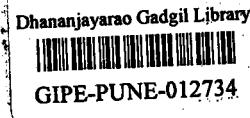


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NUMBER 33

*Some Theoretical Problems suggested by*  
**THE MOVEMENTS OF INTEREST RATES,**  
**BOND YIELDS AND STOCK PRICES**  
**IN THE UNITED STATES SINCE 1856**

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*(Resolution of October 25, 1926, revised February 6, 1933)*

*Some Theoretical Problems suggested by*

**THE MOVEMENTS OF INTEREST RATES,  
BOND YIELDS AND STOCK PRICES  
IN THE UNITED STATES SINCE 1856**

**FREDERICK R. MACAULAY**

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**NATIONAL BUREAU OF ECONOMIC RESEARCH**

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**MANUFACTURED IN THE UNITED STATES OF AMERICA**

To

My Friend

WESLEY CLAIR MITCHELL

## ACKNOWLEDGMENTS

I wish to thank sincerely Miss E. Gail Benjamin, who aided me in the earlier stages of the statistical work of this book, Miss Celeste Nason, who assisted me later, and Miss Dorothy Achilles, who was in charge of that work as the book went to press. Miss Achilles made most of the calculations and drew all the charts.

To Miss Martha Anderson goes deep appreciation of her careful editorial scrutiny and of the laborious work of seeing the book through the press.

I am grateful to the Metropolitan Life Insurance Company for clerical aid in the collection of bond prices and the calculation of yields. My friend, the late Walter Case, defrayed the expenses of collecting stock prices and constructing the stock price index numbers.

To Dr. Wesley C. Mitchell I am indebted not merely for scientific and scholarly criticism throughout the course of the study, but also for a friendship without which it is literally and exactly true that this book would never have been written.

F. R. M.

## PREFACE

**T**HIS book is a striking example of the way in which scientific problems evolve when they are attacked by a thoughtful and thorough investigator.

As Dr. Macaulay explains, he planned at the outset to study the course of interest rates and bond yields in the United States over a long period with a view to ascertaining what statistical relations these rates and yields bear to one another, to the prices of stocks and commodities, to the physical and monetary volume of trade, and to credit and banking activities. One outcome of this plan is the collection of index numbers and time series presented in the Appendix. Men of affairs and students will find in these tables a skillfully and carefully compiled record of past experience that can be put to many practical and scientific uses. No other investigator of interest rates, bond yields and security prices has made so thorough an examination of the surviving data about past transactions in American financial markets, or prepared such trustworthy measures of the various types of fluctuation that these rates, yields and prices have undergone.

This part of Dr. Macaulay's work goes far beyond the task of making a faithful compilation of scattered data. Not only did he make critical use of his sources, such as we expect of a classical scholar who is trying to establish a sound text, but he also observed characteristics of his materials that had received little or no attention. The effort to see clearly what was dimly visible in the original data led him both to extend his collections and to invent ingenious methods of measuring the characteristics that he had found.

While he was studying the behavior of his series relating to bond yields, interest rates, stock prices, commodity prices, bank clearings, and pig iron production, Dr. Macaulay tested numerous hypotheses concerning the interrelations among their movements. Though he found that most of the relations that have been announced by others failed conspicuously over the long periods covered by his data, he also found that

some rules of thumb hold good most of the time. But the more he wrestled with these problems, the more critical he became of purely empirical relations, and the more desirous of finding out why his different series behave as they do.

This striving for rational understanding of his statistical results carried Dr. Macaulay back to antecedent questions concerning the basic characteristics of the several classes of objects he was observing. He had to ask himself a series of fundamental questions about things that we usually take for granted. What are bond 'yields', interest rates, shares in corporations? For what purposes do men want bonds, loans, shares, commodities, gold, money? Why do they make investments for different terms at different rates? What is the 'duration' of a loan?

These questions and their congeners involved a consideration of the economic planning in which men are more or less consciously engaged. One factor appeared to be involved in all plans. Virtually every present transaction into which men enter involves the future—a future that may belong to the 'specious present' or that may be far removed. In few transactions is this element more prominent than in buying bonds or lending money. To understand the behavior of bond yields and interest rates it is necessary to take account of futurity—a factor that constitutes one of the leading differences between the natural and the social sciences, because it does not complicate the explanation of physico-chemical phenomena but does dominate the planning of men and so must be considered in explaining human behavior. In his *Institutional Economics* Professor John R. Commons has recently directed the attention of economists to the role played by the future in men's transactions with one another; but Dr. Macaulay brings more definite data to the treatment of the theme and carries the analysis further.

Of course the future is always uncertain. Men try to foresee, sometimes spending much systematic effort, often contenting themselves with vague anticipations, accepting what has been as an adumbration of what will be. There has been not a little speculation among economists about such matters as the extent to which forecasts of future price fluctuations influence the present demand for loans. Out of such speculations have been spun theories concerning the relations among the movements of prices, interest rates, investments, volume of credit, and production. By taking the clear test case of bond yields and short term interest rates, both considered with reference to the same period, Dr. Macaulay is able first

to demonstrate what the mathematical relationship between the two sets of movements would be if men forecast the future correctly, and second to demonstrate that the actual relationships are commonly of an opposite sort. Though the theoretical relations that would exist between other paired series if the future were accurately known are less simple in their logic, he is able to show how dubious are numerous explanations of the actual relations that credit men with greater ability to foresee the future than they possess.

This discussion of the role played by the future in economic behavior grows out of Dr. Macaulay's efforts to solve the problems attacked in the latter part of his book. Coming later in time so far as the progress of his thinking is concerned, it comes earlier in logical order and is properly placed in Chapter I. Readers interested only in the historical facts concerning interest rates or security prices may not at first grasp the relevance of this philosophical analysis, penetrating as they may admit it to be. But if they follow the argument as it unfolds, their thinking will evolve as Dr. Macaulay's did, and they will see that the book is 'all of one piece'. The beginning really prepares for and illuminates the end.

But the end of the book is not the end of the investigation. For, much as Dr. Macaulay has contributed to our understanding of the behavior of bond yields, interest rates, stock prices, commodity prices, clearings and production, and of the interrelations among these variables, his largest service lies in formulating fundamental problems of economics in a way that opens them to attack, in providing better and more abundant data concerning them, in forging tools for analytic use, and showing how to carry the work further. Many a reader will lay down this book longing to enter himself on the enticing tasks that Dr. Macaulay suggests.

WESLEY C. MITCHELL  
DIRECTOR OF RESEARCH

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## **APPENDICES**

## APPENDIX A

THE FIGURES for the cyclical and cycle-eliminating curves and other mathematical material presented in Appendix A are, in most instances, given to at least one more decimal place than are the original data on which they are based.

In some of the mathematical material (such as the sigma equations of Tables 7 and 8 and the sigma 'slopes' of Table 9) extra decimals are given because cumulative multiplication was one of the purposes for which the material was calculated and, with such cumulation, if the number of decimals be too small, accuracy decreases rapidly. But the primary defense of such a procedure as calculating and printing one more decimal in a graduation (and in the deviations of the data from that graduation) than occur in the original data is that some readers may be interested in the graduation from a purely mathematical standpoint. While the economist might ask (particularly as to deviations) why more decimals were included than are warranted by the accuracy of the data and the adequacy of the graduation formula, the student of graduation *per se* might as reasonably inquire why the extra decimal was dropped. He might well be primarily interested in studying the significance and mathematical peculiarities of the results obtained by using the formula; and, for most phases of such a study, the complete accuracy and even representativeness of the data would be assumed—if not considered irrelevant. For most of his analytic problems, the data are mere mathematical premises and not economic observations.

**TABLE 1**  
**IDENTIFICATION TABLE OF AMERICAN RAILROAD BONDS**

This is a table to be used with Tables 2 and 3. Table 3 contains the identification numbers of Table 1, and also an abbreviated description. In Table 2 identification numbers only are given.

Table 1 consists of the exact name of each bond and information concerning security, medium of payment (gold or currency), date of issue, date of maturity, amount and dates of interest payments, whether bond is registered or coupon, and convertible or callable features.

(All bonds are coupon bonds unless designated registered)

1. Hudson River Railroad 1st mortgage 7s currency.  
Dated Feb 1, 1849; due Feb 1, 1869.  
Interest paid Feb 1 & Aug 1. Registered.
2. Chicago and Rock Island Railroad 1st mortgage 7s currency  
Dated July 10, 1850; due July 10, 1870.  
Interest paid Jan 10 & July 10.  
Convertible into common stock of Chicago and Rock Island Railroad at par on any interest date on or before the 10th of July, 1858.
3. Lehigh Coal and Navigation Company general mortgage and deed of trust 6s currency.  
Dated Mar 7, 1842; due Mar 1, 1870.  
Interest paid quarterly Jan 1, Apr 1, July 1 & Oct 1.
4. Philadelphia and Reading Railroad 2nd mortgage 6s currency  
Dated Apr 1, 1849; due Apr 1, 1870.  
Interest paid Apr 1 & Oct 1.
5. New York and Harlem Railroad 1st mortgage 7s currency.  
Dated May 1, 1853; due May 1, 1873.  
Interest paid May 1 & Nov 1.
6. Lehigh Valley Railroad 1st mortgage 6s currency.  
Dated May 1, 1853; due May 1, 1873.  
Interest paid May 1 & Nov 1.
7. Morris Canal and Banking Company 1st mortgage 6s currency.  
Dated Oct 1, 1856; due April 1, 1876.  
Interest paid Apr 1 & Oct 1.
8. Eastern Railroad (Massachusetts) 6s currency.  
Dated Aug 1, 1854; due Aug 1, 1874.  
Interest paid Feb 1 & Aug 1.
9. Pennsylvania Railroad 2nd mortgage dollar bonds 6s currency.  
Dated June 1, 1854; due Mar 31, 1875.  
Interest paid Apr 1 & Oct 1.
10. Pennsylvania Railroad 1st mortgage dollar bonds 6s currency.  
Dated Oct 14, 1852; due Dec 31, 1880.  
Interest paid Jan 1 & July 1.

11. Camden and Amboy Railroad 6s currency.  
Dated Jan 1, 1854; due Jan 1, 1889.  
Interest paid June 1 & Dec 1.
12. Camden and Amboy Railroad 6s currency.  
Dated July 1, 1833; due Feb 1, 1883.  
Interest paid Feb 1 & Aug 1.
13. New York Central Railroad debt certificates or "premium bonds" 6s currency.  
Dated Aug 1, 1853; due May 1, 1883.  
Interest paid May 1 & Nov 1.  
Note:—The term "premium bonds" does not refer to the principal of the bond. These bonds promised to pay \$1,000 on May 1, 1883.
14. New York Central Railroad "bonds for debts assumed" 7s currency.  
Dated Aug 1, 1856; due Aug 1, 1876.  
Interest paid Feb 1 & Aug 1.
15. Chicago, Burlington and Quincy Railroad 1st mortgage 8s currency.  
Dated Jan 1, 1858; due Jan 1, 1883.  
Interest paid Jan 1 & July 1.
16. Hudson River Railroad 2nd mortgage 7s currency.  
Dated Dec 16, 1850; extended Dec 16, 1860; due June 16, 1885.  
Interest paid June 16 & Dec 16.
17. Chicago and Northwestern Railway "preferred sinking fund" (1st mortgage, Chicago to Oshkosh) 7s currency.  
Dated July 1, 1859; due Aug 1, 1885.  
Interest paid Feb 1 & Aug 1.
18. Philadelphia and Erie Railroad 1st mortgage 6s currency.  
Dated Mar 31, 1861; due Mar 31, 1881.  
Interest paid Apr 1 & Oct 1.
19. Galena and Chicago Union Railroad 1st mortgage 7s currency.  
Dated Feb 1, 1852; extended Feb 1, 1862; due Feb 1, 1882.  
Interest paid Feb 1 & Aug 1  
Callable at 105 on Feb 1, 1877.
20. Michigan Southern and Northern Indiana Railroad 1st mortgage 7s currency.  
Dated May 1, 1855; due May 1, 1885.  
Interest paid May 1 & Nov 1.
21. Cleveland and Toledo Railroad 1st mortgage 7s currency.  
Dated July 1, 1855; due July 1, 1885.  
Interest paid Jan 1 & July 1.
22. Connecticut and Passumpsic Rivers Railroad 1st mortgage 6s currency.  
Dated Dec 1, 1856; due Dec 1, 1876.  
Interest paid June 1 & Dec 1.
23. Buffalo, New York and Erie Railroad 1st mortgage 7s currency.  
Dated Oct 29, 1857; due Dec 1, 1877.  
Interest paid June 1 & Dec 1.

## RAILROAD BOND YIELDS

A7

24. Chicago and Alton Railroad 1st mortgage 7s currency.  
Dated Dec 1, 1862; due Jan 1, 1893.  
Interest paid Jan 1 & July 1.
25. Pittsburgh, Fort Wayne and Chicago Railway 1st mortgage 7s Series A currency.  
Dated Mar 1, 1862; due July 1, 1912.  
Interest paid Jan 1 & July 1.
26. Camden and Amboy Railroad mortgage 6s currency.  
Dated Nov 1, 1862; due Nov 1, 1889.  
Interest paid May 1 & Nov 1.
27. Toledo and Wabash Railroad 1st mortgage 7s currency.  
Dated Aug 1, 1853; extended Aug 1, 1865; due Aug 1, 1890.  
Interest paid Feb 1 & Aug 1.
28. St. Louis, Alton and Terre Haute Railroad 1st mortgage 7s Series A currency.  
Dated June 30, 1862; due July 1, 1894.  
Interest paid Jan 1 & July 1.
29. New York Central Railroad renewal bonds 6s currency.  
Dated June 15, 1854—7s; extended June 15, 1864—6s; due Dec 15, 1887.  
Interest paid June 15 & Dec 15.
30. Morris and Essex Railroad 1st mortgage 7s currency.  
Dated July 1, 1864; due May 1, 1914.  
Interest paid May 1 & Nov 1.
31. New York and Erie Railroad 1st mortgage 7s currency.  
Dated July 1, 1847; extended May 1, 1867; due May 1, 1897.  
Interest paid May 1 & Nov 1.
32. Milwaukee and St. Paul Railway (Prairie du Chien Division)  
1st mortgage 8s currency.  
Dated Feb 1, 1868; due Feb 1, 1898.  
Interest paid Feb 1 & Aug 1.
33. Lehigh Valley Railroad 1st mortgage 6s currency.  
Dated June 1, 1868; due June 1, 1898.  
Interest paid June 1 & Dec 1.
34. Central Railroad of New Jersey "new bonds" later 1st mortgage 7s currency.  
Dated 1869; due Feb 1, 1890.  
Interest paid Feb 1 & Aug 1.
35. Lehigh Coal and Navigation Company "railroad loan" 6s currency.  
Dated 1867; due Feb 1, 1897.  
Interest paid quarterly Feb 1, May 1, Aug 1 & Nov 1.
36. Chicago and Milwaukee Railroad 1st mortgage 7s currency.  
Dated 1863; due July 1, 1898.  
Interest paid Jan 1 & July 1.
37. Lake Shore Railway "dividend bonds" 7s currency.  
Dated Apr 1, 1869; due Apr 1, 1899.  
Interest paid Apr 1 & Oct 1.
38. Cleveland, Columbus, Cincinnati and Indianapolis Railway

## APPENDIX

- 1st mortgage 7s currency.  
Dated 1869; due May 1, 1899  
Interest paid May 1 & Nov 1.
39. Lehigh Valley Railroad 2nd mortgage 7s currency.  
Dated July 1, 1870; due Sept 1, 1910.  
Interest paid Mar 1 & Sept 1. Registered.
40. Chicago and Northwestern Railway consolidated 7s currency.  
Dated Jan 16, 1865; due Feb 1, 1915.  
Interest paid quarterly, Feb 1, May 1, Aug 1 & Nov 1.
41. Lake Shore and Michigan Southern Railway consolidated 1st  
mortgage 7s currency.  
Dated July 1, 1870; due July 1, 1900.  
Interest paid Jan 1 & July 1.
42. Pennsylvania Railroad general mortgage 6s currency.  
Dated July 1, 1867; due July 1, 1910.  
Interest paid Jan 1 & July 1.
43. New York and Harlem Railroad consolidated (later 1st) mortgage  
7s currency.  
Dated May 1, 1872; due May 1, 1900.  
Interest paid May 1 & Nov 1.
44. New York Central and Hudson River Railroad 1st mortgage 7s  
currency.  
Dated Jan 15, 1873; due Jan 1, 1903.  
Interest paid Jan 1 & July 1.
45. Chicago, Burlington and Quincy Railroad consolidated mortgage  
7s currency.  
Dated July 1, 1873; due July 1, 1903.  
Interest paid Jan 1 & July 1.
46. Cleveland and Pittsburgh Railroad consolidated mortgage 7s cur-  
rency.  
Dated 1867; due Nov 1, 1900.  
Interest paid May 1 & Nov 1.
47. Michigan Central Railroad consolidated mortgage 7s currency.  
Dated May 1, 1872; due May 1, 1902.  
Interest paid May 1 & Nov 1.
48. Central Pacific Railroad 1st mortgage 6s Series A gold.  
Dated July 1, 1865; due July 1, 1895.  
Interest paid Jan 1 & July 1.
49. Chicago, Rock Island and Pacific Railroad 1st mortgage 6s cur-  
rency.  
Dated May 1, 1877; due July 1, 1917.  
Interest paid Jan 1 & July 1.
50. Chicago and Northwestern Railway consolidated mortgage 7s gold.  
Dated Nov 1, 1872; due Dec 1, 1902.  
Interest paid June 1 & Dec 1.
51. Chicago, St Paul and Minneapolis Railway 1st mortgage 6s gold.  
Dated May 9, 1878; due May 1, 1918.  
Interest paid May 1 & Nov 1.
52. St. Paul, Minneapolis & Manitoba 2nd mortgage 6s gold.

## RAILROAD BOND YIELDS

A9

- Dated Oct 1, 1879; due Oct 1, 1909.  
Interest paid Apr 1 & Oct 1.
53. Nashville, Chattanooga and St. Louis Railway 1st mortgage 7s currency.  
Dated July 1, 1873; due July 1, 1913.  
Interest paid Jan 1 & July 1.
54. St Paul and Sioux City Railroad 1st mortgage 6s gold.  
Dated July 1, 1879; due Apr 1, 1919.  
Interest paid Apr 1 & Oct 1.
55. Chicago, Milwaukee and St Paul Railway (Southern Minnesota Division) 1st mortgage 6s currency.  
Dated Jan 1, 1880; due Jan 1, 1910.  
Interest paid Jan 1 & July 1.
56. Canada Southern Railway 1st mortgage 5s Canadian currency.  
Dated Oct 31, 1877; due Jan 1, 1908.  
Interest paid Jan 1 & July 1.
57. Chicago, St Paul, Minneapolis and Omaha Railway consolidated 6s currency.  
Dated June 1, 1880; due June 1, 1930.  
Interest paid June 1 & Dec 1.
58. St. Paul, Minneapolis and Manitoba Railway (Dakota Extension) 1st mortgage 6s gold.  
Dated Nov 1, 1880; due Nov 1, 1910.  
Interest paid May 1 & Nov 1.
59. Philadelphia and Erie Railroad general mortgage 5s gold.  
Dated July 1, 1869; due July 1, 1920  
Interest paid Apr 1 & Oct 1. Registered.
60. Chicago, Milwaukee and St Paul Railway (Chicago and Pacific Western Division) 1st mortgage 5s gold.  
Dated Jan 1, 1881; due Jan 1, 1921.  
Interest paid Jan 1 & July 1.
61. Chicago, Milwaukee & St Paul Railway (Wisconsin and Minnesota Division) 1st mortgage 5s gold  
Dated July 1, 1881; due July 1, 1921.  
Interest paid Jan 1 & July 1.
62. Chicago, St Louis and New Orleans Railroad consolidated mortgage 5s gold.  
Dated Mar 15, 1881; due June 15, 1951.  
Interest paid June 15 & Dec 15.
63. Pennsylvania Company 1st mortgage 4½s gold.  
Dated Apr 1, 1881; due July 1, 1921.  
Interest paid Jan 1 & July 1.
64. New York, Lackawanna and Western Railway 1st mortgage 6s gold.  
Dated Dec 1, 1880; due Jan 1, 1921.  
Interest paid Jan 1 & July 1.
65. Hannibal and St Joseph Railroad consolidated mortgage 6s currency.  
Dated Apr 30, 1881; due Mar 1, 1911.  
Interest paid Mar 1 & Sept 1.

## APPENDIX

66. New York Central and Hudson River Railroad debenture 5s currency.  
Dated Sept 1, 1884; due Sept 1, 1904.  
Interest paid Mar 1 & Sept 1.
67. Baltimore and Ohio Railroad 5s gold.  
Dated Jan 31, 1885; due Feb 1, 1925.  
Interest paid Feb 1 & Aug 1.
68. Chicago, Milwaukee and St Paul Railway, terminal mortgage 5s gold.  
Dated July 1, 1884; due July 1, 1914.  
Interest paid Jan 1 & July 1.
69. Chicago and Northwestern Railway debenture 5s currency.  
Dated July 1, 1884; due Nov 1, 1909.  
Interest paid May 1 & Nov 1.
70. West Shore Railroad 1st mortgage 4s currency.  
Dated Dec 5, 1885; due Jan 1, 2361.  
Interest paid Jan 1 & July 1.
71. Chicago and Northwestern Railway debenture 5s currency.  
Dated May 1, 1883; due May 1, 1933.  
Interest paid May 1 & Nov 1.
72. Chicago and Northwestern Railway extension 4s currency.  
Dated Apr 15, 1886; due Aug 15, 1926.  
Interest paid Feb 15 & Aug 15.
73. St Paul, Minneapolis and Manitoba Railway consolidated mortgage 4½s (originally 6s) gold.  
Dated May 1, 1883; due July 1, 1933.  
Interest paid Jan 1 & July 1.
74. Cincinnati, Indianapolis, St Louis and Chicago Railway general 1st mortgage 4s gold.  
Dated Aug 2, 1886; due Aug 1, 1936.  
Interest paid quarterly Feb 1, May 1, Aug 1 & Nov 1.
75. Pacific Railroad (of Missouri) 1st mortgage extended 4s gold.  
Dated Aug 1, 1868; due Aug 1, 1888 (6% coupon); extended Feb 1, 1887; due Aug 1, 1938 (4% coupon).  
Interest paid Feb 1 & Aug 1.
76. Illinois Central Railroad collateral trust 4s gold.  
Dated Mar 31, 1888; due Apr 1, 1952.  
Interest paid Apr 1 & Oct 1.
77. Lake Erie and Western Railroad 1st mortgage 5s gold.  
Dated Feb 21, 1887; due Jan 1, 1937.  
Interest paid Jan 1 & July 1.
78. Wabash Railroad 1st mortgage 5s gold.  
Dated May 1, 1889; due May 1, 1939.  
Interest paid May 1 & Nov 1.
79. Chesapeake and Ohio Railway (Eastern Extension) 1st mortgage 6s gold.  
Dated Jan 1, 1881; due Jan, 1911.  
Interest paid Apr 1 & Oct 1.
80. Rome, Watertown and Ogdensburg Railroad consolidated mortgage 5s gold.

## RAILROAD BOND YIELDS

A11

- Dated July 1, 1874; extended July 1, 1882 (gold); due July 1, 1922.  
 Interest paid Apr 1 & Oct 1 and a  $1\frac{1}{4}\%$  coupon on July 1, 1922.
81. New York, Chicago and St Louis Railroad 1st mortgage 4s gold.  
 Dated Oct 1, 1887; due Oct 1, 1937.  
 Interest paid Apr 1 & Oct 1.
82. Chesapeake and Ohio Railway 1st consolidated mortgage 5s gold.  
 Dated Jan 1, 1889; due May 1, 1939.  
 Interest paid May 1 & Nov 1.
83. Illinois Central Railroad collateral trust (Louisville, New Orleans and Texas Railway collateral) 4s gold.  
 Dated Sept 1, 1892; due Nov 1, 1953.  
 Interest paid May 1 & Nov 1.
84. Chesapeake and Ohio Railway (Richmond and Alleghany Railway Division) 1st consolidated mortgage 4s gold.  
 Dated Jan 20, 1890; due Jan 1, 1989.  
 Interest paid Jan 1 & July 1.
85. Cleveland, Cincinnati, Chicago and St Louis Railway (St Louis Division) 1st collateral trust mortgage 4s gold.  
 Dated Nov 1, 1890; due Nov 1, 1990.  
 Interest paid May 1 & Nov 1.
86. East Tennessee, Virginia and Georgia Railway consolidated 1st mortgage 5s gold.  
 Dated July 5, 1886; due Nov 1, 1956.  
 Interest paid May 1 & Nov 1.
87. Chicago, Milwaukee and St Paul Railway general mortgage 4s Series A gold.  
 Dated May 1, 1889; due May 1, 1989..  
 Interest paid Jan 1 & July 1.
88. Lake Shore and Michigan Southern Railway 1st mortgage  $3\frac{1}{2}$ s gold.  
 Dated June 1, 1897; due June 1, 1997.  
 Interest paid June 1 & Dec 1.
89. St Paul, Minneapolis and Manitoba Railway (Montana Extension) 1st mortgage 4s gold.  
 Dated June 1, 1887; due June 1, 1937.  
 Interest paid June 1 & Dec 1.
90. Baltimore and Ohio Railroad 1st mortgage 4s gold.  
 Dated July 1, 1898; due July 1, 1948.  
 Interest paid Apr 1 & Oct 1.  
 Callable at 105 after June 30th 1923 upon three months' notice.
91. Union Pacific Railroad 1st mortgage railroad and land grant 4s gold.  
 Dated July 1, 1897; due July 1, 1947.  
 Interest paid Jan 1 & July 1.
92. Chicago and Northwestern Railway general mortgage  $3\frac{1}{2}$ s gold.  
 Dated Nov 1, 1897; due Nov 1, 1987.  
 Interest paid May 1 & Nov 1.
93. Chicago, Rock Island and Pacific Railway general mortgage 4s gold.

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- Dated Jan 1, 1898; due Jan 1, 1988.  
Interest paid Jan 1 & July 1.
94. Atchison, Topeka and Santa Fe Railway general mortgage 4s gold.  
Dated Dec 12, 1895; due Oct 1, 1995.  
Interest paid Apr 1 & Oct 1.
95. New York Central and Hudson River Railroad refunding mortgage  
 $3\frac{1}{2}$ s gold.  
Dated June 1, 1897; due July 1, 1997.  
Interest paid Jan 1 & July 1.
96. Scioto Valley and New England Railroad 1st mortgage 4s gold.  
Dated Nov 1, 1889; due Nov 1, 1989.  
Interest paid May 1 & Nov 1.
97. Lehigh Valley Railway (of New York) 1st mortgage  $4\frac{1}{2}$ s gold.  
Dated June 23, 1890; due July 1, 1940.  
Interest paid Jan 1 & July 1.
98. Louisville and Nashville Railroad unified mortgage 4s gold.  
Dated June 2, 1890; due July 1, 1940.  
Interest paid Jan 1 & July 1.
99. Oregon Railroad and Navigation Company consolidated mortgage  
4s gold.  
Dated Aug 17, 1896; due June 1, 1946.  
Interest paid June 1 & Dec 1.
100. Chicago, Burlington and Quincy Railroad (Illinois Division) 1st  
mortgage  $3\frac{1}{2}$ s currency.  
Dated July 1, 1899; due July 1, 1949.  
Interest paid Jan 1 & July 1.  
Callable as a whole at 105 and interest on any interest date  
after July 1, 1929 on six months' notice.
101. Central Pacific Railway 1st refunding mortgage 4s gold.  
Dated Aug 1, 1899; due Aug 1, 1949.  
Interest paid Feb 1 & Aug 1.
102. Northern Pacific Railway prior lien railroad and land grant  
mortgage 4s gold.  
Dated Nov 10, 1896; due Jan 1, 1997.  
Interest paid quarterly Jan 1, Apr 1, July 1 & Oct 1.
103. Norfolk and Western Railway 1st consolidated mortgage 4s gold.  
Dated Oct 22, 1896; due Oct 1, 1996.  
Interest paid Apr 1 & Oct 1.
104. Central Railroad Company of New Jersey general mortgage 5s gold.  
Dated July 1, 1887; due July 1, 1987.  
Interest paid Jan 1 & July 1.
105. Hocking Valley Railway 1st consolidated mortgage  $4\frac{1}{2}$ s gold.  
Dated July 1, 1899; due July 1, 1999.  
Interest paid Jan 1 & July 1.
106. Norfolk and Western Railway divisional first lien and general  
mortgage 4s gold.  
Dated July 1, 1904; due July 1, 1944.  
Interest paid Jan 1 & July 1.  
Callable at 105 and interest on any interest date after January  
1, 1929 upon three months' notice.

## RAILROAD BOND YIELDS

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107. Oregon Short Line Railroad consolidated 1st mortgage 5s gold.  
Dated Mar 1, 1897; due July 1, 1946.  
Interest paid Jan 1 & July 1.
108. Southern Pacific Railroad (California) first refunding mortgage 4s gold.  
Dated Jan 3, 1905; due Jan 1, 1955.  
Interest paid Jan 1 & July 1.  
Callable at 105 and interest on Jan 1, 1910 or on any interest date thereafter at not less than three months' notice.
109. Atchison, Topeka and Santa Fe Railway adjustment mortgage 4s gold, stamped.  
Dated Dec 12, 1895; due July 1, 1995.  
Interest paid May 1 & Nov 1.
110. Northern Pacific Railway general lien 3s gold.  
Dated Nov 10, 1896; due Jan 1, 2047.  
Interest paid quarterly Feb 1, May 1, Aug 1 & Nov 1.
111. Atlantic Coast Line Railroad 1st consolidated mortgage 4s gold.  
Dated July 1, 1902; due July 1, 1952.  
Interest paid Mar 1 & Sept 1.
112. Delaware and Hudson Company first and refunding mortgage 4s gold.  
Dated May 1, 1908; due May 1, 1943.  
Interest paid May 1 & Nov 1.  
Callable as a whole at 107½ and interest on May 1, 1918 or on any interest date thereafter upon thirteen weeks' notice.
113. Central of Georgia Railway consolidated mortgage 5s gold.  
Dated Nov 1, 1895; due Nov 1, 1945.  
Interest paid May 1 & Nov 1.
114. Pennsylvania Railroad consolidated mortgage 4s gold.  
Dated May 1, 1908; due May 1, 1948.  
Interest paid May 1 & Nov 1.
115. Kansas City Southern Railway 1st mortgage 3s gold.  
Dated Apr 2, 1900; due Apr 1, 1950  
Interest paid Apr 1 & Oct 1.
116. Louisville and Nashville Railroad (Atlanta, Knoxville and Cincinnati Division) mortgage 4s gold.  
Dated Apr 1, 1905; due May 1, 1955.  
Interest paid May 1 & Nov 1.
117. Illinois Central Railroad refunding mortgage 4s gold.  
Dated Nov 1, 1908; due Nov 1, 1955.  
Interest paid May 1 & Nov 1.  
Callable as a whole at 107½ and interest on Nov 1, 1918 or on any interest date thereafter upon not less than thirteen weeks' notice.
118. Chicago, Burlington and Quincy Railroad general mortgage 4s currency.  
Dated Mar 2, 1908; due Mar 1, 1958.  
Interest paid Mar 1 & Sept 1.
119. Southern Railway 1st consolidated mortgage 5s gold.

## APPENDIX

- Dated Oct 2, 1894; due July 1, 1994.  
Interest paid Jan 1 & July 1.
120. Union Pacific Railroad 1st lien and refunding mortgage 4s gold.  
Dated June 1, 1908; due June 1, 2008.  
Interest paid Mar 1 & Sept 1.  
Callable as a whole at 107½ and interest on Sept 1, 1918 or on  
any interest date thereafter upon three months' notice.
121. Atlantic Coast Line Railroad collateral trust (Louisville and Nash-  
ville Railroad collateral) 4s gold.  
Dated Nov 1, 1902; due Oct 1, 1952.  
Interest paid May 1 & Nov 1.  
Callable on any interest date in amounts of not less than  
\$100,000 at 105 and interest.
122. Norfolk and Western Railway Pocahontas Coal and Coke joint  
mortgage 4s gold.  
Dated Dec 2, 1901; due Dec 1, 1941.  
Interest paid June 1 & Dec 1.  
Callable at 105 and interest after Apr 1, 1906 from charges  
against coal mined.
123. Great Northern Railway 1st and refunding mortgage 4½s Series  
A gold.  
Dated May 1, 1911; due July 1, 1961.  
Interest paid Jan 1 & July 1.  
Callable as a whole at 105 and interest on or after Jan 1, 1941  
upon ninety days' notice.
124. Canada Southern Railway 1st and refunding consolidated mort-  
gage 5s Series A gold.  
Dated Oct 1, 1912; due Oct 1, 1962.  
Interest paid Apr 1 & Oct 1.
125. Morris and Essex Railroad 1st refunding mortgage 3½s gold.  
Dated Dec 1, 1900; due Dec 1, 2000.  
Interest paid June 1 & Dec 1.
126. Pennsylvania Railroad consolidated mortgage 4½s gold.  
Dated Feb 1, 1915; due Aug 1, 1960.  
Interest paid Feb 1 & Aug 1.
127. Canadian Northern Railway sinking fund debenture 6½s gold.  
Dated July 1, 1921; due July 1, 1946.  
Interest paid Jan 1 & July 1.
128. Great Northern Railway general mortgage 5½s Series B gold.  
Dated Jan 1, 1922; due Jan 1, 1952.  
Interest paid Jan 1 & July 1.
129. Atlantic Coast Line Railroad general unified 4½s Series A gold.  
Dated June 1, 1914; due June 1, 1964.  
Interest paid June 1 & Dec 1.
130. Pennsylvania Railroad general mortgage 4½s Series A gold.  
Dated June 1, 1915; due June 1, 1965.  
Interest paid June 1 & Dec 1.
131. Pennsylvania Railroad general mortgage 5s Series B gold.  
Dated Dec 1, 1918; due Dec 1, 1968.  
Interest paid June 1 & Dec 1.

## RAILROAD BOND YIELDS

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132. Great Northern Railway general mortgage 5s Series C gold.  
Dated Jan 1, 1923; due Jan 1, 1973.  
Interest paid Jan 1 & July 1.
133. St Louis Southwestern Railway 1st mortgage bond certificates  
(issued by the Central Trust Company) 4s gold.  
Dated Nov 1, 1890; due Nov 1, 1989.  
Interest paid May 1 & Nov 1.
134. Missouri, Kansas & Texas Railway 1st mortgage 4s gold.  
Dated June 1, 1890; due June 1, 1990.  
Interest paid June 1 & Dec 1.
135. Chesapeake and Ohio Railway general mortgage 4½s gold.  
Dated Feb 23, 1892; due Mar 1, 1992.  
Interest paid Mar 1 & Sept 1.
136. Cleveland, Cincinnati, Chicago and St Louis Railway general mort-  
gage 4s Series A gold.  
Dated May 15, 1893; due June 1, 1993.  
Interest paid June 1 & Dec 1.
137. New York Central Railroad consolidation mortgage 4s Series A  
gold.  
Dated Aug 1, 1913; due Feb 1, 1998.  
Interest paid Feb 1 & Aug 1.
138. Texas and Pacific Railway 1st mortgage 5s gold.  
Dated Feb 1, 1888; due June 1, 2000.  
Interest paid June 1 & Dec 1.
139. Lehigh Valley Railroad (Pennsylvania) general consolidated mort-  
gage 4s gold.  
Dated Sept 30, 1903; due May 1, 2003.  
Interest paid May 1 & Nov 1.
140. Canadian Pacific Railway 4% irredeemable debenture stock (a bond  
without maturity).  
Issue authorized by an act of Parliament of the Dominion of  
Canada, passed in 1889, and subsequent acts. Issue of stock may  
be made from time to time.  
Interest paid Jan 1 & July 1
141. Southern Railway development and general mortgage 4s Series A  
gold.  
Dated Apr 18, 1906; due Apr 1, 1956.  
Interest paid Apr 1 & Oct 1.
142. Chicago and Western Indiana Railroad Company consolidated  
mortgage 4s gold.  
Dated July 1, 1902; due July 1, 1952.  
Interest paid Jan 1 & July 1.
143. Pittsburgh, Cincinnati, Chicago & St Louis Railroad general mort-  
gage 5s Series B gold.  
Dated Apr 1, 1925; due Apr 15, 1975.  
Interest paid Apr 1 & Oct 1.
144. Great Northern Railway general mortgage 4½s Series D gold.  
Dated July 1, 1926; due July 1, 1976.  
Interest paid Jan 1 & July 1.

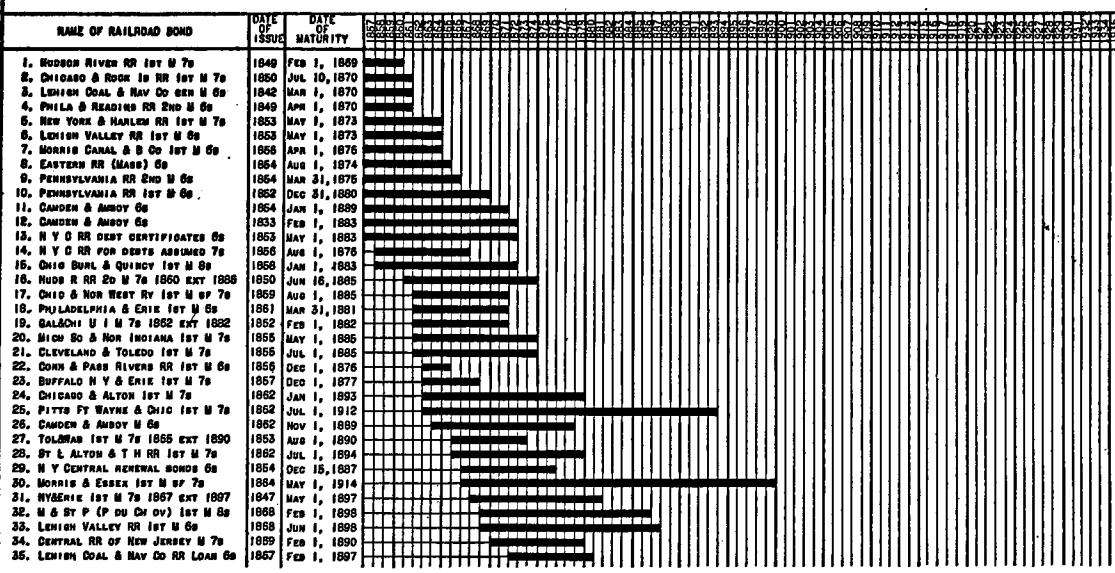
145. Chicago, Milwaukee and St Paul Railway general (now 1st) mortgage 4s Series A gold.  
Dated May 1, 1889; due May 1, 1989.  
Interest paid Jan 1 & July 1.  
Remain undisturbed under plan of reorganization.
146. Erie Railroad Company 1st consolidated prior lien 4s gold.  
Dated Dec 10, 1895; due Jan 1, 1996.  
Interest paid Jan 1 & July 1.
147. Pennsylvania Railroad general mortgage  $4\frac{1}{4}$ s Series D gold.  
Dated Apr 1, 1931; due Apr 1, 1981.  
Interest paid Apr 1 & Oct 1.
148. Chicago and Erie Railroad 1st 5s gold.  
Dated Aug 21, 1890; due May 1, 1982.  
Interest paid May 1 & Nov 1.
149. Chesapeake and Ohio Railway (Richmond and Alleghany Division)  
1st 4s gold  
Dated Jan 20, 1890; due Jan 1, 1989.  
Interest paid Jan 1 & July 1.
150. Cleveland, Cincinnati, Chicago and St Louis Railway (St Louis  
Division) 1st collateral 4s gold  
Dated Nov 1, 1890; due Nov 1, 1990.  
Interest paid May 1 & Nov 1.

## RAILROAD BOND YIELDS

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CHART 30

**AMERICAN RAILROAD BONDS USED IN CONSTRUCTING INDEX NUMBERS  
AND THE PERIODS DURING WHICH QUOTATIONS WERE USED**



## APPENDIX

## **CHART 30**

**AMERICAN RAILROAD BONDS USED IN CONSTRUCTING INDEX NUMBERS (CONTINUED)**

NAME OF RAILROAD BOND	DATE OF ISSUE	DATE OF MATURITY
36. CHICAGO & MILWAUKEE RR 1ST M 7s	1863 JUL 1, 1888	
37. LAKE SHORE RR DIVIDEND BONDS 7s	1869 APR 1, 1899	
38. CLEV CO L & IND 1ST M 7s	1869 MAY 1, 1899	
39. LEHIGH VALLEY RR 2ND M REG 7s	1870 SEP 1, 1910	
40. CHIC & NORT WEST RR CONS 5% 7s	1881 FEB 1, 1915	
41. L SH & MICH BO CONS 1ST M 5% 7s	1870 JUL 1, 1900	
42. PENNSYLVANIA RR Co GEN M 6s	1867 JUL 1, 1910	
43. NEW YORK & HARLEM RR CONS M 7s	1872 MAY 1, 1900	
44. N Y C & H R RR 1ST M 7s	1873 JAN 1, 1903	
45. CHIC BURL & QUINCY RR CONS M 7s	1873 JUL 1, 1903	
46. CLEVELAND & PITTS CONS 5% M 7s	1867 NOV 1, 1900	
47. MICHIGAN CENTRAL RR CONS M 7s	1872 MAY 1, 1902	
48. CENTRAL PACIFIC RR 1ST M 6s	1865 JUL 1, 1895	
49. CHICAGO RR IS & PAC RR Co M 6s	1877 JUL 1, 1917	
50. CHICAGO & NORT HEAT CONS M 7s	1872 DEC 1, 1902	
51. CHIC ST PAUL & MINN 1ST M 6s	1878 MAY 1, 1918	
52. ST PAUL MINN & MAN 2ND M 6s	1879 OCT 1, 1909	
53. NASH CHATT & ST L 1ST M 7s	1873 JUL 1, 1913	
54. ST P & SIOUX CITY RR 1ST M 6s	1879 APR 1, 1919	
55. C M & ST P (SO. MIN DV) 1ST M 6s	1880 JAN 1, 1910	
56. CANADA SOUTHERN Ry 1ST M 6s	1877 JAN 1, 1908	
57. CHIC ST P MINN & OMAHA CONS M 6s	1881 JUN 1, 1930	
58. ST P MIN & MAN (Dak DV) 1ST M 6s	1888 NOV 1, 1910	
59. PHILADELPHIA & ERIE GEN M 6s	1869 JUL 1, 1920	
60. C M & ST P (C & P W DV) 1ST M 6s	1881 JAN 1, 1921	
61. C M & ST P WIS & MIN DV 1ST M 6s	1881 JUL 1, 1921	
62. CHIC ST LOUIS & N ORLEANS 5s	1881 JUN 15, 1951	
63. PENNSYLVANIA Co GU 1ST M 4-1/2% 2s	1881 JUL 1, 1921	
64. NEW YORK, LACE & WEST 1ST M 6s	1890 JAN 1, 1921	
65. HANNIBAL & ST JOSEPH CONS 4% 6s	1881 MAR 1, 1911	
66. N Y CENT & HUDSON RIVER DES 6s	1884 SEP 1, 1904	
67. BALTIMORE & OHIO 5s	1884 FEB 1, 1926	
68. CHIC MILW & ST PAUL TERM M 6s	1884 JUL 1, 1914	
69. CHICAGO & NW RR DES 5s	1884 NOV 1, 1909	
70. WEST SHORE RR 1ST M 4s	1885 JAN 1, 2361	
71. CHICAGO & N W RR BY DEG 6s	1883 MAY 1, 1933	
72. CHICAGO & NORTHEASTERN EXCH 4s	1886 AUG 15, 1926	
73. ST PAUL MINN & MAN CONS M 4-1/2% 2s	1888 JUL 1, 1933	

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CHART 30

AMERICAN RAILROAD BONDS USED IN CONSTRUCTING INDEX NUMBERS (CONTINUED)

NAME OF RAILROAD BOND	DATE OF ISSUE	DATE OF MATURITY	BOND YIELD
74. OHIO IND ST L & OHIO GEN 1ST M 48	1868 AUG 1,	1938	
75. PACIFIC RR OF BO 1ST EXP M 48	1868 AUG 1,	1938	
76. ILLINOIS CENTRAL RR COAL 48	1868 APR 1,	1952	
77. LAKE ERIE & WESTERN 1ST M 58	1867 JAN 1,	1937	
78. WABASH RR CO 1ST M 68	1869 MAY 1,	1930	
79. CHESAPEAKE & OHIO (PENN Ext) 1ST M 68	1881 JAN 1,	1911	
80. ROCK WATER & OGDENS CONS M 68	1874 JUL 1,	1922	
81. N Y CHIO & ST LOUIS 1ST M 48	1867 OCT 1,	1937	
82. CHESAPEAKE & OHIO RR 1ST CONS 58	1869 MAY 1,	1939	
83. ILL CENTRAL (L N O & T) COAL 48	1892 NOV 1,	1953	
84. O & O (R & A Div) 1ST CONS M 48	1890 JAN 1,	1968	
85. C C C & ST L (ST L Div) 1ST CL 48	1890 NOV 1,	1990	
86. E TENN V & S RY CONS 1ST M 58	1885 NOV 1,	1955	
87. CHICAGO MILW & ST PAUL GEN M 48	1889 MAY 1,	1898	
88. LAKE SH & NICH CO 1ST M 3-1/28	1897 JUN 1,	1997	
89. ST PAUL MINN & MAN 1ST M 48	1867 JUN 1,	1937	
90. BALTIMORE & OHIO RR 1ST M 48	1868 JUL 1,	1948	
91. UNION PAC RR 1ST M RR & LO 48	1897 JUL 1,	1947	
92. CHICAGO & NORTH WEST GEN M 3-1/28	1897 NOV 1,	1987	
93. CHI ROCK IS & PAC RR GEN M 48	1895 JAN 1,	1988	
94. ATCH TOP & SANTA FE GEN M 48	1895 OCT 1,	1995	
95. N Y CENT & HUDSON RIVER M 3-1/28	1897 JUL 1,	1997	
96. BOISE VAL & NEV ENO 1ST M 48	1889 NOV 1,	1989	
97. LEHIGH VALLEY (N Y) 1ST M 4-1/28	1890 JUL 1,	1940	
98. LOUISVILLE & NASH UNIFED 48	1890 JUL 1,	1940	
99. OREGON RR & NAV CO CONS M 48	1895 JUN 1,	1946	
100. CHI BUS & Q (ILL Div) M 3-1/28	1895 JUL 1,	1949	
101. CENTRAL PACIFIC 1ST REP M 48	1895 AUG 1,	1949	
102. HOR PAC RR PRIOR LIEN LO M 48	1895 JAN 1,	1897	
103. HORSE & WEST RR 1ST CONS M 48	1895 OCT 1,	1995	
104. CENTRAL RR OF N J GEN M 48	1887 JUL 1,	1987	
105. HOCKING VALLEY 1ST CONS M 4-1/28	1899 JUL 1,	1999	
106. N & W RR DIV 1ST L & GEN M 48	1904 JUL 1,	1944	
107. ONE SH LINE RR CONS 1ST M 58	1897 JUL 1,	1945	
108. SOUTHERN PAC 1ST REP M 48	1905 JAN 1,	1955	
109. A T & S FE RR ADD M 48 STAMPED	1895 JUL 1,	1995	
110. NORTHERN PAC RR GEN LIEN 38	1895 JAN 1,	2047	
111. ATL COAST LINE 1ST CONS M 48	1902 JUL 1,	1952	

CHART 30

## AMERICAN RAILROAD BONDS USED IN CONSTRUCTING INDEX NUMBERS (CONCLUDED)

NAME OF RAILROAD BOND	DATE OF ISSUE	DATE OF MATURITY	PERPETUITY
112. DEL & HUDBERG 1ST & REF M 48	1908	MAY 1, 1943	
113. CENTRAL OF GEORGIA CONS M 68	1895	NOV 1, 1945	
114. PENNSYLVANIA RR CONS M 48	1908	MAY 1, 1948	
115. KANSAS CITY SO RR 1ST M 38	1900	APR 1, 1960	
116. L & N (ATL KNOX & CLE) DIV 48	1905	MAY 1, 1955	
117. ILLINOIS CENTRAL RR REF M 48	1908	NOV 1, 1955	
118. CHICAGO & QUINCY GEN M 48	1908	MAR 1, 1958	
119. SOUTHERN RR 1ST CONS M 58	1891	JUL 1, 1994	
120. U.S. PAC RR 1ST LIEN & REF. M 48	1908	JUN 1, 2008	
121. ATL COAST LINE (L & N COLL.) 48	1902	OCT 1, 1952	
122. NORF & WEST (P C & C) JOINT 48	1901	OCT 1, 1941	
123. O&T NOR RR 1ST & REF M 4-1/28	1911	JUL 1, 1981	
124. CANADA SO 1ST & REF CONS 58	1912	OCT 1, 1982	
125. MORRIS & ESSEX 1ST REF M 3-1/28	1900	DEC 1, 2000	
126. PENNSYLVANIA RR CONS M 4-1/28	1915	AUG 1, 1960	
127. CAN NOR RR 25 YR BY DEB 5-1/28	1921	JUL 1, 1946	
128. O&T NOR RR GEN SERIES 8 5-1/28	1922	JAN 1, 1982	
129. ATL COAST LINE GEN UNIFED 4-1/28	1914	JUN 1, 1964	
130. PENNSYLVANIA RR GEN M 4-1/28	1915	JUN 1, 1965	
131. O&T NOR RR GEN M 58	1916	DEC 1, 1988	
132. O&T NOR RR GEN SERIES C 58	1923	JAN 1, 1973	
133. ST LOUIS BOSTONIAN 1ST M 48	1890	NOV 1, 1989	
134. MO-KANSAS-TEXAS RR 1ST M 48	1890	JUN 1, 1980	
135. CHEESE & OHIO RR GEN M 4-1/28	1892	MAR 1, 1992	
136. CLEVE OHIO CHI & ST L GEN M 48	1893	JUN 1, 1993	
137. NY CENTRAL RR CONSOL M 48	1913	FEB 1, 1998	
138. TEX & PAC RR 1ST M 58	1888	JUN 1, 2000	
139. LEHIGH & V RR (PA) GEN CONS M 48	1903	MAY 1, 2003	
140. CANADIAN PAC RR 45 DEB 5%GEN M 48	1903	PERPETUITY	
141. SOUTHERN RR DEB & GEN M 48	1905	APR 1, 1986	
142. OHIO & WEST IND RR CONS M 48	1902	JUL 1, 1982	
143. PITTS CINC OHIO & ST L GEN M 68	1925	APR 1, 1975	
144. GREAT NORTHERN RR GEN M 4-1/28	1926	JUL 1, 1976	
145. CHI MIL & ST PAUL RR GEN M 48	1869	MAY 1, 1989	
146. CHI RR CONS PRIORITY 48	1895	JAN 1, 1986	
147. PENNSYLVANIA RR GEN M 48	1921	APR 1, 1981	
148. CHICAGO & ERIE 1ST 58	1890	MAY 1, 1982	
149. C & O (RICH & ALL DIV) 1ST 48	1890	JAN 1, 1989	
150. C & C & ST L (BY L DIV) 1ST 48	1890	NOV 1, 1990	

## RAILROAD BOND YIELDS

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TABLE 2

### PAPER PRICES OF AMERICAN RAILROAD BONDS, MONTHLY, JANUARY 1857—JANUARY 1879

This table is intended to aid students who wish original data on railroad bond prices in the paper ('greenback') money period. Gaps in this table occur in months when no sales were made. For identification of the bonds refer by numbers to Table 1.

With the exception of Bond Number 8, all prices in this table are 'flat'. 'Flat' prices are given because that is the form in which they were quoted during the period covered by the table. Since January 1, 1909, it has been the almost universal practice in the United States to quote bonds at 'and interest' prices. In the period from January 1857 to December 1862, inclusive, the quotations for Bond Number 8 are 'and interest' prices for one day in the month. From January 1862 to January 1866 the quotations for Bond Number 8 are 'flat'.

The 'flat' price of a bond is the actual amount of money which changes hands when the bond is sold. The 'and interest' price equals the 'flat' price less the allowance for the accrued portion of the current coupon. Except on interest dates, the 'flat' price is, of course, greater than the 'and interest' price. For a simple discussion of 'flat' and 'and interest' prices, see Justin H. Moore; *Handbook of Financial Mathematics*, pages 434 and 435.

**PRICES OF RAILROAD BONDS**  
**JAN. 1857—JAN. 1858**

No.	JAN.		FEB.		MAR.		APR.		MAY		JUNE		JULY		AUG.		SEPT.		OCT.		NOV.		DEC.		JAN.				
	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High			
1	95%	99%	95%	97%	96%	97%	97%	98%	97%	98%	98%	98%	95%	98%	94%	95%	90%	90%	71%	90%	88%	99%	95%	96%	95%	98%			
2	92%	96	95	95	97%	102	100	102	96	97	90	93	91	95	84	84	80	80	85	85	93	94%	82%	88	88	90	92%		
3	91%	92%	92	92	88%	82	81%	81	81	82	91	92	92	93%	89%	90	84	81	81	81	88	88	89	89	89	89	89	89	
4	82%	82%	81%	82%	81%	81	81	81	78	78	78%	79	78%	78	78%	70	70	62%	62%	63%	63%	75	72%	75	73%	74	74		
5	79	81	81	81	81%	82	81%	82	74	79	75	76	75%	76	72	75	55	71	60	60	64	64	64	64	65	65	65	65	
6	70	70%	71	72	72%	73	73%	75	70%	70%	72%	72%	72%	73	73	73	70%	70%	64	66	60	65	64	64	64	64	64	64	
7	80%	80%	80%	80%	80%	80	80%	80%	80%	80%	80%	80%	80%	80%	80%	80	80	80	80	81	81	82	82	82	82	82	82	82	
8	80%	80%	80%	80%	80%	80	80%	80%	80%	80%	80%	80%	80%	80%	80%	80	80	80	80	81	81	82	82	82	82	82	82	82	
9	88%	88%	88%	88%	88%	88	88%	88%	86%	86	85	85	85	85	85	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	
10	95%	98%	98%	98%	97%	97	97%	97	97%	97	95	98	95	95	95	95	95	95	95	95	90	91	95	95	95	95	95	95	
11	76	76%	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	
12	79%	80%	77%	78	76%	78%	77%	77%	77%	77%	74	75%	72%	74%	71	71	65	65	65	65	70	70	70	70	70	70	70	70	70
13	86	88%	87%	89	88%	90%	88%	89%	85	87%	84	85%	84	87%	86	87	62	84	64	80	77%	90	81	84	82%	88%	88%	88%	88%

**PRICES OF RAILROAD BONDS**  
**JAN. 1858—JAN. 1859**

No.	JAN.		FEB.		MAR.		APR.		MAY		JUNE		JULY		AUG.		SEPT.		OCT.		NOV.		DEC.		JAN.			
	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High		
1	95	98	97	98	98	100	100	101	102	102	102	103	100	101	100	101	101	102	103	103	103	104	101	101	104	104		
2	90	92	91	92	92	94	95	95	95	95	95	95	94	94	94	95	95	95	96	95	96	98	98	98	93	97	97	
3	89	89	91	93	94	94	94	94	93	93	94	94	96	96	96	97	97	97	97	97	97	98	98	98	99	96	97	
4	73	76	75	76	77	78	78	78	79	79	79	79	74	74	74	77	76	80	81	83	80	83	82	83	83	85	84	
5	65	75	72	85	81	84	84	84	82	82	82	82	86	84	84	86	86	86	86	87	87	87	87	87	88	86	84	
6	64	71	71	72	74	74	74	78	80	80	80	80	80	80	80	82	82	83	83	84	84	84	84	85	85	86	86	
7	72	74	74	79	80	80	80	80	80	80	80	80	83	83	83	83	83	84	86	86	87	87	87	87	87	87	89	
8	81	81	84	84	92	92	92	92	92	92	92	92	91	91	91	91	91	90	90	90	90	91	91	91	91	93	93	
9	70	80	81	80	80	88	88	89	84	86	86	86	85	85	87	87	87	87	87	88	89	89	90	91	91	92	92	
10	94	95	95	96	99	99	99	98	98	99	99	99	101	101	101	98	98	98	98	98	98	98	98	98	98	98	98	
11	69	69	70	70	70	72	72	75	75	75	75	75	80	80	80	82	82	86	86	87	87	87	87	87	87	87	87	
12	71	73	70	72	72	73	75	75	80	80	80	80	81	81	81	81	81	81	81	81	81	81	81	81	81	82	87	
13	82	88	88	88	89	90	90	90	90	92	92	92	89	89	89	89	89	89	89	89	89	89	89	89	89	88	88	
14	93	96	96	94	97	97	97	96	96	96	96	96	98	98	98	97	97	98	95	95	96	97	97	101	101	100	101	103
15	.....	.....	.....	.....	90	92	.....	.....	89	89	89	89	85	87	87	85	85	85	85	85	85	89	89	89	90	90	85	85

# RAILROAD BOND YIELDS

A2.

## PRICES OF RAILROAD BONDS

JAN. 1859—JAN. 1860

No.	JAN.		FEB.		MAR.		APR.		MAY		JUNE		JULY		AUG.		SEPT.		OCT.		NOV.		DEC.		JAN.				
	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High			
1	101 1/4	104 1/4	100 1/2	101 1/2	102	102 1/2	102 1/2	104	105	105	104	105	104 1/2	105	102	104	101 1/2	102	102 1/2	103 1/2	103 1/2	104	104	106	106 1/4				
2	93	97 1/4	93	94	95	96	93	95	92	95	90 1/2	93	88	89	89	89	94 1/2	95 1/2	96 1/2	97	97	95 1/2	97	98 1/2	99	99 1/2	100 1/2	100	
3	97 1/2	97 1/2	97 1/2	98	97	98	96 1/2	97	95 1/2	97	94 1/2	96	94 1/2	95 1/2	95 1/2	96 1/2	97	97	97	97	98 1/2	99	99 1/2	100	100	100	100		
4	83 3/4	84 3/4	82 1/2	83 1/2	82 1/2	85 3/4	82 1/2	85 1/2	78 1/2	84 3/4	80	81	80	81	79	81 1/2	82 1/2	82	82	82	82	82	82	78	78	80	80	78 1/2	80
5	92 1/2	95	91 1/2	92 1/2	92 1/2	95	94 1/2	95	89 1/2	91	89	90	92	92	92 1/2	94	93	93	93	94	94	91	92	92 1/2	94	93	94 1/2		
6	86 3/4	90	89 1/2	89 1/2	89	90	90	93	84 1/2	85	87	87	86 1/2	87	87	88	88 1/2	89	91	90 1/2	91	90 1/2	91	91	91	91	86 3/4	88	
7	87 1/2	89	89 1/2	90 1/2	91	93	89 1/2	89 1/2	89 1/2	89 1/2	86	86	87	88	88	88 1/2	89 1/2	91	91	91	91	91	91	86 1/2	86 1/2	86 1/2	86 1/2	86 1/2	89 1/2
8	93	93	95	95	96	96	95	95	95	95	94	94	94	94	95	95	95	97	97	97	97	97	97	95 1/2	97	97	97 1/2		
9	92 1/2	92 1/2	92 1/2	93	92 1/2	94 1/2	90	91	87 1/2	90 1/2	87	87 1/2	86 1/2	86 1/2	86 1/2	86 1/2	86 1/2	86 1/2	86 1/2	86 1/2	86 1/2	86 1/2	86 1/2	86 1/2	86 1/2	86 1/2	87		
10	101	101	101 1/2	101 1/2	101 1/2	101	101	103	101	103	100	101	98 1/2	99	99 1/2	100 1/2	100	100	100	100	100	100	100	100	100	98 1/2	100 1/2		
11	82	87	87	87	87	87 1/2	84 1/2	84 1/2	84 1/2	84 1/2	80	80	80	82 1/2	82 1/2	82	82	82 1/2	83	83 1/2	84	84 1/2	84	84	82 1/2	82 1/2			
12	85	88	86	86	86	83	85	84	85 1/2	83 1/2	86	82 1/2	84 1/2	84 1/2	84 1/2	84 1/2	81 1/2	82	82	84 1/2	83 1/2	84	84	86	86	84	86		
13	90 1/2	92	91 1/2	92	91 1/2	92 1/2	93 1/2	93	94 1/2	94 1/2	92	89	89 1/2	90	90	92	93 1/2	93	94	90 1/2	92	90 1/2	91 1/2	90 1/2	91 1/2	91 1/2			
14	103	103 1/2	99	100	101 1/2	103	103	103	103	103	98	102	100 1/2	100 1/2	99	99	98 1/2	99 1/2	99 1/2	100 1/2	101 1/2	101	101 1/2	102	102	103 1/2			
15	85	85	85	85	85	85	85	85	87	87	84	84	84	84	84	84	84	84	84	84	84	84	84	84	84	84	84		

## PRICES OF RAILROAD BONDS

JAN. 1860—JAN. 1861

No.	JAN.		FEB.		MAR.		APR.		MAY		JUNE		JULY		AUG.		SEPT.		OCT.		NOV.		DEC.		JAN.				
	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High			
1	106	106 1/2	102	103	103	103 1/2	101 1/2	103 1/2	104	107	106 1/2	107	105	110	106	106	106	106	105 1/2	106 1/2	102	106	101	102	105	105			
2	90	92	93	94	92	92	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93	95		
3	100	100	100 1/2	101	100 1/2	100 1/2	100 1/2	100 1/2	100 1/2	100 1/2	100 1/2	100 1/2	100 1/2	100 1/2	100 1/2	100 1/2	100 1/2	100 1/2	100 1/2	100 1/2	100 1/2	100 1/2	100 1/2	100 1/2	100 1/2	100 1/2	100 1/2		
4	78 1/2	80	78	82 1/2	82 1/2	85	81 1/2	82	81	83	84	85	84 1/2	84 1/2	85	86	87 1/2	87 1/2	84	84	82 1/2	83	79 1/2	81	82	84	84	84	
5	93	94 1/2	94	95	95 1/2	96	97	100 1/2	96	96 1/2	96	96 1/2	96	96 1/2	96	96 1/2	96	96 1/2	96	96 1/2	96	96 1/2	96	96 1/2	96	96 1/2	96	96 1/2	
6	81	81	89 1/2	90 1/2	90 1/2	90 1/2	92 1/2	92 1/2	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93	
7	86 1/2	89 1/2	89 1/2	90 1/2	90 1/2	92 1/2	92 1/2	92 1/2	92 1/2	92 1/2	90 1/2	92 1/2	92 1/2	92 1/2	92 1/2	92 1/2	92 1/2	92 1/2	92 1/2	92 1/2	92 1/2	92 1/2	92 1/2	92 1/2	92 1/2	92 1/2	92 1/2		
8	97 1/2	97 1/2	97	97	97	97 1/2	97 1/2	97 1/2	100	100	101	101	102 1/2	102 1/2	103	103	101 1/2	101 1/2	101 1/2	101 1/2	101 1/2	101 1/2	101	101	98	98			
9	86 1/2	87	86 1/2	88 1/2	88 1/2	88	87	88	88	89 1/2	89 1/2	89	89 1/2	89 1/2	90	90	90 1/2	90 1/2	91	91	92	92	93	93	94	94	94		
10	98 1/2	100	100 1/2	100 1/2	100 1/2	101 1/2	101	102	101 1/2	101 1/2	101	103	100 1/2	100 1/2	101 1/2	101 1/2	101 1/2	101 1/2	102 1/2	102 1/2	103 1/2	103 1/2	99 1/2	100	100	100	100	100	
11	81	82 1/2	82 1/2	84	83 1/2	85	84 1/2	86 1/2	87 1/2	86	86 1/2	86 1/2	86 1/2	86 1/2	86 1/2	86 1/2	86 1/2	86 1/2	86 1/2	86 1/2	86 1/2	86 1/2	86 1/2	86 1/2	86 1/2	86 1/2	86 1/2		
12	84	86	82	84 1/2	84	86	84 1/2	86	85 1/2	86 1/2	87	87	86 1/2	86 1/2	87	87	86 1/2	86 1/2	87	87	86 1/2	87 1/2	83	83	84	84	84	84	
13	90 1/2	91 1/2	91	92	92 1/2	92 1/2	92 1/2	93 1/2	94	91	93	93	95 1/2	94	95 1/2	95	96	96	99	97	97 1/2	97 1/2	90	94	92	91	96	96	
14	102	103 1/2	99 1/2	100 1/2	100 1/2	100 1/2	100 1/2	100 1/2	100 1/2	100 1/2	99 1/2	99 1/2	101 1/2	101 1/2	104 1/2	104 1/2	104 1/2	104 1/2	104 1/2	104 1/2	104 1/2	104 1/2	104 1/2	104 1/2	104 1/2	104 1/2	104 1/2	104 1/2	104 1/2
15	....	....	86	86	86	86	91 1/2	92	90 1/2	93	98	98	97	97	98	98	99 1/2	99 1/2	99 1/2	99 1/2	99 1/2	99 1/2	99	99	92	92	98	98	

**PRICES OF RAILROAD BONDS**  
JAN. 1861—JAN. 1862

No.	JAN.		FEB.		MAR.		APR.		MAY		JUNE		JULY		AUG.		SEPT.		OCT.		NOV.		DEC.		JAN.		
	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High															
2	99	100%	100%	101%	100	100	96	96	91%	92	95	95	94	94	92	92	94	94	93	93	95	96	97	98			
3	99	100%	100%	101%	101	102%	100%	101%	99%	100%	98%	100%	100	101	101	102	100	103	99%	100	97	98%	100	100	100%	101%	
4	82	84	82%	83	101	102%	100%	101%	80	83%	76	79	80	82	83	83	82	85	83	84	79	80	80	83	81%	82	
5	96	99	99	99%	99%	99%	100%	99%	101	95	97	95	97	96	96	97%	96	95	94	94%	93%	96%	95%	96%	99%	101%	
6	90	90%	89%	90	91	92	90	92%	85%	87	85%	89%	89%	92%	91	91	90%	91	91	91%	91	91	91%	91	91%	94	94%
7	90	90	90	91%	91	91	87	87	87	87	90	91	91	91	91	91	91	92%	92%	91	91%	91	91%	91	91%	91	91%
8	100	100	98%	98%	100	100	100	101%	101%	100	100	100	101	101%	100	100	100	100	100	98	98	99	99	98	98	98	98
9	86	88	87%	89	90%	91	84	88	82	84	83%	84%	85	86%	90	86	88	82%	84	83	85%	83%	85	84%	92		
10	100	100	100	100%	100	100	99%	100	97%	99%	97	98%	94	96	94%	96	92%	94	94%	96	97%	95	97%	94	100%		
11	80	80%	80%	81	83	83	83	83	76	78	75	77	78%	79	78%	81	81	80	80	80	80%	80	80%	80	80%	82%	
12	83	84	80%	83	84	80	83	76	76	77	80	82	84	80%	81%	81	82	79%	80%	82%	83	82%	82%	81	84		
13	91	96	96	97%	97%	97%	95	96%	92	92	92	90%	90%	92	92	93	91%	92	91%	92	90%	91%	91%	91%	95%		
14	98	103%	100	100%	102	102	100	102	100	100%	100%	101	101	102	100	101	100%	101	100	100%	101	100	100%	104%	104%		
15	88	92%	93	93%	94	99%	92	99%	93	94%	93	93	91	91	91	92	92%	92%	93%	92%	93%	95	92	98			
16	96%	99	98%	101	99	101	99	101	99%	101	97	99%	96	97%	96	96%	97	95	96%	97	97	99	99%	100%			

**PRICES OF RAILROAD BONDS**  
JAN. 1862—JAN. 1863

No.	JAN.		FEB.		MAR.		APR.		MAY		JUNE		JULY		AUG.		SEPT.		OCT.		NOV.		DEC.		JAN.		
	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High															
5	99%	101%	100	101	100	100	101%	102%	99%	103	102%	104	104%	105%	106	107	108	109	110	111	109%	110	108	109%	113%	118	
6	94	94%	98%	98%	97	98%	98	100	99%	100	100	100	100%	101%	103	103%	103%	103%	101%	110	108	108%	106%	108%	112		
7	91	96%	97%	97%	100%	100%	95	95	96%	98	98%	99	99%	99%	99	99	100%	100%	100%	100%	105	109	109	113			
8	98	98	101	101	100%	100%	100	100	100%	102	103%	103	103%	103%	103%	103%	106	106	108	108	107	107	107	107	110	110	
9	84%	92	91%	93	92%	94%	92	93%	95%	98%	98%	98	99	97	100	99%	100%	102	103%	102	107	106	107	107	107	113%	
10	97	100%	100%	100%	98%	100	100%	101%	102%	104	104%	106%	102	103	103	105	105%	105	104%	104%	107	107	107	107	107	118	
11	80	82%	85	86	85	86	86	88	93	95	94	94	94	94	91%	92%	94	94	95	100	102	104	105%	98%	101	103%	106%
12	81	84	84	84	84%	85%	88	88	91%	95	95	95	96	92	94	91	93	95	99	99	103%	103	105%	101	102%	103	107%
13	91%	95%	95	98%	95	97	95%	97%	95	95	100%	101	101	101%	102%	102%	104%	104%	106%	108	107%	108	111	111	111	116%	
14	104%	105	105%	105	102	104	103	103%	104	108	107	108%	108%	109	109	109	110	110	111	112%	113%	112	114%	115%	122	125	
15	92	98	98	100	98%	100	95%	99%	100	105%	106%	110	105	108	108	109	111	115	115	118	116	116	115	121	122	128	
16	99	100%	101%	102	99	100	100	100	102%	105	105%	106%	103	103	103	105	107	107	101	100%	102	102	102	102	106	112	
17	85	87	87	87	88	87	87	92	95	96	97%	92	95	94	95	95	97	97	100%	97%	104	104%	103%	103	104%	104%	
18	—	—	—	—	80	86	83	86%	83	90	90	92%	91%	93%	92	93%	95	97	100%	97%	104	104%	103%	103	104%	104%	
19	99	103	99%	101	99%	100%	99%	100	101	104	102%	104	104%	104%	106	104	104%	103%	106	106	109	110	110	115	120		
20	82	85%	84%	91%	80%	91%	91%	91%	92%	90%	98%	97%	101%	99%	100%	103%	103%	107	106	109	109	105%	105	105	114		
21	78	84%	83	87	85%	85%	86%	85	89	89%	98	96	99	90	93%	91%	96%	94	104	102%	104%	103	103%	103%	107	104%	115



PRICES OF RAILROAD BONDS  
JAN. 1865—JAN. 1866

No.	JAN.		FEB.		MAR.		APR.		MAY		JUNE		JULY		AUG.		SEPT.		OCT.		NOV.		DEC.		JAN.			
	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High										
8	102 1/4	105	99	103	99 1/4	99 1/2	99 1/4	99 1/2	99 1/4	99 1/2	99 1/4	100	100	94	100	94	95 1/4	93 1/4	93 1/4	91	93 1/4	94 1/4	94 1/4	94	95			
9	104 1/2	105 1/2	103	104	99	100	96 1/2	99	97	99 1/2	98	98 1/2	99 1/4	100	101	102	101 1/2	94 1/2	94 1/2	94	95	95	92	92 1/2	92 1/2			
10	105 1/2	107	106 1/2	107	101 1/2	106	101 1/2	102	102 1/2	103 1/2	103	104 1/2	103	104	105	104 1/2	104 1/2	104 1/2	99	104	98 1/2	100	99 1/2	102	94 1/2	96 1/2		
11	99	100	99 1/4	99 1/2	100	101	103	103	103	103	103	103	103	103	103	103	103	103	103	103	103	103	103	103	103	103		
12	100	101 1/2	93	97	90	96	96 1/2	98	90	89 1/4	90	88	89 1/4	90	90	88	89	88	90	90	90	90	90	88	88 1/2	85	85	
13	102	105	101 1/2	103 1/2	98 1/2	102	96	98 1/2	90	101	90	93 1/2	94	94	94	95	94	94	93 1/2	93 1/2	90 1/2	92	90 1/2	91 1/2	92	93		
14	116	116 1/2	108	108	100	100	100 1/2	102	104	105 1/2	102	106	106	106	102	102	102	102	102	102	100	103	101 1/2	101 1/2	103	103		
15	111	113 1/2	112 1/2	115	109	112	112	114	111	113	110	112	110	110	109	109	109	110 1/2	110 1/2	112	111	112	112	112 1/2	114	109	109	
16	105	108	105	109	106	107	103 1/2	103 1/2	105	105	100	100	102	104	102	102	102	102 1/2	102 1/2	103	103	103	105	106	101	101		
17	102	107	99	100 1/2	99	99	100	95	100	95	93	92 1/2	92 1/2	97	97	97	97	94	94 1/2	94	95	90	91	91	92	92	92	
18	100	103	99	99	95	100	94	94	93	93	91 1/2	92 1/2	92 1/2	93	94	94	94	95	95	90	91 1/2	86 1/2	86 1/2	88	86 1/2	89	89	
19	95	95	95	95	95	95	99	99	100	100	100	100	103	103	103	103	100	100	100	102 1/2	100	100	101	101	102 1/2	102 1/2	102 1/2	
20	95	105	103 1/2	104	104	103	103	103	100	103	98	99	96	96	97	97	97	96	96	97	97	98	94	95	94	94	96	
21	104	106	104	104	95	100	98	100	96	100	96	97	97	97	94	94	95	95	96	96	98	99	98	99	99	98	98	99
22	96	96	96	96	96	96	96	96	96	99	99	89 1/2	90	90	90	88 1/2	91	90	90	90	90	90	90	90	88	88	90	
23	105	107	100	101	98	100	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	93 1/2	94	94	94	94	
24	101	105	103 1/2	105	105	99	100	98	100	98	99	96	98	97	98 1/2	97	98 1/2	98 1/2	96	98	95	96	96	97	92	92	94 1/2	
25	107	107	108	110	100	108 1/2	100	104	100	104 1/2	100	101 1/2	100	100	103 1/2	102 1/2	103	103	105	102	105	102	103	102	103	100	100 1/2	
26	105	107	104 1/2	105	98	104	104	102	99 1/2	100	98 1/2	98 1/2	99	98	99	99	99	99	99	99	99	100 1/2	100 1/2	91	94	94 1/2	91	

PRICES OF RAILROAD BONDS  
JAN. 1866—JAN. 1867

No.	JAN.		FEB.		MAR.		APR.		MAY		JUNE		JULY		AUG.		SEPT.		OCT.		NOV.		DEC.		JAN.			
	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High		
9	92	92 1/2	91	93	93	93 1/2	92	95	94 1/2	97 1/2	93 1/2	96	95 1/2	96	97	98 1/2	98 1/2	99	96	97	97 1/2	97 1/2	98	97	97 1/2	97 1/2	97 1/2	97 1/2
10	94 1/2	96 1/2	93	96 1/2	93	95 1/2	96 1/2	100	100 1/2	100	103	100 1/2	101	98 1/2	100	98	101	101	101	102	102	102 1/2	102 1/2	99 1/2	99 1/2	99 1/2	99 1/2	
11	83 1/2	83 1/2	84	84 1/2	81 1/2	83	84	85	89	89	90	90	90	90	88	88 1/2	89	91	91	91 1/2	92	92	92	90	90	90	90	90
12	85	85	82	82	83	83	83	84	85 1/2	90	90	90	90	88 1/2	91	89	90	90	90	92 1/2	92 1/2	92 1/2	92	92	92	92	92	
13	92	92	92	93	91	92 1/2	91	91	91	94	92	93 1/2	93	98	94	94	94	95	95	96 1/2	93	95 1/2	94	95 1/2	93	94 1/2	94 1/2	
14	103	103	100	100 1/2	100	101 1/2	101	101 1/2	101	102	102	102	102	102	102	102	102	102	102	107	106 1/2	106 1/2	105 1/2	103	103	103		
15	109	109	110	110	109	109	108	108	112	112	112	112	106 1/2	109	110	110	110	110	110 1/2	111	111	113	113	111	111	114	111 1/2	
16	101	101	100	101	101	101	101	102	102	101	101	103 1/2	101	103 1/2	103	103 1/2	103	103	103	104	105	105	105	105 1/2	100 1/2	102	103	
17	91	92	90	90	87	87	87	87	91	91 1/2	91	91 1/2	92	96 1/2	98 1/2	99	99	97 1/2	95	96	95 1/2	96	97	97	97	97	97	97
18	86 1/2	89	90	90	92	92	88 1/2	90 1/2	91	91 1/2	90	91	91	91	91	90 1/2	91 1/2	91	90 1/2	90 1/2	92 1/2	92 1/2	91 1/2	91 1/2	91 1/2	92		
19	101	102 1/2	97	97	97	97	97	97	98	98	96	96	100	100	96	96	100 1/2	100 1/2	100	100	100	100	100	100	100	100	100	
20	94	96	93	95	94	95	94 1/2	96	92	94 1/2	96	95	95	95	95	95	95	95	95	95	97 1/2	97 1/2	96	96	96	96	96	96
21	94	94	94	94	94	94	94	94	94	94	94	94	94	94	94	94	94	94	94	94	94	94	94	94	94	94	94	94
23	94	94	94	94	94	94	94	94	94	94	94	94	94	94	94	94	94	94	94	94	94	94	94	94	94	94	94	94
24	92	94 1/2	93	93	96	96	94	96	97	97	97	97	97	97	97	97	97	97	97	97	97	97	97	97	97	97	97	97
25	100	100 1/2	98	100	98	99	97	100 1/2	100 1/2	101 1/2	102	100	103	101	103	102	103 1/2	97	104 1/2	104 1/2	105	102	103 1/2	101	101	101	101	
26	90 1/2	91	90 1/2	90 1/2	91 1/2	94	94	93	89	95	93	94	93 1/2	95	95	94	96 1/2	97	98 1/2	99	100	100 1/2	95 1/2	94 1/2	94 1/2	95	95	
27	90	92	87	87	85	87 1/2	87	90	89	90 1/2	90	90	90	90	90	90	90	90	90	92	93	93	93	91 1/2	94	94	94	94
28	91	92	90	94	90	90	89	90 1/2	90	90	91	90	90	90	90	90	91	91	92	92	92	91	91	91	91	91	91	91



PRICES OF RAILROAD BONDS  
 JAN. 1869—JAN. 1870

No.	JAN.		FEB.		MAR.		APR.		MAY		JUNE		JULY		AUG.		SEPT.		OCT.		NOV.		DEC.		JAN.		
	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High															
10	98	98½	98	98½	98½	98¾	99½	98½	99½	99¾	102	100½	101½	97½	98	98½	99	99	97	98½	97	98	96	100	97	97½	
11	88	88½	85½	85½	85	85½	86	86½	86½	86	85½	85½	86	86	82½	86	83½	84	84½	86	82	83½	82	83	82	83	
12	88½	88½	86	86	85	86	85	86	85	86	89½	88½	89	88	89½	86	85½	85½	83½	85	84	84½	84	84½	85½	86	
13	90	91	90½	92	91	92	90	92	92½	89	92	91	93	91	92½	92	90	91	91½	90	91	86	89½	85	86	90½	
15	109	112	111	112	111	111	110½	111	112	112	112	112	108	108	107½	108	107½	108	107½	108	111	112	107	109	112	109	
16	101½	107½	101	101½	101½	102½	102½	102½	103½	101	104	101	101	102½	102½	102½	102	102½	103	103	103	100	100	101	104	104	
17	101	107	93	95	95	95	95	95	97	97	97	97	96	96	96	96	96	96	96	96	92	92½	92	96	98	95	
18	85	87	86½	86½	86½	86½	86½	86½	87½	85	85½	88	88	88	88	89½	89½	90½	90½	86½	86½	87	87	87	87	87	
19	90	97½	97	97½	98	98	98	98	98	98	98	98	100	100	96	97	99	99	99	99	100	100	99	99	99	99	99
20	95	97½	96½	97	93½	99	98½	99	96	96	99½	99	98	99	99	99	99	99	99	99	99	99	99	99	99	99	
21	99½	100	99	99½	99½	99½	99½	99	99	99½	100½	100½	102	98	98	99	99	99	99½	99½	98½	99	95½	96	96½	97½	
24	90½	100	100	101	101	101	100	102	101½	101½	104	104	100	100	100	100	100	100	100	100	100	100	100	97	98		
25	99½	99½	100½	100½	101½	101½	102½	102	102½	103	105½	104	104	104	100½	100½	102½	101	102	98½	100	101	101	101	102½		
26	92	93½	93	93½	92	93½	93	93½	94	91½	93½	93	93	93	93	93	93	94	95	95	96	93	93	93½	92½		
27	93	95	91½	92	90	91	91	91	92	92	91½	91	92	92	89	89	89	89	89	89	88	88	88	87½	87	89	90½
28	91½	93	93	93	93	93	93½	93½	93½	92½	94	95	95	92½	92½	91½	91½	92	95	95	92½	92½	93	92	92	92	
29	90	91	89	91	90	91	90	90½	90	90½	90	90½	90	89	89	91	91½	91	90	90	91	90	84	86	84	90	
30	96	97	97	97	97½	97½	100½	99	100	96½	100	99	99½	98	98	98	98	98	99½	99	100	95½	96½	95	97	96½	
31	102	102	100	102	101½	102	100	100	100	98	99½	98	98	98	98	98	98	98	98	98	98	98	95	95	95		
32	103	106	102½	103½	102	103	102	103	103	105	104½	105	104	104	105½	105½	101	101	100	100	100	101	101	103	103		
33	103	106	92½	94	93	94	93½	94	94½	95	94½	92½	94	94	94	94	94	94	94	94	94	94	94	94	93½		

 PRICES OF RAILROAD BONDS  
 JAN. 1870—JAN. 1871

No.	JAN.		FEB.		MAR.		APR.		MAY		JUNE		JULY		AUG.		SEPT.		OCT.		NOV.		DEC.		JAN.	
	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High														
11	82	83	83	86½	87½	87½	88	88½	88½	92½	89	92½	90	90	92	92	92	92	92	92	92	92	92	92	93	94
12	85½	86	83	83½	86½	86½	87	87	89	89	91	91	93	94	95	93½	93½	92	92	92	94	92	93	93	97	
13	86	90½	88½	91	91	92	92½	93½	93	92½	93½	93	93	95	90½	90½	91	91	91	91½	90	90	91	92	92	
15	107	109	110	111	111½	112	113	113	114	114	113½	114	110	111	110	111	111	111	111	111	112	112	113	113	110	
16	101	104	104	105	105	105	104	106	105	105½	103	106	100	100	101	102	104	104	104	104	104	104	104	103	103	
17	95	95	96½	97	96	96	97	97	97½	97½	100	100	100	100	102½	102½	96	97	97	98	98	98	98	98	98	
18	88	90	92	92	88	89	90	91	91½	91½	92	92	92	92	92	92	92	92	92	92	92	92	92	91½	93	
19	99½	101	101	99	99	99	98	98	99	99½	100	100	103	103	103½	103½	99	99	99	99	100	100	100	100	100	
20	96½	97½	97	102	99½	102	101	102	102	102	100	100	99½	100	99½	100	98	99	99	99	99	98	97½	98	100	
21	93	93	96	98	100½	103	101	101	101	103	103	103	103	103	103	103	103	103	103	103	103	103	103	103	104	
24	97	98	102	102	102½	103	101	102½	102½	103	101	102	101	101	101	102	104	104	104	104	102	102	102	102	102	
25	101	102½	103	105	105	106½	104	105	104	105	103	105	102	102	102	102	102	102	102	102	102	102	102	102	102	
26	92½	93	92½	94	93½	95	95	97½	93½	93½	94	94	95	95	94½	96	95	96	96	96	95	95	95	95	96	96
27	90½	90½	90½	92	92	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93	91	92½	94½	94	94	
28	92	92	94	94	94½	95	95	95	95	96	97	97	94	95	95	98	98	98	98	98	98	95	95	95	95	
29	84	84	89	89	90½	90	91	91	91½	91½	101	101	100	100	100	100	99	99	99	99	100	100	100	100	102	
30	96½	100	100	101	101	101	102	103	100	101	100	100	101	101	101	101	100	101	101	102	101	100	99½	100	100	
31	92	92	90	98	98	98	98	98	98	98	99	99	99	99	99	99	99	99	99	99	100	100	97½	95	95	
32	103	106	103	103	103½	105	104	105	105½	105½	107	107	108	108	102	103	104	104	105	104	105	105	105½	106½		
33	93½	93½	93½	96	94	94	94	94	94	94	97	97	95	95	95	96	97	97	98	98	98	98	98	98	98	
34	97½	98	98	99	99	99	99	99	99	99	101	102½	102	103	103	100½	100½	101	101	102	102	102	102	102	102	

PRICES OF RAILROAD BONDS  
JAN. 1871—JAN. 1872

No.	JAN.		FEB.		MAR.		APR.		MAY		JUNE		JULY		AUG.		SEPT.		OCT.		NOV.		DEC.		JAN.					
	Low	High																												
11	93	94	91	91	94	94	93 1/4	93 1/4	93	93 1/4	88 1/2	88 1/2	88 1/2	90	90	90	90	90	90	90	90	91	87 1/2	88 1/2	89	90				
12	93 1/2	97	91 1/4	93	92 1/4	94	93 1/4	93 1/4	92 1/2	93 1/4	93 1/2	93 1/2	93 1/2	94	93	93 1/4	93 1/4	92 1/2	93 1/4	94 1/2	92 1/2	90	91	91 1/2	91	93	93 1/4			
13	90	92	90 1/2	92	91 1/4	94 1/2	93	94	91	93 1/4	91 1/2	91 1/2	93	91 1/2	93	91 1/2	92 1/2	93 1/4	94 1/2	92 1/2	94	90	91 1/2	91	93	96 1/4				
15	109	110	109 1/2	111	112 1/2	113	112 1/2	113	113 1/2	114 1/2	110 1/2	110 1/2	110 1/2	111	112	112	112 1/2	110 1/2	112	110 1/2	110 1/2	111 1/2	111 1/2	111 1/2	111 1/2	111 1/2	115			
16	102 1/2	103	103	103	102 1/2	102 1/2	102 1/2	102 1/2	102 1/2	102 1/2	104	104	103	103	104	104 1/2	104	104 1/2	104	104 1/2	104 1/2	104 1/2	104 1/2	104 1/2	104 1/2	106 1/2	106 1/2			
17	98 1/2	98 1/2	99	99	98 1/2	98 1/2	98 1/2	98 1/2	98 1/2	98 1/2	99	99	99	99	100	100	101	100	100	100	100	101	87 1/2	88 1/2	89	88 1/2	89 1/2	92 1/2		
18	91 1/4	93	94	94	94 1/4	95	92 1/2	92 1/2	91 1/2	92 1/2	92 1/2	92 1/2	92 1/2	93	92 1/2	92 1/2	92 1/2	92 1/2	92 1/2	92 1/2	92 1/2	92 1/2	92 1/2	92 1/2	92 1/2	92 1/2	92 1/2	92 1/2	92 1/2	
19	100	100	98 1/2	98 1/2	101	100 1/2	102 1/2	101 1/2	104	100 1/2	101 1/2	100 1/2	100 1/2	102 1/2	102 1/2	102 1/2	102 1/2	102 1/2	102 1/2	102 1/2	102 1/2	102 1/2	102 1/2	102 1/2	102 1/2	102 1/2	102 1/2	105		
20	98 1/2	100	99 1/2	101	100 1/2	102 1/2	101	102	102	102 1/2	102 1/2	103	103	104	104	102 1/2	102 1/2	102 1/2	102 1/2	102 1/2	102 1/2	102 1/2	102 1/2	102 1/2	102 1/2	103 1/2	103 1/2	103 1/2	103 1/2	
21	99	100 1/2	99	101	100	102	102	102	102	102 1/2	102 1/2	103	103	104	104	102 1/2	102 1/2	102 1/2	102 1/2	102 1/2	102 1/2	102 1/2	102 1/2	102 1/2	102 1/2	102 1/2	103 1/2	103 1/2	105	
24	99 1/4	99 1/4	101	101	102 1/2	101	102	102	102	102 1/2	102 1/2	103	103	104	104	102 1/2	102 1/2	102 1/2	102 1/2	102 1/2	102 1/2	102 1/2	102 1/2	102 1/2	102 1/2	102 1/2	102 1/2	102 1/2	102 1/2	
25	100	102	103	103	102 1/2	103	103	103	104 1/2	105	105	105 1/2	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106		
26	94	96 1/2	95 1/2	96 1/2	95 1/2	96	96	96 1/2	93 1/4	96	95	95	95	96	95 1/2	96	95 1/2	96	95 1/2	96	95 1/2	96	95 1/2	96	95 1/2	96	95 1/2	96	95 1/2	
27	94	94 1/2	94 1/2	94 1/2	94 1/2	93	93 1/2	94 1/2	94 1/2	94 1/2	95 1/2	95 1/2	95 1/2	95 1/2	95 1/2	95 1/2	95 1/2	95 1/2	95 1/2	95 1/2	95 1/2	95 1/2	95 1/2	95 1/2	95 1/2	95 1/2	95 1/2			
28	95	95	96	97	97	96	96	96	96	96	99 1/2	100	100	100	102 1/2	100	99 1/2	99 1/2	99 1/2	99 1/2	100	99 1/2	99 1/2	99 1/2	99 1/2	99 1/2	99 1/2	99 1/2	99 1/2	
29	88	88	89	92	92	92	92	92	92	92	92	92	92	92	92	92	91	91	91	91	91	91	91	91	91	91	91	91 1/2		
30	100	102	102	102	102 1/2	103	103	103	103	104 1/2	104	104	104	104	104	104	104	104	104	104	104	104	104	104	104	104	104			
31	95	98	95	99	98 1/2	98 1/2	99	99	100 1/2	99 1/2	100 1/2	100 1/2	100 1/2	100 1/2	100 1/2	100 1/2	101 1/2	101 1/2	101 1/2	101 1/2	101 1/2	101 1/2	101 1/2	101 1/2	101 1/2	101 1/2				
32	105 1/2	106 1/2	102 1/2	104	103 1/2	105	105	105	106 1/2	106 1/2	107 1/2	108 1/2	108 1/2	108 1/2	108 1/2	109	106 1/2	108 1/2	109	105 1/2	105 1/2	105 1/2	105 1/2	105 1/2	105 1/2	105 1/2	105 1/2			
33	94	94 1/2	94 1/2	94 1/2	94 1/2	94 1/2	94 1/2	94 1/2	94 1/2	94 1/2	95 1/2	95 1/2	95 1/2	95 1/2	95 1/2	95 1/2	95 1/2	95 1/2	95 1/2	95 1/2	95 1/2	95 1/2	95 1/2	95 1/2	95 1/2	95 1/2	95 1/2			
34	105 1/2	108 1/2	103 1/2	105	105	105	104 1/2	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105		
35	94	95	93 1/2	94 1/2	94 1/2	93 1/2	93 1/2	93 1/2	93 1/2	93 1/2	93 1/2	93 1/2	93 1/2	93 1/2	93 1/2	93 1/2	93 1/2	93 1/2	93 1/2	93 1/2	93 1/2	93 1/2	93 1/2	93 1/2	93 1/2	93 1/2	93 1/2	93 1/2		
36	92	95	94	94 1/2	94	96	95	96	96	96	96	96	96	96	96	96	96	96	96	96	96	96	96	96	96	96	96	96		
37	93	96	96	96	97	99	94 1/2	95	95 1/2	95 1/2	96 1/2	96 1/2	96 1/2	96 1/2	96 1/2	96 1/2	96 1/2	96 1/2	96 1/2	96 1/2	96 1/2	96 1/2	96 1/2	96 1/2	96 1/2	96 1/2	96 1/2	96 1/2		
38	101	102	101 1/2	103	101	103	102 1/2	102 1/2	102 1/2	102 1/2	102 1/2	102 1/2	102 1/2	102 1/2	102 1/2	102 1/2	102 1/2	102 1/2	102 1/2	102 1/2	102 1/2	102 1/2	102 1/2	102 1/2	102 1/2	102 1/2	102 1/2	102 1/2		
39	102	103 1/2	100 1/2	104 1/2	100 1/2	101 1/2	101	103	104 1/2	105 1/2	105 1/2	105 1/2	105 1/2	106 1/2	106 1/2	106 1/2	106 1/2	106 1/2	106 1/2	106 1/2	106 1/2	106 1/2	106 1/2	106 1/2	106 1/2	106 1/2	106 1/2	106 1/2	106 1/2	
40	92	95 1/2	93	94 1/2	94 1/2	95	95 1/2	97	95	95	98	96	96	99	97 1/2	97 1/2	97 1/2	97 1/2	97 1/2	97 1/2	97 1/2	97 1/2	97 1/2	97 1/2	97 1/2	97 1/2	97 1/2	97 1/2	97 1/2	97 1/2

RAILROAD BOND YIELDS







TABLE 3

YIELDS OF AMERICAN RAILROAD BONDS, MONTHLY,  
JANUARY 1857—JANUARY 1936

This table gives for each month the yield of each bond if held to maturity. The yields are based on the assumption that each bond is bought at the middle of the month and costs the arithmetic average of the highest and lowest prices of the month. The italicised yields are not based on actual price quotations but are interpolated. For a more complete description of the bonds used in this table see Table 1.

This is a 'currency' or 'dollar' yield table. In other words all calculations have been based on the assumption that the buyers and sellers were interested only in legal tender without reference to its gold, 'commodity', or other exchange value. For example, if on Jan. 15th, 1863, an individual bought for \$1000 in greenbacks a one thousand dollar 6% bond maturing in exactly ten years and received as interest \$30 in greenbacks every 6 months until maturity and \$1030 in greenbacks at maturity, he would consider that he had received 6% on his investment throughout the ten years without any reference to how many ounces of gold he could have bought with the original 1000 greenback dollars or with any or all of the greenback interest payments or the 1030 greenback dollars received January 15, 1873.

The yields in this table therefore correspond to those which would be obtained by entering an ordinary bond yield table with the dollar (or 'greenback') purchase price. This was, of course, the form in which the prices were actually quoted throughout the period.

YIELDS OF RAILROAD BONDS  
JAN. 1857—JAN. 1858

Ref. No.	Name of Bond	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
1	Hudson River RR 1st M 7s 1869.....	7.72	7.49	7.48	7.54	7.52	7.58	7.86	7.74	8.50	10.15	8.15	7.99	7.92
2	Chicago & Rock Is RR 1st M 7s 1870.....	7.83	7.69	7.18	7.10	7.73	8.47	8.13	8.42	9.33	10.08	8.65	8.15	8.18
3	Lehigh Coal & Nav Co gen M 6s 1870.....	6.77	6.79	6.85	6.92	6.82	6.83	6.67	7.01	7.67	7.88	7.85	7.25	7.05
4	Phila & Reading RR 2nd M 6s 1870.....	8.47	8.59	8.78	8.87	8.88	8.86	9.12	9.27	10.81	11.84	10.63	10.16	10.01
5	New York & Harlem RR 1st M 7s 1873.....	9.64	9.55	9.54	9.64	9.80	10.27	10.32	10.80	12.95	13.32	11.93	11.85	11.32
6	Lehigh Valley RR 1st M 6s 1873.....	9.84	9.76	9.71	9.50	9.65	9.46	9.52	9.57	10.11	11.14	11.17	10.80	10.38
7	Morris Canal & B Co 1st M 6s 1876.....	9.35	9.28	9.29	9.33	9.41	9.47	9.57	9.58	10.32	10.99	10.14	9.25	9.28
8	Eastern RR (Mass) 6s 1874.....	8.09	8.09	8.16	8.10	8.11	8.18	8.19	8.06	7.94	8.47	8.48	8.15	8.08
9	Pennsylvania RR 2nd M 6s 1875.....	7.33	7.24	7.41	7.39	7.51	7.68	7.75	7.76	7.99	9.09	9.20	8.93	8.44
10	Pennsylvania RR 1st M 6s 1880.....	6.27	6.17	6.27	6.38	6.40	6.52	6.27	6.10	6.53	7.29	7.04	6.66	6.48
11	Camden & Amboy 6s Jan 1889.....	8.18	8.21	8.31	8.33	8.38	8.70	8.90	9.04	9.78	9.95	10.09	9.60	9.08
12	Camden & Amboy 6s 1883.....	8.09	8.04	8.16	8.29	8.31	8.68	8.89	8.90	9.85	10.24	9.73	9.29	9.11
13	N Y C RR debt certificates 6s 1883.....	7.18	7.13	7.05	7.18	7.18	7.37	7.34	7.32	8.90	9.11	7.44	7.63	7.38

YIELDS OF RAILROAD BONDS  
JAN. 1858—JAN. 1859

Ref. No.	Name of Bond	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
1	Hudson River RR 1st M 7s 1869.....	7.92	7.34	7.53	7.47	7.17	7.05	7.06	6.97	7.03	6.96	6.82	6.86	7.05
2	Chicago & Rock Is R R 1st M 7s 1870.....	8.18	8.12	7.86	7.85	7.73	7.64	7.81	7.77	7.82	7.97	7.93	7.67	7.89
3	Lehigh Coal & Nav Co gen M 6s 1870.....	7.05	6.73	6.74	6.69	6.74	6.34	6.32	6.33	6.43	6.41	6.31	6.27	6.39
4	Phila & Reading RR 2nd M 6s 1870.....	10.01	9.77	9.52	9.89	9.81	9.88	9.76	9.37	8.89	8.57	8.48	8.37	8.47
5	New York & Harlem RR 1st M 7s 1873.....	11.32	9.62	9.50	9.47	9.34	9.44	9.17	9.20	9.18	8.63	8.55	8.52	7.92
6	Lehigh Valley RR 1st M 6s 1873.....	10.38	9.66	9.23	8.84	8.47	8.31	8.40	8.26	8.22	7.82	7.49	7.52	7.46
7	Morris Canal & B Co 1st M 6s 1876.....	9.28	8.89	8.41	8.29	8.25	8.12	8.02	7.96	7.63	7.37	7.32	7.31	7.39
8	Eastern RR (Mass) 6s 1874.....	8.08	7.73	6.81	6.81	6.86	6.65	6.81	6.93	7.04	7.04	6.66	6.61	6.72
9	Pennsylvania RR 2nd M 6s 1875.....	8.44	7.79	7.48	7.55	7.60	7.58	7.54	7.48	7.18	7.01	7.04	6.95	6.94
10	Pennsylvania RR 1st M 6s 1880.....	6.48	6.44	6.18	6.28	6.23	6.14	6.11	6.15	6.10	5.98	5.93	5.92	5.94
11	Camden & Amboy 6s Jan 1889.....	9.08	8.98	8.63	8.20	7.96	8.06	7.17	7.95	7.68	7.36	7.38	7.53	7.34
12	Camden & Amboy 6s 1883.....	9.11	8.94	8.59	8.25	7.95	8.16	8.45	7.96	7.58	7.38	7.43	7.40	7.45
13	N Y C RR debt certificates 6s 1883.....	7.38	7.08	6.99	6.95	7.02	6.92	7.07	7.05	7.00	6.77	6.82	6.83	6.83
14	N Y C RR for debts assumed 7s 1876.....	7.86	7.47	7.35	7.51	7.50	7.57	7.56	7.54	7.55	7.18	7.08	7.19	7.00
15	Chic Burl & Quincy 1st M 8s 1883.....	10.00	9.49	9.05	9.23	9.38	9.47	9.58	9.56	9.81	9.64	9.53	9.45	9.66

**YIELDS OF RAILROAD BONDS**  
JAN. 1859—JAN. 1860

Ref. No.	Name of Bond	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
1	Hudson River RR 1st M 7s 1869.....	7.05	6.89	6.81	6.74	6.58	6.73	6.79	6.61	6.88	6.84	6.79	6.84	6.58
2	Chicago & Rock Is RR 1st M 7s 1870.....	7.89	7.97	7.78	8.07	8.24	8.60	8.69	8.66	8.01	8.40	8.30	8.29	8.30
3	Lehigh Coal & Nav Co gen M 6s 1870.....	6.39	6.43	6.53	6.52	6.61	6.89	6.72	6.61	6.60	6.32	6.21	6.09	
4	Phila & Reading RR 2nd M 6s 1870.....	8.47	8.70	8.67	8.30	8.73	9.03	9.13	9.28	9.14	9.32	9.50	9.25	9.50
5	New York & Harlem RR 1st M 7s 1873.....	7.92	8.21	8.06	8.00	8.22	8.41	8.28	8.20	7.99	8.19	8.09	7.93	7.97
6	Lehigh Valley RR 1st M 6s 1873.....	7.46	7.36	7.46	7.28	7.83	7.61	7.73	7.68	7.44	7.40	7.53	7.64	7.59
7	Morris Canal & B Co 1st M 6s 1876.....	7.39	7.23	7.08	7.06	7.12	7.60	7.50	7.48	7.32	7.34	7.52	7.57	7.45
8	Eastern RR (Mass) 6s 1874.....	6.72	6.51	6.40	6.51	6.51	6.62	6.62	6.52	6.30	6.31	6.47	6.31	6.26
9	Pennsylvania RR 2nd M 6s 1875.....	6.94	6.97	6.94	7.01	7.27	7.52	7.62	7.63	7.43	7.54	7.53	7.60	7.67
10	Pennsylvania RR 1st M 6s 1880.....	5.94	5.95	6.00	5.98	6.02	6.19	6.13	6.07	6.11	6.15	6.19	5.98	6.05
11	Camden & Amboy 6s Jan 1889.....	7.34	7.13	7.43	7.47	7.63	7.75	7.54	7.65	7.58	7.46	7.59	7.60	7.63
12	Camden & Amboy 6s 1883.....	7.45	7.21	7.51	7.48	7.54	7.76	7.71	7.72	7.59	7.54	7.71	7.81	7.64
13	N Y C RR debt certificates 6s 1883.....	6.83	6.84	6.85	6.76	6.72	6.94	7.01	6.94	6.79	6.78	6.77	6.81	6.89
14	N Y C RR for debts assumed 7s 1876.....	7.00	7.08	6.86	6.85	7.08	7.27	7.31	7.13	7.19	7.07	7.11	7.08	7.04
15	Chic Burl & Quincy 1st M 8s 1883.....	9.66	9.74	9.82	9.79	9.74	9.84	9.80	9.56	9.22	9.34	9.45	9.52	9.00

**YIELDS OF RAILROAD BONDS**  
JAN. 1860—JAN. 1861

Ref. No.	Name of Bond	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
1	Hudson River RR 1st M 7s 1869.....	6.58	6.67	6.65	6.82	6.48	6.34	6.35	6.12	6.20	6.27	6.69	7.19	6.71
2	Chicago & Rock Is RR 1st M 7s 1870.....	8.30	8.04	8.33	8.28	7.01	7.61	7.38	7.39	7.62	7.86	8.43	8.71	8.08
3	Lehigh Coal & Nav Co gen M 6s 1870.....	6.09	6.05	6.13	6.09	6.08	6.18	6.01	6.08	6.01	5.91	6.08	6.32	6.10
4	Phila & Reading RR 2nd M 6s 1870.....	9.50	9.44	8.88	8.82	8.89	8.54	8.68	8.60	8.38	8.52	8.85	9.45	9.05
5	New York & Harlem RR 1st M 7s 1873.....	7.97	7.93	7.86	7.55	7.28	7.19	7.23	7.42	7.59	7.55	7.90	8.09	7.50
6	Lehigh Valley RR 1st M 6s 1873.....	7.59	7.42	7.24	7.13	7.04	6.80	6.73	6.76	6.77	6.75	7.27	7.66	7.38
7	Morris Canal & B Co 1st M 6s 1876.....	7.45	7.25	7.10	6.97	6.93	6.96	6.69	6.75	6.77	6.76	7.16	7.47	7.28
8	Eastern RR (Mass) 6s 1874.....	6.20	6.31	6.31	6.26	6.00	5.89	5.73	5.68	5.81	5.86	5.88	6.21	6.00
9	Pennsylvania RR 2nd M 6s 1875.....	7.67	7.66	7.42	7.42	7.27	7.26	7.36	7.22	7.10	7.20	7.39	7.78	7.72
10	Pennsylvania RR 1st M 6s 1880.....	6.05	6.06	6.05	6.02	6.08	6.07	6.01	5.92	5.93	5.90	6.19	6.34	6.02
11	Camden & Amboy 6s Jan 1889.....	7.63	7.51	7.46	7.39	7.27	7.16	7.19	7.22	7.24	7.32	7.57	8.10	7.81
12	Camden & Amboy 6s 1883.....	7.64	7.57	7.44	7.47	7.15	7.19	7.20	7.22	7.27	7.31	7.75	8.00	7.84
13	N Y C RR debt certificates 6s 1883.....	6.89	6.88	6.83	6.78	6.72	6.57	6.56	6.53	6.40	6.46	6.72	6.82	6.67
14	N Y C RR for debts assumed 7s 1876.....	7.04	7.02	7.06	7.00	6.89	6.83	6.85	6.81	6.77	6.75	7.05	7.15	7.28
15	Chic Burl & Quincy 1st M 8s 1883.....	9.60	9.63	9.72	9.12	9.07	8.57	8.33	8.20	8.27	8.45	8.94	9.42	9.06

RAILROAD BOND YIELDS

**YIELDS OF RAILROAD BONDS**  
JAN. 1861—JAN. 1862

Ref. No.	Name of Bond	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan:
2	Chicago & Rock Is RR 1st M 7s 1870..	8.08	7.64	7.19	7.91	8.70	8.28	7.99	8.17	8.50	8.28	8.54	8.23	7.43
3	Lehigh Coal & Nav Co gen M 6s 1870..	6.10	6.01	5.99	5.97	6.17	6.33	6.01	5.93	5.93	6.10	6.52	6.38	5.89
4	Phila & Reading RR 2nd M 6s 1870..	9.05	9.19	8.93	8.87	9.98	9.41	9.13	9.19	9.30	9.61	9.36	9.42	8.52
5	New York & Harlem RR 1st M 7s 1873..	7.50	7.35	7.33	7.37	7.55	7.63	7.61	7.66	8.20	7.86	7.71	7.63	7.12
6	Lehigh Valley RR 1st M 6s 1873..	7.38	7.49	7.34	7.43	7.81	7.72	7.32	7.37	7.47	7.51	7.26	7.19	6.91
7	Morris Canal & B Co 1st M 6s 1876..	7.28	7.25	7.15	7.27	7.54	7.42	7.18	7.26	7.17	7.21	7.06	7.05	6.89
8	Eastern RR (Mass) 6s 1874..	6.00	6.15	6.00	5.83	6.00	5.85	6.00	6.00	6.00	6.22	6.11	6.22	6.22
9	Pennsylvania RR 2nd M 6s 1875..	7.72	7.62	7.36	7.68	8.15	8.11	7.91	7.64	7.90	8.07	8.03	8.10	7.64
10	Pennsylvania RR 1st M 6s 1880..	6.02	6.06	6.12	6.18	6.35	6.44	6.47	6.51	6.73	6.68	6.52	6.62	6.14
11	Camden & Amboy 6s Jan 1889..	7.81	7.84	7.73	7.74	8.40	8.20	7.97	7.93	7.85	8.01	8.04	8.03	7.73
12	Camden & Amboy 6s 1883..	7.84	7.91	7.63	7.91	8.64	8.39	7.91	7.88	7.87	8.10	7.84	7.93	7.99
13	N Y C RR debt certificates 6s 1883..	6.67	6.43	6.52	6.61	6.73	6.91	6.55	6.81	6.92	6.99	6.82	6.86	6.69
14	N Y C RR for debts assumed 7s 1876..	7.28	7.00	6.88	7.05	7.20	7.21	7.19	6.98	7.02	7.12	7.04	7.10	6.87
15	Chic Burl & Quincy 1st M 8s 1883..	9.06	8.79	9.48	8.68	8.99	9.14	8.99	8.93	9.00	9.00	9.06	9.00	8.56
16	Hudson River RR 2d M 7s 1885..	7.25	7.13	7.16	7.21	7.25	7.32	7.35	7.43	7.48	7.59	7.54	7.44	7.06

**YIELDS OF RAILROAD BONDS**  
JAN. 1862—JAN. 1863

Ref. No.	Name of Bond	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
5	New York & Harlem RR 1st M 7s 1873..	7.12	7.20	7.35	7.17	6.88	6.69	6.54	6.41	6.23	6.04	5.78	5.95	5.17
6	Lehigh Valley RR 1st M 6s 1873..	6.91	6.42	6.58	6.48	6.04	6.10	6.05	5.83	5.84	5.64	5.00	5.18	4.87
7	Morris Canal & Co 1st M 6s 1876..	6.89	6.50	6.63	6.57	6.39	6.26	6.27	6.14	5.97	5.73	5.57	5.67	5.03
8	Eastern RR (Mass) 6s 1874..	6.22	5.88	5.93	6.00	5.93	5.65	5.59	5.58	5.31	5.09	4.76	4.87	4.86
9	Pennsylvania RR 2nd M 6s 1875..	7.64	7.19	7.09	6.87	6.43	6.32	6.38	6.26	5.99	5.53	5.36	5.49	5.07
10	Pennsylvania RR 1st M 6s 1880..	6.14	6.06	6.18	6.10	5.90	5.75	5.80	5.72	5.47	5.12	5.22	5.36	4.84
11	Camden & Amboy 6s Jan 1889..	7.73	7.33	7.39	7.29	6.70	6.47	6.71	6.74	6.58	6.08	5.83	6.02	5.62
12	Camden & Amboy 6s 1883..	7.99	7.55	7.49	7.24	6.77	6.61	6.88	6.75	6.33	6.00	5.77	6.06	5.79
13	N Y C RR debt certificates 6s 1883..	6.69	6.44	6.55	6.56	6.22	6.02	5.99	5.86	5.73	5.49	5.51	5.30	5.00
14	N Y C RR for debts assumed 7s 1876..	6.87	6.47	6.77	6.81	6.58	6.44	6.40	5.98	5.84	5.74	5.83	5.68	4.93
15	Chic Burl & Quincy 1st M 8s 1883..	8.56	8.20	8.25	8.48	8.01	7.56	7.42	7.27	6.93	6.70	6.80	6.68	6.01
16	Hudson River RR 2d M 7s 1885..	7.06	6.95	7.20	7.21	6.94	6.77	6.79	6.58	6.64	6.57	6.16	6.06	5.41
17	Chic Nor West Ry 1st M 7s 1885..	8.72	8.29	8.30	8.41	7.80	7.54	7.91	7.54	7.26	7.04	7.00	7.06	6.51
18	Philadelphia & Erie 1st M 6s 1881..	8.02	7.97	7.84	7.35	6.90	6.84	6.87	6.80	6.36	5.94	5.81	5.86	5.52
19	Gal & Chi U RR 1st M 7s 1882..	7.21	7.00	7.10	7.15	6.96	6.94	6.81	6.65	6.63	6.58	6.32	6.11	5.56
20	Mich So & Nor Indiana 1st M 7s 1885..	8.79	8.38	8.17	8.10	7.55	7.13	7.16	7.07	6.82	6.64	6.70	6.79	6.31
21	Cleveland & Toledo 1st M 7s 1885..	8.95	8.57	8.53	8.49	7.84	7.53	7.81	7.66	7.13	6.87	6.93	6.82	6.20

## RAILROAD BOND YIELDS

A37

### YIELDS OF RAILROAD BONDS

JAN. 1863-JAN. 1864

Name of Bond	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
1 New York & Harlem RR 1st M 7s 1873.....	5.17	4.96	5.28	5.75	5.54	5.38	5.38	5.70	5.70	5.74	5.84	5.88	6.01
Lehigh Valley RR 1st M 6s 1873.....	4.87	4.41	4.57	4.86	4.93	4.99	5.04	4.99	4.90	5.16	5.35	5.54	
Morris Canal & B Co 1st M 6s 1876.....	5.03	4.98	5.02	5.32	5.28	5.32	5.22	5.15	5.35	5.41	5.52	5.60	5.68
Eastern RR (Mass) 6s 1874.....	4.86	4.69	4.63	4.73	4.83	4.72	4.71	5.15	4.97	5.06	5.42	5.55	5.61
Pennsylvania RR 2nd M 6s 1875.....	5.07	4.65	4.70	5.09	5.17	5.17	5.27	5.50	5.36	5.35	5.35	5.44	5.49
Pennsylvania RR 1st M 6s 1880.....	4.84	4.58	4.72	4.91	4.91	5.02	5.06	5.26	5.13	5.13	5.32	5.32	5.36
Camden & Amboy 6s Jan 1889.....	5.62	5.63	5.70	5.87	5.81	5.69	5.75	5.67	5.72	5.76	5.78	5.85	5.98
Camden & Amboy 6s 1883.....	5.79	5.60	5.61	5.83	5.70	5.74	5.81	5.60	5.80	5.76	5.89	5.96	5.96
N Y C RR debt certificates 6s 1883.....	5.00	4.71	5.14	5.25	5.22	5.40	5.62	5.58	5.64	5.43	5.47	5.60	5.67
N Y C RR for debts assumed 7s 1876.....	4.93	4.71	4.91	5.17	5.04	5.55	5.56	5.31	5.46	5.40	5.27	5.36	5.41
Chic Burl & Quincy 1st M 8s 1883.....	6.01	5.55	5.70	6.01	6.45	6.35	6.29	6.25	6.13	6.14	6.31	6.22	6.37
Hudson River RR 2d M 7s 1885.....	5.41	5.34	5.51	5.69	5.88	5.65	5.45	5.56	5.60	5.64	5.61	5.66	5.80
Chic & Nor West Ry 1st M 7s 1883.....	6.51	6.47	6.21	6.55	6.66	6.67	6.78	6.92	6.82	6.68	6.92	6.88	6.94
Philadelphia & Erie 1st M 6s 1881.....	5.52	5.35	5.33	5.62	5.30	5.39	5.75	5.76	5.79	5.62	5.67	5.86	5.89
Gal & Chi U RR 1st M 7s 1882.....	5.56	5.65	5.74	5.72	5.93	6.04	6.19	6.02	5.88	5.82	5.95	6.05	6.20
Mich So & Nor Indiana 1st M 7s 1885.....	6.31	6.11	6.20	6.20	6.12	6.25	6.49	6.37	6.22	6.14	6.24	6.33	6.44
Cleveland & Toledo 1st M 7s 1885.....	6.20	6.12	6.23	6.36	6.18	6.32	6.47	6.17	6.06	6.07	6.17	6.34	6.37
Conn & Pass Rivers RR 1st M 6s 1876.....	5.42	5.48	5.47	5.76	5.85	5.82	5.81	5.81	5.85	5.88	5.86	5.92	5.97
Buffalo NY & Erie 1st M 7s 1877.....	6.62	6.26	6.10	6.32	6.09	6.22	6.12	6.40	6.31	5.90	6.37	6.63	6.67
Chicago & Alton 1st M 7s 1893.....	6.63	6.34	6.29	6.51	6.50	6.62	6.71	6.83	6.88	6.85	6.89	6.95	7.27
Pitts Ft Wayne & Chic 1st M 7s 1912.....	6.15	5.94	6.00	6.58	6.43	6.65	6.69	6.58	6.62	6.45	6.53	6.69	6.64

## APPENDIX

**YIELDS OF RAILROAD BONDS**  
JAN. 1864—JAN. 1865

Ref. No.	Name of Bond	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
5	New York & Harlem RR 1st M 7s 1873.....	6.01	6.06	5.79	5.26	5.43	5.59	4.66	4.85	5.53	6.27	5.75	6.27	6.60
6	Lehigh Valley RR 1st M 6s 1873.....	5.54	5.57	5.28	4.85	4.67	4.72	4.56	4.95	5.56	5.44	5.46	6.02	6.16
7	Morris Canal & B Co 1st M 6s 1876.....	5.68	5.67	5.67	5.34	5.07	5.12	4.49	4.63	5.04	5.50	5.49	5.78	6.08
8	Eastern RR (Mass) 6s 1874.....	5.61	5.78	5.54	5.53	5.37	5.32	5.26	5.12	5.11	5.32	5.65	5.68	5.50
9	Pennsylvania RR 2nd M 6s 1875.....	5.49	5.31	5.00	4.62	4.70	4.56	3.86	4.00	4.76	5.16	5.11	5.25	5.56
10	Pennsylvania RR 1st M 6s 1880.....	5.36	5.16	5.01	4.89	4.80	4.63	4.04	4.05	4.15	5.04	5.01	5.16	5.43
11	Camden & Amboy 6s Jan 1889.....	5.98	6.05	5.92	5.56	5.60	5.53	5.48	5.45	5.67	6.08	6.00	6.01	6.09
12	Camden & Amboy 6s 1883.....	5.96	5.97	5.91	5.55	5.54	5.72	5.53	5.39	5.69	6.07	6.02	6.17	6.19
13	N Y C RR debt certificates 6s 1883.....	5.67	5.58	5.47	5.33	5.17	5.01	4.58	4.55	4.90	5.17	5.25	5.46	5.80
14	N Y C RR for debts assumed 7s 1876.....	5.41	5.52	5.40	5.21	5.22	4.87	4.13	3.76	3.92	4.91	5.37	5.24	5.46
15	Chic Burl & Quincy 1st M 8s 1883.....	6.37	6.28	6.00	5.85	5.85	5.55	5.43	5.25	6.12	6.34	6.10	6.32	6.82
16	Hudson River RR 2d M 7s 1885.....	5.80	5.74	5.77	5.56	5.41	5.29	4.75	4.70	5.42	5.62	5.80	5.86	6.47
17	Chic & Nor West Ry 1st M 6s 1885.....	6.94	6.87	6.72	6.34	6.32	6.26	5.61	6.11	6.23	6.68	6.54	6.70	6.88
18	Philadelphia & Erie 1st M 6s 1881.....	5.89	5.75	5.57	5.25	5.40	5.31	5.04	5.29	5.22	5.91	5.56	5.91	6.03
19	Gal & Chi U RR 1st M 7s 1882.....	6.20	5.95	5.72	5.60	5.73	5.29	5.78	4.77	5.29	5.70	5.62	5.84	6.45
20	Mich So & Nor Indiana 1st M 7s 1885.....	6.44	6.26	6.16	6.10	6.07	5.81	5.58	5.80	6.07	6.62	6.35	6.53	7.14
21	Cleveland & Toledo 1st M 7s 1885.....	6.37	6.26	5.97	5.72	5.84	5.76	5.83	5.81	5.95	6.54	6.60	6.60	6.58
22	Conn & Pass Rivers RR 1st M 6s 1876.....	5.97	5.96	5.84	5.83	5.83	5.83	5.91	5.94	5.97	5.98	6.00	6.03	6.48
23	Buffalo NY & Erie 1st M 7s 1877.....	6.67	6.72	6.24	6.20	6.13	5.93	5.34	5.63	6.03	6.50	6.40	6.60	6.42
24	Chicago & Alton 1st M 7s 1893.....	7.27	6.93	6.50	6.44	6.42	6.28	5.88	5.95	6.54	6.92	6.73	6.74	6.78
25	Pitts Ft Wayne & Chic 1st M 7s 1912.....	6.64	6.75	6.38	6.12	6.08	5.90	5.35	5.35	5.88	6.42	6.21	6.32	6.45
26	Camden & Amboy M 6s Nov 1889.....	5.65	5.67	5.56	5.23	5.24	5.20	5.01	4.92	5.42	5.70	5.50	5.57	5.64

YIELDS OF RAILROAD BONDS  
JAN. 1865—JAN. 1866

Ref. No.	Name of Bond	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
8	Eastern RR (Mass) 6s 1874.....	5.50	5.86	6.07	6.03	6.04	6.04	6.00	6.45	6.82	7.03	7.22	6.82	6.84
9	Pennsylvania RR 2nd M 6s 1875.....	5.56	5.84	6.45	6.35	6.35	6.42	6.26	6.11	6.18	6.58	6.92	7.00	7.44
10	Pennsylvania RR 1st M 6s 1880.....	5.43	5.43	5.74	6.00	5.94	5.90	5.75	5.63	5.71	6.03	6.31	6.22	6.51
11	Camden & Amboy 6s Jan 1889.....	6.09	6.14	6.09	5.94	5.49	7.21	7.23	7.18	7.12	7.09	7.12	7.47	7.59
12	Camden & Amboy 6s 1883.....	6.19	6.50	6.73	7.17	7.21	7.39	7.29	7.18	7.19	7.14	7.19	7.44	7.90
13	N Y C RR debt certificates 6s 1883.....	5.80	5.94	6.18	6.53	6.46	6.89	6.71	6.71	6.82	6.90	6.90	6.98	6.88
14	N Y C RR for debts assumed 7s 1876.....	5.46	6.05	7.10	7.02	6.65	6.81	6.63	6.71	6.85	7.05	7.06	7.14	7.01
15	Chic Burl & Quincy 1st M 8s 1883.....	6.82	6.74	7.09	6.94	7.08	7.24	7.01	7.14	7.03	7.05	7.07	7.01	7.10
16	Hudson River RR 2d M 7s 1885.....	6.47	6.48	6.58	6.90	6.81	7.17	6.78	6.93	6.92	6.96	7.12	6.66	6.96
17	Chic & Nor West Ry 1st M sf 7s 1885.....	6.88	7.05	7.18	7.38	7.60	8.01	7.61	7.59	7.64	7.78	7.95	8.03	8.21
18	Phila & Erie 1st M 6s 1881.....	6.03	6.33	6.54	6.65	6.82	6.97	6.96	6.86	6.87	7.01	7.35	7.54	7.55
19	Gal & Chi U RR 1st M 7s 1882.....	6.45	6.99	7.63	7.45	7.27	7.28	7.06	6.99	7.03	7.16	7.09	7.28	7.15
20	Mich So & Nor Indiana 1st M 7s 1885.....	7.14	6.84	6.97	7.16	7.17	7.47	7.43	7.55	7.57	7.56	7.56	8.07	7.64
21	Cleveland & Toledo 1st M 7s 1885.....	6.58	6.72	7.38	7.29	7.45	7.41	7.32	7.48	7.58	7.48	7.41	7.46	7.58
22	Conn & Pass Rivers RR 1st M 6s 1876.....	6.48	6.48	6.49	6.49	6.12	6.97	7.33	7.12	7.30	7.31	7.32	7.32	7.48
23	Buffalo NY & Erie 1st M 7s 1877.....	6.42	7.12	7.37	7.80	8.05	8.20	8.02	8.10	7.91	7.96	7.94	7.92	7.90
24	Chicago & Alton 1st M 7s 1893.....	6.78	6.73	7.16	7.26	7.35	7.55	7.24	7.47	7.52	7.44	7.63	7.59	7.64
25	Pitts Ft Wayne & Chic 1st M 7s 1912.....	6.45	6.44	7.80	7.00	7.03	7.17	6.90	6.87	6.82	6.90	7.01	7.05	7.00
26	Camden & Amboy M 6s Nov 1889.....	5.64	5.76	6.18	6.23	6.04	6.12	6.23	6.23	6.21	6.21	6.56	6.70	6.90

YIELDS OF RAILROAD BONDS  
JAN. 1866—JAN. 1867

Ref. No.	Name of Bond	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
9	Pennsylvania RR 2nd M 6s 1875.....	7.44	7.56	7.44	7.03	6.72	6.97	6.96	6.70	6.62	6.59	6.54	6.57	6.73
10	Pennsylvania RR 1st M 6s 1880.....	6.51	6.65	6.58	6.16	6.08	6.23	6.11	6.14	5.98	6.00	5.99	6.01	6.07
11	Camden & Amboy 6s Jan 1889.....	7.59	7.57	7.84	7.65	7.18	6.89	7.14	7.12	6.94	6.92	6.87	6.95	6.93
12	Camden & Amboy 6s 1883.....	7.90	7.91	7.98	7.92	7.49	7.27	7.36	7.22	6.99	6.95	6.90	7.06	7.12
13	N Y C RR debt certificates 6s 1883.....	6.88	6.91	7.05	7.20	6.78	6.81	6.57	6.78	6.68	6.71	6.61	6.63	6.78
14	N Y C RR for debts assumed 7s 1876.....	7.01	7.00	7.02	7.01	7.07	7.06	6.93	6.89	6.84	6.23	6.37	6.58	7.03
15	Chic Burl & Quincy 1st M 8s 1883.....	7.10	7.10	7.21	7.38	7.05	7.19	7.20	7.04	7.05	7.09	6.94	7.05	6.88
16	Hudson River RR 2d M 7s 1885.....	6.96	7.06	7.11	7.06	7.09	6.96	6.84	6.80	6.91	6.80	6.79	7.05	6.77
17	Chic & Nor West Ry 1st M sf 7s 1885.....	8.21	8.06	8.45	8.33	8.11	7.85	7.44	7.34	7.54	7.57	7.51	7.57	7.63
18	Philadelphia & Erie 1st M 6s 1881.....	7.55	7.34	7.16	7.15	7.02	7.18	7.19	7.21	7.10	7.00	6.92	6.99	7.10
19	Gal & Chi U RR 1st M 7s 1882.....	7.15	7.33	7.49	7.48	7.49	7.74	7.35	7.22	7.07	7.16	7.16	7.29	7.36
20	Mich So & Nor Indiana 1st M 7s 1885.....	7.64	7.82	7.83	7.81	7.69	7.52	7.56	7.61	7.36	7.33	7.50	7.59	7.59
21	Cleveland & Toledo 1st M 7s 1885.....	7.58	7.58	7.75	7.66	7.45	7.36	6.98	6.75	6.95	6.90	6.95	7.32	7.12
22	Buffalo NY & Erie 1st M 7s 1877.....	7.90	7.99	8.15	8.16	8.23	7.60	7.78	7.87	7.82	7.98	7.78	7.72	7.79
23	Chicago & Alton 1st M 7s 1893.....	7.64	7.63	7.62	7.63	7.49	7.54	7.24	7.08	7.20	7.15	7.10	7.12	7.15
24	Pitts Ft Wayne & Chic 1st M 7s 1912.....	7.00	7.14	7.22	7.25	7.09	7.11	6.91	6.92	6.92	7.10	6.85	7.03	6.95
25	Camden & Amboy M 6s Nov 1889.....	6.90	6.99	6.81	6.71	6.71	6.62	6.58	6.56	6.42	6.38	6.36	6.49	6.55
26	Tol & Wabash 1st M 7s 1890.....	8.15	8.27	8.41	8.24	8.18	8.20	8.16	7.82	7.77	7.78	7.89	7.98	7.96
27	St L Alton & T H RR 1st M 7s 1894.....	7.77	7.78	8.01	8.08	8.18	8.15	7.92	7.97	7.94	7.90	7.82	7.87	7.82

**YIELDS OF RAILROAD BONDS**  
JAN. 1867—JAN. 1868

Ref. No.	Name of Bond	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
10	Pennsylvania RR 1st M 6s 1880.....	6.07	6.10	6.17	6.27	6.32	6.38	6.25	6.17	6.17	6.25	6.31	6.23	6.15
11	Camden & Amboy 6s Jan 1889.....	6.93	7.11	7.16	7.11	7.23	7.37	7.38	7.13	7.34	7.53	7.62	7.60	7.27
12	Camden & Amboy 6s 1883.....	7.12	7.27	7.22	7.24	7.40	7.38	7.26	7.24	7.28	7.59	7.69	7.69	7.37
13	N Y C RR debt certificates 6s 1883.....	6.78	6.83	6.76	6.80	6.69	6.48	6.62	6.65	6.65	6.90	6.87	7.03	6.97
14	N Y C RR for debts assumed 7s 1876.....	7.03	6.63	6.61	6.63	6.72	6.80	6.45	6.55	6.67	6.88	6.85	7.10	7.03
15	Chic Burl & Quincy 1st M 8s 1883.....	6.88	6.94	7.03	7.11	7.15	7.19	6.76	6.84	6.93	7.04	7.06	7.20	7.03
16	Hudson River RR 2d M 7s 1885.....	6.77	6.87	6.91	6.99	6.87	6.86	6.76	6.68	6.62	6.79	6.89	6.93	6.86
17	Chic & Nor West Ry 1st M sf 7s 1885.....	7.63	7.67	7.65	7.80	7.89	8.00	7.64	7.56	7.50	7.62	7.68	7.54	
18	Philadelphia & Erie 1st M 6s 1881.....	7.10	7.24	7.24	7.04	6.94	6.99	6.96	6.83	6.90	7.05	7.26	7.10	7.03
19	Gal & Chi U RR 1st M 7s 1882.....	7.36	7.34	7.27	7.16	7.23	7.21	7.08	7.03	6.96	6.94	7.10	7.20	7.19
20	Mich So & Nor Indiana 1st M 7s 1885.....	7.59	7.47	7.33	7.38	7.38	7.34	7.25	7.28	7.24	7.33	7.37	7.49	7.37
21	Cleveland & Toledo 1st M 7s 1885.....	7.12	7.04	7.00	7.00	7.06	7.02	6.78	6.89	6.90	6.92	7.01	6.98	6.93
22	Buffalo N Y & Erie 1st M 7s 1877.....	7.79	7.90	8.01	8.16	8.40	8.49	8.42	8.38	8.64	8.59	8.63	8.60	8.37
24	Chicago & Alton 1st M 7s 1893.....	7.15	7.16	7.15	7.22	7.21	7.19	7.04	6.89	6.94	6.94	6.97	7.04	7.02
25	Pitts Ft Wayne & Chic 1st M 7s 1912.....	6.95	7.03	7.01	7.03	7.03	6.83	6.74	6.75	6.79	6.81	6.84	6.88	
26	Camden & Amboy M 6s Nov 1889.....	6.55	6.58	6.57	6.52	6.54	6.63	6.54	6.52	6.55	6.54	6.67	6.69	6.49
27	Tol & Wabash 1st M 7s 1890.....	7.96	8.07	8.16	8.29	8.26	8.27	7.99	8.09	8.07	8.21	8.34	8.29	8.08
28	St L Alton & T H RR 1st M 7s 1894.....	7.82	7.70	7.88	8.10	8.19	7.96	7.91	7.81	7.67	7.73	7.66	7.60	
29	N Y Central renewal bonds 6s 1887.....	6.63	6.66	6.64	6.88	6.68	6.52	6.68	6.89	6.73	6.69	6.84	6.87	6.83
30	Morris Essex 1st M sf 7s 1914.....	7.42	7.44	7.50	7.59	7.48	7.48	7.38	7.38	7.32	7.36	7.42	7.41	7.32

**YIELDS OF RAILROAD BONDS**  
JAN. 1868—JAN. 1869

Ref. No.	Name of Bond	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
10	Pennsylvania RR 1st M 6s 1880.....	6.15	6.08	6.02	6.03	5.95	5.95	6.02	6.08	6.12	6.12	6.14	6.24	6.22
11	Camden & Amboy 6s Jan 1889.....	7.27	7.15	7.30	7.28	7.16	7.18	7.20	7.22	7.31	7.36	7.40	7.46	7.50
12	Camden & Amboy 6s 1883.....	7.37	7.27	7.33	7.37	7.27	7.19	7.19	7.34	7.44	7.51	7.46	7.62	7.66
13	N Y C RR debt certificates 6s 1883.....	6.97	6.87	6.77	6.61	6.64	6.67	6.56	6.58	6.77	6.85	6.68	7.08	7.20
15	Chic Burl & Quincy 1st M 8s 1883.....	7.03	6.85	6.70	6.83	6.85	6.92	6.96	6.80	6.94	6.93	7.02	7.07	6.84
16	Hudson River RR 2d M 7s 1885.....	6.86	6.83	6.73	6.68	6.75	6.98	6.77	6.62	6.75	6.75	6.69	6.68	6.61
17	Chic Nor West Ry 1st M sf 7s 1885.....	7.54	7.61	7.62	7.94	7.58	7.35	7.39	7.34	7.41	7.47	7.56	7.70	7.69
18	Philadelphia & Erie 1st M 6s 1881.....	7.03	6.94	6.91	7.04	7.12	7.16	7.20	7.27	7.30	7.29	7.87	7.99	8.04
19	Gal & Chi U RR 1st M 7s 1882.....	7.19	7.15	7.08	7.11	7.05	7.20	7.32	6.92	7.01	7.06	7.18	7.32	7.37
20	Mich So & Nor Indiana 1st M 7s 1885.....	7.37	7.23	7.11	7.17	7.14	7.01	7.00	7.13	7.22	7.25	7.35	7.38	7.57
21	Cleveland & Toledo 1st M 7s 1885.....	6.93	6.89	6.95	6.97	6.93	6.91	6.99	7.13	7.16	6.96	7.04	7.06	
23	Buffalo N Y & Erie 1st M 7s 1877.....	8.37	8.16	8.14	8.04	7.98	7.96	7.90	8.01	8.18	8.75	8.99	8.97	8.94
24	Chicago & Alton 1st M 7s 1893.....	7.02	6.93	6.87	7.00	7.01	6.85	6.73	7.08	7.04	7.07	7.17	7.04	7.04
25	Pitts Ft Wayne & Chic 1st M 7s 1912.....	6.88	6.83	6.71	6.74	6.83	6.77	6.75	6.81	6.75	6.77	6.95	7.00	7.04
26	Camden & Amboy M 6s Nov 1889.....	6.49	6.39	6.46	6.44	6.35	6.37	6.37	6.44	6.50	6.50	6.73	6.70	6.77
27	Tol & Wabash 1st M 7s 1890.....	8.08	7.94	7.91	7.95	7.85	7.62	7.84	7.85	7.90	8.00	7.90	7.99	7.89
28	St L Alton & T H RR 1st M sf 7s 1894.....	7.60	7.58	7.63	7.67	7.66	7.63	7.57	7.64	7.64	7.67	7.87	7.78	7.73
29	N Y Central renewal bonds 6s 1887.....	6.83	6.73	6.74	6.74	6.69	6.60	6.59	6.65	6.75	6.75	6.82	6.95	7.00
30	Morris Essex 1st M sf 7s 1914.....	7.32	7.33	7.29	7.29	7.13	7.11	7.08	7.07	7.15	7.22	7.31	7.30	7.38
31	N Y & Erie RR 1st M 7s 1897.....	6.90	6.81	6.81	6.86	6.82	6.82	6.81	6.89	6.96	6.98	6.98	6.93	

## RAILROAD BOND YIELDS

A41

### YIELDS OF RAILROAD BONDS JAN. 1869—JAN. 1870

Ref. No.	Name of Bond	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
10	Pennsylvania RR 1st M 6s 1880.....	6.22	6.32	6.28	6.34	6.17	6.23	6.31	6.25	6.32	6.51	6.61	6.61	6.39
11	Camden & Amboy 6s Jan 1889.....	7.50	7.53	7.64	7.58	7.47	7.44	7.48	7.50	7.77	7.87	7.77	7.78	7.86
12	Camden & Amboy 6s 1883.....	7.66	7.48	7.81	7.85	7.75	7.61	7.69	7.78	7.85	8.11	8.19	8.29	8.14
13	N Y C RR debt certificates 6s 1883.....	7.20	7.16	7.21	7.31	7.10	7.00	7.06	7.16	7.35	7.43	7.48	7.85	7.55
15	Chic Burl & Quincy 1st M 8s 1883.....	6.84	6.80	6.92	7.01	6.95	7.01	7.09	7.15	7.26	7.33	7.40	7.05	7.07
16	Hudson River RR 2d M 7s 1885.....	6.61	7.00	6.94	6.99	6.93	7.08	7.03	6.86	6.95	6.94	7.00	7.19	6.80
17	Chic & Nor West Ry 1st M of 7s 1885.....	7.69	7.68	7.63	7.59	7.54	7.67	7.85	7.47	7.72	8.02	7.90	7.62	7.93
18	Philadelphia & Erie 1st M 6s 1881.....	8.04	8.01	8.05	7.98	7.65	7.72	7.80	7.67	7.60	7.82	7.84	7.92	7.90
19	Cel & Chi U RR 1st M 7s 1882.....	7.31	7.31	7.36	7.52	7.50	7.32	7.46	7.48	7.37	7.31	7.29	7.33	7.50
20	Mich So & Nor Indiana 1st M 7s 1885.....	7.57	7.57	7.69	7.45	7.27	7.23	7.33	7.38	7.45	7.57	7.62	7.57	7.48
21	Cleveland & Toledo 1st M 7s 1885.....	7.08	7.17	7.19	7.32	7.29	7.22	7.24	7.15	7.22	7.47	7.62	7.83	7.82
24	Chicago & Alton 1st M 7s 1893.....	7.04	6.99	7.02	7.09	7.06	6.91	7.05	7.07	7.15	7.12	7.21	7.29	7.25
25	Pitts Ft Wayne & Chic 1st M 7s 1912.....	7.04	6.99	6.96	6.98	6.88	6.87	6.93	6.95	7.03	7.20	7.20	7.17	6.89
26	Camden & Amboy M 6s Nov 1889.....	6.77	6.77	6.85	6.78	6.69	6.67	6.71	6.68	6.71	6.64	6.57	6.68	6.78
27	Tol & Wabash 1st M 7s 1890.....	7.89	7.83	8.01	7.99	7.99	8.07	8.21	8.12	8.20	8.30	8.41	8.48	8.29
28	St L Alton & T H RR 1st M 7s 1894.....	7.73	7.71	7.73	7.77	7.85	7.74	7.71	7.86	7.73	7.88	8.00	7.98	7.76
29	N Y Central renewal bonds 6s 1887.....	7.00	7.06	7.06	7.14	6.94	6.88	6.99	6.89	7.08	7.13	7.24	7.70	7.37
30	Morris & Essex 1st M of 7s 1914.....	7.38	7.36	7.28	7.25	7.15	7.11	7.19	7.23	7.27	7.28	7.34	7.38	7.24
31	N Y & Erie RR 1st M 7s 1897.....	6.93	7.09	7.07	7.27	7.02	7.17	7.32	7.35	7.39	7.54	7.46	7.44	7.71
32	M & St P (P du Ch dv) 1st M 8s 1898.....	7.93	7.70	7.87	7.92	7.85	7.86	7.88	7.92	8.05	8.13	8.16	8.05	7.93
33	Lehigh Valley RR 1st M 6s 1898.....	6.54	6.58	6.64	6.66	6.62	6.52	6.52	6.56	6.63	6.66	6.72	6.67	6.58

**YIELDS OF RAILROAD BONDS**  
JAN. 1870—JAN. 1871

Ref. No.	Name of Bond	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
11	Camden & Amboy 6s Jan 1889.....	7.86	7.67	7.44	7.37	7.18	6.82	7.04	6.88	7.01	6.96	6.99	6.91	6.69
12	Camden & Amboy 6s 1883.....	8.14	7.89	7.69	7.63	7.37	7.17	7.00	6.82	6.96	7.07	7.07	7.17	6.93
13	N Y C RR debt certificates 6s 1883.....	7.55	7.42	7.27	7.15	7.16	6.95	6.87	7.25	7.44	7.41	7.32	7.23	7.26
15	Chic Burl & Quincy 1st M 8s 1883.....	7.07	6.86	6.79	6.72	6.68	6.76	6.76	6.83	6.85	6.98	6.88	6.83	6.84
16	Hudson River RR 2d M 7s 1885.....	6.80	6.65	6.64	6.72	6.75	6.71	7.06	6.97	6.76	6.75	6.75	6.82	6.76
17	Chic & Nor West Ry 1st M of 7s 1885.....	7.93	7.39	7.54	7.61	7.48	7.29	7.08	7.42	7.47	7.49	7.52	7.52	7.54
18	Philadelphia & Erie 1st M 6s 1881.....	7.90	7.79	7.42	7.51	7.26	7.24	7.31	7.27	7.19	7.24	7.30	7.39	7.35
19	Cal & Chi U RR 1st M 7s 1882.....	7.50	6.91	7.24	7.38	7.30	7.34	7.03	7.18	7.25	7.26	7.28	7.35	7.43
20	Mich So & Nor Indiana 1st M 7s 1885.....	7.48	7.27	7.21	7.18	7.14	7.12	7.20	7.40	7.41	7.31	7.35	7.40	7.28
21	Cleveland & Toledo 1st M 7s 1885.....	7.82	7.43	6.97	7.11	7.07	6.97	7.06	7.26	7.39	7.22	7.36	7.33	7.08
24	Chicago & Alton 1st M 7s 1893.....	7.25	6.90	6.89	7.03	7.01	6.97	6.96	7.06	6.95	7.00	7.03	7.04	7.09
25	Pitts Ft Wayne & Chic 1st M 7s 1912.....	6.89	6.77	6.69	6.82	6.87	6.85	6.84	6.96	6.93	6.86	6.90	7.02	6.95
26	Camden & Amboy M 6s Nov 1889.....	6.78	6.77	6.76	6.60	6.62	6.58	6.57	6.58	6.65	6.58	6.58	6.58	6.57
27	Tol & Wabash 1st M 7s 1890.....	8.29	8.02	7.72	7.82	7.90	7.90	7.87	7.92	7.89	8.09	8.03	7.84	7.93
28	St L Alton & T H RR 1st M 7s 1894.....	7.76	7.63	7.58	7.67	7.64	7.56	7.53	7.26	7.36	7.53	7.71	7.66	7.48
29	N Y Central renewal bonds 6s 1887.....	7.37	7.20	7.09	7.04	7.02	7.00	7.02	7.15	7.21	7.25	7.29	7.56	7.29
30	Morris & Essex 1st M of 7s 1914.....	7.24	7.12	7.03	7.05	6.99	7.00	6.83	7.11	7.12	7.07	7.03	7.06	7.03
31	N Y & Erie RR 1st M 7s 1897.....	7.71	7.38	7.18	7.27	7.22	7.16	7.13	7.26	7.28	7.27	7.24	7.52	7.43
32	M & St P (P du Ch dv) 1st M 8s 1898.....	7.93	7.76	7.70	7.71	7.66	7.65	7.62	7.81	7.63	7.73	7.81	7.79	7.79
33	Lehigh Valley RR 1st M 6s 1898.....	6.58	6.48	6.42	6.44	6.35	6.41	6.38	6.33	6.46	6.33	6.33	6.48	6.51
34	Central RR of New Jersey M 7s 1890.....	7.50	7.15	7.17	7.24	7.03	7.01	7.02	6.98	6.99	7.08	7.03	7.03	7.00

## RAILROAD BOND YIELDS

A43

### YIELDS OF RAILROAD BONDS JAN. 1871—JAN. 1872

Ref. No.	Name of Bond	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
11	Camden & Amboy 6s Jan 1889.....	6.69	7.00	6.74	6.87	6.94	7.17	7.16	7.13	7.18	7.24	7.25	7.26	7.14
12	Camden & Amboy 6s 1883.....	6.93	6.98	6.96	6.99	7.13	7.08	7.22	7.36	7.45	7.40	7.50	7.71	7.43
13	N Y C RR debt certificates 6s 1883.....	7.26	7.30	7.13	7.15	7.02	7.07	7.12	7.13	7.09	7.21	7.22	7.13	6.86
15	Chic Burl & Quincy 1st M. 8s 1883.....	6.84	6.86	6.90	6.63	6.76	6.70	6.72	6.65	6.64	6.83	6.90	6.95	6.25
16	Hudson River RR 2d M 7s 1885.....	6.76	6.80	6.95	6.88	6.80	6.75	6.73	6.66	6.68	6.78	6.66	6.47	6.43
17	Chic & Nor West Ry 1st M of 7s 1885.....	7.54	7.35	7.17	7.33	7.27	7.36	7.25	7.03	7.03	7.12	7.12	7.09	6.96
18	Philadelphia & Erie 1st M 6s 1881.....	7.35	7.16	7.15	7.12	7.30	7.23	7.27	7.36	7.49	7.72	7.88	7.90	7.39
19	Gal & Chi U RR 1st M 7s 1882.....	7.43	7.24	7.20	7.15	7.08	7.12	7.06	7.02	6.61	6.52	6.90	6.68	6.48
20	Mich So & Nor Indiana 1st M 7s 1885.....	7.28	7.20	7.14	7.04	6.94	6.95	6.94	6.86	6.90	7.15	7.12	6.99	6.77
21	Cleveland & Toledo 1st M 7s 1885.....	7.08	7.10	7.05	7.00	7.01	6.98	6.97	6.93	6.89	7.09	7.12	7.05	6.85
24	Chicago & Alton 1st M 7s 1893.....	7.09	6.93	7.00	6.98	6.94	6.93	6.80	6.81	6.63	6.64	6.93	6.76	6.65
25	Pitts Ft Wayne & Chic 1st M 7s 1912.....	6.95	6.85	6.92	6.89	6.82	6.81	6.84	6.64	6.75	6.79	6.79	6.74	6.58
26	Camden & Amboy M 6s Nov 1889.....	6.57	6.55	6.61	6.62	6.53	6.50	6.53	6.57	6.52	6.67	6.60	6.66	6.56
27	Tol & Wabash 1st M 7s 1890.....	7.93	7.84	7.86	7.79	7.82	7.72	7.60	7.46	7.47	7.83	7.83	7.62	7.26
28	St L Alton & T H RR 1st M 7s 1894.....	7.48	7.40	7.46	7.52	7.40	7.16	7.08	7.10	7.18	7.37	7.43	7.37	7.15
29	N Y Central renewal bonds 6s 1887.....	7.29	7.07	7.04	7.01	6.87	6.86	6.87	7.02	6.94	6.93	7.00	7.01	6.83
30	Morris & Essex 1st M of 7s 1914.....	7.03	6.97	6.96	6.96	6.93	6.85	6.85	6.84	6.79	6.91	6.89	6.89	6.77
31	N Y & Erie RR 1st M 7s 1897.....	7.43	7.44	7.35	7.30	7.04	7.05	7.06	7.04	7.07	7.20	7.24	7.07	7.01
32	M & St P (F du Ch dy) 1st M 8s 1898.....	7.79	7.74	7.69	7.62	7.56	7.57	7.55	7.43	7.32	7.67	7.66	7.59	7.41
33	Lehigh Valley RR 1st M 6s 1898.....	6.51	6.52	6.61	6.61	6.25	6.39	6.44	6.36	6.31	6.41	6.42	6.46	6.48
34	Central RR of New Jersey M 7s 1890.....	7.00	7.00	7.01	7.00	6.99	6.93	6.94	6.86	6.80	6.98	6.93	6.91	6.64

**YIELDS OF RAILROAD BONDS**  
JAN. 1872—JAN. 1873

Ref. No.	Name of Bond	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
12	Camden & Amboy 6s 1883.....	7.43	7.21	7.25	7.25	7.35	7.36	7.30	7.26	7.14	7.27	7.26	7.44	7.37
13	N Y C RR debt certificates 6s 1883.....	6.86	6.74	7.15	7.02	7.09	6.91	6.73	6.90	7.55	7.44	7.41	7.29	7.20
15	Chic Burl & Quincy 1st M 8s 1883.....	6.25	6.31	6.41	6.51	6.66	6.49	6.07	6.38	6.51	6.60	6.74	6.72	6.45
16	Hudson River RR 2d M 7s 1885.....	6.43	6.39	6.57	6.49	6.59	6.61	6.57	6.55	6.39	6.57	6.88	6.79	6.74
20	Mich So & Nor Indiana 1st M 7s 1885.....	6.77	6.80	6.81	6.91	6.89	6.84	6.83	6.89	7.08	7.01	6.94	6.94	6.75
21	Cleveland & Toledo 1st M 7s 1885.....	6.85	6.76	7.17	6.95	6.94	6.89	6.81	6.87	6.93	6.95	7.01	7.03	6.96
24	Chicago & Alton 1st M 7s 1893.....	6.65	6.61	6.70	6.71	6.60	6.77	6.77	6.69	6.62	6.78	6.92	6.93	6.88
25	Pitts Ft Wayne & Chic 1st M 7s 1912.....	6.68	6.65	6.76	6.73	6.79	6.74	6.66	6.71	6.78	6.86	6.91	6.91	6.74
26	Camden & Amboy M 6s Nov 1889.....	6.56	6.52	6.56	6.58	6.58	6.51	6.36	6.34	6.41	6.42	6.50	6.67	6.53
27	Tol & Wabash 1st M 7s 1890.....	7.26	7.17	7.32	7.40	7.46	7.47	7.35	7.54	7.69	7.67	7.57	7.35	7.35
28	St L Alton & T H RR 1st M 7s 1894.....	7.15	7.32	7.42	7.26	7.26	7.25	7.12	7.13	7.14	7.12	7.15	7.23	7.07
29	N Y Central renewal bonds 6s 1887.....	6.83	6.72	6.88	6.88	6.90	6.79	6.64	6.98	7.02	7.50	7.30	7.00	
30	Morris & Essex 1st M sf 7s 1914.....	6.77	6.74	6.85	6.80	6.82	6.71	6.61	6.83	6.98	6.87	6.88	6.78	6.79
31	N Y & Erie RR 1st M 7s 1897.....	7.01	6.91	6.99	7.01	7.01	6.95	6.85	6.90	6.97	6.95	6.88	6.95	7.01
32	M & St P (P du Ch dv) 1st M 8s 1898.....	7.41	7.42	7.44	7.50	7.53	7.54	7.45	7.37	7.47	7.62	7.58	7.64	7.63
33	Lehigh Valley RR 1st M 6s 1898.....	6.48	6.43	6.47	6.46	6.30	6.26	6.18	6.22	6.29	6.37	6.37	6.51	6.48
34	Central RR of New Jersey M 7s 1890.....	6.64	6.62	6.65	6.68	6.73	6.67	6.57	6.66	6.82	6.88	6.96	6.94	6.75
35	Lehigh Coal & Nav Co RR Loan 6s 1897.....	6.60	6.57	6.68	6.71	6.69	6.50	6.43	6.33	6.36	6.50	6.57	6.62	6.73
36	Chicago & Milwaukee RR 1st M 7s 1898.....	7.61	7.59	7.57	7.58	7.66	7.64	7.64	7.78	7.69	7.81	7.84	7.82	7.70
37	Lake Shore Ry Dividend bonds 7s 1899.....	7.66	7.57	7.45	7.48	7.43	7.43	7.46	7.46	7.54	7.67	7.64	7.74	7.76
38	Clev Col Cin & Ind 1st M sf 7s 1899.....	6.98	7.00	7.06	7.06	7.00	6.99	6.95	6.96	6.99	7.02	7.03	7.04	6.98
39	Lehigh Valley RR 2nd M reg 7s 1910.....	6.99	7.06	6.96	6.92	6.74	6.75	6.74	6.79	6.82	6.83	6.83	6.86	6.86
40	Chic & Nor West Ry cons of 7s 1915.....	7.66	7.57	7.52	7.44	7.33	7.31	7.32	7.46	7.61	7.62	7.63	7.82	7.83

## RAILROAD BOND YIELDS

A45

### YIELDS OF RAILROAD BONDS JAN. 1873—JAN. 1874

Ref. No.	Name of Bond	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
16	Hudson River RR 2d M 7s 1885 . . . . .	6.74	6.66	6.74	6.74	6.59	6.43	6.52	6.65	6.73	6.95	7.10	7.10	6.85
20	Mich So & Nor Indiana 1st M 7s 1885 . . . . .	6.73	6.85	6.78	6.82	6.79	6.67	6.68	6.71	6.72	7.25	7.30	7.13	6.87
21	Cleveland & Toledo 1st M 7s 1885 . . . . .	6.96	7.00	7.06	7.00	6.96	6.88	6.90	6.96	6.97	7.23	7.44	7.16	6.90
24	Chicago & Alton 1st M 7s 1893 . . . . .	6.88	6.82	6.87	6.84	6.80	6.77	6.70	6.57	6.77	7.10	6.97	6.96	6.74
25	Pitts Ft Wayne & Chic 1st M 7s 1912 . . . . .	6.74	6.70	6.76	6.59	6.72	6.69	6.57	6.66	6.69	6.95	7.12	6.98	6.69
26	Camden & Amboy M 6s Nov 1889 . . . . .	6.53	6.53	6.57	6.64	6.56	6.56	6.47	6.41	6.74	6.94	6.81	6.92	6.47
27	Tol & Wabash 1st M 7s 1890 . . . . .	7.35	7.45	7.56	7.63	7.59	7.59	7.52	7.48	7.55	8.00	8.16	7.91	7.58
28	St L Alton & T H RR 1st M 7s 1894 . . . . .	7.07	7.08	7.09	7.19	7.29	7.21	7.21	7.13	7.44	7.89	7.90	7.33	7.07
29	N Y Central renewal bonds 6s 1887 . . . . .	7.00	7.02	7.01	7.13	7.17	7.21	6.94	7.00	7.01	7.83	7.78	7.41	7.25
30	Morris & Essex 1st M of 7s 1914 . . . . .	6.79	6.76	6.79	6.85	6.80	6.71	6.77	6.75	6.99	7.04	7.01	6.85	6.77
31	N Y & Erie RR 1st M 7s 1897 . . . . .	7.01	6.99	6.95	7.00	6.92	6.89	6.85	6.82	6.85	7.13	7.16	7.08	6.98
32	M & St P (P du Ch dv) 1st M 8s 1898 . . . . .	7.63	7.56	7.44	7.53	7.49	7.48	7.46	7.49	7.51	7.88	8.15	7.85	7.56
33	Lehigh Valley RR 1st M 6s 1898 . . . . .	6.48	6.49	6.45	6.34	6.36	6.46	6.47	6.51	6.65	6.69	6.66	6.55	6.31
34	Central RR of New Jersey M 7s 1890 . . . . .	6.73	6.76	6.78	6.84	6.77	6.62	6.58	6.56	6.58	6.95	7.24	6.86	6.68
35	Lehigh Coal & Nav Co RR Loan 6s 1897 . . . . .	6.73	6.62	6.66	6.76	6.75	6.77	6.81	6.77	6.99	7.34	7.13	7.08	6.77
36	Chicago & Milwaukee RR 1st M 7s 1898 . . . . .	7.70	7.64	7.60	7.75	7.69	7.65	7.67	7.70	7.78	8.14	8.11	7.90	7.72
37	Lake Shore Ry dividend bonds 7s 1899 . . . . .	7.76	7.69	7.64	7.67	7.70	7.66	7.53	7.62	7.66	8.41	8.48	8.06	7.73
38	Clev Col Cin & Ind 1st M of 7s 1899 . . . . .	6.98	6.97	6.99	7.02	6.90	6.83	6.77	6.77	7.07	7.51	7.34	7.21	7.07
39	Lehigh Valley RR 2nd M reg 7s 1910 . . . . .	6.86	6.79	6.77	6.78	6.81	6.82	6.86	6.96	6.92	7.00	7.08	6.99	6.86
40	Chic & Nor West Ry cons 1st 7s 1915 . . . . .	7.83	7.80	7.80	7.94	7.95	7.91	7.76	7.74	7.97	8.53	8.57	8.08	7.95
41	L Sh & Mich So cons 1st M of 7s 1900 . . . . .	7.15	7.17	7.22	7.28	7.34	7.33	7.07	7.12	7.58	8.13	8.21	7.97	7.40

## APPENDIX

YIELDS OF RAILROAD BONDS  
JAN. 1874—JAN. 1875

Ref. No.	Name of Bond	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
16	Hudson River RR 2d M 7s 1885.....	6.85	6.51	6.62	6.53	6.68	6.58	6.46	6.48	6.54	6.46	6.29	6.57	6.22
20	Mich So & Nor Indiana 1st M 7s 1885.....	6.87	6.80	6.73	6.70	6.78	6.72	6.73	6.84	6.75	6.76	6.57	6.45	6.47
21	Cleveland & Toledo 1st M 7s 1885.....	6.90	6.99	6.87	6.78	6.95	6.90	6.89	6.86	6.86	6.87	6.55	6.64	6.31
24	Chicago & Alton 1st M 7s 1893.....	6.74	6.69	6.66	6.57	6.62	6.64	6.60	6.61	6.66	6.35	6.43	6.58	6.43
25	Pitts Ft Wayne & Chic 1st M 7s 1912.....	6.69	6.66	6.67	6.67	6.79	6.77	6.74	6.72	6.67	6.56	6.46	6.44	6.55
26	Camden & Amboy M 6s Nov 1889.....	6.47	6.40	6.33	6.33	6.18	6.13	6.08	6.12	6.09	6.02	6.03	5.96	5.89
28	St L Alton & T H RR 1st M 7s 1894.....	7.07	7.15	7.24	7.10	7.25	7.07	6.87	6.81	6.50	6.48	6.62	6.84	6.56
29	N Y Central renewal bonds 6s 1887.....	7.25	6.84	6.71	6.91	6.94	6.64	6.90	6.87	6.57	6.29	6.29	6.24	
30	Morris & Essex 1st M of 7s 1914.....	6.77	6.70	6.72	6.75	6.72	6.70	6.69	6.71	6.67	6.65	6.52	6.46	6.46
31	N Y & Erie RR 1st M 7s 1897.....	6.98	6.92	6.94	6.85	6.85	6.77	6.93	6.85	6.90	6.88	6.80	6.81	6.74
32	M & St P (P du Ch dv) 1st M 8s 1898.....	7.56	7.51	7.47	7.49	7.66	7.67	7.65	7.68	7.70	7.59	7.53	7.54	7.46
33	Lehigh Valley RR 1st M 6s 1898.....	6.31	6.14	6.21	6.14	6.12	6.06	6.06	6.09	6.11	6.04	5.96	5.90	
34	Central RR of New Jersey M 7s 1890.....	6.68	6.57	6.50	6.36	6.54	6.41	6.61	6.61	6.51	6.43	6.37	6.28	6.39
35	Lehigh Coal & Nav Co RR Loan 6s 1897.....	6.77	6.49	6.52	6.58	6.54	6.48	6.42	6.34	6.29	6.29	6.28	6.18	6.22
36	Chicago & Milwaukee RR 1st M 7s 1898.....	7.72	7.63	7.74	7.72	7.74	7.75	7.84	7.78	7.88	7.84	7.85	7.76	7.64
37	Lake Shore Ry dividend bonds 7s 1899.....	7.73	7.54	7.53	7.49	7.54	7.51	7.50	7.47	7.47	7.34	7.23	7.21	7.14
38	Clev Col Cin & Ind 1st M of 7s 1899.....	7.07	7.00	6.94	7.00	7.07	7.14	7.09	7.04	6.95	6.88	6.72	6.72	6.62
39	Lehigh Valley RR 2nd M reg 7s 1910.....	6.86	6.92	6.81	6.81	6.79	6.67	6.70	6.81	6.71	6.72	6.66	6.64	
40	Chic & Nor West Ry cons 7s 1915.....	7.95	7.63	7.78	7.94	8.12	8.19	8.30	8.38	8.42	8.45	8.18	7.99	7.90
41	L Sh & Mich So cons 1st M of 7s 1900.....	7.40	7.38	7.38	7.37	7.42	7.45	7.40	7.39	7.26	7.13	6.98	7.06	6.94
42	Pennsylvania RR Co gen M <sup>4</sup> 6s 1910.....	6.84	6.81	6.87	6.86	6.94	6.77	6.69	6.59	6.63	6.68	6.59	6.42	6.31

## RAILROAD BOND YIELDS

A47

### YIELDS OF RAILROAD BONDS JAN. 1875—JAN. 1876

Ref. No.	Name of Bond	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
24	Chicago & Alton 1st M 7s 1893.....	6.43	6.23	6.25	5.97	6.00	6.01	6.11	6.08	6.00	6.04	5.83	5.89	5.88
25	Pitts Ft Wayne & Chic 1st M 7s 1912.....	6.55	6.47	6.43	6.42	6.34	6.30	6.21	6.18	6.17	6.18	6.09	6.14	5.99
26	Camden & Amboy M 6s Nov 1889.....	5.89	5.86	5.90	5.86	5.76	5.71	5.73	5.74	5.64	5.61	5.57	5.59	5.58
28	St L Alton & T H RR 1st M 7s 1894.....	6.56	6.64	6.65	6.62	6.68	6.77	6.45	6.39	6.42	6.48	6.64	6.51	6.48
29	N Y Central renewal bonds 6s 1887.....	6.24	6.20	6.21	6.12	5.99	5.94	5.89	5.86	5.78	5.99	5.86	5.91	5.74
30	Morris & Essex 1st M sf 7s 1914.....	6.46	6.32	6.34	6.30	6.29	6.29	6.25	6.18	6.06	6.17	6.01	6.04	6.07
31	N Y & Erie RR 1st M 7s 1897.....	6.74	6.77	6.70	6.71	6.71	6.92	6.88	6.86	6.83	6.75	6.71	6.57	6.43
32	M & St P (P du Ch div) 1st M 8s 1898.....	7.46	7.50	7.51	7.39	7.33	7.31	7.20	7.28	7.22	7.20	7.12	7.00	6.94
33	Lehigh Valley RR 1st M 6s 1898.....	5.90	5.85	5.90	5.78	5.78	5.76	5.79	5.85	5.82	5.85	5.81	5.73	5.72
34	Central RR of New Jersey M 7s 1890.....	6.39	6.12	6.09	5.72	6.01	6.02	6.00	5.98	5.93	5.89	5.90	5.70	5.64
35	Lehigh Coal & Nav Co RR Loan 6s 1897.....	6.22	6.07	6.09	6.07	5.96	5.92	5.94	6.00	5.97	6.03	5.94	5.83	5.77
36	Chicago & Milwaukee RR 1st M 7s 1898.....	7.64	7.58	7.56	7.60	7.43	7.39	7.32	7.28	7.27	7.35	7.24	7.02	7.00
37	Lake Shore Ry dividend bonds 7s 1899.....	7.14	7.21	7.08	6.98	6.95	7.12	7.11	7.11	7.08	7.07	7.09	7.00	6.83
38	Clev Col Cin & Ind 1st M sf 7s 1899.....	6.62	6.52	6.63	6.58	6.46	6.56	6.61	6.64	6.56	6.47	6.54	6.58	6.55
39	Lehigh Valley RR 2nd M reg 7s 1910.....	6.64	6.71	6.46	6.46	6.48	6.48	6.47	6.43	6.31	6.38	6.40	6.38	6.31
40	Chic & Nor West Ry cons sf 7s 1915.....	7.90	7.94	7.97	7.70	7.58	7.52	7.37	7.24	7.22	7.43	7.31	7.18	7.05
41	I. Sh & Mich So cons 1st M sf 7s 1900.....	6.94	7.04	6.97	6.93	6.92	7.37	6.86	6.78	6.95	6.97	6.99	6.89	6.79
42	Pennsylvania RR Cons gen M 6s 1910.....	6.31	6.13	6.14	6.04	5.90	5.98	5.90	5.99	6.02	6.04	6.01	5.99	5.94
43	New York & Harlem RR cons M 7s 1900.....	6.34	6.34	6.38	6.27	6.23	6.23	6.24	6.21	6.13	6.18	6.09	5.98	5.85
44	N Y C & H R RR 1st M 7s 1903.....	6.11	6.09	6.10	6.10	5.96	5.98	5.87	5.87	5.60	5.68	5.70	5.49	5.32
45	Chic Burl & Quincy RR RR cons M 7s 1903.....	6.85	6.85	6.81	6.81	6.66	6.60	6.69	6.60	6.61	6.65	6.58	6.45	6.42

## APPENDIX

**YIELDS OF RAILROAD BONDS**  
JAN. 1876—JAN. 1877

Ref. No.	Name of Bond	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
24	Chicago & Alton 1st M 7s 1893.....	5.88	5.65	5.63	5.60	5.56	5.47	5.37	5.23	5.31	5.56	5.53	5.54	5.54
25	Pitts Ft Wayne & Chic 1st M 7s 1912.....	5.99	5.99	5.91	5.90	5.86	5.86	5.81	5.65	5.77	5.79	5.77	5.74	5.80
26	Camden & Amboy M 6s Nov 1889.....	5.58	5.58	5.63	5.73	5.67	5.54	5.52	5.44	5.44	5.46	5.32	5.13	5.08
28	St L Alton & T H RR 1st M 7s 1894.....	6.48	6.44	6.42	6.44	6.64	6.27	6.20	6.32	6.44	6.50	6.51	6.54	6.25
29	N Y Central renewal bonds 6s 1887.....	5.74	5.62	5.52	5.65	5.39	5.61	5.44	5.37	5.70	5.53	5.65	5.80	5.54
30	Morris & Essex 1st M of 7s 1914.....	6.07	5.97	5.96	5.96	6.01	5.98	5.84	5.78	6.01	6.01	5.94	5.82	6.00
31	N Y & Erie RR 1st M 7s 1897.....	6.43	6.37	6.33	6.11	6.30	6.25	6.20	6.27	6.41	6.06	6.29	6.11	6.28
32	M & St P (P du Ch dv) 1st M 6s 1898.....	6.94	6.79	6.68	6.73	6.79	6.83	6.73	6.60	6.60	6.69	6.69	6.73	6.74
33	Lehigh Valley RR 1st M 6s 1898.....	5.72	5.70	5.65	5.67	5.62	5.52	5.52	5.60	5.58	5.56	5.44	5.37	5.29
34	Central RR of New Jersey M 7s 1890.....	5.64	5.52	5.60	5.87	5.87	6.05	5.70	5.65	6.26	6.18	6.12	6.23	6.46
35	Lehigh Coal & Nav Co RR Loan 6s 1897.....	5.77	5.82	5.81	5.84	5.83	5.84	5.84	5.90	6.02	6.10	5.93	6.02	5.77
36	Chicago & Milwaukee RR 1st M 7s 1898.....	7.00	6.97	6.96	7.10	6.93	6.96	6.82	6.76	6.61	6.67	6.71	6.67	6.59
37	Lake Shore Ry dividend bonds 7s 1899.....	6.83	6.82	6.82	6.68	6.78	6.82	6.88	6.79	6.80	6.64	6.62	6.76	6.61
38	Cleve Col Cin & Ind 1st M of 7s 1899.....	6.55	6.41	6.34	6.33	6.35	6.31	6.33	6.42	6.33	6.37	6.34	6.37	6.36
39	Lehigh Valley RR 2nd M reg 7s 1910.....	6.31	6.32	6.23	6.30	6.40	6.32	6.24	6.34	6.22	6.29	6.17	6.09	6.12
40	Chic & Nor West Ry cons of 7s 1915.....	7.05	6.92	6.86	6.90	6.90	6.89	6.85	6.71	6.78	6.83	6.88	6.85	6.84
41	L Sh & Mich So cons 1st M of 7s 1900.....	6.79	6.70	6.54	6.55	6.66	6.57	6.47	6.53	6.54	6.60	6.70	6.59	
42	Pennsylvania RR Co gen M 6s 1910.....	5.94	5.82	5.78	5.80	5.78	5.76	5.76	5.65	5.63	5.68	5.69	5.57	5.49
43	New York & Harlem RR cons M 7s 1900.....	5.85	5.75	5.68	5.67	5.74	5.74	5.68	5.56	5.68	5.76	5.65	5.65	5.59
44	N Y C & H R RR 1st M 7s 1903.....	5.52	5.52	5.46	5.62	5.79	5.77	5.50	5.49	5.76	5.73	5.73	5.78	5.70
45	Chic Burl & Quincy RR cons M 7s 1903.....	6.42	6.40	6.35	6.32	6.30	6.29	6.28	6.22	6.24	6.22	6.29	6.28	6.24

## RAILROAD BOND YIELDS

A49

### YIELDS OF RAILROAD BONDS JAN. 1877—JAN. 1878

Ref. No.	Name of Bond	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
24	Chicago & Alton 1st M 7s 1893.....	5.54	5.58	5.77	5.80	5.79	5.57	5.39	5.53	5.65	5.75	5.79	5.84	5.70
25	Pitts Ft Wayne & Chic 1st M 7s 1912.....	5.80	5.69	5.74	5.79	5.80	5.79	5.79	5.83	5.87	5.91	5.88	5.85	5.80
26	Camden & Amboy M 6s Nov 1889.....	5.08	5.12	5.27	5.47	5.36	5.23	5.21	5.05	5.01	5.10	5.20	5.13	5.08
28	St L Alton & T H RR 1st M 7s 1894.....	6.25	6.28	6.36	6.40	6.49	6.23	6.05	6.09	6.11	6.14	6.26	6.33	6.33
30	Morris & Essex 1st M sf 7s 1914.....	6.00	6.09	6.09	6.10	6.06	5.93	5.98	6.07	6.04	6.08	6.04	6.00	6.02
31	N Y & Erie RR 1st M 7s 1897.....	6.28	6.28	6.08	6.02	5.98	5.90	5.94	5.94	6.05	6.17	6.11	6.05	6.15
32	M & St P (P du Ch dv) 1st M 8s 1898.....	6.74	6.74	6.75	6.76	6.55	6.67	6.71	6.70	6.83	6.83	6.75	6.59	6.49
33	Lehigh Valley RR 1st M 6s 1898.....	5.29	5.50	5.62	5.69	5.64	5.49	5.38	5.41	5.43	5.44	5.45	5.36	5.34
34	Central RR of New Jersey M 7s 1890.....	6.46	6.60	6.69	6.44	6.20	6.17	5.91	5.88	5.94	6.00	5.91	5.81	5.78
35	Lehigh Coal & Nav Co RR Loan 6s 1897.....	5.77	5.87	6.13	6.18	6.13	6.13	6.00	5.91	5.81	5.71	5.94	5.96	5.90
36	Chicago & Milwaukee RR 1st M 7s 1898.....	6.59	6.51	6.61	6.61	6.67	6.46	6.29	6.38	6.45	6.52	6.50	6.45	6.85
37	Lake Shore Ry dividend bonds 7s 1899.....	6.61	6.58	6.56	6.62	6.56	6.48	6.48	6.52	6.55	6.59	6.52	6.39	6.41
38	Clev Col Cin & Ind 1st M sf 7s 1899.....	6.36	6.36	6.52	6.52	6.45	6.21	6.28	6.35	6.44	6.42	6.42	6.30	6.37
39	Lehigh Valley RR 2nd M reg 7s 1910.....	6.12	6.34	6.40	6.58	6.52	6.45	6.31	6.39	6.25	6.21	6.15	6.14	6.15
40	Chic & Nor West Ry cons sf 7s 1915.....	6.84	6.81	6.75	6.74	6.69	6.63	6.65	6.66	6.63	6.65	6.59	6.57	6.55
41	L Sh & Mich So cons 1st M sf 7s 1900.....	6.59	6.48	6.52	6.64	6.53	6.51	6.37	6.47	6.38	6.41	6.40	6.30	6.24
42	Pennsylvania RR Co gen M 6s 1910.....	5.49	5.56	5.67	5.67	5.64	5.66	5.65	5.72	5.66	5.69	5.69	5.65	5.56
43	New York & Harlem RR cons M 7s 1900.....	5.59	5.59	5.72	5.63	5.65	5.71	5.66	5.70	5.72	5.81	5.58	5.64	5.55
44	N Y C & H R RR 1st M 7s 1903.....	5.70	5.82	5.97	5.87	5.74	5.70	5.68	5.71	5.78	5.78	5.69	5.70	5.62
45	Chic Burl & Quincy RR cons M 7s 1903.....	6.24	6.29	6.50	6.41	6.40	6.38	6.33	6.32	6.37	6.32	6.27	6.24	6.27

## YIELDS OF RAILROAD BONDS

JAN. 1878—JAN. 1879

Ref. No.	Name of Bond	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
24	Chicago & Alton 1st M 7s 1893.....	5.70	5.66	5.62	5.57	5.67	5.54	5.56	5.57	5.61	5.73	5.70	5.56	5.49
25	Pitts Ft Wayne & Chic 1st M 7s 1912.....	5.80	5.81	5.83	5.81	5.80	5.79	5.76	5.72	5.81	5.73	5.72	5.75	5.64
26	Camden & Amboy M 6s Nov 1889.....	5.08	5.13	5.19	5.24	5.19	5.09	5.01	5.07	4.99	5.01	4.98	5.04	4.86
28	St L Alton & T H RR 1st M 7s 1894.....	6.35	6.39	6.30	6.20	6.16	6.09	6.37	6.68	6.54	6.37	6.40	6.31	5.92
30	Morris & Essex 1st M of 7s 1914.....	6.02	5.99	5.95	5.90	5.90	5.85	5.86	5.86	5.91	5.87	5.90	5.94	5.91
31	N Y & Erie RR 1st M 7s 1897.....	6.15	6.08	6.09	6.04	6.00	5.89	5.73	5.75	5.82	5.80	5.76	5.73	5.63
32	M & St P (P du Ch dv) 1st M 8s 1898.....	6.49	6.53	6.52	6.53	6.44	6.29	6.33	6.35	6.44	6.39	6.31	6.30	6.15
33	Lehigh Valley RR 1st M 6s 1898.....	5.34	5.29	5.33	5.33	5.40	5.33	5.32	5.26	5.18	5.17	5.14	5.17	5.00
34	Central RR of New Jersey M 7s 1890.....	5.78	5.80	5.79	5.85	5.83	5.64	5.52	5.57	5.47	5.54	5.56	5.44	5.32
35	Lehigh Coal & Nav Co RR Loan 6s 1897.....	5.90	5.78	5.91	5.96	5.84	5.78	5.73	5.72	5.64	5.69	5.61	5.63	5.67
36	Chicago & Milwaukee RR 1st M 7s 1898.....	6.85	6.70	6.64	6.69	6.67	6.48	6.71	6.83	6.91	6.87	6.42	6.33	6.26
37	Lake Shore Ry dividend bonds 7s 1899.....	6.41	6.40	6.41	6.41	6.24	6.19	6.25	6.34	6.27	6.18	6.17	6.19	6.10
38	Clev Col Cin & Ind 1st M of 7s 1899.....	6.37	6.35	6.37	6.37	6.31	6.34	6.46	6.56	6.52	6.29	6.29	6.17	6.04
39	Lehigh Valley RR 2nd M reg 7s 1910.....	6.15	6.20	6.10	6.10	6.12	6.12	6.03	6.11	6.00	5.95	5.95	6.02	5.92
40	Chic & Nor West Ry cons of 7s 1915.....	6.55	6.51	6.52	6.53	6.43	6.40	6.33	6.36	6.39	6.33	6.29	6.19	6.10
41	L Sh & Mich So cons 1st M of 7s 1900.....	6.24	6.24	6.23	6.27	6.28	6.15	6.07	6.07	6.01	6.06	6.09	5.87	
42	Pennsylvania RR Co gen M 6s 1910.....	5.56	5.57	5.62	5.66	5.62	5.53	5.54	5.56	5.58	5.56	5.48	5.49	5.40
43	New York & Harlem RR cons M 7s 1900.....	5.33	5.58	5.54	5.54	5.54	5.30	5.48	5.51	5.54	5.55	5.40	5.40	5.36
44	N Y C & H R RR 1st M 7s 1903.....	5.62	5.65	5.66	5.67	5.63	5.62	5.63	5.68	5.69	5.66	5.68	5.65	5.49
45	Chic Burl & Quincy RR cons M 7s 1903.....	6.27	6.29	6.32	6.30	6.28	6.21	6.10	6.02	6.03	6.05	6.02	5.94	5.80
46	Cleveland & Pitts cons sf M 7s 1900.....	6.28	6.29	6.38	6.30	6.20	6.14	6.15	6.18	6.20	6.18	6.11	6.07	5.94
47	Michigan Central RR cons M 7s 1902.....	6.62	6.62	6.58	6.49	6.35	6.26	6.18	6.20	6.25	6.11	6.11	6.16	5.98

## RAILROAD BOND YIELDS

A51

### YIELDS OF RAILROAD BONDS JAN. 1879—JAN. 1880

Ref. No.	Name of Bond	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
24	Chicago & Alton 1st M 7s 1893.....	5.49	5.19	5.42	5.51	5.40	5.38	5.36	5.17	5.53	5.33	5.32	5.34	5.27
25	Pitts Ft Wayne & Chic 1st M 7s 1912.....	5.64	5.59	5.55	5.61	5.54	5.52	5.46	5.24	5.37	5.32	5.42	5.44	5.35
28	St L Alton & T H RR 1st M 7s 1894.....	5.92	5.83	5.95	5.98	5.87	5.69	5.52	5.65	5.87	5.98	5.96	5.93	5.87
30	Morris & Essex 1st M of 7s 1914.....	5.91	5.72	5.80	5.82	5.57	5.55	5.43	5.50	5.66	5.64	5.59	5.47	5.44
31	N Y & Erie RR 1st M 7s 1897.....	5.63	5.47	5.49	5.57	5.28	5.35	5.16	5.21	5.29	5.26	5.17	5.24	5.27
32	M & St P (P du Ch dv) 1st M 8s 1898.....	6.15	5.96	5.98	6.01	5.90	5.86	5.84	5.84	5.91	5.85	5.94	5.82	5.84
33	Lehigh Valley RR 1st M 6s 1898.....	5.00	5.15	5.18	5.12	4.93	4.74	4.75	4.80	4.92	4.92	4.76	4.79	4.74
34	Central RR of New Jersey M 7s 1890.....	5.32	5.13	5.27	5.29	5.21	5.12	5.12	5.10	5.31	5.33	5.39	5.10	5.10
35	Lehigh Coal & Nav Co RR Loan 6s 1897.....	5.67	5.46	5.55	5.61	5.44	5.37	5.31	5.25	5.28	5.34	5.25	5.23	5.19
36	Chicago & Milwaukee RR 1st M 7s 1898.....	6.26	6.05	6.10	6.15	6.17	6.11	5.94	5.85	6.00	6.05	5.92	6.01	5.85
37	Lake Shore Ry dividend bonds 7s 1899.....	6.10	5.85	6.05	5.89	5.74	5.60	5.94	5.76	5.67	5.85	5.75	5.65	5.56
38	Clev Col Cin & Ind 1st M sf 7s 1899.....	6.04	5.84	5.97	5.90	5.69	5.67	5.65	5.67	5.87	5.87	5.66	5.63	5.66
39	Lehigh Valley RR 2nd M reg 7s 1910.....	5.92	5.82	5.85	5.87	5.75	5.69	5.61	5.73	5.64	5.57	5.54	5.52	5.50
40	Chic & Nor West Ry cons sf 7s 1915.....	6.10	5.89	5.99	5.96	5.82	5.76	5.67	5.64	5.86	5.91	5.85	5.77	5.66
41	L Sh & Mich So cons 1st M of 7s 1900.....	5.87	5.66	5.74	5.80	5.59	5.51	5.41	5.48	5.56	5.54	5.79	5.46	5.39
42	Pennsylvania RR Co gen M 6s 1910.....	5.40	5.31	5.31	5.36	5.20	5.13	5.07	5.05	5.07	5.09	5.11	5.10	5.09
43	New York & Harlem RR cons M 7s 1900.....	5.36	5.31	5.34	5.38	5.29	5.21	5.10	5.11	5.21	5.21	5.09	5.10	5.01
44	N Y C & H R RR 1st M 7s 1903.....	5.49	5.39	5.49	5.45	5.39	5.35	5.18	5.21	5.29	5.26	5.30	5.29	5.17
45	Chic Burl & Quincy RR cons M 7s 1903.....	5.80	5.71	5.81	5.80	5.67	5.65	5.58	5.46	5.58	5.57	5.59	5.57	
46	Cleveland & Pitts cons of M 7s 1900.....	5.94	5.70	5.90	5.86	5.81	5.85	5.90	5.97	5.85	5.63	5.63	5.62	5.61
47	Michigan Central RR cons M 7s 1902.....	5.98	5.67	5.90	5.85	5.65	5.60	5.56	5.62	5.71	5.65	5.64	5.65	5.61
48	Central Pacific RR 1st M 6s 1895.....	5.41	5.21	5.30	5.20	5.13	5.12	5.15	5.24	5.24	5.20	5.24	5.20	5.18
49	Chicago Rk Is & Pac RR 1st M 6s 1917.....	5.39	5.27	5.35	5.28	5.20	5.21	5.19	5.21	5.28	5.23	5.23	5.19	5.12

**YIELDS OF RAILROAD BONDS**  
JAN. 1880—JAN. 1881

Ref. No.	Name of Bond	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
25	Pitts Ft Wayne & Chi 1st M 7s 1912.....	5.35	5.26	5.20	5.18	5.20	5.21	4.94	4.85	4.80	4.83	4.77	4.74	4.74
30	Morris & Essex 1st M sf 7s 1914.....	5.44	5.49	5.29	5.30	5.29	5.16	5.13	5.04	5.10	5.17	4.94	4.94	4.99
31	N Y & Erie RR 1st M 7s 1897.....	5.27	5.26	5.22	5.24	5.12	5.03	4.91	4.96	4.85	4.82	4.74	4.69	4.57
32	M & St P (P du Ch dv) 1st M 8s 1898.....	5.84	5.71	5.76	5.67	5.71	5.47	5.40	5.36	5.27	5.22	5.14	5.09	5.07
33	Lehigh Valley RR 1st M 6s 1898.....	4.74	4.71	4.67	4.65	4.67	4.54	4.54	4.63	4.61	4.53	4.40	4.31	4.34
35	Lehigh Coal & Nav. Co RR Loan 6s 1897.....	5.19	5.14	5.12	5.26	5.15	5.18	5.23	5.12	4.85	4.81	4.72	4.72	4.72
36	Chicago & Milwaukee RR 1st M 7s 1898.....	5.85	5.82	5.78	5.82	5.84	5.84	5.54	5.42	5.42	5.46	5.16	5.11	5.12
37	Lake Shore Ry dividend bonds 7s 1899.....	5.56	5.58	5.60	5.64	5.66	5.52	5.48	5.48	5.44	5.37	5.25	5.16	5.16
38	Clev Col Cin & Ind 1st M sf 7s 1899.....	5.66	5.62	5.57	5.53	5.51	5.50	5.49	5.41	5.37	5.28	5.14	4.87	4.89
39	Lehigh Valley RR 2nd M reg 7s 1910.....	5.50	5.49	5.38	5.37	5.34	5.30	5.31	5.22	5.11	5.07	5.09	5.07	4.95
40	Chi & Nor West Ry cons sf 7s 1915.....	5.66	5.56	5.62	5.66	5.65	5.65	5.58	5.46	5.45	5.31	5.11	5.02	5.00
41	L St & Mich So cons 1st M sf 7s 1900.....	5.39	5.25	5.21	5.42	5.36	5.35	5.21	5.09	5.16	5.16	5.02	4.85	4.65
42	Pennsylvania RR Co gen M 6s 1910.....	5.09	4.97	4.99	5.00	5.09	5.00	4.87	4.81	4.76	4.72	4.63	4.49	
43	New York & Harlem RR cons M 7s 1900.....	5.01	5.06	5.14	5.11	5.09	5.00	4.82	4.80	4.82	4.75	4.55	4.48	4.46
44	N Y C & H R RR 1st M 7s 1903.....	5.17	5.11	5.13	5.16	5.15	5.09	4.88	4.80	4.86	4.82	4.71	4.62	4.55
45	Chi Burl & Quincy RR cons M 7s 1903.....	5.57	5.51	5.50	5.51	5.50	5.49	5.42	5.26	5.25	5.19	5.09	4.97	4.94
46	Cleveland & Pitts cons sf M 7s 1900.....	5.61	5.62	5.59	5.59	5.48	5.48	5.41	5.38	5.39	5.37	5.29	5.25	5.24
47	Michigan Central RR cons M 7s 1902.....	5.61	5.60	5.60	5.56	5.60	5.63	5.48	5.29	5.34	5.19	4.97	5.00	4.98
48	Central Pacific RR 1st M 6s 1895.....	5.18	4.94	4.97	4.97	5.01	4.91	4.88	4.90	4.97	4.93	4.85	4.83	4.72
49	Chicago Rl Is & Pac RR 1st M 6s 1917.....	5.12	5.02	5.03	5.09	5.07	5.06	4.84	4.85	4.81	4.72	4.67	4.57	4.58
50	Chicago & Nor West cons M 7s 1902.....	5.82	5.81	5.84	5.83	5.77	5.66	5.67	5.63	5.59	5.50	5.27	5.02	5.07
51	Chic St Paul & Minn 1st M 6s 1918.....	5.90	5.80	5.81	5.86	5.89	5.90	5.74	5.73	5.64	5.65	5.65	5.53	5.46
52	St Paul Minn & Man 2nd M 6s 1909.....	6.58	6.52	6.49	6.41	6.35	6.36	6.32	6.33	6.06	5.98	6.01	6.03	5.89
53	Nash Chatt & St L 1st M 7s 1913.....	6.40	6.10	6.12	6.12	6.15	6.22	6.36	6.33	6.36	6.28	5.98	5.87	5.78
54	St P & Sioux City RR 1st M 6s 1919.....	6.20	5.99	5.93	5.93	5.96	5.98	5.93	5.85	5.82	5.74	5.62	5.51	5.34

## RAILROAD BOND YIELDS

A53

### YIELDS OF RAILROAD BONDS JAN. 1881—JAN. 1882

Ref. No.	Name of Bond	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
25	Pitts Ft Wayne & Chic 1st M 7s 1912.....	4.74	4.77	4.80	4.92	4.82	4.77	4.68	4.60	4.73	4.76	4.74	4.76	4.74
30	Morris & Essex 1st M of 7s 1914.....	4.99	4.99	4.99	5.03	4.78	4.84	4.64	4.66	4.98	4.96	4.88	4.87	4.82
31	N Y & Erie RR 1st M 7s 1897.....	4.57	4.78	4.77	4.69	4.49	4.37	4.30	4.41	4.57	4.64	4.63	4.70	4.72
32	M & St P (P du Ch dv) 1st M 8s 1898.....	5.07	5.08	5.25	5.03	4.98	4.96	4.86	4.84	5.09	5.09	5.11	5.19	5.02
33	Lehigh Valley RR 1st M 6s 1898.....	4.34	4.28	4.27	4.19	4.02	4.05	4.23	4.26	4.35	4.40	4.21	4.32	4.29
37	Lake Shore Ry dividend bonds 7s 1899.....	5.16	5.14	5.10	5.18	5.03	4.94	4.93	4.97	5.06	5.11	5.08	5.14	5.15
38	Clev Col Cin & Ind 1st M of 7s 1899.....	4.80	5.00	5.09	5.22	5.05	5.01	5.01	5.02	5.08	5.10	4.89	5.01	5.05
39	Lehigh Valley RR 2nd M reg 7s 1910.....	4.95	4.94	4.84	4.76	4.74	4.77	4.78	4.78	4.84	5.03	5.01	4.96	4.96
40	Chic & Nor West Ry cons of 7s 1915.....	5.00	5.06	5.18	5.14	5.01	5.00	5.00	5.02	4.98	5.09	5.08	5.16	5.06
41	L Sh & Mich So cons 1st M of 7s 1900.....	4.63	4.86	4.89	4.91	4.82	4.62	4.65	4.73	4.83	4.73	4.73	4.80	4.60
42	Pennsylvania RR Co gen M 6s 1910.....	4.49	4.52	4.52	4.47	4.37	4.34	4.43	4.49	4.60	4.63	4.58	4.59	4.78
43	New York & Harlem RR cons M 7s 1900.....	4.46	4.50	4.63	4.63	4.46	4.32	4.31	4.34	4.43	4.41	4.30	4.33	4.33
44	N Y C & H R RR 1st M 7s 1903.....	4.55	4.65	4.71	4.71	4.60	4.42	4.37	4.36	4.37	4.48	4.53	4.49	4.51
45	Chic Burl & Quincy RR cons M 7s 1903.....	4.94	5.01	5.10	5.07	4.96	4.88	4.74	4.71	4.77	4.84	4.94	4.96	4.98
46	Cleveland & Pitts cons of M 7s 1900.....	5.24	5.27	5.27	5.10	4.83	4.80	4.82	4.88	4.90	4.88	4.82	4.72	4.87
47	Michigan Central RR cons M 7s 1902.....	4.98	5.11	5.13	5.09	4.89	4.78	4.91	4.84	5.14	5.27	5.18	5.16	5.17
48	Central Pacific RR 1st M 6s 1895.....	4.72	4.77	4.86	4.76	4.61	4.49	4.45	4.57	4.66	4.65	4.70	4.68	4.64
49	Chicago Rk Is & Pac RR 1st M 6s 1917.....	4.58	4.66	4.77	4.69	4.59	4.51	4.39	4.45	4.54	4.63	4.63	4.56	4.55
50	Chicago & Nor West cons M 7s 1902.....	5.07	5.23	5.24	5.27	5.09	4.99	4.97	5.07	5.22	5.28	5.22	5.17	5.10
51	Chic St Paul & Minn 1st M 6s 1918.....	5.46	5.35	5.44	5.45	5.34	5.30	5.31	5.29	5.32	5.36	5.39	5.51	5.42
52	St Paul Minn & Man 2nd M 6s 1909.....	5.89	5.75	5.82	5.84	5.71	5.52	5.46	5.48	5.56	5.63	5.62	5.68	5.71
53	Nash Chatt & St L 1st M 7s 1913.....	5.78	5.85	5.88	5.83	5.77	5.54	5.72	5.78	5.81	5.91	5.96	5.95	5.91
54	St P & Sioux City RR 1st M 6s 1919.....	5.34	5.34	5.44	5.45	5.38	5.30	5.33	5.40	5.40	5.42	5.44	5.50	5.49
55	C M & St P (So Min Dv) 1st M 6s 1910.....	5.47	5.56	5.62	5.61	5.51	5.46	5.51	5.61	5.68	5.72	5.68	5.71	5.74
56	Canada Southern Ry 1st M 5s 1908.....	4.83	4.98	5.07	5.09	4.94	4.89	4.99	5.05	5.11	5.23	5.19	5.24	5.31
57	Chic St P Min & Omaha cons M 6s 1930.....	5.66	5.69	5.84	5.89	5.78	5.69	5.82	5.92	5.92	5.97	5.95	6.01	6.09

**YIELDS OF RAILROAD BONDS**  
JAN. 1882—JAN. 1883

Ref. No.	Name of Bond	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
25	Pitts Ft Wayne & Chic 1st M 7s 1912.....	4.74	4.74	4.77	4.70	4.70	4.69	4.73	4.75	4.77	4.75	4.79	4.74	4.73
30	Morris & Essex 1st M sf 7s 1914.....	4.82	4.94	4.96	4.84	4.81	4.90	4.85	4.80	4.77	4.79	4.84	4.80	4.82
32	M & St P (P du Ch dv) 1st M 8s 1898.....	5.02	4.98	5.09	5.06	5.00	5.03	5.14	5.12	5.11	5.11	5.01	5.12	5.08
33	Lehigh Valley RR 1st M 6s 1898.....	4.29	4.19	4.25	4.22	4.10	4.28	4.16	4.16	4.18	4.22	4.37	4.36	4.28
37	Lake Shore Ry dividend bonds 7s 1899.....	5.15	5.17	5.20	5.16	5.14	5.15	5.17	5.21	5.26	5.20	5.20	5.21	5.16
38	Clev Col Cin & Ind 1st M sf 7s 1899.....	5.05	5.03	5.05	5.00	4.94	4.91	5.04	5.05	5.27	5.43	5.15	5.13	5.08
39	Lehigh Valley RR 2nd M reg 7s 1910.....	4.96	4.97	4.97	4.89	4.92	4.89	4.93	4.80	4.86	4.89	4.93	4.94	4.88
40	Chic & Nor West Ry cons 7s 1915.....	5.06	5.11	5.11	5.08	4.98	5.07	5.07	5.10	5.05	4.98	5.07	5.00	5.05
41	L Sh & Mich So cons 1st M sf 7s 1900.....	4.50	4.73	4.88	4.87	5.04	4.92	4.73	4.91	4.80	4.81	4.81	4.81	4.74
42	Pennsylvania RR Co gen M 6s 1910.....	4.78	4.61	4.53	4.51	4.31	4.39	4.52	4.48	4.48	4.51	4.51	4.60	4.58
43	New York & Harlem RR cons M 7s 1900.....	4.33	4.36	4.55	4.49	4.44	4.46	4.47	4.51	4.55	4.49	4.44	4.83	4.62
44	N Y C & H R RR 1st M 7s 1903.....	4.51	4.54	4.59	4.58	4.58	4.61	4.65	4.59	4.65	4.61	4.63	4.67	4.65
45	Chic Burl & Quincy RR cons M 7s 1903.....	4.98	5.06	5.10	5.01	5.01	4.88	4.89	4.91	4.97	5.00	4.97	5.00	4.94
46	Cleveland & Pitts cons sf M 7s 1900.....	4.87	5.05	4.98	4.98	4.95	4.94	4.99	5.12	5.07	4.95	4.99	4.83	4.89
47	Michigan Central RR cons M 7s 1902.....	5.17	5.11	5.08	5.07	5.02	5.12	5.14	5.17	5.15	5.00	5.21	5.21	5.07
48	Central Pacific RR 1st M 6s 1895.....	4.64	4.68	4.64	4.57	4.49	4.45	4.35	4.44	4.62	4.67	4.70	4.65	4.59
49	Chicago Rk L & Pac RR 1st M 6s 1917.....	4.55	4.53	4.51	4.53	4.56	4.51	4.39	4.48	4.57	4.50	4.52	4.55	4.57
50	Chicago & Nor West cons M 7s 1902.....	5.10	5.16	5.24	5.08	5.05	5.05	4.95	5.10	5.12	5.04	5.07	5.02	5.03
51	Chic St Paul & Minn 1st M 6s 1918.....	5.42	5.39	5.44	5.31	5.27	5.29	5.25	5.41	5.35	5.29	5.35	5.35	5.32
52	St Paul Minn & Man 2nd M 6s 1909.....	5.71	5.79	5.70	5.56	5.46	5.35	5.25	5.35	5.31	5.31	5.40	5.46	5.51
53	Nash Chatt & St L 1st M 7s 1913.....	5.91	5.98	6.06	6.01	5.99	6.05	6.04	6.02	5.99	6.07	6.07	6.03	5.88
54	St P & Sioux City RR 1st M 6s 1919.....	5.49	5.38	5.41	5.39	5.40	5.39	5.39	5.46	5.43	5.40	5.41	5.36	5.31
55	C M & St P (So Min Dv) 1st M 6s 1910.....	5.74	5.81	5.81	5.60	5.59	5.55	5.51	5.53	5.53	5.58	5.60	5.55	5.55
56	Canada Southern Ry 1st M 5s 1908.....	5.31	5.49	5.55	5.48	5.46	5.43	5.50	5.54	5.57	5.58	5.59	5.37	5.33
57	Chic St P Min & Omaha cons M 6s 1930.....	6.09	6.09	6.11	6.00	5.89	5.89	5.78	5.76	5.74	5.68	5.71	5.59	5.54
58	St P Min & Man (Dak Dv) 1st M 6s 1910.....	5.70	5.70	5.70	5.66	5.56	5.52	5.49	5.54	5.58	5.59	5.58	5.59	5.49
59	Philadelphia & Erie gen M 5s 1920.....	4.79	4.82	4.86	4.88	4.91	4.88	4.83	4.86	4.85	4.86	4.90	4.89	4.87
60	C M & St P (C & P W Dv) 1st M 5s 1921.....	5.36	5.55	5.51	5.47	5.47	5.51	5.48	5.45	5.50	5.56	5.61	5.58	5.55

## RAILROAD BOND YIELDS

A55

### YIELDS OF RAILROAD BONDS JAN. 1883—JAN. 1884

Ref. No.	Name of Bond	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
25	Pitts Ft Wayne & Chic 1st M 7s 1912.....	4.73	4.76	4.76	4.62	4.73	4.76	4.72	4.73	4.72	4.73	4.74	4.77	4.67
30	Morris & Essex 1st M of 7s 1914.....	4.82	4.89	4.90	4.88	4.85	4.86	4.80	4.91	4.88	4.82	4.84	4.87	4.82
32	M & St P (P du Ch dv) 1st M 8s 1898.....	5.08	5.04	5.05	5.09	5.13	5.15	5.02	5.17	5.18	5.15	5.03	4.99	5.08
33	Lehigh Valley RR 1st M 6s 1898.....	4.28	4.16	4.24	4.32	4.26	4.22	4.30	4.36	4.40	4.42	4.34	4.30	4.25
37	Lake Shore Ry dividend bonds 7s 1899.....	5.16	5.22	5.20	5.21	5.22	5.22	5.16	5.16	5.13	5.13	5.13	5.04	5.02
38	Clev Col Cin & Ind 1st M of 7s 1899.....	5.08	5.09	5.11	5.10	5.14	5.02	5.16	5.18	5.15	5.18	5.22	5.24	
39	Lehigh Valley RR 2nd M reg 7s 1910.....	4.88	4.88	4.86	4.84	4.90	4.88	4.84	4.92	4.98	4.96	4.90	4.93	4.88
40	Chic & Nor West Ry cons of 7s 1915.....	5.05	5.08	5.13	5.10	5.11	5.07	5.02	5.01	5.11	5.10	4.99	5.00	5.04
41	L Sh & Mich So cons 1st M of 7s 1900.....	4.74	4.86	4.98	5.07	5.02	4.95	4.88	4.85	5.00	4.87	4.84	4.96	4.72
42	Pennsylvania RR Co gen M 6s 1910.....	4.58	4.58	4.59	4.62	4.56	4.59	4.61	4.67	4.73	4.75	4.73	4.72	4.68
43	New York & Harlem RR cons M 7s 1900.....	4.62	4.62	4.64	4.61	4.62	4.68	4.66	4.69	4.69	4.72	4.74	4.53	4.47
44	N Y C & H R RR 1st M 7s 1903.....	4.64	4.73	4.75	4.74	4.78	4.76	4.80	4.81	4.75	4.73	4.73	4.65	4.53
45	Chic Burl & Quincy RR cons M 7s 1903.....	4.94	4.99	4.99	4.95	4.95	4.93	4.91	4.95	4.95	4.92	4.93	4.88	4.73
46	Cleveland & Pitts cons of M 7s 1900.....	4.89	4.96	5.01	5.01	5.09	5.05	5.07	5.09	5.12	5.11	5.01	4.99	5.00
47	Michigan Central RR cons M 7s 1902.....	5.07	5.11	5.13	5.11	5.12	5.10	5.06	5.22	5.21	5.19	5.08	5.03	5.05
48	Central Pacific RR 1st M 6s 1895.....	4.59	4.61	4.65	4.64	4.66	4.63	4.70	4.70	4.81	4.79	4.80	4.67	4.34
49	Chicago Rk Is & Pac RR 1st M 6s 1917.....	4.57	4.61	4.66	4.68	4.60	4.61	4.62	4.64	4.59	4.51	4.55	4.51	4.49
50	Chicago & Nor West cons M 7s 1902.....	5.03	5.10	5.15	5.10	5.11	5.15	5.20	5.23	5.22	5.16	5.06	5.05	5.04
51	Chic St Paul & Minn 1st M 6s 1918.....	5.32	5.44	5.24	5.25	5.15	5.19	5.21	5.24	5.26	5.18	5.14	5.18	5.07
52	St Paul Minn & Man 2nd M 6s 1909.....	5.51	5.52	5.57	5.38	5.42	5.48	5.55	5.44	5.40	5.47	5.44	5.46	5.44
53	Nash Chatt & St L 1st M 7s 1913.....	5.88	5.96	5.92	5.89	5.87	5.87	5.86	5.87	5.86	5.87	5.81	5.80	5.82
54	St P & Sioux City RR 1st M 6s 1919.....	5.31	5.40	5.41	5.39	5.27	5.26	5.26	5.21	5.20	5.19	5.15	5.15	5.12
55	C M & St P (So Min Dv) 1st M 6s 1910.....	5.55	5.60	5.65	5.58	5.56	5.54	5.59	5.63	5.61	5.54	5.48	5.51	5.51
56	Canada Southern Ry 1st M 5s 1908.....	5.33	5.44	5.40	5.31	5.30	5.21	5.30	5.43	5.45	5.45	5.34	5.29	5.33
57	Chic St P Min & Omaha cons M 6s 1930.....	5.54	5.62	5.68	5.66	5.61	5.58	5.53	5.46	5.53	5.61	5.57	5.52	5.51
58	St P Min & Man (Dak Dv) 1st M 6s 1910.....	5.49	5.51	5.55	5.43	5.44	5.49	5.50	5.53	5.49	5.47	5.42	5.46	5.42
59	Philadelphia & Erie gen. M 5s 1920.....	4.87	4.83	4.84	4.83	4.85	4.89	4.88	4.90	4.90	4.86	4.85	4.83	4.79
60	C M & St P (C & P V Dv) 1st M 5s 1921.....	5.55	5.56	5.54	5.47	5.43	5.37	5.39	5.48	5.47	5.46	5.47	5.38	5.43
61	C M & St P (Wis & Min Dv) 1st M 5s 1921.....	5.56	5.58	5.64	5.63	5.69	5.65	5.64	5.71	5.54	5.69	5.62	5.57	5.57
62	Chic St Louis & N Orleans 5s 1951.....	4.83	4.84	4.88	4.84	4.80	4.75	4.78	4.81	4.80	4.81	4.75	4.65	4.71
63	Pennsylvania Co gu 1st M 4 1/2s 1921.....	4.81	4.80	4.81	4.80	4.81	4.83	4.82	4.84	4.85	4.84	4.82	4.79	4.85

**YIELDS OF RAILROAD BONDS**  
JAN. 1884—JAN. 1885

Ref. No.	Name of Bond	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
25	Pitts Ft Wayne & Chic 1st M 7s 1912.....	4.67	4.62	4.63	4.64	4.61	4.73	4.71	4.69	4.70	4.65	4.70	4.69	4.68
30	Morris & Essex 1st M of 7s 1914.....	4.82	4.70	4.75	4.74	4.85	4.93	4.85	4.88	4.85	4.78	4.79	4.79	4.84
32	M & St P (P du Ch dv) 1st M 8s 1898.....	5.08	4.97	4.97	4.96	5.02	5.04	5.00	4.99	5.03	5.09	5.10	5.05	4.96
33	Lehigh Valley RR 1st M 6s 1898.....	4.25	4.24	4.10	4.06	4.13	4.17	4.13	4.20	4.15	4.07	4.10	4.09	4.02
37	Lake Shore Ry dividend bonds 7s 1899.....	5.02	4.92	4.94	4.99	5.13	5.18	5.22	5.19	5.21	5.20	5.18	5.14	5.09
38	Clev Col Cin & Ind 1st M of 7s 1899.....	5.24	5.09	5.01	4.98	5.18	5.14	5.45	5.21	5.01	4.93	4.97	5.02	5.02
39	Lehigh Valley RR 2nd M reg 7s 1910.....	4.88	4.85	4.87	4.84	4.84	4.87	4.90	4.90	4.97	4.93	4.78	4.83	4.77
40	Chic & Nor West Ry cons of 7s 1915.....	5.04	4.98	4.98	4.99	4.99	5.31	5.18	4.99	5.02	5.03	4.97	4.92	4.90
41	L Sh & Mich So cons 1st M of 7s 1900.....	4.72	4.68	4.69	4.56	4.76	4.72	4.99	4.81	4.76	4.81	4.83	4.74	4.65
42	Pennsylvania RR Co gen M 6s 1910.....	4.68	4.66	4.63	4.65	4.67	4.71	4.57	4.59	4.62	4.58	4.54	4.50	4.41
43	New York & Harlem RR cons M 7s 1900.....	4.47	4.44	4.47	4.29	4.41	4.54	4.61	4.50	4.56	4.61	4.58	4.53	4.12
44	N Y C & H R RR 1st M 7s 1903.....	4.53	4.51	4.59	4.50	4.61	4.71	4.65	4.55	4.59	4.71	4.72	4.64	4.46
45	Chic Burl & Quincy RR cons M 7s 1903.....	4.73	4.71	4.71	4.76	4.85	5.05	5.00	4.97	4.93	4.85	4.86	4.73	4.60
46	Cleveland & Pitts cons of M 7s 1900.....	5.00	4.85	4.81	4.86	4.84	4.93	4.96	4.93	5.03	4.90	4.80	4.92	4.93
47	Michigan Central RR cons M 7s 1902.....	5.05	4.95	4.88	4.87	5.01	5.02	5.03	4.99	5.02	5.00	5.02	5.10	4.99
48	Central Pacific RR 1st M 6s 1895.....	4.34	4.68	4.54	4.59	4.80	5.04	5.11	4.77	4.81	4.87	5.06	4.92	4.80
49	Chicago Rk Is & Pac RR 1st M 6s 1917.....	4.49	4.50	4.52	4.52	4.55	4.59	4.60	4.56	4.57	4.59	4.60	4.56	4.47
50	Chicago & Nor West cons M 7s 1902.....	5.04	4.95	4.89	4.88	4.91	5.12	5.16	5.06	5.05	5.02	5.00	4.89	4.84
51	Chic St Paul & Minn 1st M 6s 1918.....	5.07	4.99	4.95	4.98	4.99	5.17	5.17	5.09	5.02	5.09	5.05	5.01	5.00
52	St Paul Minn & Man 2nd M 6s 1909.....	5.44	5.34	5.27	5.20	5.33	5.69	5.64	5.52	5.47	5.38	5.50	5.39	5.35
53	Nash Chatt & St L 1st M 7s 1913.....	5.82	5.80	5.78	5.64	5.76	5.80	5.93	5.87	5.92	5.92	5.99	5.84	5.78
54	St P & Sioux City RR 1st M 6s 1919.....	5.12	5.08	5.00	4.99	5.09	5.11	5.15	5.06	5.04	5.05	5.08	5.07	5.05
55	C M & St P (So Min Dv) 1st M 6s 1910.....	5.51	5.37	5.29	5.21	5.31	5.64	5.72	5.40	5.51	5.56	5.59	5.50	5.42
56	Canada Southern Ry 1st M 5s 1908.....	5.33	5.21	5.09	5.05	5.17	5.38	5.41	5.27	5.32	5.33	5.37	5.29	5.28
57	Chic St P Min & Omaha cons M 6s 1930.....	5.51	5.45	5.38	5.36	5.49	5.67	5.47	5.40	5.45	5.43	5.47	5.41	5.36
58	St P Min & Man (Dak Dv) 1st M 6s 1910.....	5.42	5.34	5.29	5.28	5.36	5.51	5.48	5.46	5.53	5.49	5.46	5.41	5.39
59	Philadelphia & Erie gen M 5s 1920.....	4.79	4.77	4.74	4.74	4.74	4.86	4.89	4.90	4.95	4.89	4.86	4.81	4.78
60	C M & St P (C & P W Dv) 1st M 5s 1921.....	5.43	5.35	5.14	5.08	5.31	5.48	5.41	5.42	5.37	5.46	5.44	5.35	5.42
61	C M & St P (Wis & Min Dv) 1st M 5s 1921.....	5.57	5.50	5.34	5.14	5.37	5.52	5.60	5.50	5.49	5.52	5.46	5.43	5.44
62	Chic St Louis & N Orleans 5s 1951.....	4.71	4.72	4.66	4.68	4.68	4.71	4.77	4.77	4.78	4.79	4.82	4.80	4.77
63	Pennsylvania Co gu 1st M 41&s 1921.....	4.85	4.80	4.78	4.77	4.79	4.86	4.83	4.82	4.79	4.71	4.74	4.71	4.74
64	New York Lack & West 1st M 6s 1921.....	4.95	4.88	4.90	4.83	4.98	5.15	5.18	5.00	4.96	5.02	5.04	4.99	4.97

**YIELDS OF RAILROAD BONDS**  
JAN. 1885—JAN. 1886

Ref. No.	Name of Bond	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
25	Pitts Ft Wayne & Chic 1st M 7s 1912.....	4.68	4.67	4.60	4.56	4.57	4.59	4.57	4.48	4.48	4.49	4.50	4.47	4.35
30	Morris & Essex 1st M 6s 1914.....	4.84	4.73	4.68	4.72	4.49	4.41	4.57	4.48	4.48	4.48	4.46	4.49	4.47
32	M & St P (P du Ch dv) 1st M 6s 1898.....	4.96	4.88	4.80	4.85	4.96	4.85	4.86	4.70	4.67	4.52	4.50	4.56	4.58
33	Lehigh Valley RR 1st M 6s 1898.....	4.02	3.93	3.94	3.92	3.89	3.86	3.80	3.74	3.67	3.74	3.72	3.60	3.66
37	Lake Shore Ry dividend bonds 7s 1899.....	5.09	5.06	4.97	4.92	5.04	4.99	4.97	4.97	4.96	4.92	4.90	4.83	
38	Clev Col Cin & Ind 1st M of 7s 1899.....	5.02	5.04	5.06	4.80	4.95	5.00	4.93	4.97	4.84	4.80	4.71	4.85	4.63
39	Lehigh Valley RR 2nd M reg 7s 1910.....	4.77	4.77	4.70	4.67	4.64	4.63	4.65	4.63	4.60	4.50	4.46	4.44	4.44
40	Chic & Nor West Ry cons 8s 1915.....	4.90	4.80	4.78	4.78	4.75	4.64	4.66	4.69	4.71	4.67	4.64	4.64	4.57
41	L Sh & Mich So cons 1st M 6s 1900.....	4.65	4.63	4.62	4.52	4.54	4.55	4.48	4.47	4.46	4.47	4.50	4.47	4.34
42	Pennsylvania RR Co gen M 6s 1910.....	4.41	4.38	4.33	4.28	4.20	4.12	4.22	4.26	4.26	4.25	4.19	4.15	4.07
43	New York & Harlem RR cons M 7s 1900.....	4.12	4.21	4.12	4.14	4.05	3.95	3.88	3.80	3.86	3.81	3.77	3.75	3.78
44	N Y C & H R RR 1st M 7s 1903.....	4.46	4.39	4.32	4.32	4.26	4.26	4.24	4.32	4.25	4.17	4.15	4.13	4.12
45	Chic Burl & Quincy RR cons M 7s 1903.....	4.60	4.59	4.51	4.52	4.49	4.38	4.30	4.30	4.29	4.20	4.26	4.24	4.12
46	Cleveland & Pitts cons of M 7s 1900.....	4.93	4.96	4.99	4.92	4.86	4.77	4.67	4.53	4.51	4.53	4.51	4.51	4.52
47	Michigan Central R.R. cons M 7s 1902.....	4.99	4.90	4.84	4.93	4.91	4.91	4.91	4.95	4.81	4.66	4.63	4.65	4.51
49	Chicago Rk Is & Pac RR 1st M 6s 1917.....	4.47	4.39	4.37	4.39	4.37	4.29	4.24	4.31	4.30	4.28	4.29	4.29	4.31
50	Chicago & Nor West cons M 7s 1902.....	4.84	4.78	4.71	4.74	4.70	4.65	4.47	4.67	4.71	4.61	4.52	4.54	4.38
51	Chic St Paul & Minn 1st M 6s 1918.....	5.00	4.96	4.81	4.88	4.87	4.81	4.78	4.74	4.71	4.74	4.75	4.67	4.55
52	St Paul Minn & Man 2nd M 6s 1909.....	5.35	5.35	5.21	5.19	5.14	5.04	5.07	5.12	5.01	4.92	4.89	4.84	4.76
53	Nash Chatt & St L 1st M 7s 1913.....	5.78	5.82	5.80	5.74	5.68	5.67	5.62	5.49	5.53	5.48	5.40	5.40	5.37
54	St P & Sioux City RR 1st M 6s 1919.....	5.05	4.98	4.91	4.93	4.86	4.84	4.81	4.82	4.81	4.70	4.69	4.69	4.58
55	C M & St P (So Min Dv) 1st M 6s 1910.....	5.42	5.35	5.30	5.25	5.25	5.21	5.11	5.14	5.11	5.11	5.04	5.01	4.90
56	Canada Southern Ry 1st M 5s 1908.....	5.28	5.26	5.18	5.29	5.37	5.25	5.16	5.05	5.04	4.95	4.90	4.70	4.69
57	Chic St P Min & Omaha cons M 6s 1930.....	5.36	5.34	5.44	5.45	5.42	5.35	5.33	5.35	5.30	5.23	5.15	4.99	4.92
58	St P Min & Man (Dak Dv) 1st M 6s 1910.....	5.39	5.35	5.25	5.27	5.27	5.08	5.10	5.07	5.00	4.94	4.91	4.83	4.71
59	Philadelphia & Erie gen M 5s 1920.....	4.78	4.70	4.68	4.65	4.61	4.58	4.61	4.58	4.54	4.51	4.47	4.49	4.43
60	C M & St P (C & P W Dv) 1st M 5s 1921.....	5.42	5.38	5.37	5.38	5.33	5.23	5.11	5.13	5.13	5.06	4.98	4.88	4.81
61	C M & St P (Wis & Min Dv) 1st M 5s 1921.....	5.44	5.42	5.43	5.45	5.39	5.27	5.17	5.18	5.18	5.09	5.00	4.96	4.84
62	Chic St Louis & N Orleans 5s 1951.....	4.77	4.72	4.64	4.55	4.58	4.54	4.45	4.46	4.45	4.46	4.49	4.54	4.44
63	Pennsylvania Co gu 1st M 4½s 1921.....	4.74	4.62	4.61	4.62	4.54	4.51	4.52	4.53	4.55	4.50	4.46	4.46	4.29
64	New York Lack & West 1st M 6s 1921.....	4.97	4.88	4.85	4.81	4.87	4.79	4.65	4.65	4.73	4.74	4.71	4.62	4.43
65	Hannibal & St Joseph cons M 6s 1911.....	5.11	5.03	4.97	4.98	4.93	4.89	4.89	4.90	4.94	4.91	4.89	4.89	4.77

## APPENDIX

YIELDS OF RAILROAD BONDS  
JAN. 1886—JAN. 1887

Ref. No.	Name of Bond	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
25	Pitts Ft Wayne & Chic 1st M 7s 1912.....	4.35	4.30	4.29	4.29	4.30	4.31	4.29	4.29	4.42	4.34	4.36	4.41	4.42
30	Morris & Essex 1st M sf 7s 1914.....	4.47	4.37	4.34	4.38	4.38	4.40	4.42	4.39	4.39	4.40	4.38	4.44	4.44
32	M & St P (P du Ch dv) 1st M 8s 1898.....	4.58	4.36	4.43	4.27	4.32	4.30	4.27	4.26	4.37	4.42	4.46	4.44	4.50
33	Lehigh Valley RR 1st M 6s 1898.....	3.66	3.60	3.55	3.58	3.60	3.65	3.46	3.45	3.50	3.50	3.60	3.62	3.57
37	Lake Shore Ry dividend bonds 7s 1899.....	4.83	4.76	4.69	4.74	4.69	4.67	4.65	4.64	4.70	4.70	4.67	4.66	4.69
38	Clev Col Cin & Ind 1st M sf 7s 1899.....	4.63	4.47	4.43	4.47	4.60	4.51	4.55	4.60	4.63	4.60	4.54	4.62	4.66
39	Lehigh Valley RR 2nd M reg 7s 1910.....	4.44	4.37	4.32	4.35	4.30	4.26	4.28	4.10	4.21	4.20	4.30	4.19	4.11
40	Chic & Nor West Ry cons 7s 1915.....	4.57	4.47	4.45	4.49	4.46	4.43	4.42	4.42	4.49	4.52	4.56	4.55	4.53
41	L Sh & Mich So Cons 1st M sf 7s 1900.....	4.34	4.24	4.24	4.25	4.25	4.15	4.14	4.28	4.25	4.27	4.30	4.39	4.36
42	Pennsylvania RR Co gen M 6s 1910.....	4.07	3.90	3.93	3.98	4.12	4.05	3.78	3.85	3.98	4.06	4.10	4.07	3.83
43	New York & Harlem RR cons M 7s 1900.....	3.78	3.80	3.83	3.86	3.83	3.83	3.85	3.92	3.99	4.00	3.95	4.06	3.98
44	N Y C & H R RR 1st M 7s 1903.....	4.12	4.07	4.09	4.05	4.02	3.96	4.02	3.99	4.15	4.19	4.06	4.05	4.11
45	Chic Burl & Quincy RR cons M 7s 1903.....	4.12	4.08	4.21	4.25	4.27	4.16	4.17	4.25	4.35	4.39	4.30	4.31	4.19
46	Cleveland & Pitts cons M 7s 1900.....	4.52	4.40	4.44	4.44	4.40	4.38	4.36	4.35	4.40	4.41	4.42	4.45	4.41
47	Michigan Central RR cons M 7s 1902.....	4.51	4.51	4.48	4.44	4.39	4.47	4.44	4.48	4.51	4.49	4.51	4.53	4.53
49	Chicago Rl Is & Pac RR 1st M 6s 1917.....	4.31	4.21	4.20	4.21	4.12	4.15	4.07	4.00	3.99	3.92	3.93	3.99	4.13
50	Chicago & Nor West cons M 7s 1902.....	4.38	4.27	4.18	4.23	4.10	4.11	4.14	4.14	4.26	4.33	4.30	4.33	4.25
51	Chic St Paul & Minn 1st M 6s 1918.....	4.55	4.42	4.41	4.42	4.41	4.41	4.45	4.41	4.42	4.46	4.48	4.50	4.44
52	St Paul Minn & Man 2nd M 6s 1909.....	4.76	4.63	4.67	4.70	4.71	4.70	4.68	4.69	4.71	4.70	4.62	4.79	4.72
53	Nash Chatt & St L 1st M 7s 1913.....	5.37	5.27	5.18	5.16	5.30	5.25	5.03	5.03	5.07	5.09	5.07	5.05	4.99
54	St P & Sioux City RR 1st M 6s 1919.....	4.58	4.50	4.48	4.51	4.51	4.47	4.52	4.49	4.51	4.49	4.51	4.53	4.52
55	C M & St P (So Min Dv) 1st M 6s 1910.....	4.90	4.81	4.84	4.88	4.83	4.78	4.61	4.70	4.87	4.92	4.95	4.88	4.86
56	Canada Southern Ry 1st M 5s 1908.....	4.69	4.55	4.59	4.64	4.65	4.59	4.52	4.61	4.68	4.63	4.62	4.65	4.59
57	Chic St P Min & Omaha cons M 6s 1930.....	4.92	4.90	4.92	4.91	4.81	4.76	4.75	4.84	4.74	4.76	4.79	4.81	4.84
58	St P Min & Man (Dak Dv) 1st M 6s 1910.....	4.71	4.65	4.66	4.69	4.74	4.70	4.70	4.62	4.75	4.72	4.69	4.81	4.73
59	Philadelphia & Erie gen M 5s 1920.....	4.43	4.40	4.34	4.32	4.25	4.27	4.30	4.27	4.42	4.23	4.35	4.40	4.37
60	C M & St P (C & P W Dv) 1st M 5s 1921.....	4.81	4.74	4.72	4.72	4.67	4.54	4.54	4.58	4.63	4.65	4.63	4.57	
61	C M & St P (Wm & Min Dv) 1st M 5s 1921.....	4.84	4.78	4.75	4.72	4.69	4.61	4.60	4.58	4.64	4.68	4.68	4.69	4.65
62	Chic St Louis & N Orleans 5s 1951.....	4.44	4.35	4.30	4.32	4.33	4.24	4.17	4.14	4.30	4.32	4.30	4.31	
63	Pennsylvania Co gu 1st M 4½s 1921.....	4.29	4.29	4.19	4.21	4.24	4.21	4.12	4.12	4.19	4.19	4.26		4.23
64	New York Lack & West 1st M 6s 1921.....	4.43	4.37	4.32	4.36	4.39	4.34	4.29	4.28	4.42	4.43	4.42	4.48	4.50
65	Hannibal & St Joseph cons M 6s 1911.....	4.77	4.69	4.65	4.63	4.61	4.55	4.52	4.63	4.50	4.55	4.58	4.69	4.61
66	N Y Cent & Hudson River Deb 5s 1904.....	4.40	4.34	4.31	4.31	4.31	4.36	4.28	4.29	4.38	4.31	4.33	4.41	
67	Baltimore & Ohio 5s 1925.....	4.56	4.48	4.44	4.49	4.49	4.40	4.39	4.39	4.43	4.47	4.49	4.54	4.52
68	Chic Milw & St Paul Term M 5s 1914.....	4.89	4.78	4.74	4.74	4.76	4.66	4.68	4.71	4.79	4.78	4.75	4.82	4.80
69	Chicago & N W Ry Deb 5s 1909.....	4.69	4.61	4.58	4.58	4.59	4.51	4.47	4.57	4.59	4.60	4.51	4.50	4.51
70	West Shore RR 1st M 4½s 2361.....	3.90	3.90	3.93	3.94	3.95	3.92	3.88	3.92	3.97	3.98	3.91	3.91	3.90

# RAILROAD BOND YIELDS

A59

## YIELDS OF RAILROAD BONDS JAN. 1887—JAN. 1888

Ref. No.	Name of Bond	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
25	Pitts Ft Wayne & Chic 1st M 7s 1912.....	4.42	4.39	4.39	4.42	4.45	4.40	4.37	4.38	4.37	4.40	4.37	4.45	4.39
30	Morris & Essex 1st M of 7s 1914.....	4.44	4.46	4.45	4.42	4.40	4.46	4.43	4.45	4.51	4.65	4.51	4.49	4.41
33	Lehigh Valley RR 1st M 6s 1898.....	3.57	3.50	3.58	3.62	3.65	3.64	3.62	3.59	3.61	3.99	3.96	3.72	3.75
37	Lake Shore Ry dividend bonds 7s 1899.....	4.69	4.62	4.63	4.63	4.60	4.61	4.61	4.79	4.80	4.93	4.97	4.86	4.74
38	Clev Col Cin & Ind 1st M of 7s 1899.....	4.66	4.52	4.71	4.74	4.72	4.81	4.85	4.80	4.90	5.05	4.96	4.87	4.80
39	Lehigh Valley RR 2nd M reg 7s 1910.....	4.11	4.10	4.23	4.27	4.27	4.31	4.35	4.38	4.45	4.54	4.54	4.56	4.58
40	Chic & Nor West Ry cons of 7s 1915.....	4.53	4.52	4.56	4.59	4.56	4.57	4.55	4.55	4.61	4.67	4.62	4.57	4.48
41	L Sh & Mich So cons 1st M of 7s 1900.....	4.36	4.46	4.38	4.45	4.45	4.50	4.45	4.60	4.59	4.48	4.44	4.44	4.30
42	Pennsylvania RR Co gen M 6s 1910.....	3.83	3.83	3.77	3.83	3.88	3.91	3.81	3.93	4.08	4.05	4.10	4.11	4.00
43	New York & Harlem RR cons M 6s 1900.....	3.98	4.02	4.01	4.11	4.03	4.03	4.09	4.09	4.13	4.14	4.05	4.01	4.11
44	N Y C & H R RR 1st M 7s 1903.....	4.11	4.10	4.13	4.06	4.09	4.13	3.99	4.20	4.29	4.27	4.10	3.99	4.01
45	Chic Burl & Quincy RR cons M 7s 1903.....	4.19	4.37	4.41	4.41	4.30	4.30	4.32	4.42	4.42	4.47	4.45	4.37	4.29
46	Cleveland & Pitts cons of M 7s 1900.....	4.41	4.37	4.33	4.41	4.35	4.28	4.29	4.37	4.49	4.49	4.22	4.33	4.41
47	Michigan Central RR cons M 7s 1902.....	4.53	4.45	4.53	4.49	4.49	4.48	4.50	4.59	4.67	4.66	4.69	4.61	4.49
49	Chicago Rk Is & Pac RR 1st M 6s 1917.....	4.13	4.18	4.17	4.12	4.14	4.19	4.18	4.17	4.26	4.24	4.29	4.19	4.14
50	Chicago & Nor West cons M 7s 1902.....	4.25	4.39	4.39	4.42	4.41	4.46	4.40	4.49	4.61	4.63	4.65	4.56	4.30
51	Chi St Paul & Minn 1st M 6s 1918.....	4.44	4.51	4.57	4.55	4.61	4.56	4.56	4.63	4.74	4.74	4.64	4.71	4.62
52	St Paul Minn & Man 2nd M 6s 1909.....	4.72	4.79	4.73	4.68	4.65	4.69	4.69	4.71	4.94	4.91	4.86	4.90	4.81
53	Nash Chatt & St L 1st M 7s 1913.....	4.99	5.00	5.07	5.06	5.10	5.08	5.07	5.13	5.27	5.20	5.16	5.09	4.96
54	St P & Sioux City RR 1st M 6s 1919.....	4.52	4.54	4.58	4.54	4.57	4.58	4.61	4.57	4.63	4.64	4.63	4.66	4.63
55	C M & St P (So Min Dv) 1st M 6s 1910.....	4.86	4.85	4.82	4.84	4.89	4.80	4.84	4.91	5.06	5.20	5.12	5.20	5.08
56	Canada Southern Ry 1st M 5s 1908.....	4.59	4.66	4.63	4.62	4.57	4.52	4.61	4.67	4.69	4.73	4.71	4.66	4.53
57	Chi St P Min & Omaha cons M 6s 1930.....	4.84	4.89	4.89	4.84	4.81	4.83	4.90	5.00	5.07	5.08	5.06	5.00	4.92
58	St P Min & Man (Dak Dv) 1st M 6s 1910.....	4.73	4.76	4.75	4.75	4.71	4.75	4.75	4.88	5.06	4.86	4.87	4.91	4.79
59	Philadelphia & Erie gen M 5s 1920.....	4.37	4.37	4.33	4.38	4.27	4.30	4.34	4.36	4.45	4.39	4.39	4.45	4.45
60	C M & St P (C & P W Dv) 1st M 5s 1921.....	4.57	4.63	4.62	4.60	4.63	4.64	4.74	4.80	4.85	4.93	4.89	4.94	4.84
61	C M & St P (Win & Min Dv) 1st M 5s 1921.....	4.65	4.66	4.71	4.75	4.70	4.75	4.79	4.84	4.92	5.00	5.04	5.04	4.99
62	Chi St Louis & N Orleans 5s 1951.....	4.31	4.31	4.32	4.31	4.29	4.30	4.27	4.28	4.34	4.38	4.31	4.34	4.27
63	Pennsylvania Co gu 1st M 4 1/2s 1921.....	4.23	4.24	4.26	4.23	4.21	4.21	4.27	4.30	4.34	4.31	4.26	4.22	4.16
64	New York Lack & West 1st M 6s 1921.....	4.50	4.48	4.50	4.51	4.50	4.51	4.45	4.41	4.61	4.62	4.60	4.61	4.44
65	Hannibal & St Joseph cons M 6s 1911.....	4.61	4.57	4.63	4.69	4.69	4.65	4.81	4.71	4.81	4.84	4.81	4.81	4.75
66	N Y Cent & Hudson River Deb 5s 1904.....	4.41	4.39	4.45	4.43	4.38	4.32	4.34	4.33	4.44	4.41	4.39	4.39	4.38
67	Baltimore & Ohio 5s 1925.....	4.52	4.46	4.42	4.50	4.48	4.48	4.43	4.48	4.61	4.89	4.73	4.73	4.60
68	Chi Milw & St Paul Term M 5s 1914.....	4.80	4.81	4.86	4.83	4.79	4.81	4.86	4.85	4.90	5.00	5.02	5.06	4.98
69	Chicago & N W Ry Deb 5s 1909.....	4.51	4.55	4.59	4.55	4.53	4.57	4.77	4.75	4.84	4.88	4.79	4.79	4.69
70	West Shore RR 1st M 4s 2361.....	3.90	3.91	3.93	3.93	3.92	3.93	4.00	4.06	4.10	4.09	4.06	4.01	3.99
71	Chicago & N W Ry sf Deb 5s 1933.....	4.57	4.58	4.60	4.60	4.56	4.53	4.57	4.63	4.67	4.75	4.68	4.62	4.61

## APPENDIX

**YIELDS OF RAILROAD BONDS**  
JAN. 1888—JAN. 1889

Ref. No.	Name of Bond	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
25	Pitts Ft Wayne & Chic 1st M 7s 1912.....	4.39	4.30	4.30	4.28	4.32	4.33	4.27	4.23	4.19	4.24	4.22	4.24	4.19
30	Morris & Essex 1st M of 7s 1914.....	4.41	4.52	4.38	4.36	4.37	4.35	4.28	4.34	4.35	4.34	4.24	4.23	4.19
38	Clev Col Cin & Ind 1st M of 7s 1899.....	4.80	4.74	4.72	4.69	4.66	4.59	4.51	4.60	4.68	4.67	4.63	4.57	4.54
39	Lehigh Valley RR 2nd M reg 7s 1910.....	4.58	4.32	4.30	4.38	4.30	4.30	4.39	4.33	4.31	4.30	4.32	4.32	4.29
40	Chic & Nor West Ry cons of 7s 1915.....	4.48	4.42	4.41	4.43	4.45	4.41	4.35	4.35	4.36	4.31	4.28	4.35	4.24
41	L Sh & Mich So cons 1st M of 7s 1900.....	4.30	4.40	4.47	4.46	4.40	4.31	4.33	4.14	4.19	4.22	4.20	4.17	4.10
42	Pennsylvania RR Co gen M 6s 1910.....	4.00	4.03	4.06	4.09	4.10	4.01	3.84	3.89	3.94	3.95	3.97	3.97	3.93
43	New York & Harlem RR cons M 7s 1900.....	4.11	3.94	4.01	4.08	4.05	4.02	3.82	3.79	3.78	3.74	3.76	3.76	3.68
44	N Y C & H R RR 1st M 7s 1903.....	4.01	3.99	4.06	4.11	4.10	4.02	3.95	3.89	3.94	3.91	3.88	3.89	3.84
45	Chic Burl & Quincy RR cons M 7s 1903.....	4.29	4.29	4.29	4.27	4.30	4.26	4.26	4.21	4.22	4.26	4.23	4.22	4.14
46	Cleveland & Pitts cons of M 7s 1900.....	4.41	4.51	4.51	4.43	4.34	4.28	4.22	4.22	4.23	4.22	4.06	4.23	4.09
47	Michigan Central RR cons M 7s 1902.....	4.49	4.41	4.49	4.51	4.44	4.36	4.21	4.27	4.32	4.21	4.16	4.02	4.01
49	Chicago Rk Is & Pac RR 1st M 6s 1917.....	4.14	4.10	4.15	4.21	4.18	4.18	4.20	4.19	4.19	4.17	4.16	4.12	4.05
50	Chicago & Nor West cons M 7s 1902.....	4.30	4.28	4.37	4.37	4.34	4.32	4.21	4.23	4.26	4.24	4.29	4.33	4.15
51	Chic St Paul & Minn 1st M 6s 1918.....	4.62	4.54	4.60	4.63	4.60	4.58	4.56	4.54	4.54	4.51	4.54	4.61	4.61
52	St Paul Minn & Man 2nd M 6s 1909.....	4.81	4.80	4.81	4.80	4.74	4.66	4.63	4.66	4.67	4.70	4.74	4.59	4.66
53	Nash Chatt & St L 1st M 7s 1913.....	4.96	4.99	5.00	5.04	5.07	5.04	4.93	4.96	5.00	5.01	5.04	4.89	4.92
54	St P & Sioux City RR 1st M 6s 1919.....	4.63	4.59	4.59	4.60	4.61	4.61	4.59	4.53	4.52	4.58	4.59	4.60	4.59
55	C M & St P (So Min Dv) 1st M 6s 1910.....	5.08	5.05	5.13	5.22	5.19	5.30	5.21	5.10	5.29	5.36	5.29	5.28	5.19
56	Canada Southern Ry 1st M 5s 1908.....	4.53	4.58	4.66	4.65	4.57	4.53	4.49	4.57	4.66	4.68	4.63	4.51	4.43
57	Chic St P Min & Omaha cons M 6s 1930.....	4.92	4.91	4.92	4.89	4.88	4.82	4.81	4.89	4.90	4.90	4.89	4.88	4.88
58	St P Min & Man (Dak Dv) 1st M 6s 1910.....	4.79	4.69	4.65	4.71	4.85	4.85	4.81	4.82	4.84	4.83	4.75	4.70	4.72
59	Philadelphia & Erie gen M 5s 1920.....	4.45	4.39	4.36	4.39	4.37	4.18	4.18	4.24	4.33	4.31	4.30	4.34	4.30
60	C M & St P (C & P W Dv) 1st M 5s 1921.....	4.84	4.77	4.82	4.83	4.82	4.82	4.74	4.65	4.76	4.87	4.84	4.85	4.75
61	C M & St P (Wis & Min Dv) 1st M 5s 1921.....	4.99	4.95	4.98	4.95	4.97	5.07	4.97	4.92	5.12	5.09	5.08	5.11	5.00
62	Chic St Louis & N Orleans 5s 1951.....	4.27	4.24	4.31	4.24	4.24	4.27	4.24	4.22	4.24	4.30	4.29	4.29	4.28
63	Pennsylvania Co gu 1st M 4 1/2s 1921.....	4.16	4.16	4.14	4.14	4.10	4.09	4.01	4.05	4.08	4.09	4.09	4.12	4.08
64	New York Lack & West 1st M 6s 1921.....	4.44	4.36	4.38	4.38	4.37	4.32	4.24	4.23	4.28	4.31	4.32	4.31	4.21
65	Hannibal & St Joseph cons M 6s 1911.....	4.75	4.69	4.66	4.71	4.70	4.75	4.71	4.71	4.71	4.77	4.70	4.68	4.61
66	N Y Cent & Hudson River Deb 5s 1904.....	4.38	4.31	4.29	4.22	4.21	4.18	4.19	4.12	4.13	4.15	4.17	4.17	4.17
67	Baltimore & Ohio 5s 1925.....	4.60	4.56	4.68	4.68	4.63	4.62	4.57	4.53	4.58	4.68	4.61	4.61	4.59
68	Chic Milw & St Paul Term M 5s 1914.....	4.98	4.96	5.00	4.99	4.98	4.96	4.93	4.89	5.00	5.01	4.99	4.97	4.95
69	Chicago & N W Ry Deb 5s 1909.....	4.69	4.73	4.78	4.77	4.67	4.64	4.61	4.66	4.73	4.72	4.72	4.73	4.66
70	West Shore RR 1st M 4s 2361.....	3.99	3.98	3.98	3.96	3.93	3.92	3.91	3.90	3.91	3.92	3.90	3.89	3.84
71	Chicago & N W Ry 1st Deb 5s 1933.....	4.61	4.62	4.65	4.57	4.58	4.60	4.51	4.48	4.48	4.53	4.55	4.54	4.54
72	Chicago & North Western ext 4s 1926.....	4.38	4.41	4.43	4.37	4.28	4.24	4.24	4.24	4.20	4.31	4.32	4.24	4.09
73	St Paul Minn & Man cons M 4 1/2s 1933.....	4.68	4.70	4.74	4.77	4.73	4.71	4.69	4.73	4.73	4.73	4.69	4.65	4.56

**YIELDS OF RAILROAD BONDS**

JAN. 1889—JAN. 1890

Ref. No.	Name of Bond	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
25	Pitts Ft Wayne & Chic 1st M 7s 1912.....	4.19	4.11	4.08	4.00	3.88	3.87	3.92	4.00	4.00	4.03	4.04	4.04	4.02
30	Morris & Essex 1st M of 7s 1914.....	4.19	4.09	4.17	4.19	4.12	4.02	4.12	4.07	4.07	4.03	4.05	4.06	4.10
39	Lehigh Valley RR 2nd M reg 7s 1910.....	4.29	4.31	4.31	4.36	4.26	4.29	4.32	4.32	4.25	4.23	4.22	4.23	4.30
40	Chic & Nor West Ry cons of 7s 1915.....	4.24	4.19	4.21	4.22	4.21	4.16	4.19	4.07	4.05	4.27	4.26	4.26	4.28
41	L Sh & Mich Sc cons 1st M of 7s 1900.....	4.10	3.98	4.03	4.04	4.01	3.98	4.01	4.05	4.09	4.07	4.03	4.19	4.08
42	Pennsylvania RR Co gen M 6s 1910.....	3.93	3.96	3.98	3.94	3.99	3.88	3.90	4.04	3.98	3.98	3.95	3.87	3.77
43	New York & Harlem RR cons M 7s 1900.....	3.68	3.59	3.55	3.57	3.54	3.60	3.71	3.78	3.84	3.96	3.91	3.87	3.94
44	N Y C & H R RR 1st M 7s 1903.....	3.84	3.78	3.76	3.81	3.84	3.75	3.79	3.76	3.90	3.91	3.97	4.01	4.01
45	Chic Burl & Quincy RR cons M 7s 1903.....	4.14	4.13	4.18	4.17	4.09	4.12	4.15	4.19	4.12	4.31	4.40	4.41	4.40
47	Michigan Central RR cons M 7s 1902.....	4.01	4.02	4.02	4.07	3.97	3.94	4.08	4.15	4.18	4.27	4.25	4.34	4.31
49	Chicago Rk Is & Pac RR 1st M 6s 1917.....	4.05	4.11	4.15	4.12	4.02	3.90	3.96	3.99	3.93	3.92	4.00	3.98	4.19
50	Chicago & Nor West cons M 7s 1902.....	4.15	4.16	4.18	4.25	4.16	4.09	4.10	4.19	4.27	4.32	4.33	4.39	4.31
51	Chic St Paul & Minn 1st M 6s 1918.....	4.61	4.53	4.48	4.52	4.51	4.47	4.43	4.44	4.44	4.49	4.53	4.52	4.56
52	St Paul M nn & Man 2nd M 6s 1909.....	4.66	4.59	4.62	4.65	4.56	4.58	4.55	4.51	4.60	4.60	4.69	4.71	4.64
53	Nash Chatt & St L 1st M 7s 1913.....	4.92	4.87	4.77	4.79	4.77	4.59	4.60	4.68	4.74	4.76	4.77	4.76	4.71
54	St P & Sioux City RR 1st M 6s 1919.....	4.59	4.58	4.52	4.49	4.55	4.48	4.51	4.49	4.49	4.47	4.52	4.57	4.55
55	C M & St P (So Min Dv) 1st M 6s 1910.....	5.19	5.12	5.19	5.16	5.04	4.97	4.95	4.78	4.54	4.78	4.88	4.86	4.84
56	Canada Southern Ry 1st M 5s 1908.....	4.45	4.43	4.41	4.38	4.29	4.28	4.37	4.34	4.37	4.44	4.41	4.40	4.41
57	Chic St P Min & Omaha cons M 6s 1930.....	4.88	4.86	4.89	4.89	4.84	4.81	4.78	4.78	4.77	3.85	4.95	4.87	4.82
58	St P Min & Man (Dak Dv) 1st M 6s 1910.....	4.72	4.65	4.73	4.69	4.65	4.59	4.58	4.58	4.59	4.64	4.80	4.80	4.69
59	Philadelphia & Erie gen M 5s 1920.....	4.30	4.24	4.25	4.23	4.20	4.19	4.20	4.19	4.20	4.23	4.22	4.23	4.19
60	C M & St P (C & P W Dv) 1st M 5s 1921.....	4.75	4.71	4.72	4.72	4.65	4.59	4.62	4.64	4.58	4.62	4.68	4.68	4.62
61	C M & St P (Wis & Min dv) 1st M 5s 1921.....	5.00	4.98	5.04	5.01	4.83	4.70	4.69	4.72	4.70	4.78	4.81	4.84	4.83
62	Chic St Louis & N Orleans 5s 1951.....	4.28	4.26	4.28	4.25	4.21	4.20	4.20	4.20	4.22	4.24	4.31	4.32	4.32
63	Pennsylvania Co gu 1st M 4 1/2s 1921.....	4.08	4.05	4.05	4.10	4.03	4.01	3.99	3.96	3.94	3.95	3.99	3.98	4.00
64	New York Lack & West 1st M 6s 1921.....	4.21	4.10	4.04	4.02	3.99	3.98	3.97	3.98	3.96	4.01	4.05	4.15	4.11
65	Hannibal & St Joseph cons M 6s 1911.....	4.61	4.51	4.51	4.51	4.51	4.46	4.49	4.51	4.60	4.65	4.74	4.75	4.67
66	N Y Cent & Hudson River Deb Ss 1904.....	4.17	4.10	3.99	4.01	3.91	3.81	3.86	3.93	3.97	4.02	4.09	4.16	4.16
67	Baltimore & Ohio 5s 1925.....	4.59	4.52	4.57	4.53	4.60	4.51	4.59	4.56	4.63	4.61	4.64	4.58	4.59
68	Chic Milly & St Paul Term M 5s 1914.....	4.95	4.91	4.96	4.97	4.81	4.67	4.65	4.65	4.66	4.74	4.79	4.82	4.73
69	Chicago & N W Ry Deb Ss 1909.....	4.66	4.61	4.64	4.50	4.59	4.47	4.48	4.62	4.64	4.66	4.63	4.61	4.61
70	West Shore RR 1st M 4s 2361.....	3.84	3.79	3.79	3.79	3.76	3.74	3.76	3.79	3.80	3.82	3.84	3.84	3.83
71	Chicago & N W Ry sf Deb Ss 1933.....	4.54	4.49	4.48	4.46	4.34	4.32	4.35	4.35	4.28	4.37	4.47	4.48	4.53
72	Chicago & North Western ext 4s 1926.....	4.09	3.94	3.99	3.99	3.98	3.96	3.99	4.01	4.05	4.09	4.16	4.23	4.24
73	St Paul Minn & Man cons M 4 1/2s 1933.....	4.56	4.51	4.53	4.54	4.43	4.43	4.45	4.45	4.44	4.49	4.52	4.58	4.42
74	Cin Ind St L & Chi gen 1st 4s 1936.....	4.26	4.09	4.15	4.10	4.04	4.01	3.97	3.91	3.93	3.96	4.01	4.07	4.06
75	Pacific RR of Mo 1st ext M 4s 1938.....	4.12	4.06	4.08	4.04	3.98	3.96	3.98	4.03	4.06	4.08	4.13	4.14	4.08
76	Illinois Central RR coll 4s 1952.....	4.05	4.01	4.04	3.97	3.95	3.95	3.97	3.95	3.96	3.99	4.00	3.99	4.00

**RAILROAD BOND YIELDS**

## APPENDIX

YIELDS OF RAILROAD BONDS  
JAN. 1890—JAN. 1891

Ref. No.	Name of Bond	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
25	Pitts Ft Wayne & Chic 1st M 7s 1912.....	4.02	4.01	4.08	4.05	4.07	4.09	4.07	4.10	4.10	4.09	4.17	4.23	4.14
30	Morris & Essex 1st M sf 7s 1914.....	4.10	4.09	4.14	4.18	4.18	4.19	4.16	4.21	4.26	4.30	4.28	4.30	4.28
39	Lehigh Valley RR 2nd M reg 7s 1910.....	4.30	4.27	4.31	4.35	4.35	4.40	4.45	4.49	4.51	4.54	4.49	4.50	4.48
40	Chic & Nor West Ry cons sf 7s 1915.....	4.28	4.28	4.32	4.31	4.31	4.32	4.36	4.39	4.41	4.43	4.53	4.58	4.47
42	Pennsylvania RR Co gen M 6s 1910.....	3.77	3.79	3.90	3.94	3.92	4.04	3.98	4.00	4.06	4.20	4.34	4.37	4.17
44	N Y C & H R RR 1st M 7s 1903.....	4.01	4.02	4.00	4.07	4.11	4.19	4.19	4.21	4.28	4.23	4.27	4.26	4.11
45	Chic Burl & Quincy RR cons M 7s 1903.....	4.40	4.43	4.41	4.49	4.51	4.47	4.51	4.62	4.64	4.68	4.77	4.86	4.66
47	Michigan Central RR cons M 7s 1902.....	4.31	4.31	4.39	4.32	4.28	4.27	4.36	4.35	4.44	4.49	4.52	4.65	4.57
49	Chicago Rk Is & Pac RR 1st M 6s 1917.....	4.19	4.18	4.22	4.26	4.18	4.23	4.25	4.29	4.35	4.41	4.57	4.55	4.39
50	Chicago & Nor West cons M 7s 1902.....	4.31	4.40	4.42	4.40	4.37	4.38	4.39	4.54	4.61	4.62	4.46	4.41	4.28
51	Chic St Paul & Minn 1st M 6s 1918.....	4.50	4.58	4.61	4.56	4.51	4.57	4.65	4.66	4.66	4.62	4.61	4.62	4.59
52	St Paul Minn & Man 2nd M 6s 1909.....	4.64	4.65	4.61	4.68	4.68	4.68	4.71	4.75	4.77	4.80	4.88	4.95	4.87
53	Nash Chatt & St L 1st M 7s 1913.....	4.71	4.74	4.77	4.80	4.83	4.90	4.95	4.98	4.99	4.98	5.08	5.22	5.08
54	St P & Sioux City RR 1st M 6s 1919.....	4.55	4.53	4.61	4.58	4.58	4.62	4.64	4.66	4.61	4.65	4.61	4.71	4.62
55	C M & St P (St Min Dv) 1st M 6s 1910.....	4.84	4.91	4.93	4.84	4.90	4.88	4.93	4.99	4.97	5.04	5.12	5.19	5.08
56	Canada Southern Ry 1st M 5s 1908.....	4.41	4.33	4.38	4.38	4.41	4.41	4.47	4.55	4.54	4.57	4.74	4.72	4.52
57	Chic St P Min & Omaha cons M 6s 1930.....	4.82	4.87	4.91	4.90	4.88	4.89	4.91	4.98	5.04	5.01	5.11	5.13	5.02
58	St P Min & Man (Dak Dv) 1st M 6s 1910.....	4.69	4.77	4.67	4.69	4.65	4.64	4.61	4.71	4.79	4.81	4.74	4.90	4.80
59	Philadelphia & Erie gen M 5s 1920.....	4.19	4.22	4.26	4.26	4.25	4.25	4.26	4.27	4.26	4.26	4.32	4.41	4.34
60	C M & St P (C & P W Dv) 1st M 5s 1921.....	4.62	4.58	4.67	4.67	4.60	4.61	4.57	4.61	4.72	4.77	4.81	4.86	4.68
61	C M & St P (Wis & Min Dv) 1st M 5s 1921.....	4.83	4.81	4.86	4.87	4.86	4.82	4.79	4.79	4.81	4.88	5.12	5.05	4.89
62	Chic St Louis & N Orleans 5s 1951.....	4.32	4.31	4.33	4.34	4.34	4.33	4.20	4.26	4.32	4.39	4.26	4.44	4.44
63	Pennsylvania Co gu 1st M 4 1/2s 1921.....	4.00	4.01	3.99	4.01	4.05	4.09	4.11	4.11	4.18	4.21	4.25	4.24	4.18
64	New York Lack & West 1st M 6s 1921.....	4.11	4.10	4.14	4.11	4.13	4.21	4.20	4.23	4.24	4.24	4.31	4.36	4.24
65	Hannibal & St Joseph cons M 6s 1911.....	4.67	4.65	4.70	4.66	4.79	4.89	4.76	4.84	4.91	4.89	4.92	5.06	4.95
66	N Y Cent & Hudson River Deb 5s 1904.....	4.16	4.15	4.01	4.01	3.91	3.99	4.15	4.12	4.08	4.18	4.32	4.41	4.26
67	Baltimore & Ohio 5s 1925.....	4.59	4.60	4.59	4.54	4.59	4.59	4.59	4.56	4.63	4.61	4.74	4.72	4.62
68	Chic Milw & St Paul Term M 5s 1914.....	4.73	4.78	4.82	4.82	4.81	4.77	4.78	4.76	4.82	4.91	5.10	5.14	4.88
69	Chicago & N W Ry Deb 5s 1909.....	4.61	4.53	4.55	4.60	4.63	4.59	4.58	4.69	4.68	4.67	4.70	4.85	4.69
70	West Shore RR 1st M 4s 2361.....	3.83	3.82	3.84	3.84	3.84	3.83	3.85	3.88	3.88	3.91	3.99	4.04	3.95
71	Chicago & N W Ry of Deb 5s 1933.....	4.53	4.50	4.49	4.52	4.52	4.51	4.55	4.59	4.61	4.62	4.76	4.71	4.66
72	Chicago & North Western ext 4s 1926.....	4.24	4.16	4.19	4.09	4.09	4.05	4.09	4.08	4.07	4.08	4.12	4.25	4.18
73	St Paul Minn & Man cons M 4 1/2s 1933.....	4.42	4.48	4.49	4.49	4.49	4.48	4.48	4.49	4.47	4.46	4.49	4.61	4.46
74	Cin Ind St L & Chi gen 1st 4s 1936.....	4.06	4.05	4.00	4.02	4.03	4.07	4.10	4.12	4.15	4.20	4.17	4.19	4.26
75	Pacific RR of Mo 1st ext M 4s 1938.....	4.08	4.04	4.08	4.07	4.08	4.09	4.10	4.23	4.15	4.18	4.27	4.27	4.11
76	Illinois Central RR coll 4s 1952.....	4.00	4.00	3.98	3.98	4.00	3.99	4.01	4.03	4.04	4.06	4.11	4.13	4.22
77	Lake Erie & Western 1st M 5s 1937.....	4.46	4.48	4.50	4.56	4.49	4.50	4.50	4.55	4.65	4.71	4.77	4.61	
78	Wabash RR Co 1st M 5s 1939.....	4.90	4.89	4.92	4.88	4.88	4.91	4.94	5.02	5.04	5.18	5.29	5.08	

# RAILROAD BOND YIELDS

A63

## YIELDS OF RAILROAD BONDS JAN. 1891—JAN. 1892

Ref. No.	Name of Bond	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
25	Pitts Ft Wayne & Chic 1st M 7s 1912.....	4.14	4.13	4.18	4.20	4.21	4.25	4.26	4.25	4.26	4.26	4.31	4.26	4.22
30	Morris & Essex 1st M sf 7s 1914.....	4.28	4.28	4.41	4.32	4.30	4.49	4.53	4.58	4.55	4.49	4.40	4.41	4.26
39	Lehigh Valley RR 2nd M reg 7s 1910.....	4.48	4.40	4.48	4.61	4.66	4.63	4.66	4.62	4.60	4.39	4.37	4.42	4.31
40	Chic & Nor West Ry cons sf 7s 1915.....	4.47	4.50	4.49	4.47	4.55	4.67	4.70	4.70	4.69	4.60	4.50	4.41	4.37
42	Pennsylvania RR Co gen M 6s 1910.....	4.17	4.12	4.00	4.00	3.95	3.98	3.98	3.96	3.93	3.90	3.92	3.92	3.85
44	N Y C & H R RR 1st M 7s 1903.....	4.11	4.22	4.29	4.31	4.38	4.44	4.35	4.41	4.44	4.45	4.37	4.34	4.26
45	Chic Burl & Quincy RR cons M 7s 1903.....	4.66	4.70	4.80	4.84	4.89	4.97	5.00	5.01	4.84	4.75	4.70	4.55	4.54
47	Michigan Central RR cons M 7s 1902.....	4.57	4.60	4.67	4.61	4.70	4.87	4.89	4.87	4.66	4.63	4.54	4.44	4.35
49	Chicago Rr Is & Pac RR 1st M 6s 1917.....	4.39	4.32	4.40	4.46	4.56	4.73	4.72	4.73	4.69	4.73	4.60	4.52	4.55
50	Chicago & Nor West cons M 7s 1902.....	4.28	4.25	4.35	4.44	4.56	4.59	4.56	4.57	4.65	4.57	4.43	4.48	4.30
51	Chic St Paul & Minn 1st M 6s 1918.....	4.59	4.69	4.66	4.74	4.70	4.79	4.81	4.84	4.83	4.67	4.71	4.63	4.61
52	St Paul Minn & Man 2nd M 6s 1909.....	4.87	4.79	4.86	4.82	4.87	4.79	4.81	4.87	4.90	4.84	4.84	4.80	4.77
53	Nash Chatt & St L 1st M 7s 1913.....	5.08	5.11	5.17	5.15	5.18	5.20	5.17	5.20	5.19	5.19	4.95	4.92	4.92
54	St P & Sioux City RR 1st M 6s 1919.....	4.62	4.62	4.67	4.70	4.74	4.80	4.79	4.80	4.79	4.62	4.67	4.63	4.63
55	C M & St P (So Min Dv) 1st M 6s 1910.....	5.08	5.00	5.10	5.12	5.15	5.16	5.07	4.99	5.00	4.99	4.90	4.81	4.84
56	Canada Southern Ry 1st M 5s 1908.....	4.52	4.49	4.54	4.58	4.67	4.76	4.72	4.70	4.67	4.56	4.52	4.52	4.48
57	Chic St P Min & Omaha cons M 6s 1930.....	5.02	5.06	5.11	5.09	5.09	5.14	5.05	5.05	5.11	5.02	5.00	4.92	4.86
58	St P Min & Man (Dak Dv) 1st M 6s 1910.....	4.80	4.74	4.88	4.86	4.88	4.94	4.93	4.91	4.85	4.81	4.76	4.78	4.76
59	Philadelphia & Erie gen M 5s 1920.....	4.34	4.37	4.40	4.36	4.36	4.40	4.36	4.37	4.39	4.31	4.27	4.26	4.24
60	C M & St P (C & P W Dv) 1st M 5s 1921.....	4.68	4.69	4.76	4.72	4.73	4.76	4.73	4.73	4.74	4.67	4.66	4.65	4.62
61	C M & St P (Wis & Min Dv) 1st M 5s 1921.....	4.89	4.91	5.00	4.99	5.01	5.03	4.86	4.94	4.95	4.87	4.77	4.79	4.78
62	Chic St Louis & N Orleans 5s 1951.....	4.44	4.48	4.58	4.57	4.60	4.63	4.51	4.69	4.64	4.59	4.47	4.41	4.43
63	Pennsylvania Co gu 1st M 4½s 1921.....	4.18	4.20	4.25	4.29	4.32	4.34	4.32	4.33	4.26	4.26	4.16	4.15	4.15
64	New York Lack & West 1st M 6s 1921.....	4.24	4.29	4.28	4.28	4.31	4.41	4.42	4.45	4.50	4.55	4.55	4.48	4.41
65	Hannibal & St Joseph cons M 6s 1911.....	4.95	4.91	5.07	5.00	5.05	5.12	5.14	5.09	5.01	4.99	4.91	4.79	4.76
66	N Y Cen & Hudson River Deb 5s 1904.....	4.26	4.27	4.42	4.32	4.45	4.66	4.53	4.64	4.52	4.55	4.44	4.35	4.27
67	Baltimore & Ohio 5s 1925.....	4.62	4.62	4.65	4.82	4.81	4.94	4.87	4.78	4.68	4.73	4.71	4.66	4.65
68	Chic Milw & St Paul Term M 5s 1914.....	4.88	4.96	5.01	4.93	4.96	5.04	4.97	4.93	4.95	4.81	4.74	4.74	4.74
69	Chicago & N W Ry Deb 5s 1909.....	4.69	4.68	4.71	4.75	4.79	4.85	4.90	4.87	4.77	4.80	4.82	4.70	4.67
70	West Shore RR 1st M 4s 2361.....	3.95	3.92	3.94	3.94	3.96	3.99	4.01	4.00	3.95	3.99	3.98	3.95	3.90
71	Chicago & N W Ry sf Deb 5s 1933.....	4.66	4.59	4.72	4.72	4.85	4.91	4.90	4.86	4.86	4.83	4.61	4.60	4.71
72	Chicago & North Western ext 4s 1926.....	4.18	4.27	4.25	4.34	4.39	4.35	4.44	4.39	4.38	4.38	4.36	4.33	4.19
73	St Paul Minn & Man cons M 4½s 1933.....	4.46	4.41	4.51	4.51	4.55	4.50	4.67	4.64	4.63	4.66	4.70	4.70	4.65
74	Cin Ind St L & Chi gen 1st 4s 1936.....	4.26	4.23	4.32	4.37	4.36	4.37	4.45	4.46	4.43	4.45	4.57	4.44	4.36
75	Pacific RR of Mo 1st ext M 4s 1938.....	4.11	4.13	4.13	4.20	4.37	4.31	4.21	4.14	4.22	4.24	4.18	4.09	4.09
76	Illinois Central RR coll 4s 1952.....	4.22	4.25	4.23	4.29	4.29	4.29	4.30	4.31	4.32	4.29	4.31	4.25	4.18
77	Lake Erie & Western 1st M 5s 1937.....	4.61	4.55	4.59	4.61	4.65	4.72	4.71	4.74	4.69	4.70	4.65	4.55	4.55
78	Wabash RR Co 1st M 5s 1939.....	5.08	5.02	5.08	5.05	5.13	5.16	5.14	5.07	5.05	5.00	4.96	4.90	4.85
79	Ches & O (East Ext) 1st M 6s 1911.....	4.84	4.80	4.82	4.90	4.87	4.97	5.27	5.17	5.02	4.84	4.89	4.93	4.79

YIELDS OF RAILROAD BONDS  
JAN. 1892—JAN. 1893

Ref. No.	Name of Bond	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
25	Pitts Ft Wayne & Chic 1st M 7s 1912.....	4.22	4.20	4.24	4.25	4.27	4.25	4.17	4.10	4.13	4.18	4.19	4.22	4.20
30	Morris & Essex 1st M sf 7s 1914.....	4.26	4.27	4.28	4.30	4.22	4.18	4.17	4.21	4.21	4.27	4.28	4.29	4.29
39	Lehigh Valley RR 2nd M reg 7s 1910.....	4.31	4.33	4.34	4.41	4.33	4.25	4.25	4.27	4.31	4.25	4.40	4.35	4.30
40	Chic & Nor West Ry cons sf 7s 1915.....	4.37	4.44	4.44	4.33	4.30	4.35	4.35	4.37	4.41	4.38	4.41	4.40	4.48
42	Pennsylvania RR Co gen M 6s 1910.....	3.85	3.89	3.93	3.92	3.92	3.85	3.74	3.81	3.80	3.80	3.87	3.90	3.88
44	N Y C & H R RR 1st M 7s 1903.....	4.26	4.22	4.20	4.13	4.13	4.07	4.07	4.13	4.21	4.27	4.27	4.28	4.26
45	Chic Burl & Quincy RR cons M 7s 1903.....	4.54	4.51	4.53	4.51	4.47	4.44	4.45	4.49	4.51	4.50	4.50	4.57	4.59
49	Chicago Rk W & Pac RR 1st M 6s 1917.....	4.55	4.50	4.46	4.42	4.43	4.43	4.44	4.44	4.51	4.52	4.50	4.51	4.49
52	St Paul Minn & Man 2nd M 6s 1909.....	4.77	4.65	4.68	4.63	4.60	4.58	4.54	4.62	4.68	4.67	4.60	4.66	4.63
53	Nash Chatt & St L 1st M 7s 1913.....	4.92	4.90	4.99	4.99	4.97	4.86	4.81	4.86	4.98	4.99	5.03	5.00	4.88
54	St P & Sioux City RR 1st M 6s 1919.....	4.63	4.62	4.62	4.55	4.55	4.58	4.50	4.58	4.61	4.59	4.56	4.54	4.54
55	C M & St P (So Min Dv) 1st M 6s 1910.....	4.84	4.76	4.69	4.70	4.72	4.74	4.69	4.59	4.71	4.75	4.70	4.81	4.80
56	Canada Southern Ry 1st M 5s 1908.....	4.48	4.41	4.43	4.46	4.44	4.37	4.46	4.52	4.56	4.58	4.59	4.56	4.50
57	Chic St P Min & Omaha cons M 6s 1930.....	4.86	4.89	4.89	4.82	4.78	4.80	4.82	4.83	4.86	4.88	4.87	4.87	4.84
58	St P Minn & Man (Dale Dv) 1st M 6s 1910.....	4.76	4.69	4.68	4.71	4.66	4.60	4.57	4.58	4.67	4.62	4.64	4.64	4.66
59	Philadelphia & Erie gen M 5s 1920.....	4.24	4.24	4.30	4.29	4.25	4.27	4.17	4.18	4.29	4.18	4.18	4.17	4.15
60	C M & St P (C & W Dv) 1st M 5s 1921.....	4.62	4.59	4.59	4.56	4.47	4.48	4.47	4.42	4.49	4.48	4.49	4.50	4.44
61	C M & St P (Wis & Min Dv) 1st M 5s 1921.....	4.78	4.71	4.72	4.69	4.64	4.65	4.64	4.58	4.62	4.66	4.70	4.70	4.69
62	Chic St Louis & N Orleans 5s 1951.....	4.43	4.41	4.38	4.36	4.32	4.30	4.31	4.27	4.28	4.29	4.31	4.33	4.28
63	Pennsylvania Co gu 1st M 4½s 1921.....	4.15	4.21	4.15	4.15	4.13	4.11	4.12	4.12	4.15	4.17	4.13	4.14	4.13
64	New York Lack & West 1st M 6s 1921.....	4.41	4.37	4.36	4.38	4.38	4.36	4.28	4.22	4.35	4.31	4.32	4.32	4.23
65	Hannibal & St Joseph cons M 6s 1911.....	4.76	4.75	4.74	4.77	4.67	4.72	4.73	4.73	4.82	4.84	4.81	4.78	4.81
66	N Y Cent & Hudson River Deb 5s 1904.....	4.27	4.26	4.23	4.21	4.22	4.21	4.23	4.23	4.25	4.36	4.35	4.39	4.33
67	Baltimore & Ohio 5s 1925.....	4.65	4.59	4.53	4.43	4.48	4.45	4.40	4.43	4.40	4.39	4.42	4.41	4.41
68	Chic Millw & St Paul Term M 5s 1914.....	4.74	4.72	4.65	4.61	4.61	4.60	4.52	4.43	4.52	4.52	4.55	4.65	4.58
69	Chicago & N W Ry Deb 5s 1909.....	4.67	4.69	4.61	4.66	4.67	4.65	4.55	4.64	4.70	4.69	4.67	4.75	4.67
70	West Shore RR Int M 4s 2361.....	3.90	3.89	3.90	3.90	3.87	3.86	3.89	3.89	3.92	3.93	3.91	3.92	3.94
71	Chicago & N W Ky st Deb 5s 1933.....	4.71	4.71	4.78	4.77	4.69	4.63	4.63	4.58	4.66	4.60	4.55	4.61	4.63
72	Chicago & North Western ext 4s 1926.....	4.19	4.12	4.14	4.13	4.11	4.10	4.15	4.14	4.20	4.19	4.19	4.24	4.24
73	St Paul Minn & Man cons M 4½s 1933.....	4.65	4.61	4.59	4.47	4.50	4.49	4.48	4.48	4.50	4.53	4.51	4.51	4.50
74	Cin Ind St L & Chi gen 1st 4s 1936.....	4.36	4.24	4.27	4.26	4.25	4.28	4.28	4.30	4.29	4.26	4.29	4.31	4.32
75	Pacific RR of Mo 1st ext M 4s 1938.....	4.09	4.09	4.14	4.14	4.12	4.11	4.14	4.16	4.14	4.15	4.21	4.20	4.02
76	Illinois Central RR coll 4s 1952.....	4.18	4.03	4.04	4.02	3.99	4.01	3.94	3.91	3.98	3.99	3.99	4.00	
77	Lake Erie & Western 1st M 5s 1937.....	4.55	4.50	4.51	4.50	4.45	4.42	4.46	4.47	4.53	4.51	4.52	4.56	4.49
78	Wabash RR Co 1st M 5s 1939.....	4.85	4.80	4.84	4.79	4.74	4.74	4.74	4.79	4.85	4.82	4.82	4.87	4.86
79	Ches & O (East Ext) 1st M 6s 1911.....	4.70	4.69	4.75	4.78	4.73	4.72	4.72	4.76	4.68	4.68	4.73	4.74	4.77
80	Home Water & Ogdens cons M 5s 1922.....	4.30	4.27	4.28	4.29	4.28	4.27	4.28	4.25	4.32	4.27	4.29	4.32	4.28
81	N Y Chic & St Louis 1st M 4s 1937.....	4.25	4.18	4.20	4.10	4.17	4.08	4.15	4.19	4.19	4.17	4.19	4.17	4.19
82	Ches & Ohio Ry 1st cons 5s 1939.....	4.80	4.84	4.86	4.81	4.78	4.80	4.83	4.86	4.89	4.88	4.89	4.95	4.88

**YIELDS OF RAILROAD BONDS**

JAN. 1893—JAN. 1894

Ref. No.	Name of Bond	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
25	Pitts Ft Wayne & Chic 1st M 7s 1912.....	4.20	4.25	4.32	4.34	4.40	4.46	4.62	4.72	4.67	4.66	4.63	4.46	4.40
30	Morris & Essex 1st M of 7s 1914.....	4.29	4.23	4.23	4.28	4.32	4.41	4.76	4.72	4.72	4.38	4.29	4.20	4.22
39	Lehigh Valley RR 2nd M reg 7s 1910.....	4.30	4.35	4.44	4.43	4.38	4.49	4.80	4.92	4.82	4.78	4.68	4.59	4.46
40	Chic & Nor West Ry cons of 7s 1915.....	4.48	4.52	4.56	4.56	4.64	4.79	4.77	4.87	4.62	4.59	4.41	4.31	4.31
42	Pennsylvania RR Co gen M 6s 1910.....	3.88	3.83	3.86	3.82	3.85	3.92	3.98	4.04	4.00	4.07	4.11	3.90	3.63
49	Chicago Rk Is & Pac RR 1st M 6s 1917.....	4.49	4.43	4.50	4.52	4.68	4.65	4.88	5.03	4.59	4.54	4.47	4.39	4.38
52	St Paul Minn & Man 2nd M 6s 1909.....	4.63	4.59	4.62	4.61	4.58	4.69	5.11	5.20	5.07	4.89	4.89	4.71	4.63
53	Nash Chatt & St L 1st M 7s 1913.....	4.88	4.88	4.99	5.11	5.16	5.22	5.32	5.45	5.31	5.24	5.09	4.86	4.93
54	St P & Sioux City RR 1st M 6s 1919.....	4.54	4.59	4.60	4.58	4.64	4.79	4.76	5.17	4.81	4.78	4.64	4.50	4.44
55	C M & St P (So Min Dv) 1st M 6s 1910.....	4.80	4.66	4.76	4.83	5.03	5.11	5.20	5.42	5.20	5.11	4.95	4.81	4.88
56	Canada Southern Ry 1st M 5s 1908.....	4.50	4.43	4.50	4.48	4.60	4.64	4.90	5.00	4.76	4.68	4.43	4.37	4.36
57	Chic St P Min & Omaha cons M 6s 1930.....	4.84	4.80	4.80	4.82	5.00	5.02	5.19	5.32	5.10	4.99	4.89	4.80	4.82
58	St P Min & Man (Dak Dv) 1st M 6s 1910.....	4.66	4.58	4.73	4.60	4.71	4.82	5.08	5.27	4.94	4.94	4.77	4.76	4.76
59	Philadelphia & Erie gen M 5s 1920.....	4.15	4.14	4.33	4.20	4.19	4.23	4.23	4.30	4.32	4.37	4.39	4.28	4.24
60	C M & St P (C & P W Dv) 1st M 5s 1921.....	4.44	4.41	4.43	4.43	4.44	4.54	4.64	4.76	4.52	4.56	4.54	4.52	4.52
61	C M & St P (Wis & Min Dv) 1st M 5s 1921.....	4.69	4.67	4.65	4.63	4.64	4.68	5.05	5.01	4.96	4.87	4.75	4.71	4.72
62	Chic St Louis & N Orleans 5s 1951.....	4.28	4.23	4.18	4.28	4.31	4.34	4.43	4.46	4.45	4.43	4.42	4.44	4.48
63	Pennsylvania Co gu 1st M 4½s 1921.....	4.13	4.07	4.06	3.99	4.08	4.11	4.25	4.23	4.09	4.12	4.11	4.06	4.13
64	New York Lack & West 1st M 6s 1921.....	4.23	4.20	4.27	4.33	4.54	4.60	4.66	4.81	4.77	4.59	4.39	4.28	4.27
65	Hannibal & St Joseph cons M 6s 1911.....	4.81	4.81	4.81	4.83	4.88	4.95	5.23	5.44	5.08	5.00	4.78	4.69	4.81
66	N Y Cent & Hudson River Deb 5s 1904.....	4.33	4.36	4.29	4.23	4.28	4.42	4.69	4.95	4.67	4.51	4.30	4.34	4.31
67	Baltimore & Ohio 5s 1925.....	4.41	4.41	4.39	4.40	4.44	4.49	4.61	4.59	4.53	4.51	4.47	4.40	4.33
68	Chic Milwaukee & St Paul Term M 5s 1914.....	4.58	4.50	4.51	4.50	4.60	4.58	5.00	5.02	4.75	4.75	4.68	4.62	4.56
69	Chicago & N W Ry Deb 5s 1909.....	4.67	4.67	4.71	4.74	4.66	4.98	5.02	5.16	5.09	5.03	4.83	4.72	4.55
70	West Shore RR 1st M 4s 2361.....	3.94	3.93	3.98	4.02	4.03	4.05	4.15	4.21	4.11	4.02	3.93	3.92	3.95
71	Chicago & N W Ry of Deb 5s 1933.....	4.63	4.46	4.55	4.56	4.57	4.63	4.75	4.87	4.78	4.80	4.68	4.62	4.64
72	Chicago & North Western ext 1st M 5s 1926.....	4.24	4.23	4.30	4.35	4.34	4.44	4.53	4.66	4.52	4.32	4.31	4.19	4.26
73	St Paul Minn & Man cons M 4½s 1933.....	4.50	4.46	4.40	4.40	4.45	4.50	4.49	4.65	4.64	4.57	4.53	4.54	4.60
74	Cin Ind St L & Chi gen 1st 4s 1936.....	4.32	4.33	4.38	4.38	4.41	4.46	4.59	4.57	4.60	4.67	4.46	4.43	4.52
75	Pacific RR of Mo 1st ext M 4s 1938.....	4.02	4.00	4.02	4.09	4.12	4.14	4.18	4.29	4.23	4.34	4.16	4.25	4.23
76	Illinois Central RR coll 4s 1952.....	4.00	3.98	3.88	3.87	3.89	4.00	4.04	4.08	4.07	4.01	4.02	4.07	4.08
77	Lake Erie & Western 1st M 5s 1937.....	4.49	4.39	4.50	4.49	4.45	4.49	4.45	4.67	4.59	4.61	4.52	4.49	4.45
78	Wabash RR Co 1st M 5s 1939.....	4.86	4.79	4.82	4.80	4.90	5.01	5.22	5.32	5.06	4.95	4.87	4.87	4.90
79	Ches & O (East Ext) 1st M 6s 1911.....	4.77	4.69	4.76	4.72	4.79	4.88	5.04	5.19	5.13	4.88	4.81	4.67	4.78
80	Rome Water & Ogdensburg cons M 5s 1922.....	4.28	4.25	4.26	4.31	4.36	4.39	4.58	4.74	4.51	4.49	4.33	4.28	4.24
81	N Y Chic & St Louis 1st M 4s 1937.....	4.19	4.15	4.19	4.23	4.33	4.35	4.45	4.54	4.42	4.34	4.22	4.17	4.17
82	Ches & Ohio Ry 1st cons 5s 1939.....	4.88	4.81	4.86	4.82	4.90	5.08	5.30	5.45	5.14	4.98	4.87	4.90	4.92

**YIELDS OF RAILROAD BONDS**  
JAN. 1894—JAN. 1895

Ref. No.	Name of Bond	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
30	Morris & Essex 1st M sf 7s 1914.	4.22	4.19	4.16	4.19	4.03	4.07	3.98	4.02	4.07	3.80	3.84	3.87	3.90
39	Lehigh Valley RR 2nd M reg 7s 1910.	4.46	4.39	4.32	4.30	4.32	4.35	4.43	4.34	4.29	4.28	4.18	4.15	4.12
40	Chic & Nor West Ry cons sf 7s 1915.	4.31	4.21	4.20	4.20	4.35	4.16	4.15	4.11	4.12	4.09	3.83	3.98	3.99
42	Pennsylvania RR Co gen M 6s 1910.	3.63	3.67	3.73	3.63	3.54	3.55	3.57	3.56	3.47	3.48	3.44	3.44	3.44
49	Chicago Rk Is & Pac RR 1st M 6s 1917.	4.38	4.28	4.25	4.25	4.30	4.30	4.26	4.23	4.19	4.21	4.12	4.10	4.18
52	St Paul Minn & Man 2nd M 6s 1909.	4.63	4.59	4.45	4.39	4.45	4.48	4.54	4.56	4.48	4.41	4.37	4.40	4.45
53	Nash Chatt & St L 1st M 7s 1913.	4.93	4.91	4.92	4.88	4.80	4.80	4.82	4.80	4.68	4.56	4.48	4.43	4.45
54	St P & Sioux City RR 1st M 6s 1919.	4.44	4.42	4.38	4.28	4.35	4.32	4.30	4.34	4.43	4.22	4.15	4.17	4.20
55	C M & St P (Se Min Dv) 1st M 6s 1910.	4.88	4.81	4.69	4.65	4.71	4.68	4.71	4.73	4.78	4.60	4.54	4.55	4.47
56	Canada Southern Ry 1st M 6s 1908.	4.36	4.21	4.20	4.19	4.28	4.18	4.18	4.13	4.11	4.08	4.05	3.95	4.02
57	Chic St P Min & Omaha cons M 6s 1930.	4.82	4.71	4.70	4.65	4.61	4.61	4.62	4.65	4.51	4.50	4.51	4.51	4.61
58	St P Min & Man (Dak Dv) 1st M 6s 1910.	4.76	4.71	4.53	4.50	4.50	4.50	4.53	4.55	4.57	4.54	4.44	4.47	4.44
59	Philadelphia & Erie gen M 5s 1920.	4.24	4.21	4.21	4.07	4.07	4.15	4.16	4.14	4.09	4.03	3.95	3.92	3.91
60	C M & St P (C & P W Dv) 1st M 5s 1921.	4.52	4.50	4.45	4.41	4.42	4.44	4.47	4.47	4.42	4.38	4.34	4.30	4.31
61	C M & St P (Wis & Min Dv) 1st M 5s 1921.	4.72	4.58	4.56	4.60	4.56	4.63	4.66	4.58	4.53	4.53	4.52	4.53	4.49
62	Chic St Louis & N Orleans 5s 1951.	4.48	4.47	4.47	4.45	4.28	4.28	4.37	4.33	4.31	4.28	4.29	4.31	4.26
63	Pennsylvania Co gu 1st M 4½s 1921.	4.13	4.11	4.01	3.88	3.82	3.87	3.90	3.89	3.89	3.92	3.94	3.90	3.90
64	New York Lack & West 1st M 6s 1921.	4.27	4.22	4.18	4.13	4.11	4.06	4.09	4.02	4.02	4.01	3.98	3.97	3.97
65	Hannibal & St Joseph cons M 6s 1911.	4.81	4.67	4.63	4.58	4.54	4.53	4.54	4.51	4.46	4.42	4.41	4.44	4.44
67	Baltimore & Ohio 5s 1925.	4.33	4.36	4.37	4.35	4.40	4.39	4.42	4.41	4.30	4.36	4.35	4.38	4.39
68	Chic Milw & St Paul Term M 5s 1914.	4.56	4.48	4.46	4.46	4.49	4.48	4.55	4.47	4.33	4.34	4.31	4.36	4.32
69	Chicago & N W Ry Deb 5s 1909.	4.55	4.58	4.56	4.42	4.51	4.51	4.57	4.55	4.53	4.55	4.50	4.46	4.42
70	West Shore RR 1st M 4s 2361.	3.95	3.90	3.88	3.84	3.88	3.88	3.87	3.86	3.86	3.84	3.82	3.83	3.83
71	Chicago & N W Ry of Deb 5s 1933.	4.64	4.55	4.49	4.47	4.52	4.44	4.45	4.50	4.50	4.48	4.47	4.61	4.60
72	Chicago & North Western ext 4s 1926.	4.26	4.15	4.08	4.05	4.12	4.16	4.21	4.05	3.99	3.95	3.90	3.93	4.09
73	St Paul Min & Man cons M 4½s 1933.	4.60	4.59	4.55	4.51	4.53	4.52	4.51	4.50	4.49	4.50	4.49	4.49	4.43
74	Cin Ind St L & Chi gen 1st 4s 1936.	4.52	4.57	4.51	4.44	4.37	4.44	4.38	4.29	4.28	4.29	4.31	4.28	4.27
75	Pacific RR of Mo 1st ext M 4s 1938.	4.23	4.11	4.08	4.03	4.04	4.10	4.14	4.11	4.06	4.02	4.00	3.95	3.92
76	Illinois Central RR coll 4s 1952.	4.08	4.04	3.99	3.93	3.99	3.97	3.99	3.97	3.95	4.01	3.97	3.96	3.96
77	Lake Erie & Western 1st M 5s 1937.	4.45	4.34	4.33	4.31	4.34	4.35	4.31	4.30	4.35	4.29	4.39	4.33	4.32
78	Wabash RR Co 1st M 5s 1939.	4.90	4.87	4.82	4.76	4.78	4.84	4.94	4.88	4.81	4.81	4.77	4.78	4.78
79	Ches & Co (East Ext) 1st M 6s 1911.	4.78	4.68	4.59	4.47	4.55	4.60	4.60	4.60	4.54	4.45	4.39	4.30	4.47
80	Rome Water & Ogdena cons M 5s 1922.	4.24	4.21	4.23	4.12	4.07	4.11	4.08	4.10	4.07	4.07	4.04	3.99	4.00
81	N V Chic & St Louis 1st M 4s 1937.	4.17	4.12	4.09	4.04	4.04	4.03	4.06	4.02	4.00	3.97	3.94	3.94	3.89
82	Ches & Ohio Ry 1st cons 5s 1939.	4.92	4.83	4.81	4.79	4.78	4.80	4.82	4.74	4.62	4.65	4.61	4.63	4.69
83	Ill Central (L N O & T) col 4s 1953.	4.24	4.27	4.17	4.11	4.07	4.12	4.13	4.10	4.08	4.06	4.07	4.08	4.12

# RAILROAD BOND YIELDS

A 67

## YIELDS OF RAILROAD BONDS

JAN. 1895—JAN. 1896

Ref. No.	Name of Bond	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
30	Morris & Essex 1st M of 7s 1914.....	3.90	4.09	4.01	3.95	3.98	3.96	3.94	3.91	3.84	3.80	3.75	3.84	3.90
39	Lehigh Valley RR 2nd M reg 7s 1910.....	4.12	4.13	4.11	4.13	4.00	3.96	3.92	3.92	3.97	4.03	4.07	3.94	4.03
40	Chic & Nor West Ry cons of 7s 1915.....	3.99	4.12	4.16	4.20	4.13	4.08	4.02	4.03	4.04	4.05	4.01	4.08	4.04
42	Pennsylvania RR Co gen M 6s 1910.....	3.44	3.48	3.49	3.48	3.49	3.45	3.44	3.39	3.38	3.39	3.34	3.34	3.32
49	Chicago Rk Is & Pac RR 1st M 6s 1917.....	4.18	4.19	4.26	4.22	4.18	4.07	4.01	3.95	3.99	4.00	3.91	3.94	4.08
52	St Paul Minn & Man 2nd M 6s 1909.....	4.45	4.54	4.56	4.58	4.54	4.41	4.30	4.15	4.15	4.30	4.28	4.30	4.54
53	Nash Chatt & St L 1st M 7s 1913.....	4.45	4.49	4.65	4.67	4.67	4.63	4.57	4.49	4.50	4.50	4.52	4.64	4.70
54	St P & Sioux City RR 1st M 6s 1919.....	4.20	4.21	4.29	4.37	4.29	4.18	4.10	4.00	3.99	4.08	4.12	4.15	4.21
55	C M & St P (So Min Dv) 1st M 6s 1910.....	4.47	4.50	4.62	4.61	4.57	4.51	4.50	4.48	4.38	4.48	4.47	4.59	4.70
56	Canada Southern Ry 1st M 5s 1908.....	4.02	4.01	4.10	4.18	4.09	4.02	4.01	4.00	3.98	3.98	4.03	4.13	4.26
57	Chic St P Min & Omaha cons M 6s 1930.....	4.61	4.71	4.70	4.65	4.58	4.52	4.48	4.46	4.51	4.49	4.47	4.58	4.62
58	St P Min & Man (Dak Dv) 1st M 6s 1910.....	4.44	4.50	4.50	4.56	4.56	4.19	4.34	4.30	4.30	4.26	4.20	4.16	4.35
59	Philadelphia & Erie gen M 5s 1920.....	3.91	3.98	3.95	3.99	3.92	3.93	3.97	3.99	4.01	3.93	3.93	3.94	4.02
60	C M & St P (C & F W Dv) 1st M 5s 1921.....	4.31	4.39	4.34	4.31	4.28	4.18	4.18	4.06	4.08	4.11	4.15	4.17	4.31
61	C M & St P (Wis & Min Dv) 1st M 5s 1921.....	4.49	4.43	4.49	4.52	4.50	4.47	4.39	4.39	4.27	4.28	4.36	4.48	4.52
62	Chic St Louis & N Orleans 5s 1951.....	4.26	4.20	4.23	4.25	4.21	4.16	4.21	4.14	4.10	4.12	4.13	4.10	4.24
63	Pennsylvania Co qu 1st M 4½s 1921.....	3.90	3.89	3.90	3.86	3.75	3.65	3.78	3.59	3.71	3.70	3.78	3.79	3.91
64	New York Lack & West 1st M 6s 1921.....	3.97	4.03	4.10	4.09	4.00	3.97	3.97	3.87	3.95	3.99	4.02	4.08	4.13
65	Hannibal & St Joseph cons M 6s 1911.....	4.44	4.60	4.58	4.67	4.66	4.58	4.55	4.06	4.24	4.22	4.27	4.64	4.63
66	Chic Milw & St Paul Term M 5s 1914.....	4.32	4.36	4.38	4.29	4.35	4.28	4.22	4.16	4.16	4.18	4.21	4.30	4.24
69	Chicago & N W Ry Deb 5s 1909.....	4.42	4.49	4.50	4.51	4.41	4.49	4.47	4.47	4.56	4.43	4.39	4.77	4.65
70	West Shore RR 1st M 4s 2361.....	3.83	3.86	3.84	3.84	3.84	3.82	3.81	3.78	3.77	3.80	3.79	3.84	3.83
71	Chicago & N W Ry 1st Deb 5s 1933.....	4.60	4.60	4.58	4.63	4.64	4.52	4.51	4.44	4.48	4.44	4.42	4.48	4.56
72	Chicago & North Western ext 4s 1926.....	4.09	3.95	4.08	4.10	4.05	4.01	3.98	3.92	3.90	3.92	3.95	4.01	4.06
73	St Paul Minn & Man cons M 4½s 1933.....	4.43	4.47	4.47	4.50	4.38	4.34	4.29	4.29	4.27	4.23	4.28	4.35	4.41
74	Cin Ind St L & Chi gen 1st 4s 1936.....	4.27	4.26	4.29	4.33	4.23	4.25	4.14	4.01	4.02	4.00	4.04	4.17	4.24
75	Pacific RR of Mo 1st ext M 4s 1938.....	3.92	3.96	4.00	4.02	3.87	3.83	3.84	3.77	3.82	3.82	3.92	3.92	3.98
76	Illinois Central RR coll 4s 1952.....	3.96	3.99	3.99	3.98	3.92	3.86	3.83	3.74	3.70	3.82	3.95	3.92	3.87
77	Lake Erie & Western 1st M 5s 1937.....	4.32	4.30	4.26	4.30	4.23	4.26	4.22	4.21	4.19	4.18	4.20	4.25	4.31
78	Wabash RR Co 1st M 5s 1939.....	4.78	4.81	4.81	4.78	4.72	4.64	4.66	4.66	4.63	4.65	4.68	4.86	4.86
79	Ches & O (East Ext) 1st M 6s 1911.....	4.47	4.58	4.47	4.55	4.54	4.48	4.28	4.32	4.31	4.35	4.32	4.34	4.47
80	Rome Water & Ogdens cons M 5s 1922.....	4.00	4.05	4.09	4.14	4.05	3.98	3.95	3.95	3.97	3.92	3.93	3.95	4.01
81	N Y Chic & St Louis 1st M 4s 1937.....	3.89	3.99	3.92	3.91	3.91	3.81	3.79	3.79	3.77	3.81	3.89	3.91	3.91
82	Ches & Ohio Ry 1st cons 5s 1939.....	4.69	4.78	4.84	4.72	4.58	4.45	4.45	4.46	4.47	4.49	4.53	4.62	4.70
83	Ill Central (L N O & T) col 4s 1953.....	4.12	4.14	4.14	4.12	4.05	4.02	3.87	3.86	3.85	3.90	3.93	3.94	4.06
84	C & O (R & A Dv) 1st cons M 4s 1989.....	4.28	4.38	4.39	4.37	4.28	4.16	4.11	4.15	4.19	4.21	4.22	4.28	4.30
85	C C C & St L (St L Dv) 1st col 4s 1990.....	4.47	4.46	4.48	4.47	4.42	4.33	4.25	4.26	4.28	4.28	4.35	4.33	4.35
86	E Tenn V & G Ry cons 1st M 5s 1956.....	4.85	4.88	4.84	4.82	4.72	4.61	4.58	4.59	4.57	4.61	4.65	4.68	4.75

## APPENDIX

**YIELDS OF RAILROAD BONDS**  
JAN. 1896—JAN. 1897

Ref. No.	Name of Bond	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
30	Morris & Essex 1st M of 7s 1914.....	3.90	4.04	4.00	3.91	3.90	4.06	4.15	4.45	4.28	4.08	3.94	3.92	3.80
39	Lehigh Valley RR 2nd M reg 7s 1910.....	4.03	3.99	4.10	4.00	4.07	4.03	4.09	4.36	4.42	4.46	4.45	4.33	4.21
40	Chic & Nor West Ry cons of 7s 1915.....	4.04	4.06	4.12	4.05	4.11	4.07	4.12	4.56	4.46	4.39	4.17	4.01	3.96
42	Pennsylvania RR Co gen M 6s 1910.....	3.32	3.33	3.38	3.46	3.38	3.21	3.29	3.30	3.45	3.37	3.39	3.30	3.21
49	Chicago Rk Is & Pac RR 1st M 6s 1917.....	4.08	4.14	4.24	4.21	4.18	4.06	4.18	4.54	4.44	4.36	4.09	3.99	3.97
52	St Paul Minn & Man 2nd M 6s 1909.....	4.54	4.42	4.41	4.39	4.35	4.27	4.31	4.70	4.45	4.46	4.47	4.31	4.25
53	Nash Chatt & St L 1st M 7s 1913.....	4.70	4.77	4.77	4.72	4.66	4.61	4.62	4.83	4.83	4.98	4.74	4.74	4.59
54	St P & Sioux City RR 1st M 6s 1919.....	4.21	4.19	4.16	4.18	4.02	4.08	4.31	4.50	4.31	4.21	4.19	4.17	4.03
56	Canada Southern Ry 1st M 5s 1908.....	4.26	4.17	4.20	4.16	4.18	4.12	4.27	4.45	4.34	4.37	4.24	4.11	4.00
57	Chic St P Min & Omaha cons M 6s 1930.....	4.62	4.61	4.59	4.61	4.57	4.51	4.76	4.97	4.82	4.68	4.60	4.45	4.40
58	St P Min & Man (Dak Dy) 1st M 6s 1910.....	4.35	4.32	4.34	4.35	4.37	4.30	4.50	4.83	4.89	4.70	4.65	4.48	4.39
59	Philadelphia & Erie gen M 5s 1920.....	4.02	3.91	3.91	3.90	3.90	3.95	4.01	4.15	4.07	4.01	3.88	3.89	3.88
60	C M & St P (C & P W Dy) 1st M 5s 1921.....	4.31	4.24	4.18	4.19	4.17	4.16	4.28	4.44	4.38	4.33	4.24	4.21	4.19
61	C M & St P (Wis & Min Dy) 1st M 5s 1921.....	4.52	4.34	4.29	4.31	4.33	4.35	4.35	4.80	4.59	4.62	4.42	4.39	4.32
62	Chic St Louis & N Orleans 5s 1951.....	4.24	4.20	4.15	4.15	4.14	4.14	4.20	4.45	4.36	4.26	4.22	4.17	4.13
63	Pennsylvania Co gu 1st M 4½s 1921.....	3.91	3.82	3.86	3.86	3.81	3.82	3.84	4.11	4.04	3.98	3.90	3.90	3.85
64	New York Lack & West 1st M 6s 1921.....	4.13	3.98	4.03	4.04	4.02	4.00	4.18	4.43	4.19	4.15	4.05	4.00	3.91
65	Hannibal & St Joseph cons M 6s 1911.....	4.63	4.59	4.58	4.55	4.48	4.49	4.60	5.03	4.95	4.76	4.59	4.45	4.35
68	Chic Milv & St Paul Term M 5s 1914.....	4.24	4.12	4.07	4.19	4.17	4.12	4.30	4.56	4.42	4.33	4.18	4.20	4.15
69	Chicago & N W Ry Deb 5s 1909.....	4.65	4.55	4.56	4.59	4.51	4.45	4.58	4.71	4.68	4.80	4.61	4.47	4.42
70	West Shore RR 1st M 4s 2361.....	3.83	3.80	3.81	3.82	3.83	3.82	3.89	3.97	3.91	3.90	3.86	3.80	3.78
71	Chicago & N W Ry of Deb 5s 1933.....	4.56	4.48	4.50	4.51	4.51	4.50	4.58	4.77	4.74	4.72	4.55	4.47	4.43
72	Chicago & North Western ext 4s 1926.....	4.06	4.01	3.99	3.95	3.92	3.97	4.05	4.14	4.01	4.11	4.14	4.01	3.98
73	St Paul Minn & Man cons M 4½s 1933.....	4.41	4.34	4.26	4.28	4.31	4.31	4.27	4.53	4.49	4.46	4.39	4.37	4.36
74	Cin Ind St L & Chi gen 1st 4s 1936.....	4.24	4.13	4.15	4.19	4.13	4.09	4.14	4.34	4.33	4.33	4.18	4.20	4.17
75	Pacific RR of Mo 1st ext M 4s 1938.....	3.98	3.96	3.96	3.95	3.94	3.89	3.95	4.01	4.04	4.14	4.09	4.08	4.07
76	Illinois Central RR coll 4s 1952.....	3.87	3.87	3.91	3.93	3.92	3.91	4.00	4.16	4.09	4.02	3.89	3.92	3.96
77	Lake Erie & Western 1st M 5s 1937.....	4.31	4.27	4.26	4.25	4.24	4.23	4.26	4.42	4.42	4.36	4.30	4.22	4.26
78	Wabash RR Co 1st M 5s 1939.....	4.66	4.78	4.72	4.69	4.69	4.71	4.84	5.02	4.91	4.88	4.76	4.70	4.69
79	Ches & O (East Ext) 1st M 6s 1911.....	4.47	4.52	4.60	4.60	4.53	4.44	4.72	4.75	4.67	4.52	4.31	4.36	4.34
80	Rome Water & Ogdens cons M 5s 1922.....	4.01	3.98	4.00	3.99	4.01	3.99	4.09	4.17	4.03	4.03	4.00	3.99	3.92
81	N Y Chic & St Louis 1st M 4s 1937.....	3.91	3.86	3.86	3.85	3.86	3.86	3.90	4.00	3.95	3.88	3.86	3.86	3.82
82	Che & Ohio Ry 1st cons 5s 1939.....	4.70	4.62	4.66	4.61	4.59	4.66	4.85	4.99	4.85	4.79	4.63	4.63	4.58
83	Ill Central (L N O & T) col 4s 1953.....	4.06	4.00	4.00	4.04	4.00	4.02	4.05	4.16	4.06	4.09	3.98	4.04	3.97
84	C & O (R & A Dy) 1st cons M 4s 1989.....	4.30	4.21	4.24	4.24	4.20	4.20	4.24	4.37	4.33	4.31	4.21	4.15	4.05
85	C C C & St L (St L Dy) 1st col 4s 1990.....	4.35	4.33	4.33	4.34	4.32	4.34	4.39	4.50	4.54	4.45	4.33	4.35	4.35
86	E Tenn V & G Ry cons 1st M 5s 1956.....	4.75	4.70	4.67	4.68	4.66	4.67	4.87	5.00	4.87	4.79	4.66	4.67	4.66

**YIELDS OF RAILROAD BONDS**

JAN. 1897—JAN. 1898

Ref. No.	Name of Bond	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
30	Morris & Essex 1st M sf 7s 1914.....	3.80	3.72	3.72	3.72	3.64	3.57	3.60	3.69	3.59	3.63	3.63	3.61	3.62
39	Lehigh Valley RR 2nd M reg 7s 1910.....	4.21	3.45	4.06	4.13	4.17	4.18	3.93	3.83	3.75	3.70	3.84	3.87	3.89
40	Chic & Nor West Ry cons of 7s 1915.....	3.96	3.89	3.85	3.72	3.67	3.57	3.55	3.65	3.69	3.65	3.66	3.63	3.63
42	Pennsylvania RR Co gen M ss 1910.....	3.21	3.28	3.19	3.23	3.22	3.18	3.18	3.17	3.08	3.12	3.12	3.10	3.12
49	Chicago Rk Is & Pac RR 1st M ss 1917.....	3.97	3.94	3.90	3.84	3.87	3.77	3.75	3.74	3.74	3.77	3.81	3.72	3.72
53	Nash Chatt & St L 1st M 7s 1913.....	4.59	4.56	4.50	4.62	4.55	4.46	4.35	4.41	4.47	4.44	4.35	4.30	4.29
54	St P & Sioux City RR 1st M ss 1919.....	4.03	4.02	4.01	3.98	3.94	3.94	3.95	3.97	4.02	4.02	3.99	3.89	3.87
56	Canada Southern Ry 1st M ss 1908.....	4.00	3.89	3.98	3.98	3.98	3.81	3.78	3.85	3.95	4.01	3.96	3.77	3.78
57	Chic St P Min & Omaha cons M ss 1930.....	4.40	4.38	4.35	4.38	4.32	4.22	4.22	4.26	4.30	4.25	4.15	4.07	3.99
59	Philadelphia & Erie gen M ss 1920.....	3.88	3.89	3.94	3.91	3.91	3.88	3.85	3.87	3.86	3.88	3.82	3.85	3.77
60	C M & St P (C & P W Dv) 1st M ss 1921.....	4.19	4.15	4.13	4.08	4.07	4.02	3.96	4.04	4.07	4.07	4.03	3.97	3.93
61	C M & St P (Wis & Min Dv) 1st M ss 1921.....	4.32	4.29	4.23	4.21	4.20	4.20	4.21	4.21	4.20	4.17	4.11	4.10	4.05
62	Chic St Louis & N Orleans ss 1951.....	4.13	4.07	4.04	4.05	4.05	4.01	3.96	4.00	4.02	4.05	4.03	3.98	3.97
63	Pennsylvania Co gu 1st M 4% s 1921.....	3.85	3.86	3.86	3.82	3.80	3.92	3.77	3.76	3.73	3.71	3.71	3.67	3.65
64	New York Lack & West 1st M ss 1921.....	3.91	3.83	3.76	3.75	3.73	3.65	3.58	3.57	3.61	3.64	3.61	3.55	3.54
65	Hannibal & St Joseph cons M ss 1911.....	4.35	4.35	4.30	4.14	4.15	4.16	4.09	4.16	4.17	4.17	4.06	4.01	3.99
68	Chic Milw & St Paul Term M ss 1914.....	4.15	4.09	4.11	4.04	4.02	4.00	3.99	4.00	4.00	4.00	4.00	3.94	3.85
69	Chicago & N W Ry Deb ss 1909.....	4.42	4.42	4.36	4.25	4.21	4.09	4.12	4.13	4.12	4.20	4.11	4.01	4.02
70	West Shore RR 1st M ss 1931.....	3.78	3.75	3.78	3.73	3.73	3.71	3.66	3.71	3.73	3.73	3.67	3.65	3.67
71	Chicago & N W Ry sf Deb ss 1933.....	4.43	4.42	4.42	4.37	4.26	4.15	4.13	4.14	4.17	4.20	4.17	4.12	4.11
72	Chicago & North Western ext 4s 1926.....	3.98	3.87	3.86	3.85	3.83	3.83	3.78	3.79	3.74	3.77	3.75	3.73	3.71
73	St Paul Minn & Man cons M 4% s 1933.....	4.36	4.34	4.24	4.24	4.24	4.23	4.22	4.21	4.23	4.22	4.22	4.18	4.14
74	Cin Ind St L & Chi gen 1st 4s 1936.....	4.17	4.02	3.99	3.98	3.97	3.97	3.99	4.00	3.99	3.99	4.00	3.94	3.92
75	Pacific RR of Mo 1st ext M 4s 1938.....	4.07	3.94	3.98	4.02	4.04	4.00	3.94	3.96	3.98	4.00	3.97	3.88	3.82
76	Illinois Central RR coll 4s 1952.....	3.96	3.90	3.89	3.93	3.94	3.95	3.89	3.89	3.93	3.89	3.94	3.88	3.92
77	Lake Erie & Western 1st M ss 1937.....	4.26	4.27	4.25	4.23	4.26	4.21	4.21	4.22	4.21	4.24	4.21	4.20	4.17
78	Wabash R.R. Co 1st M ss 1939.....	4.69	4.70	4.79	4.89	4.90	4.86	4.78	4.72	4.72	4.70	4.71	4.66	4.61
79	Ches & O (East Ext) 1st M ss 1911.....	4.34	4.29	4.24	4.11	4.11	4.13	4.04	4.24	4.24	4.23	4.22	4.21	4.15
80	Rome Water & Ogdens cons M ss 1922.....	3.92	3.86	3.87	3.83	3.83	3.76	3.78	3.83	3.85	3.81	3.82	3.76	3.70
81	N Y Chic & St Louis 1st M ss 1937.....	3.82	3.81	3.80	3.80	3.79	3.80	3.78	3.77	3.75	3.81	3.77	3.71	3.71
82	Ches & Ohio Ry 1st cons ss 1939.....	4.58	4.54	4.54	4.51	4.50	4.47	4.49	4.48	4.45	4.48	4.42	4.35	4.29
83	Illi Central (L N O & T) col 4s 1953.....	3.97	4.00	4.00	4.05	3.93	3.95	3.97	3.97	4.00	4.03	4.03	3.95	3.96
84	C & O (R & A Dv) 1st cons M 4s 1989.....	4.05	4.00	3.93	3.97	3.97	3.95	3.87	3.93	3.96	3.99	3.98	3.85	3.83
85	C C C & St L (St L Dv) 1st col 4s 1990.....	4.35	4.36	4.28	4.25	4.23	4.23	4.27	4.25	4.38	4.25	4.26	4.23	4.17
86	E Tenn V & G Ry cons 1st M ss 1956.....	4.66	4.65	4.65	4.64	4.63	4.61	4.57	4.53	4.58	4.58	4.57	4.55	4.54
87	Chic Milw & St Paul gen M 4s 1989.....	4.11	4.07	3.99	3.99	4.00	3.96	3.91	3.91	3.92	3.90	3.87	3.84	3.81

## APPENDIX

YIELDS OF RAILROAD BONDS  
JAN. 1898—JAN. 1899

Ref. No.	Name of Bond	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
30	Morris & Essex 1st M sf 7s 1914.....	3.62	3.74	3.87	3.90	3.81	3.72	3.75	3.77	3.77	3.73	3.45	3.45	3.41
39	Lehigh Valley RR 2nd M reg 7s 1910.....	3.89	3.75	4.01	4.14	4.31	4.05	4.07	4.07	4.07	3.92	3.97	3.91	3.82
40	Chic & Nor West Ry cons sf 7s 1915.....	3.63	3.64	3.76	3.75	3.87	3.85	3.70	3.61	3.65	3.63	3.59	3.46	3.50
42	Pennsylvania RR Co gen M 6s 1910.....	3.12	3.07	3.10	3.24	3.26	3.24	2.97	3.08	3.16	3.17	3.17	3.12	3.04
49	Chicago Rk Is & Pac RR 1st M 6s 1917.....	3.72	3.75	3.85	3.78	3.87	3.83	3.80	3.74	3.78	3.75	3.76	3.65	3.63
53	Nash Chatt & St L 1st M 7s 1913.....	4.29	4.28	4.40	4.61	4.46	4.42	4.41	4.33	4.36	4.28	4.22	4.24	4.06
54	St P & Sioux City RR 1st M 6s 1919.....	3.87	3.90	4.00	4.11	4.04	3.94	3.90	3.89	3.83	3.81	3.78	3.72	3.72
57	Chic St P Min & Omaha cons M 6s 1930.....	3.99	4.01	4.17	4.54	4.20	4.10	4.02	4.03	4.10	4.11	4.08	4.05	4.00
59	Philadelphia & Erie gen M 5s 1920.....	3.77	3.77	3.79	3.82	3.84	3.80	3.79	3.82	3.84	3.82	3.78	3.78	3.79
60	C M & St P (C & P W Dv) 1st M 5s 1921.....	3.93	3.93	4.02	4.21	4.13	4.01	3.96	3.91	3.91	3.91	3.89	3.77	3.65
61	C M & St P (Wis & Min Dv) 1st M 5s 1921.....	4.05	4.05	4.18	4.31	4.28	4.21	4.16	4.12	4.12	4.04	3.92	3.87	3.82
62	Chic St Louis & N Orleans 5s 1951.....	3.97	3.98	4.11	4.31	4.22	4.09	4.03	3.99	3.98	3.98	3.96	3.97	3.97
63	Pennsylvania Co gu 1st M 4½s 1921.....	3.65	3.70	3.82	3.99	3.96	3.80	3.68	3.69	3.70	3.66	3.61	3.44	3.44
64	New York Lack & West 1st M 6s 1921.....	3.54	3.60	3.62	3.64	3.65	3.62	3.62	3.61	3.64	3.63	3.60	3.57	3.53
65	Hannibal & St Joseph cons M 6s 1911.....	3.99	4.01	4.05	4.12	4.06	4.14	4.04	3.95	3.98	3.97	3.94	3.91	3.80
68	Chic Milw & St Paul Term M 5s 1914.....	3.85	3.81	3.85	4.11	4.06	4.01	3.98	3.95	3.95	3.94	3.99	3.86	3.78
69	Chicago & N W Ry Deb Ss 1909.....	4.02	4.05	4.26	4.34	4.14	4.09	4.11	4.10	4.12	4.10	4.00	3.93	3.98
70	West Shore RR 1st M 4s 1936.....	3.67	3.66	3.71	3.84	3.78	3.72	3.69	3.67	3.68	3.67	3.64	3.61	3.59
71	Chicago & N W Ry sf Deb 5s 1933.....	4.11	4.12	4.16	4.29	4.21	4.15	4.09	4.05	4.06	4.03	3.98	3.93	3.87
72	Chicago & North Western ext 4s 1926.....	3.71	3.72	3.79	3.86	3.81	3.79	3.75	3.73	3.74	3.71	3.72	3.73	3.72
73	St Paul Minn & Man cons M 4½s 1933.....	4.14	4.09	4.15	4.27	4.27	4.20	4.11	4.07	4.08	4.02	3.91	3.88	3.83
75	Pacific RR of Mo 1st ext M 4s 1938.....	3.82	3.82	3.92	3.89	3.98	3.89	3.90	3.82	3.79	3.76	3.80	3.72	3.72
76	Illinois Central RR coll 4s 1952.....	3.92	3.98	3.96	3.94	3.98	3.93	3.91	3.89	3.90	3.89	3.84	3.84	3.78
77	Lake Erie & Western 1st M 5s 1937.....	4.17	4.17	4.21	4.31	4.29	4.23	4.20	4.18	4.20	4.21	4.19	4.13	4.11
78	Wabash RR Co 1st M 5s 1939.....	4.61	4.59	4.76	4.76	4.64	4.53	4.51	4.46	4.48	4.44	4.39	4.38	4.31
79	Ches & O (East Ext) 1st M 6s 1911.....	4.15	4.19	4.30	4.31	4.17	4.38	4.14	4.12	4.13	4.06	4.08	4.05	4.02
80	Rome Water & Ogden cons M 5s 1922.....	3.70	3.72	3.80	3.85	3.77	3.70	3.63	3.59	3.57	3.41	3.27	3.25	3.20
81	N Y Chic & St Louis 1st M 4s 1937.....	3.71	3.75	3.88	3.96	3.85	3.82	3.78	3.76	3.77	3.75	3.73	3.71	3.71
82	Che & Ohio Ry 1st cons 5s 1939.....	4.29	4.26	4.37	4.43	4.37	4.30	4.29	4.27	4.30	4.29	4.19	4.17	4.13
83	Ill Central (L N O & T) col 4s 1953.....	3.96	3.96	4.03	4.15	4.04	3.99	3.96	3.97	3.99	3.98	3.95	3.92	3.88
84	C & O (R & A Dv) 1st cons M 4s 1989.....	3.83	3.84	3.89	3.96	3.98	3.89	3.89	3.84	3.94	3.88	3.82	3.82	3.80
85	C C C & St L (S L Dv) 1st col 4s 1990.....	4.17	4.14	4.21	4.30	4.37	4.27	4.21	4.06	4.09	4.09	4.07	3.97	3.97
86	E Tenn V & G Ry cons 1st M 5s 1956.....	4.54	4.54	4.62	4.70	4.60	4.57	4.57	4.48	4.46	4.43	4.41	4.34	4.32
87	Chic Milw & St Paul gen M 4s 1989.....	3.81	3.77	3.82	3.90	3.94	3.87	3.81	3.78	3.82	3.82	3.78	3.75	3.62
88	Lake Sh & Mich So 1st M 3½s 1997.....	3.32	3.31	3.38	3.47	3.41	3.35	3.37	3.34	3.32	3.32	3.31	3.29	3.28

**YIELDS OF RAILROAD BONDS**  
JAN. 1899—JAN. 1900

Ref. No.	Name of Bond	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
30	Morris & Essex 1st M sf 7s 1914.....	3.41	3.50	3.50	3.44	3.38	3.44	3.49	3.55	3.57	3.60	3.62	3.66	3.61
39	Lehigh Valley RR 2nd M reg 7s 1910.....	3.82	3.96	3.79	3.82	3.77	3.70	3.86	4.03	3.87	3.98	4.07	4.11	4.00
40	Chic & Nor West Ry cons sf 7s 1915.....	3.50	3.45	3.52	3.51	3.44	3.44	3.40	3.36	3.34	3.38	3.40	3.50	3.51
49	Chicago, Rock Is & Pac RR 1st M 6s 1917.....	3.63	3.63	3.62	3.59	3.55	3.51	3.46	3.53	3.61	3.71	3.80	3.76	3.62
53	Nash. Chatt & St L 1st M 7s 1913.....	4.06	4.07	4.15	4.16	4.11	4.08	4.08	4.09	4.25	4.29	4.32	4.45	4.31
54	St P & Sioux City RR 1st M 6s 1919.....	3.72	3.80	3.79	3.79	3.78	3.76	3.77	3.80	3.87	3.87	3.92	4.00	4.01
57	Chic St P Min & Omaha cons M 6s 1930.....	4.00	3.98	3.99	3.96	3.91	3.90	3.93	3.93	3.95	3.98	4.04	4.03	4.14
60	C M & St P (C & P W Dv) 1st M 5s 1921.....	3.65	3.64	3.69	3.63	3.59	3.58	3.56	3.58	3.64	3.71	3.70	3.75	3.67
62	Chic St Louis & N Orleans 5s 1951.....	3.97	3.86	3.86	3.83	3.83	3.79	3.78	3.80	3.81	3.84	3.93	3.95	3.92
63	Pennsylvania Co 1st M 4½s 1921.....	3.44	3.50	3.55	3.49	3.46	3.45	3.46	3.47	3.53	3.61	3.64	3.68	3.69
64	New York Lack & West 1st M 6s 1921.....	3.53	3.54	3.53	3.37	3.38	3.41	3.49	3.50	3.52	3.55	3.56	3.61	3.56
70	West Shore RR 1st M 4s 2361.....	3.50	3.58	3.56	3.54	3.54	3.50	3.49	3.51	3.58	3.58	3.57	3.63	3.58
71	Chicago & N W Ry 1st Deb 5s 1933.....	3.87	3.92	3.92	3.89	3.86	3.83	3.86	3.87	3.92	3.98	4.03	4.12	4.05
73	St Paul Minn & Man cons M 4½s 1933.....	3.83	3.83	3.88	3.71	3.61	3.62	3.62	3.68	3.71	3.75	3.79	3.78	3.80
75	Pacific RR of Mo 1st ext M 4s 1938.....	3.72	3.72	3.69	3.67	3.65	3.64	3.66	3.66	3.68	3.71	3.73	3.84	3.80
76	Illinois Central RR coll 4s 1952.....	3.78	3.77	3.86	3.78	3.77	3.76	3.79	3.83	3.88	3.94	3.98	3.90	3.87
77	Lake Erie & Western 1st M 5s 1937.....	4.11	4.10	4.08	4.06	4.02	4.03	3.90	3.90	4.00	4.02	3.99	4.06	4.06
78	Wabash RR Co 1st M 5s 1939.....	4.31	4.29	4.31	4.25	4.21	4.16	4.19	4.21	4.30	4.29	4.27	4.32	4.30
80	Rome Water & Ogdens cons M 5s 1922.....	3.20	3.22	3.22	3.26	3.27	3.29	3.28	3.31	3.36	3.48	3.28	3.29	3.29
81	N Y Chic & St Louis 1st M 4s 1937.....	3.71	3.71	3.72	3.68	3.69	3.68	3.68	3.66	3.72	3.74	3.73	3.77	3.76
82	Ches & Ohio Ry 1st cons 5s 1939.....	4.13	4.13	4.13	4.11	4.05	4.04	4.09	4.10	4.14	4.17	4.24	4.21	
83	Ill Central (L N O & T) col 4s 1953.....	3.88	3.86	3.86	3.84	3.77	3.76	3.81	3.83	3.80	3.85	3.89	4.03	3.96
84	C & O (R & A Dv) 1st cons M 4s 1989.....	3.80	3.78	3.77	3.78	3.77	3.77	3.82	3.85	3.87	3.91	3.96	3.93	
85	C C C & St L (St L Dv) 1st col 4s 1990.....	3.97	3.93	3.99	3.97	3.96	3.95	3.94	3.90	3.92	3.94	4.00	3.96	
86	E Tenn V & G Ry cons 1st M 5s 1956.....	4.32	4.34	4.29	4.24	4.20	4.22	4.17	4.17	4.23	4.27	4.26	4.34	4.31
87	Chic Milw & St Paul gen M 4s 1989.....	3.62	3.58	3.61	3.56	3.53	3.53	3.56	3.55	3.59	3.62	3.64	3.66	3.64
88	Lake Sh & Mich So 1st M 3½s 1997.....	3.28	3.25	3.21	3.18	3.14	3.17	3.19	3.21	3.24	3.20	3.18	3.18	
89	St P Minn & Man (Mon Ex) 1st M 4s 1937.....	3.77	3.77	3.71	3.65	3.69	3.70	3.73	3.78	3.86	3.92	3.82	3.90	3.84
90	Baltimore & Ohio RR 1st M 4s 1948.....	4.07	4.08	4.14	4.05	3.96	3.95	4.01	4.04	4.07	4.12	4.08	4.18	4.10
91	Union Pac RR 1st M RR & lg 4s 1947.....	3.78	3.83	3.83	3.78	3.73	3.73	3.75	3.78	3.83	3.88	3.91	3.95	3.85
92	Chicago & Nor West gen M 3½s 1987.....	3.42	3.38	3.36	3.29	3.21	3.18	3.20	3.21	3.23	3.25	3.23	3.26	3.28
93	Chi Rock Is & Pac Ry gen M 4s 1988.....	3.76	3.75	3.76	3.72	3.67	3.67	3.69	3.74	3.77	3.78	3.82	3.85	3.82
94	Atch Top & Santa Fe gen M 4s 1995.....	3.98	3.98	3.97	3.97	3.94	3.92	3.96	3.97	3.98	4.05	4.06	4.16	4.05
95	N Y Cent & Hudson River M 3½s 1997.....	3.13	3.13	3.12	3.12	3.13	3.12	3.15	3.16	3.17	3.18	3.21	3.20	3.20

RAILROAD BOND YIELDS

## APPENDIX

**YIELDS OF RAILROAD BONDS**  
JAN. 1900—JAN. 1901

Ref. No.	Name of Bond	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
40	Chic & Nor West Ry cons of 7s 1915.....	3.51	3.53	3.43	3.44	3.45	3.46	3.53	3.50	3.55	3.57	3.65	3.59	3.55
49	Chicago Rk Is & Pac RR 1st M 6s 1917.....	3.62	3.56	3.51	3.55	3.60	3.66	3.70	3.68	3.65	3.70	3.66	3.64	3.58
53	Nash Chatt & St L 1st M 7s 1913.....	4.31	4.25	4.31	4.33	4.44	4.46	4.35	4.24	4.33	4.31	4.24	4.19	4.12
54	St P & Sioux City RR 1st M 6s 1919.....	4.01	3.93	3.86	3.79	3.86	3.80	3.84	3.85	3.84	3.82	3.76	3.81	3.81
57	Chic St P Minn & Omaha cons M 6s 1930.....	4.14	4.06	4.05	4.03	4.08	4.10	4.15	4.13	4.12	4.09	4.08	4.02	4.01
60	C M & St P (C & P W Dv) 1st M 5s 1921.....	3.67	3.66	3.64	3.61	3.67	3.72	3.72	3.71	3.75	3.77	3.69	3.64	3.60
62	Chic St Louis & N Orleans 5s 1951.....	3.92	3.90	3.90	3.88	3.89	3.90	3.90	3.91	3.92	3.93	3.91	3.87	3.84
63	Pennsylvania Co gu 1st M 4½s 1921.....	3.69	3.57	3.59	3.51	3.53	3.52	3.40	3.42	3.44	3.50	3.49	3.50	3.51
64	New York Lack & West 1st M 6s 1921.....	3.56	3.54	3.53	3.58	3.61	3.64	3.65	3.69	3.60	3.61	3.63	3.55	3.53
70	West Shore RR 1st M 4s 2361.....	3.58	3.53	3.56	3.54	3.59	3.56	3.58	3.60	3.58	3.57	3.57	3.53	3.51
73	St Paul Minn & Man cons M 4½s 1933.....	3.80	3.73	3.71	3.69	3.72	3.74	3.75	3.78	3.78	3.81	3.73	3.71	3.70
76	Illinois Central RR coll 4s 1952.....	3.87	3.88	3.90	3.91	3.95	3.89	3.91	3.93	3.94	3.93	3.90	3.86	3.86
77	Lake Erie & Western 1st M 5s 1937.....	4.06	3.95	3.94	3.92	3.94	3.95	3.99	3.98	3.97	3.91	3.89	3.85	3.86
78	Wabash RR Co 1st M 5s 1939.....	4.30	4.22	4.22	4.19	4.21	4.27	4.21	4.19	4.17	4.20	4.18	4.15	4.09
80	Rome Water & Ogdens cons M 5s 1922.....	3.29	3.30	3.35	3.31	3.37	3.39	3.40	3.40	3.35	3.35	3.32	3.33	3.31
81	N Y Chic & St Louis 1st M 4s 1937.....	3.76	3.69	3.68	3.68	3.70	3.71	3.73	3.72	3.72	3.70	3.65	3.64	3.64
82	Chee & Ohio Ry 1st cons 5s 1939.....	4.21	4.13	4.13	4.07	4.14	4.18	4.19	4.20	4.08	4.12	4.00	3.99	4.00
83	Illi Central (L N O & T) col 4s 1953.....	3.96	3.89	3.91	3.89	3.91	3.91	3.97	3.96	3.95	3.93	3.86	3.85	3.85
84	C & O (R & A Dv) 1st cons M 4s 1989.....	3.93	3.96	3.87	3.84	3.87	3.87	3.78	3.81	3.82	3.84	3.85	3.81	3.79
85	C C C & St L (St L Dv) 1st col 4s 1990.....	3.96	3.95	3.94	3.92	3.94	3.96	3.95	3.92	3.96	3.91	3.86	3.87	3.85
86	E Tenn V & G Ry cons 1st M 5s 1956.....	4.31	4.24	4.27	4.21	4.22	4.27	4.31	4.33	4.23	4.17	4.23	4.18	4.19
87	Chic Milw & St Paul gen M 4s 1989.....	3.64	3.62	3.60	3.57	3.58	3.63	3.62	3.63	3.63	3.65	3.62	3.53	3.52
88	Lake Sh & Mich So 1st M 3½s 1997.....	3.18	3.18	3.19	3.19	3.19	3.19	3.19	3.19	3.20	3.20	3.19	3.19	3.20
89	St P Min & Man (Mon Ex) 1st M 4s 1937.....	3.84	3.84	3.88	3.85	3.86	3.88	3.87	3.87	3.85	3.89	3.86	3.82	3.85
90	Baltimore & Ohio RR 1st M 4s 1948.....	4.10	4.04	4.01	3.98	4.02	4.03	4.05	4.07	4.07	4.03	4.01	3.99	3.96
91	Union Pac RR 1st M RR & Ig 4s 1947.....	3.85	3.81	3.79	3.80	3.82	3.81	3.78	3.78	3.81	3.78	3.74	3.74	3.74
92	Chicago & Nor West gen M 3½s 1987.....	3.28	3.20	3.20	3.19	3.17	3.19	3.20	3.20	3.20	3.25	3.26	3.19	3.19
93	Chi Rock Is & Pac Ry gen M 4s 1988.....	3.82	3.78	3.77	3.75	3.77	3.75	3.74	3.75	3.79	3.79	3.74	3.71	3.68
94	Atch Top & Santa Fe gen M 4s 1993.....	4.05	4.02	3.99	3.99	4.00	4.00	4.00	4.02	4.03	4.01	3.96	3.93	3.93
95	N Y Cent & Hudson River M 3½s 1997.....	3.20	3.24	3.19	3.18	3.19	3.18	3.20	3.19	3.20	3.22	3.20	3.19	3.19
96	Scioto Val & New Eng 1st M 4s 1989.....	4.05	4.19	4.09	4.00	4.00	4.07	4.00	4.00	4.01	3.99	3.95	3.94	3.92
97	Lehigh Valley (N Y) 1st M 4½s 1940.....	4.12	4.09	4.07	4.05	4.14	4.15	4.11	4.08	4.07	4.05	4.01	4.04	4.01
98	Louisville & Nash unified 4s 1940.....	4.10	4.06	4.08	4.03	4.06	4.09	4.10	4.09	4.10	4.11	4.11	4.03	3.99
99	Oregon RR & Nav Co cons M 4s 1946.....	3.96	3.97	3.89	3.89	3.90	3.91	3.91	3.95	3.93	3.91	3.86	3.86	3.86
100	Chi Bur & Q (Illi Div) M 3½s 1949.....	3.39	3.33	3.33	3.33	3.34	3.38	3.39	3.39	3.40	3.37	3.34	3.34	3.35
101	Central Pacific 1st ref M 4s 1949.....	4.12	4.07	4.07	4.04	4.09	4.09	4.08	4.09	4.11	4.16	4.11	4.02	4.01
102	Nor Pac Ry prior lien ig M 4s 1997.....	3.90	3.88	3.87	3.86	3.87	3.88	3.86	3.88	3.90	3.91	3.87	3.84	3.84

## RAILROAD BOND YIELDS

A73

### YIELDS OF RAILROAD BONDS

JAN. 1901—JAN. 1902

Ref. No.	Name of Bond	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
40	Chic & Nor West Ry cons of 7s 1915.	3.55	3.35	3.38	3.31	3.31	3.23	3.31	3.34	3.37	3.40	3.35	3.32	3.32
49	Chicago Rk Is & Pac RR 1st M 6s 1917.	3.58	3.55	3.61	3.65	3.65	3.67	3.73	3.71	3.74	3.71	3.66	3.63	3.58
53	Nash Chatt & St L 1st M 7s 1913.	4.12	4.17	4.18	4.21	4.21	4.19	4.09	4.23	4.28	4.21	4.15	4.15	4.10
54	St P & Sioux City RR 1st M 6s 1919.	3.81	3.77	3.73	3.70	3.64	3.70	3.70	3.90	3.85	3.81	3.75	3.77	3.81
57	Chic St P Min & Omaha cons M 6s 1930.	4.01	3.90	3.79	3.81	3.79	3.80	3.80	3.84	3.87	3.83	3.79	3.73	3.74
60	C M & St P (C & P W Dv) 1st M 5s 1921.	3.60	3.58	3.58	3.63	3.71	3.74	3.80	3.80	3.79	3.76	3.76	3.67	3.67
62	Chic St Louis & N Orleans 5s 1951.	3.84	3.84	3.82	3.82	3.84	3.79	3.79	3.82	3.82	3.81	3.77	3.73	3.72
63	Pennsylvania Co gu 1st M 4½s 1921.	3.51	3.51	3.53	3.56	3.59	3.61	3.65	3.66	3.67	3.66	3.61	3.63	3.62
64	New York Lack & West 1st M 6s 1921.	3.53	3.51	3.52	3.55	3.56	3.59	3.61	3.60	3.60	3.58	3.54	3.52	3.57
70	West Shore RR 1st M 4s 2361.	3.51	3.49	3.48	3.51	3.55	3.55	3.57	3.55	3.56	3.58	3.58	3.56	3.56
73	St Paul Minn & Man cons M 4½s 1933.	3.70	3.69	3.69	3.71	3.75	3.75	3.78	3.77	3.76	3.80	3.71	3.79	3.72
76	Illinois Central RR coll 4s 1952.	3.86	3.86	3.84	3.83	3.85	3.80	3.81	3.81	3.81	3.80	3.78	3.79	3.78
77	Lake Erie & Western 1st M 5s 1937.	3.86	3.84	3.85	3.84	3.96	3.94	3.99	3.99	3.96	3.94	3.94	3.93	3.93
78	Wabash RR Co 1st M 5s 1939.	4.09	4.08	4.09	4.09	4.09	4.08	4.11	4.12	4.10	4.09	4.06	4.08	4.09
80	Rome Water & Ogdens cons M 5s 1922.	3.31	3.29	3.27	3.26	3.35	3.33	3.31	3.32	3.25	3.32	3.31	3.31	3.31
81	N Y Chic & St Louis 1st M 4s 1937.	3.64	3.64	3.64	3.66	3.64	3.66	3.67	3.69	3.70	3.67	3.62	3.66	3.68
82	Ches & Ohio Ry 1st cons 5s 1939.	4.00	3.99	4.00	4.01	4.00	3.99	4.01	4.00	4.01	4.01	4.00	4.01	3.99
83	Ill Central (L N O & T) col 4s 1953.	3.85	3.84	3.83	3.82	3.90	3.85	3.85	3.84	3.83	3.79	3.79	3.79	3.79
84	C & O (R & A Dv) 1st cons M 4s 1989.	3.79	3.78	3.78	3.77	3.85	3.82	3.84	3.86	3.91	3.90	3.87	3.86	3.84
85	C C C & St L (St L Dv) 1st col 4s 1990.	3.85	3.86	3.86	3.86	3.90	3.87	3.91	3.93	3.94	3.95	3.88	3.86	3.89
86	E Tenn V & G Ry cons 1st M 5s 1956.	4.19	4.15	4.16	4.16	4.19	4.17	4.15	4.19	4.20	4.20	4.16	4.12	4.11
87	Chic Milw & St Paul gen M 4s 1989.	3.52	3.51	3.52	3.56	3.61	3.61	3.62	3.63	3.64	3.64	3.62	3.63	3.54
88	Lake Sh & Mich So 1st M 3½s 1997.	3.20	3.20	3.20	3.21	3.19	3.21	3.21	3.21	3.21	3.22	3.21	3.23	3.22
89	St P Min & Man (Mon Ex) 1st M 4s 1937.	3.85	3.79	3.74	3.73	3.84	3.75	3.75	3.75	3.74	3.88	3.78	3.73	3.70
90	Baltimore & Ohio RR 1st M 4s 1948.	3.96	3.91	3.89	3.91	3.99	3.88	3.90	3.91	3.92	3.91	3.87	3.89	3.88
91	Union Pac RR 1st M RR & lg 4s 1947.	3.74	3.74	3.76	3.79	3.81	3.79	3.81	3.80	3.81	3.80	3.79	3.80	3.79
92	Chicago & Nor West gen M 3½s 1987.	3.19	3.19	3.20	3.20	3.22	3.20	3.21	3.20	3.19	3.18	3.18	3.20	3.20
93	Chi Rock Is & Pac Ry gen M 4s 1983.	3.68	3.66	3.70	3.72	3.74	3.75	3.74	3.75	3.75	3.79	3.79	3.80	3.79
94	Atch Top & Santa Fe gen M 4s 1995.	3.93	3.92	3.91	3.91	3.91	3.87	3.89	3.91	3.90	3.89	3.90	3.90	3.90
95	N Y Cent & Hudson River M 3½s 1997.	3.19	3.19	3.17	3.19	3.20	3.21	3.21	3.21	3.24	3.23	3.21	3.21	3.21
96	Scioto Val & New Eng 1st M 4s 1989.	3.92	3.95	3.93	3.93	3.92	3.95	4.01	4.00	4.00	3.95	3.94	3.96	3.96
97	Lehigh Valley (N Y) 1st M 4½s 1940.	4.01	3.99	3.99	4.00	4.03	4.02	4.03	4.01	4.02	4.02	4.05	4.04	4.02
98	Louisville & Nash unifed 4s 1940.	3.99	3.97	3.95	3.91	3.92	3.90	3.93	3.95	3.96	3.98	3.96	3.95	3.96
99	Oregon RR & Nav Co cons M 4s 1946.	3.86	3.85	3.85	3.85	3.87	3.84	3.91	3.91	3.92	3.92	3.91	3.90	3.89
100	Chi Bur & Q (III Div) M 3½s 1949.	3.35	3.36	3.36	3.39	3.41	3.41	3.40	3.41	3.41	3.42	3.41	3.39	3.41
101	Central Pacific 1st ref M 4s 1949.	4.01	3.97	3.97	3.99	4.01	3.98	3.95	3.96	3.98	3.95	3.94	3.96	3.91
102	Nor Pac Ry prior lien lg M 4s 1997.	3.84	3.83	3.83	3.81	3.82	3.83	3.88	3.87	3.87	3.85	3.85	3.85	3.84

## **APPENDIX**

YIELDS OF RAILROAD BONDS  
JAN. 1902—JAN. 1903

## RAILROAD BOND YIELDS

A75

### YIELDS OF RAILROAD BONDS

JAN. 1903—JAN. 1904

Ref. No.	Name of Bond	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
40	Chic & Nor West Ry cons of 7s 1915	3.69	3.65	3.77	3.78	3.72	3.68	3.90	3.76	3.75	3.72	3.71	3.72	3.73
56	St P & Sioux City RR 1st M 4s 1919	3.94	3.96	4.00	4.03	4.00	4.04	4.08	4.16	4.19	4.17	4.16	4.21	4.22
57	Chic St P Min & Omaha cons M 4s 1930	3.80	3.90	4.06	4.11	4.11	4.15	4.07	4.20	4.26	4.09	4.08	4.11	4.10
60	C M & St P (C & P W Dv) 1st M 5s 1921	3.70	3.73	3.78	3.82	3.83	3.86	3.91	4.08	3.98	3.85	3.82	3.87	3.79
63	Pennsylvania Co gu 1st M 4½s 1921	3.81	3.80	3.82	3.97	3.92	3.89	3.90	3.94	3.93	3.82	3.80	3.81	3.84
64	New York Lack & West 1st M 6s 1921	3.66	3.65	3.67	3.69	3.71	3.77	3.84	3.93	3.92	3.87	3.82	3.79	3.84
70	West Shore RR 1st M 4s 2361	3.63	3.62	3.64	3.69	3.69	3.69	3.72	3.72	3.72	3.77	3.76	3.75	3.71
73	St Paul Minn & Man cons M 4½s 1933	3.80	3.90	3.93	4.01	3.98	4.01	4.10	4.11	4.07	4.08	3.99	4.05	4.04
76	Illinois Central RR coll 4s 1932	3.89	3.89	3.91	3.90	3.84	3.85	3.87	3.90	3.88	3.89	3.88	3.89	3.87
77	Lake Erie & Western 1st M 5s 1937	3.95	4.00	4.01	4.01	4.09	4.16	4.16	4.16	4.19	4.17	4.15	4.13	4.09
78	Wabash RR Co 1st M 5s 1939	4.15	4.14	4.23	4.23	4.18	4.24	4.26	4.20	4.34	4.29	4.29	4.26	4.23
80	Rome Water & Ogdens cons M 5s 1922	3.56	3.55	3.60	3.69	3.70	3.81	3.80	3.82	3.79	3.71	3.75	3.78	3.76
81	N Y Chic & St Louis 1st M 4s 1937	3.83	3.84	3.84	3.87	3.88	3.91	3.96	3.96	3.94	3.90	3.84	3.86	3.87
82	Ches & Ohio Ry 1st gen 5s 1939	4.05	4.08	4.18	4.21	4.15	4.20	4.23	4.28	4.29	4.25	4.24	4.23	4.22
83	Ill Central (L N O & T) col 4s 1953	3.91	3.91	3.92	3.93	3.89	3.96	3.94	4.00	4.00	3.97	3.91	3.93	3.91
84	C & O (R & A Dv) 1st cons M 4s 1989	3.94	3.94	3.97	3.95	3.92	3.91	4.07	4.09	4.09	4.11	4.06	4.01	3.99
85	C C C & St L (St L Dv) 1st col 4s 1990	3.94	3.92	3.92	3.96	3.95	3.98	3.99	4.07	4.10	4.11	4.02	4.02	4.02
86	E Tenn V & G Ry cons 1st M 5s 1956	4.15	4.18	4.20	4.24	4.25	4.31	4.31	4.34	4.36	4.33	4.23	4.23	4.21
87	Chic Milw & St Paul gen M 4s 1989	3.57	3.59	3.63	3.67	3.66	3.68	3.74	3.89	3.84	3.73	3.67	3.67	3.68
88	Lake Sh & Mich So 1st M 3½s 1997	3.33	3.39	3.45	3.51	3.46	3.46	3.53	3.60	3.61	3.56	3.48	3.50	3.50
89	St P Min & Man (Mon Es) 1st M 4s 1937	3.83	3.91	3.90	3.95	3.96	4.01	3.99	4.02	4.01	3.99	3.99	3.98	3.99
90	Baltimore & Ohio RR 1st M 4s 1948	3.95	3.95	3.99	4.00	3.93	3.97	4.03	4.06	4.03	3.98	4.00	4.00	3.99
91	Union Pac RR 1st M RR & Ig 1947	3.85	3.89	3.92	3.95	3.96	3.97	4.00	4.04	4.07	4.00	3.96	3.95	3.90
92	Chicago & Nor West gen M 3½s 1987	3.38	3.44	3.52	3.59	3.49	3.50	3.53	3.70	3.71	3.62	3.55	3.55	3.59
93	Chi Rock Is & Pac Ry gen M 4s 1988	3.73	3.77	3.81	3.83	3.82	3.85	3.94	4.01	4.05	3.97	3.94	3.95	3.91
94	Atch Top & Santa Fe gen M 4s 1995	3.95	3.97	4.00	4.01	4.02	4.04	4.08	4.10	4.09	4.05	4.01	4.05	4.08
95	N Y Cent & Hudson River M 3½s 1997	3.36	3.38	3.41	3.46	3.44	3.44	3.60	3.69	3.68	3.61	3.57	3.59	3.58
96	Selco Val & New Eng 1st M 4s 1989	4.00	4.02	4.04	4.04	4.01	4.10	4.14	4.17	4.16	4.18	4.10	4.10	4.04
97	Lehigh Valley (N Y) 1st M 4½s 1940	4.08	4.09	4.10	4.16	4.15	4.16	4.18	4.19	4.32	4.30	4.22	4.22	4.22
98	Louisville & Nash unified 4s 1940	3.98	3.98	4.07	4.02	4.04	4.07	4.11	4.12	4.15	4.17	4.11	4.07	
99	Oregon RR & Nav Co cons M 4s 1946	3.97	3.97	4.03	4.06	4.05	4.11	4.14	4.16	4.20	4.11	4.10	4.10	4.06
100	Chi Bur & O (Ill Div) M 3½s 1949	3.66	3.69	3.75	3.78	3.75	3.81	3.91	3.99	3.93	3.85	3.79	3.84	3.86
101	Central Pacific 1st ref M 4s 1949	4.01	4.00	4.08	4.11	4.11	4.14	4.18	4.16	4.15	4.11	4.09	4.11	4.07
102	Nor Pac Ry prior lies 1st M 4s 1997	3.89	3.90	3.94	3.94	3.95	3.97	4.00	4.03	4.02	3.97	3.96	3.95	3.92
103	Norf & West Ry 1st cons M 4s 1996	4.01	4.00	4.05	4.09	4.05	4.10	4.17	4.20	4.21	4.19	4.16	4.18	
104	Central RR of N J gen M 5s 1987	3.70	3.74	3.82	3.84	3.79	3.82	3.88	3.90	3.90	3.87	3.87	3.87	3.82
105	Hocking Valley 1st cons M 4½s 1999	4.16	4.18	4.22	4.26	4.25	4.20	4.31	4.33	4.34	4.32	4.31	4.33	4.32

## APPENDIX

**YIELDS OF RAILROAD BONDS**  
JAN. 1904—JAN. 1905

Ref. No.	Name of Bond	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
54	St P & Sioux City RR 1st M 6s 1919	4.22	4.31	4.22	4.12	4.08	4.08	4.03	4.01	4.01	3.99	3.98	3.90	3.86
57	Chic St P Min & Omaha cons M 6s 1930	4.10	4.12	4.15	4.13	4.09	4.09	3.98	3.97	3.97	3.95	3.96	3.91	3.91
60	C M & St P (C & P W Dv) 1st M 5s 1921	3.79	3.80	3.85	3.88	3.86	3.83	3.77	3.75	3.72	3.72	3.71	3.70	3.64
63	Pennsylvania Co gu 1st M 4½s 1921	3.84	3.86	3.89	3.92	3.91	3.89	3.85	3.85	3.80	3.82	3.78	3.75	3.62
64	New York Lack & West 1st M 6s 1921	3.84	3.81	3.79	3.79	3.79	3.80	3.70	3.65	3.66	3.66	3.66	3.66	3.63
70	West Shore RR 1st M 4s 2361	3.71	3.70	3.73	3.75	3.74	3.74	3.72	3.72	3.72	3.71	3.71	3.70	3.69
73	St Paul Minn & Man cons M 4½s 1933	4.04	4.09	4.10	4.09	4.08	4.03	4.01	3.97	3.93	3.89	3.91	3.87	3.81
76	Illinois Central RR coll 4s 1952	3.88	3.89	3.91	3.89	3.87	3.76	3.80	3.82	3.85	3.80	3.85	3.84	3.82
77	Lake Erie & Western 1st M 5s 1937	4.09	4.01	4.09	4.05	4.05	4.07	4.06	3.96	3.95	3.96	4.00	4.01	3.98
78	Wabash RR Co 1st M 5s 1939	4.23	4.23	4.24	4.19	4.19	4.14	4.10	4.12	4.12	4.12	4.07	4.09	4.05
80	Rome Water & Ogdens cons M 5s 1922	3.78	3.81	3.87	3.77	3.87	3.83	3.76	3.66	3.69	3.70	3.71	3.64	
81	N Y Chic & St Louis 1st M 4s 1937	3.87	3.87	3.86	3.84	3.82	3.84	3.81	3.78	3.76	3.79	3.81		
82	Ches & Ohio Ry 1st cons 5s 1939	4.22	4.22	4.23	4.20	4.18	4.13	4.07	4.08	4.07	4.05	4.00	4.04	4.02
83	Ill Central (L N O & T) col 4s 1953	3.91	3.92	3.94	3.92	3.89	3.86	3.83	3.87	3.89	3.88	3.87	3.82	3.79
84	C & O (R & A Dv) 1st cons M 4s 1989	3.99	3.97	3.98	3.99	4.01	3.98	3.96	3.94	3.95	3.94	3.97	3.96	3.92
85	C C C & St L (St L Dv) 1st col 4s 1990	4.02	4.02	4.00	3.97	3.98	3.97	3.97	3.96	3.96	3.97	3.98	3.99	3.97
86	E Tenn V & G Ry cons 1st M 5s 1956	4.21	4.22	4.23	4.23	4.17	4.17	4.17	4.16	4.13	4.12	4.06	4.06	4.05
87	Chic Milw & St Paul gen M 4s 1989	3.68	3.69	3.73	3.71	3.70	3.71	3.68	3.66	3.67	3.66	3.65	3.62	3.55
88	Lake Sh & Mich So 1st M 3½s 1997	3.50	3.51	3.58	3.58	3.55	3.54	3.51	3.50	3.51	3.52	3.50	3.50	3.49
89	St P Min & Man (Mon Ex) 1st M 4s 1937	3.99	3.99	4.00	4.00	3.97	3.92	3.86	3.84	3.87	3.87	3.87	3.83	3.82
90	Baltimore & Ohio RR 1st M 4s 1948	3.99	4.02	4.01	3.98	3.98	3.93	3.90	3.91	3.92	3.88	3.86	3.88	3.85
91	Union Pac RR 1st M K RR & Ig 4s 1947	3.90	3.89	3.89	3.85	3.84	3.82	3.78	3.77	3.80	3.81	3.79	3.77	3.76
92	Chicago & Nor West gen M 3½s 1987	3.59	3.60	3.62	3.59	3.64	3.59	3.57	3.56	3.54	3.56	3.56	3.55	3.52
93	Chi Rock I & Pac Ry gen M 4s 1988	3.91	3.93	3.93	3.91	3.90	3.89	3.82	3.84	3.84	3.85	3.83	3.83	3.79
94	Atch Top & Santa Fe gen M 4s 1995	4.08	4.08	4.06	4.01	3.98	3.95	3.93	3.92	3.93	3.91	3.91	3.91	3.89
95	N Y Cent & Hudson River M 3½s 1997	3.58	3.61	3.62	3.59	3.58	3.53	3.52	3.51	3.51	3.53	3.52	3.51	3.50
96	Scioto Val & New Eng 1st M 4s 1989	4.04	4.07	4.07	4.05	4.01	4.00	3.99	3.98	3.96	3.96	3.93	3.94	3.94
97	Lehigh Valley (N V) 1st M 4½s 1940	4.22	4.22	4.23	4.19	4.16	4.11	4.05	4.00	4.09	4.07	4.02	4.00	3.98
98	Louisville & Nash unified 4s 1940	4.07	4.11	4.11	4.08	4.04	4.02	4.00	3.98	4.01	3.97	3.95	3.89	3.85
99	Oregon RR & Nav Co cons M 4s 1946	4.06	4.08	4.05	4.00	3.97	3.93	3.92	3.93	3.93	3.91	3.91	3.89	3.87
100	Chi Bur & Q (III Div) M 3½s 1949	3.86	3.89	3.92	3.91	3.86	3.85	3.81	3.79	3.80	3.80	3.74	3.71	3.69
101	Central Pacific 1st ref M 4s 1949	4.07	4.10	4.11	4.07	4.04	4.05	4.02	4.01	4.01	3.99	3.98	3.99	3.93
102	Nor Pac Ry prior lien lg M 4s 1997	3.92	3.93	3.93	3.90	3.88	3.87	3.84	3.83	3.85	3.83	3.84	3.82	
103	Norf & West Ry 1st cons M 4s 1996	4.18	4.17	4.16	4.11	4.10	4.06	4.01	3.99	3.99	3.99	3.99	3.99	3.98
104	Central RR of N J gen M 5s 1987	3.82	3.83	3.87	3.88	3.84	3.82	3.73	3.72	3.72	3.71	3.70	3.68	3.66
105	Hocking Valley 1st cons M 4½s 1999	4.32	4.29	4.32	4.27	4.25	4.20	4.17	4.16	4.18	4.18	4.14	4.12	4.11

**YIELDS OF RAILROAD BONDS**  
JAN. 1905—JAN. 1906

Ref. No.	Name of Bond	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
57	Chic St P Min & Omaha cons M 6s 1930.....	3.91	3.85	3.80	3.83	3.81	3.77	3.74	3.74	3.75	3.74	3.73	3.77	3.80
60	C M & St P (C & W Dv) 1st M 5s 1921.....	3.64	3.68	3.67	3.68	3.72	3.73	3.70	3.72	3.74	3.77	3.79	3.71	3.79
63	Pennsylvania Co gu 1st M 4½s 1921.....	3.62	3.64	3.68	3.71	3.74	3.79	3.79	3.81	3.84	3.81	3.89	3.90	3.91
64	New York Lack & West 1st M 6s 1921.....	3.69	3.64	3.66	3.67	3.69	3.66	3.66	3.68	3.66	3.65	3.71	3.72	3.71
70	West Shore RR 1st M 4s 2361.....	3.69	3.68	3.70	3.70	3.72	3.71	3.69	3.68	3.69	3.69	3.72	3.74	3.71
73	St Paul Minn & Man cons M 4½s 1933.....	3.81	3.89	3.89	3.90	3.91	3.82	3.83	3.80	3.76	3.73	3.79	3.81	3.77
76	Illinois Central RR coll 4s 1952.....	3.82	3.78	3.76	3.74	3.72	3.71	3.69	3.71	3.72	3.74	3.76	3.74	3.72
77	Lake Erie & Western 1st M 5s 1937.....	3.98	3.99	4.01	4.02	4.02	4.01	4.00	3.99	4.01	4.01	3.99	4.00	4.00
78	Wabash RR Co 1st M 5s 1939.....	4.05	4.05	4.08	4.10	4.09	4.08	4.08	4.08	4.09	4.08	4.08	4.18	4.17
80	Rome Water Ogdens cons M 5s 1922.....	3.64	3.63	3.65	3.65	3.67	3.68	3.68	3.69	3.69	3.71	3.75	3.79	3.80
81	N Y Chic & St Louis 1st M 4s 1937.....	3.82	3.78	3.79	3.77	3.79	3.77	3.77	3.78	3.77	3.77	3.78	3.80	3.78
82	Ches & Ohio Ry 1st cons 5s 1939.....	4.02	4.03	4.07	4.01	4.05	4.07	4.03	4.04	4.06	4.01	4.01	4.02	4.02
83	Ill Central (L N O & T) col 4s 1953.....	3.79	3.81	3.82	3.83	3.78	3.77	3.78	3.77	3.77	3.79	3.79	3.79	3.79
84	C & O (R & A Dv) 1st cons M 4s 1989.....	3.92	3.90	3.91	3.94	3.93	3.92	3.94	3.96	3.93	3.91	3.93	3.89	3.92
85	C C C & St L (St L Dv) 1st col 4s 1990.....	3.97	3.92	3.96	3.96	3.96	3.95	3.94	3.93	3.94	3.92	3.95	3.98	3.93
86	E Tenn V & G Ry cons 1st M 5s 1956.....	4.05	4.06	4.07	4.07	4.07	4.09	4.09	4.12	4.11	4.10	4.14	4.16	4.14
87	Chic Milw & St Paul gen M 4s 1989.....	3.55	3.54	3.54	3.56	3.55	3.59	3.59	3.60	3.63	3.63	3.61	3.64	3.62
88	Lake Sh & Mich So 1st M 3½s 1997.....	3.49	3.49	3.50	3.51	3.51	3.49	3.50	3.48	3.45	3.44	3.47	3.49	3.51
89	St P Min & Man (Mon Ex) 1st M 4s 1937.....	3.82	3.81	3.84	3.81	3.83	3.84	3.81	3.81	3.83	3.82	3.83	3.85	3.81
90	Baltimore & Ohio RR 1st M 4s 1948.....	3.85	3.83	3.86	3.88	3.83	3.82	3.79	3.80	3.83	3.85	3.89	3.90	3.85
91	Union Pac RR 1st M RR & lg 4s 1947.....	3.76	3.74	3.73	3.72	3.78	3.77	3.74	3.73	3.75	3.79	3.81	3.79	3.73
92	Chicago & Nor West gen M 3½s 1987.....	3.52	3.50	3.54	3.53	3.52	3.50	3.48	3.49	3.51	3.51	3.54	3.55	3.51
93	Chi Rock Is & Pac Ry gen M 4s 1988.....	3.79	3.77	3.78	3.79	3.79	3.79	3.79	3.79	3.81	3.82	3.84	3.85	3.89
94	Atch Top & Santa Fe gen M 4s 1995.....	3.89	3.89	3.89	3.90	3.91	3.89	3.87	3.89	3.86	3.89	3.93	3.93	3.90
95	N Y Cent & Hudson River M 3½s 1997.....	3.50	3.51	3.52	3.52	3.53	3.53	3.54	3.54	3.53	3.55	3.57	3.58	3.56
96	Scioto Val & New Eng 1st M 4s 1989.....	3.94	3.93	3.96	3.96	3.99	3.98	3.93	3.95	3.94	3.97	3.98	4.00	3.99
97	Lehigh Valley (N Y) 1st M 4½s 1940.....	3.98	3.98	3.95	3.99	3.99	3.95	3.96	3.98	3.92	3.93	3.96	3.98	3.99
98	Louisville & Nash unified 4s 1940.....	3.85	3.86	3.86	3.90	3.88	3.84	3.80	3.79	3.80	3.79	3.80	3.80	3.80
99	Oregon RR & Nav Co cons M 4s 1946.....	3.87	3.89	3.91	3.92	3.94	3.90	3.88	3.88	3.90	3.93	3.94	3.98	3.97
100	Chi Bur & Q (Ill Div) M 3½s 1949.....	3.69	3.67	3.68	3.67	3.68	3.68	3.70	3.71	3.71	3.71	3.76	3.76	3.75
101	Central Pacific 1st ref M 4s 1949.....	3.93	3.95	3.99	3.98	3.99	4.00	3.99	3.99	3.97	3.97	3.99	4.00	3.99
102	Nor Pac Ry prior lien lg M 4s 1997.....	3.82	3.82	3.81	3.81	3.82	3.82	3.79	3.80	3.82	3.83	3.86	3.85	3.81
103	Norf & West Ry 1st cons M 4s 1996.....	3.98	3.91	3.94	3.95	3.94	3.95	3.92	3.95	3.95	3.94	3.95	3.96	3.95
104	Central RR of N J gen M 5s 1987.....	3.66	3.63	3.65	3.67	3.68	3.68	3.69	3.69	3.70	3.72	3.74	3.74	3.76
105	Hocking Valley 1st cons M 4½s 1999.....	4.11	4.06	4.07	4.10	4.09	4.10	4.09	4.03	4.04	4.06	4.09	4.17	4.15
106	N & W Ry Div 1st & gen M 4s 1944.....	4.13	4.06	4.07	4.06	4.06	4.06	4.04	4.07	4.06	4.06	4.09	4.07	4.05
107	Ore Sh Line RR cons 1st M 5s 1946.....	4.10	4.08	4.06	4.08	4.11	4.14	4.12	4.14	4.12	4.11	4.11	4.11	4.11
108	Southern Pac 1st ref M of 4s 1955.....	4.13	4.13	4.16	4.16	4.21	4.23	4.19	4.17	4.18	4.18	4.22	4.23	4.19
109	A T & S Fe Ry adj M 4s stamped 1995.....	4.24	4.17	4.19	4.23	4.24	4.22	4.26	4.23	4.20	4.18	4.25	4.27	4.23
110	Northern Pac Ry gen lien 3s 2047.....	3.95	3.93	3.95	3.96	3.95	3.96	3.93	3.91	3.92	3.90	3.94	3.94	3.92

RAILROAD BOND YIELDS

YIELDS OF RAILROAD BONDS  
JAN. 1906—JAN. 1907

Ref. No.	Name of Bond	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
57	Chic St P Min & Omaha cons M 6s 1930.....	3.80	3.82	3.90	3.95	4.00	3.97	3.97	4.02	4.06	4.00	4.01	4.04	4.02
60	C M & St P (C & P W Dv) 1st M 5s 1921.....	3.79	3.78	3.87	3.87	3.89	3.94	3.97	4.02	4.00	3.98	4.02	4.13	4.04
63	Pennsylvania Co gu 1st M 4½s 1921.....	3.91	3.93	3.97	3.92	3.99	3.96	4.01	4.05	4.08	4.05	4.01	3.99	3.94
70	West Shore RR 1st M 4s 2361.....	3.71	3.74	3.76	3.78	3.80	3.79	3.80	3.83	3.84	3.83	3.84	3.84	3.85
73	St Paul Minn & Man cons M 4½s 1933.....	3.77	3.82	3.90	3.92	3.97	3.96	4.00	4.05	4.08	3.99	3.93	3.95	4.01
76	Illinois Central RR coll 4s 1952.....	3.72	3.73	3.77	3.77	3.79	3.78	3.78	3.86	3.87	3.86	3.86	3.88	3.91
77	Lake Erie & Western 1st M 5s 1937.....	4.00	3.98	4.05	4.18	4.16	4.10	4.13	4.16	4.23	4.24	4.20	4.19	4.24
78	Wabash RR Co 1st M 5s 1939.....	4.17	4.20	4.22	4.25	4.25	4.25	4.24	4.25	4.28	4.25	4.28	4.30	4.29
81	N Y Chic & St Louis 1st M 4s 1937.....	3.78	3.78	3.78	3.78	3.74	3.80	3.80	3.82	3.86	3.87	3.88	3.91	3.90
82	Ches & Ohio Ry 1st cons 5s 1939.....	4.02	4.02	4.10	4.12	4.10	4.08	4.08	4.15	4.15	4.15	4.10	4.11	4.19
83	Ill Central (L N O & T) col 4s 1953.....	3.79	3.79	3.84	3.83	3.83	3.81	3.81	3.86	3.91	3.90	3.88	3.92	3.92
84	C & O (R & A Dv) 1st cons M 4s 1989.....	3.92	3.95	3.98	3.97	4.00	4.02	3.97	3.98	4.00	3.97	3.94	3.99	4.01
85	C C C & St L (St L Dv) 1st col 4s 1990.....	3.93	4.00	4.02	4.03	4.00	4.00	4.04	4.08	4.11	4.11	4.04	4.00	4.06
86	E Tenn V & G Ry cons 1st M 5s 1956.....	4.14	4.16	4.17	4.18	4.21	4.22	4.20	4.21	4.22	4.22	4.20	4.22	4.24
87	Chic Milw & St Paul gen M 4s 1989.....	3.62	3.67	3.73	3.74	3.79	3.69	3.68	3.71	3.70	3.71	3.74	3.77	3.75
88	Lake Sh & Mich So 1st M 3½s 1997.....	3.51	3.50	3.54	3.54	3.59	3.60	3.62	3.64	3.67	3.71	3.69	3.69	3.74
89	St P Min & Man (Mon Ex) 1st M 4s 1937.....	3.81	3.87	3.95	3.93	3.93	3.89	4.01	3.99	4.04	4.04	4.03	4.01	4.05
90	Baltimore & Ohio RR 1st M 4s 1948.....	3.85	3.85	3.89	3.89	3.92	3.88	3.91	3.92	3.94	3.95	3.99	3.98	3.97
91	Union Pac RR 1st M RR & Ig 4s 1947.....	3.73	3.79	3.81	3.85	3.87	3.86	3.86	3.82	3.89	3.91	3.91	3.91	3.92
92	Chicago & Nor West gen M 3½s 1987.....	3.51	3.58	3.59	3.59	3.59	3.59	3.59	3.65	3.71	3.69	3.61	3.64	3.61
93	Chi Rock Is & Pac Ry gen M 4s 1988.....	3.89	3.91	3.95	3.95	3.97	3.97	4.00	4.00	4.01	3.99	3.98	3.99	4.00
94	Atch Top & Santa Fe gen M 4s 1995.....	3.90	3.92	3.92	3.96	3.98	3.95	3.94	3.96	3.99	3.96	3.95	3.95	3.98
95	N Y Cent & Hudson River M 3½s 1997.....	3.56	3.56	3.60	3.61	3.61	3.61	3.66	3.75	3.83	3.78	3.76	3.79	3.75
96	Scioto Val & New Eng 1st M 4s 1989.....	3.99	4.00	4.01	3.98	4.01	4.01	4.01	4.06	4.09	4.11	4.08	4.08	4.06
97	Lehigh Valley (N Y) 1st M 4½s 1940.....	3.99	3.99	4.00	4.02	4.04	4.00	4.04	4.01	4.06	4.07	4.08	4.08	4.09
98	Louisville & Nash unified 4s 1940.....	3.80	3.82	3.85	3.90	3.93	3.91	3.98	3.96	4.06	3.96	3.99	4.00	3.99
99	Oregon RR & Nav Co cons M 4s 1946.....	3.97	3.99	4.00	4.01	4.03	4.01	4.00	4.00	4.01	4.02	4.01	4.06	4.09
100	Chi Bur & Q (Ill Div) M 3½s 1949.....	3.75	3.79	3.84	3.86	3.89	3.88	3.91	3.93	3.94	3.89	3.88	3.89	3.90
101	Central Pacific 1st ref M 4s 1949.....	3.99	4.01	4.03	4.05	4.08	4.02	4.01	4.03	4.08	4.09	4.07	4.06	4.09
102	Nor Pac Ry prior lien Ig M 4s 1997.....	3.81	3.85	3.87	3.88	3.90	3.86	3.87	3.88	3.90	3.90	3.90	3.93	3.95
103	Norf & West Ry 1st cons M 4s 1996.....	3.95	3.99	3.99	3.99	4.00	4.02	4.03	4.03	4.06	4.04	4.03	4.08	4.09
104	Central RR of N J gen M 5s 1987.....	3.76	3.78	3.82	3.89	3.91	3.90	3.92	3.94	3.96	3.92	3.91	3.93	3.96
105	Hocking Valley 1st cons M 4½s 1999.....	4.15	4.16	4.18	4.17	4.25	4.23	4.27	4.27	4.27	4.26	4.27	4.27	4.33
106	N & W Ry Div 1st I & gen M 4s 1944.....	4.05	4.07	4.09	4.15	4.17	4.15	4.18	4.22	4.26	4.26	4.26	4.24	4.23
107	Ore Sh Line RR cons 1st M 5s 1946.....	4.11	4.13	4.15	4.22	4.16	4.15	4.18	4.19	4.19	4.19	4.25	4.30	4.32
108	Southern Pac 1st ref M of 4s 1955.....	4.19	4.17	4.20	4.27	4.27	4.24	4.25	4.24	4.25	4.26	4.26	4.25	4.27
109	A T & S Fe Ry adj M 4s stamped 1995.....	4.23	4.22	4.26	4.34	4.36	4.35	4.37	4.37	4.37	4.36	4.35	4.37	4.37
110	Northern Pac Ry gen lien 3s 2047.....	3.92	3.95	3.96	3.97	3.96	3.98	3.96	3.98	4.00	4.02	4.01	4.07	4.13
111	Atl Coast Line RR 1st cons M 4s 1952.....	3.97	3.99	4.04	4.05	4.03	4.06	4.07	4.04	4.08	4.12	4.15	4.18	4.16

**YIELDS OF RAILROAD BONDS**  
JAN. 1907—JAN. 1908

Ref. No.	Name of Bond	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
57	Chic St P Min & Omaha cons M 6s 1930.....	4.02	4.02	4.15	4.18	4.17	4.22	4.14	4.17	4.28	4.52	4.81	4.59	4.37
60	C M & St P (C & P W Dv) 1st M 5s 1921.....	4.04	4.00	4.10	4.10	4.08	4.16	4.12	4.25	4.45	4.43	4.63	4.59	4.10
63	Pennsylvania Co gu 1st M 4½s 1921.....	3.94	4.00	4.07	4.11	4.12	4.10	4.16	4.22	4.18	4.24	4.67	4.34	4.16
70	West Shore RR 1st M 4s 2361.....	3.85	3.85	3.93	3.91	3.91	3.90	3.94	4.00	4.01	4.05	4.21	4.12	3.99
73	St Paul Minn & Man cons M 4½s 1933.....	4.01	4.00	4.05	4.07	4.13	4.15	4.17	4.22	4.26	4.33	4.50	4.45	4.23
76	Illinois Central RR coll 4s 1952.....	3.91	3.95	3.99	3.96	4.04	4.13	4.06	4.08	4.10	4.14	4.27	4.17	4.12
77	Lake Erie & Western 1st M 5s 1937.....	4.24	4.23	4.26	4.28	4.34	4.38	4.34	4.31	4.34	4.38	4.50	4.58	4.49
78	Wabash RR Co 1st M 5s 1939.....	4.29	4.35	4.47	4.47	4.51	4.58	4.60	4.63	4.73	4.80	4.98	4.82	4.61
81	N Y Chic & St Louis 1st M 4s 1937.....	3.90	3.91	3.92	3.97	3.94	3.99	4.01	4.04	4.13	4.17	4.40	4.40	4.23
82	Che & Ohio Ry 1st cons 5s 1939.....	4.19	4.21	4.29	4.30	4.39	4.43	4.45	4.50	4.49	4.57	4.88	4.63	4.49
83	III Central (L N O & T) col 4s 1953.....	3.92	4.00	4.00	4.02	4.08	4.10	4.09	4.13	4.17	4.17	4.19	4.19	4.12
84	C & O (R & A Dv) 1st cons M 4s 1989.....	4.01	4.01	4.12	4.16	4.07	4.13	4.14	4.20	4.26	4.33	4.45	4.35	4.27
85	C C C & St L (St L Dv) 1st col 4s 1990.....	4.06	4.14	4.21	4.21	4.27	4.32	4.29	4.33	4.54	4.77	4.99	4.84	4.64
86	E Tenn V & G Ry cons 1st M 5s 1956.....	4.24	4.22	4.26	4.27	4.27	4.33	4.40	4.43	4.46	4.51	4.88	4.82	4.79
87	Chic Milw & St Paul gen M 4s 1989.....	3.75	3.81	3.99	3.92	3.92	3.94	3.94	3.98	4.00	4.01	4.11	4.04	3.96
88	Lake Sh & Mich So 1st M 3½s 1997.....	3.74	3.76	3.79	3.76	3.79	3.83	3.81	3.80	3.74	3.97	4.18	3.95	3.88
89	St P Min & Man (Mon Ex) 1st M 4s 1937.....	4.05	4.12	4.21	4.10	4.13	4.12	4.13	4.14	4.25	4.30	4.47	4.41	4.26
90	Baltimore & Ohio RR 1st M 4s 1948.....	3.97	3.99	4.06	4.03	4.05	4.09	4.11	4.19	4.21	4.40	4.48	4.26	4.10
91	Union Pac RR 1st M R.R. & lg 4s 1947.....	3.92	3.97	4.02	3.99	4.01	4.03	4.03	4.11	4.16	4.27	4.29	4.09	3.99
92	Chicago & Nor West gen M 4½s 1987.....	3.61	3.64	3.71	3.71	3.75	3.80	3.73	3.77	3.81	3.87	3.91	4.00	3.93
93	Chi Rock Is & Pac Ry gen M 4s 1988.....	4.00	4.01	4.06	4.06	4.06	4.08	4.08	4.19	4.22	4.29	4.50	4.31	4.11
94	Atch Top & Santa Fe gen M 4s 1995.....	3.98	4.00	4.10	4.05	4.11	4.11	4.13	4.20	4.19	4.30	4.37	4.23	4.11
95	N Y Cent & Hudson River M 3½s 1997.....	3.75	3.78	3.87	3.82	3.80	3.89	3.90	3.96	4.00	4.09	4.11	3.99	3.94
96	Scioto Val & New Eng 1st M 4s 1989.....	4.06	4.08	4.09	4.15	4.19	4.19	4.39	4.41	4.45	4.47	4.61	4.43	4.43
97	Lehigh Valley (N Y) 1st M 4½s 1940.....	4.09	4.11	4.12	4.19	4.19	4.20	4.21	4.19	4.22	4.22	4.44	4.53	4.39
98	Louisville & Nash unified 4s 1940.....	3.99	4.01	4.11	4.10	4.04	4.13	4.16	4.20	4.29	4.39	4.50	4.42	4.15
99	Oregon RR & Nav Co cons M 4s 1946.....	4.09	4.11	4.14	4.17	4.18	4.23	4.21	4.30	4.37	4.42	4.75	4.60	4.35
100	Chi Bur & Q (III Div) M 3½s 1949.....	3.90	3.93	4.00	4.00	4.02	4.11	4.06	4.15	4.13	4.24	4.43	4.29	4.10
101	Central Pacific 1st ref M 4s 1949.....	4.09	4.09	4.20	4.20	4.30	4.31	4.31	4.29	4.39	4.48	4.61	4.44	4.28
102	Nor Pac Ry prior lien lg M 4s 1997.....	3.95	3.98	4.03	3.98	4.00	4.03	4.01	4.12	4.13	4.18	4.22	4.08	4.00
103	Norf & West Ry 1st cons M 4s 1996.....	4.09	4.14	4.16	4.09	4.18	4.28	4.29	4.31	4.35	4.40	4.57	4.33	4.28
104	Central RR of N J gen M 5s 1987.....	3.96	3.96	4.02	4.05	4.03	4.08	4.04	4.11	4.20	4.22	4.37	4.31	4.15
105	Hocking Valley 1st cons M 4½s 1999.....	4.33	4.32	4.34	4.34	4.37	4.45	4.45	4.42	4.56	4.63	4.79	4.74	4.47
106	N & W Ry Div 1st & gen M 4s 1944.....	4.23	4.23	4.31	4.40	4.33	4.67	4.68	4.80	4.92	4.81	5.22	5.03	4.78
107	Ore Sh Line RR cons 1st M 5s 1946.....	4.32	4.31	4.41	4.44	4.47	4.46	4.50	4.59	4.64	4.65	4.92	4.73	4.56
108	Southern Pac 1st ref M of 4s 1955.....	4.27	4.28	4.43	4.39	4.47	4.63	4.44	4.56	4.64	4.77	4.98	4.77	4.52
109	A T & S Fe Ry adj M 4s stamped 1995.....	4.37	4.44	4.47	4.48	4.52	4.68	4.68	4.74	4.72	5.03	5.04	4.83	4.73
110	Northern Pac Ry gen lien 3s 2047.....	4.13	4.18	4.29	4.28	4.21	4.30	4.29	4.41	4.46	4.44	4.66	4.49	4.34
111	All Coast Line 1st cons M 4s 1952.....	4.16	4.18	4.28	4.32	4.26	4.28	4.35	4.53	4.65	4.74	4.96	4.85	4.68

**RAILROAD BOND YIELDS**

**YIELDS OF RAILROAD BONDS**  
JAN. 1908—JAN. 1909

Ref. No.	Name of Bond	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
87	Chic St P Min & Omaha cons M 6s 1930.	4.37	4.32	4.33	4.28	4.21	4.15	4.17	4.14	4.11	4.09	3.99	3.98	3.90
60	C M & St P (C & P W Dv) 1st M 5s 1921.	4.10	4.13	4.22	4.20	4.17	4.10	4.09	4.00	4.02	4.02	4.01	3.99	4.00
63	Pennsylvania Co gu 1st M 4½s 1921.	4.16	4.25	4.29	4.18	4.17	4.18	4.09	4.05	4.03	4.02	4.02	4.05	4.08
70	West Shore RR 1st M 4s 1961.	3.99	3.98	4.02	4.01	4.00	3.93	3.92	3.92	3.93	3.93	3.91	3.87	
73	St Paul Minn & Man cons M 4½s 1933.	4.23	4.21	4.21	4.18	4.13	4.14	4.09	4.03	4.02	4.01	3.99	3.93	3.87
76	Illinois Central RR coll 4s 1952.	4.12	4.00	4.08	4.11	4.09	4.09	4.04	3.98	3.99	4.00	3.99	3.99	
77	Lake Erie & Western 1st M 5s 1937.	4.49	4.61	4.44	4.49	4.49	4.51	4.51	4.39	4.33	4.31	4.28	4.26	4.23
78	Wabash RR Co 1st M 5s 1939.	4.61	4.78	4.87	4.73	4.73	4.78	4.71	4.53	4.52	4.42	4.34	4.24	
81	N Y Chic & St Louis 1st M 4s 1937.	4.23	4.13	4.09	4.08	4.00	4.08	4.05	4.01	3.95	3.99	3.96	3.96	3.94
82	Che & Ohio Ry 1st cons 5s 1939.	4.49	4.48	4.56	4.41	4.33	4.32	4.30	4.24	4.21	4.16	4.15	4.09	
83	Ill Central (L N O & T) col 4s 1953.	4.12	4.04	4.02	4.06	4.02	4.02	3.99	4.00	4.02	4.03	4.05	4.00	
84	C & O (R & A Dv) 1st cons M 4s 1980.	4.27	4.23	4.29	4.29	4.23	4.13	4.17	4.11	4.08	4.06	4.04	4.05	4.00
85	C C C & St L (S L Dv) 1st col 4s 1990.	4.64	4.57	4.54	4.39	4.38	4.39	4.35	4.35	4.23	4.24	4.19	4.18	4.15
86	E Tenn V & G Ky cons 1st M 5s 1956.	4.79	4.82	4.92	4.86	4.68	4.76	4.70	4.60	4.60	4.62	4.46	4.39	4.37
87	Chi Milw & St Paul gen M 4s 1989.	3.96	3.92	3.92	3.93	3.96	3.98	3.96	3.95	3.93	3.92	3.89	3.91	3.88
88	Lake Sh & Mich So 1st M 3½s 1997.	3.88	3.84	3.80	3.82	3.84	3.84	3.80	3.80	3.78	3.77	3.73	3.70	3.69
89	St P Min & Man (Min Ex) 1st M 4s 1937.	4.26	4.14	4.17	4.15	4.15	4.18	4.18	4.18	4.15	4.13	4.05	3.95	3.99
90	Baltimore & Ohio RR 1st M 4s 1948.	4.10	4.09	4.13	4.12	4.11	4.11	4.10	4.08	4.04	4.05	4.02	4.01	3.97
91	Union Pac RR 1st M RR & Ig 4s 1947.	3.99	4.01	4.06	4.05	4.02	3.99	3.94	3.91	3.91	3.93	3.91	3.87	3.87
92	Chicago & Nor West gen M 3½s 1987.	3.93	3.89	3.91	3.85	3.82	3.85	3.84	3.91	3.80	3.78	3.68	3.71	3.74
93	Chi Rock Is & Pac Ry gen M 4s 1988.	4.11	4.16	4.26	4.20	4.14	4.17	4.20	4.23	4.19	4.10	4.06	4.01	3.97
94	Atch Top & Santa Fe gen M 4s 1995.	4.11	4.10	4.16	4.13	4.10	4.12	4.11	4.08	4.03	4.00	3.99	3.97	
95	N Y Cent & Hudson River M 3½s 1997.	3.94	3.97	3.98	3.96	3.96	3.89	3.81	3.86	3.84	3.83	3.80	3.76	3.75
96	Selco Val & New Eng 1st M 4s 1989.	4.45	4.35	4.30	4.32	4.35	4.29	4.30	4.18	4.14	4.15	4.16	4.14	4.11
97	Lehigh Valley (N Y) 1st M 4½s 1940.	4.39	4.38	4.34	4.29	4.31	4.30	4.28	4.21	4.15	4.10	4.08	4.08	
98	Louisville & Nash unified 4s 1940.	4.15	4.14	4.31	4.27	4.24	4.18	4.16	4.12	4.09	4.10	4.03	3.98	3.96
99	Oregon RR & Nav Co cons M 4s 1946.	4.35	4.30	4.38	4.32	4.26	4.23	4.21	4.19	4.14	4.11	4.05	4.06	4.05
100	Chi Bur & Q (III Div) M 3½s 1949.	4.10	4.06	4.11	4.11	4.10	4.13	4.11	4.06	3.99	3.95	3.91	3.90	3.91
101	Central Pacific 1st ref M 4s 1949.	4.28	4.21	4.27	4.26	4.25	4.21	4.21	4.20	4.21	4.17	4.16	4.14	4.10
102	Nor Pac Ry prior lien lg M 4s 1997.	4.00	4.02	4.05	4.03	3.99	3.99	3.95	3.93	3.92	3.94	3.90	3.91	3.90
103	Norf & West Ry 1st cons M 4s 1996.	4.28	4.26	4.39	4.28	4.27	4.28	4.22	4.13	4.11	4.11	4.06	4.00	4.05
104	Central RR of N J gen M 5s 1987.	4.15	4.09	4.06	4.08	4.05	4.07	4.07	4.07	4.04	3.99	3.96	3.88	3.88
105	Hocking Valley 1st cons M 4½s 1999.	4.47	4.48	4.49	4.50	4.44	4.46	4.39	4.37	4.32	4.31	4.27	4.28	4.23
106	N & W Ry Div 1st l & gen M 4s 1944.	4.78	4.74	4.76	4.75	4.70	4.66	4.59	4.56	4.44	4.42	4.38	4.35	4.32
107	Ore Sh Line RR cons 1st M 5s 1946.	4.86	4.45	4.44	4.37	4.38	4.37	4.44	4.30	4.34	4.26	4.22	4.18	4.14
108	Southern Pac 1st ref M of 4s 1955.	4.52	4.55	4.64	4.61	4.51	4.49	4.44	4.35	4.28	4.28	4.20	4.26	4.23
109	A T & S Fe Ry adj M 4s stamped 1995.	4.73	4.68	4.73	4.71	4.66	4.65	4.63	4.58	4.47	4.42	4.36	4.34	4.30
110	Northern Pac Ry gen lien 5s 2047.	4.84	4.26	4.29	4.25	4.21	4.25	4.21	4.12	4.11	4.14	4.09	4.12	4.08
111	Atl Coast Line 1st cons M 4s 1952.	4.68	4.94	4.77	4.79	4.54	4.49	4.46	4.34	4.30	4.29	4.27	4.25	4.23

**YIELDS OF RAILROAD BONDS**  
JAN. 1909—JAN. 1910

Ref. No.	Name of Bond	Jan.	Feb.	Mur.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
57	Chic St P Min & Omaha cons M 6s 1930.....	3.90	3.87	3.90	3.80	3.92	3.94	3.90	3.92	4.01	4.00	4.06	4.07	4.04
70	West Shore RR 1st M 4s 2361.....	3.87	3.85	3.87	3.87	3.88	3.91	3.90	3.90	3.93	3.90	3.88	3.92	3.94
73	St Paul Minn & Man cons M 4½s 1933.....	3.87	3.80	3.90	3.80	3.80	3.93	3.96	3.96	3.99	3.99	3.99	4.07	4.01
76	Illinois Central RR cons M 4s 1952.....	3.90	3.98	3.99	3.97	3.90	3.98	3.88	3.88	3.90	3.90	3.90	3.90	3.97
78	Wabash RR Co 1st M 5s 1939.....	4.24	4.20	4.26	4.27	4.25	4.25	4.25	4.25	4.23	4.23	4.25	4.28	4.26
81	N Y Chic & St Louis 1st M 4s 1937.....	3.94	3.93	3.87	3.91	3.91	3.93	3.94	3.95	3.96	3.99	3.98	3.98	3.99
82	Che & Ohio Ry 1st cons M 5s 1930.....	4.09	4.08	4.10	4.11	4.11	4.11	4.14	4.14	4.13	4.17	4.24	4.18	4.17
83	Ill Central (L N O & T) col 4s 1953.....	4.00	3.97	3.95	3.99	3.97	3.98	3.94	3.96	4.00	3.98	3.97	4.00	4.01
84	C & O (R & A Dv) 1st cons M 4s 1989.....	4.00	3.98	4.00	4.00	4.00	4.01	4.03	4.02	4.01	4.02	4.06	4.04	4.09
85	C C C & St L (St L Dv) 1st col 4s 1990.....	4.15	4.18	4.17	4.15	4.16	4.15	4.16	4.17	4.22	4.22	4.20	4.26	4.26
86	E Tenn V & G Ry cons 1st M 5s 1956.....	4.37	4.40	4.35	4.47	4.33	4.37	4.29	4.28	4.30	4.29	4.31	4.37	4.31
87	Chic Milw : St Paul gen M 4s 1989.....	3.98	3.87	3.87	3.86	3.83	3.83	3.83	3.84	3.89	3.90	3.87	3.93	3.99
88	Lake Sh & Mich So 1st M 3½s 1997.....	3.69	3.68	3.69	3.69	3.72	3.73	3.75	3.81	3.83	3.82	3.83	3.82	3.83
90	Baltimore & Ohio RR 1st M 4s 1948.....	3.97	3.94	3.96	3.95	3.94	3.98	3.97	3.97	3.98	4.01	4.04	4.04	4.03
91	Union Pac RR 1st M RR & lg 4s 1947.....	3.87	3.83	3.85	3.85	3.85	3.83	3.79	3.82	3.86	3.86	3.88	3.90	3.93
92	Chicago & Nor West gen M 3½s 1987.....	3.74	3.76	3.78	3.78	3.79	3.85	3.82	3.86	3.90	3.89	3.91	3.93	3.94
93	Chi Rock Is & Pac Ry gen M 4s 1988.....	3.97	3.96	3.98	3.97	3.95	3.97	4.00	4.02	4.05	4.03	4.02	4.04	4.06
94	Atch Top & Santa Fe gen M 4s 1995.....	3.97	3.95	3.96	3.96	3.96	3.96	3.94	3.97	3.99	3.99	4.01	4.01	3.98
95	N Y Cent & Hudson River M 3½s 1997.....	3.75	3.76	3.77	3.76	3.75	3.77	3.79	3.83	3.83	3.85	3.88	3.84	3.84
96	Scloto Val & New Eng 1st M 4s 1989.....	4.14	4.08	4.14	4.08	4.12	4.14	4.13	4.15	4.15	4.15	4.22	4.21	4.22
97	Lehigh Valley (N Y) 1st M 4½s 1940.....	4.08	4.06	4.06	4.06	4.03	4.04	4.05	4.05	4.05	4.07	4.10	4.13	4.03
98	Louisville & Nash unified 4s 1940.....	3.96	3.90	3.92	3.92	3.95	3.98	3.97	3.99	4.03	4.06	4.02	4.01	4.01
99	Oregon RR & Nav Co cons M 4s 1946.....	4.05	4.03	4.06	4.07	4.05	4.07	4.07	4.08	4.06	4.06	4.08	4.13	4.13
100	Chi Bur & Q (Ill Div) M 3½s 1949.....	3.91	3.88	3.91	3.92	3.92	3.96	3.94	3.98	3.99	4.02	4.03	4.03	4.05
101	Central Pacific 1st ref M 4s 1949.....	4.10	4.09	4.12	4.12	4.13	4.15	4.13	4.14	4.13	4.15	4.16	4.17	4.14
102	Nor Pac Ry prior lien lg M 4s 1997.....	3.00	3.87	3.89	3.80	3.91	3.91	3.91	3.90	3.92	3.93	3.93	3.91	3.94
103	Norf & West Ry 1st cons M 4s 1996.....	4.05	4.04	4.05	4.05	4.06	4.06	4.01	4.01	4.04	4.03	4.04	4.07	4.04
104	Central RR of N J gen M 5s 1987.....	3.88	3.86	3.86	3.84	3.84	3.88	3.87	3.88	3.89	3.92	3.96	3.96	3.96
105	Hocking Valley 1st cons M 4½s 1900.....	4.23	4.16	4.15	4.28	4.25	4.26	4.26	4.28	4.31	4.36	4.36	4.39	4.39
106	N & W Ry Div 1st l & gen M 4s 1944.....	4.32	4.33	4.37	4.35	4.35	4.36	4.37	4.37	4.37	4.44	4.40	4.41	4.41
107	Ore Sh Line RR cons 1st M 5s 1946.....	4.14	4.08	4.12	4.13	4.15	4.15	4.21	4.25	4.25	4.26	4.29	4.29	4.28
108	Southern Pac 1st ref M 4s 1955.....	4.23	4.24	4.23	4.26	4.25	4.26	4.23	4.25	4.26	4.29	4.27	4.27	4.26
109	A T & S Fe Ry adj M 4s stamped 1995.....	4.30	4.22	4.24	4.27	4.28	4.26	4.27	4.27	4.25	4.25	4.25	4.24	4.24
110	Northern Pac Ry gen lien 3s 2047.....	4.08	4.04	4.04	4.04	4.05	4.06	4.06	4.06	4.05	4.10	4.17	4.11	4.11
111	Atl Coast Line 1st cons M 4s 1952.....	4.23	4.15	4.15	4.13	4.15	4.19	4.19	4.25	4.24	4.24	4.26	4.26	4.26
112	Del & Hudson Co 1st & ref M 4s 1943.....	3.92	3.89	3.88	3.87	3.86	3.87	3.88	3.90	3.93	3.96	3.97	3.98	4.00
113	Central of Georgia cons M 5s 1945.....	4.50	4.41	4.43	4.44	4.42	4.41	4.40	4.42	4.45	4.48	4.52	4.52	4.51
114	Pennsylvania RR cons M 4s 1948.....	3.78	3.78	3.78	3.76	3.75	3.76	3.78	3.78	3.81	3.80	3.78	3.79	3.78
115	Kansas City So Ry 1st M 3s 1950.....	4.37	4.31	4.31	4.30	4.31	4.33	4.32	4.32	4.34	4.40	4.42	4.42	4.44
116	L & N (Alt Knox & Clin Div) 4s 1955.....	4.24	4.19	4.18	4.18	4.18	4.20	4.24	4.22	4.27	4.30	4.31	4.31	4.29
117	Illinois Central RR ref M 4s 1955.....	3.99	3.95	3.97	3.97	3.98	4.00	4.00	4.03	4.04	4.03	4.04	4.04	4.04
118	Chic Bur & Quincy gen M 4s 1958.....	3.99	3.97	3.99	3.97	3.99	4.04	3.99	4.01	4.02	4.04	4.04	4.03	4.03
119	Southern Ry 1st cons M 5s 1994.....	4.57	4.44	4.47	4.46	4.43	4.45	4.45	4.42	4.49	4.57	4.61	4.51	4.55
120	Un Pac RR 1st lien & ref M 4s 2008.....	4.00	4.05	4.05	4.03	4.01	4.01	4.02	4.04	4.06	4.10	4.11	4.09	4.10

RAILROAD BOND YIELDS

YIELDS OF RAILROAD BONDS  
JAN. 1910—JAN. 1911

Ref. No.	Name of Bond	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
57	Chic St P Minn & Omaha cons M 6s 1930	4.04	4.07	4.10	4.14	4.22	4.22	4.22	4.27	4.09	4.11	4.14	4.14	4.14
70	West Shore RR 1st M 4s 2361	3.94	3.94	3.97	3.98	3.99	3.95	3.98	3.96	3.95	3.95	3.96	3.96	3.95
73	St Paul Minn & Man cons M 4½s 1933	4.01	4.02	4.11	4.13	4.19	4.11	4.18	4.22	4.16	4.04	4.08	4.12	4.11
76	Illinois Central RR coll 4s 1952	3.97	4.00	4.00	4.00	4.02	4.05	4.04	4.05	4.02	4.04	4.03	4.07	4.10
78	Wabash RR Co 1st M 5s 1939	4.26	4.31	4.35	4.46	4.49	4.44	4.50	4.54	4.43	4.43	4.45	4.44	4.43
81	N Y Chic & St Louis 1st M 4s 1937	3.99	3.98	4.02	4.02	4.03	4.09	4.11	4.09	4.07	4.01	4.01	4.03	4.01
82	Che & Ohio Ry 1st cons M 5s 1939	4.17	4.15	4.17	4.22	4.26	4.30	4.31	4.31	4.30	4.26	4.27	4.22	4.20
83	Ill Central (L N O & T) col 4s 1953	4.01	4.00	4.01	4.07	4.01	4.07	4.14	4.12	4.08	4.03	4.05	4.04	4.09
84	C & O (R & A Div) 1st cons M 4s 1989	4.09	4.05	4.07	4.10	4.10	4.12	4.19	4.23	4.16	4.10	4.15	4.16	4.17
85	C C C & St L (St L Div) 1st col 4s 1990	4.26	4.24	4.19	4.28	4.33	4.39	4.44	4.46	4.28	4.27	4.32	4.27	4.27
86	E Tenn V & G Ry cons 1st M 5s 1956	4.31	4.36	4.37	4.42	4.39	4.51	4.47	4.47	4.45	4.44	4.45	4.49	4.45
87	Chic Milv & St Paul gen M 4s 1989	3.99	4.00	4.02	4.04	4.03	4.05	4.07	4.06	4.02	4.02	4.04	4.04	4.03
88	Lake Sh & Mich So 1st M 3½s 1997	3.83	3.84	3.85	3.88	3.87	3.88	3.87	3.89	3.89	3.84	3.89	3.90	3.92
90	Baltimore & Ohio RR 1st M 4s 1948	4.03	4.03	4.06	4.08	4.11	4.07	4.07	4.06	4.05	4.05	4.09	4.08	4.08
91	Union Pac RR 1st M RR & lg 4s 1947	3.93	3.94	3.96	3.99	3.96	3.96	3.97	3.97	3.93	3.92	3.93	3.95	3.96
92	Chicago & Nor West gen M 3½s 1987	3.94	3.96	3.99	4.04	4.02	4.01	4.03	3.98	3.95	3.94	3.99	4.01	4.00
93	Chi Rock Is & Pac Ry gen M 4s 1988	4.06	4.07	4.11	4.15	4.17	4.19	4.18	4.20	4.14	4.11	4.11	4.11	4.11
94	Atch Top & Santa Fe gen M 4s 1995	3.98	3.99	4.02	4.05	4.05	4.05	4.06	4.08	4.04	4.04	4.07	4.04	4.04
95	N Y Cent & Hudson River M 3½s 1997	3.84	3.88	3.91	3.93	3.95	3.98	4.01	3.99	3.97	3.93	3.97	3.94	3.93
97	Lehigh Valley (N Y) 1st M 4½s 1940	4.03	4.06	4.07	4.12	4.13	4.16	4.17	4.16	4.12	4.12	4.08	4.09	4.09
98	Louisville & Nash unified 4s 1940	4.01	4.06	4.09	4.10	4.10	4.15	4.17	4.15	4.12	4.12	4.10	4.10	4.08
99	Oregon RR & Nav Co cons M 4s 1946	4.13	4.15	4.19	4.25	4.28	4.26	4.25	4.25	4.20	4.18	4.30	4.25	4.18
100	Chi Bur & Q (Ill Div) M 3½s 1949	4.05	4.08	4.13	4.16	4.18	4.17	4.19	4.12	4.10	4.09	4.12	4.11	4.12
101	Central Pacific 1st ref M 4s 1949	4.14	4.14	4.16	4.18	4.19	4.21	4.22	4.20	4.17	4.14	4.17	4.17	4.16
102	Nor Pac Ry prior lien lg M 4s 1997	3.94	3.98	3.98	4.01	3.99	3.99	4.03	4.04	3.98	4.00	4.03	4.02	4.02
103	Norf & West Ry 1st cons M 4s 1996	4.04	4.03	4.04	4.06	4.05	4.07	4.08	4.12	4.05	4.01	4.06	4.04	4.04
104	Central RR of N J gen M 5s 1987	3.96	3.96	3.98	4.00	3.98	4.05	4.10	4.09	4.03	4.02	4.04	4.05	4.04
105	Hocking Valley 1st cons M 4½s 1999	4.39	4.33	4.36	4.43	4.46	4.47	4.47	4.48	4.43	4.38	4.41	4.39	4.39
106	N & W Ry Div 1st l & gen M 4s 1944	4.41	4.42	4.42	4.44	4.46	4.48	4.49	4.48	4.41	4.37	4.42	4.39	4.40
107	Ore Sh Line RR cons 1st M 5s 1946	4.28	4.27	4.27	4.31	4.40	4.44	4.49	4.49	4.39	4.31	4.36	4.35	4.31
108	Southern Pac 1st ref M of 4s 1955	4.26	4.24	4.23	4.27	4.29	4.31	4.32	4.30	4.29	4.25	4.29	4.30	4.26
109	A T & S Fe Ry adj M 4s stamped 1995	4.24	4.24	4.27	4.41	4.45	4.46	4.47	4.45	4.39	4.36	4.42	4.40	4.35
110	Northern Pac Ry gen lien 3s 2047	4.11	4.10	4.12	4.17	4.22	4.27	4.30	4.26	4.22	4.23	4.26	4.28	4.27
111	Atl Coast Line 1st cons M 4s 1952	4.26	4.19	4.22	4.29	4.31	4.35	4.35	4.37	4.27	4.20	4.26	4.30	4.30
112	Del & Hudson Co 1st & ref M 4s 1943	4.00	4.00	4.04	4.08	4.10	4.10	4.11	4.09	4.07	4.06	4.07	4.03	4.01
113	Central of Georgia cons M 5s 1945	4.51	4.51	4.53	4.55	4.74	4.72	4.72	4.69	4.57	4.59	4.61	4.59	4.56
114	Pennsylvania RR cons M 4s 1948	3.78	3.77	3.79	3.82	3.84	3.86	3.87	3.90	3.88	3.84	3.83	3.82	3.82
115	Kansas City So Ry 1st M 3s 1950	4.44	4.42	4.45	4.50	4.48	4.47	4.51	4.51	4.45	4.44	4.43	4.43	4.40
116	L & N (Atl Knox & Cin Div) 4s 1955	4.29	4.25	4.25	4.34	4.30	4.38	4.47	4.37	4.33	4.39	4.41	4.41	4.41
117	Illinois Central RR ref M 4s 1955	4.04	4.04	4.05	4.10	4.11	4.11	4.15	4.17	4.12	4.06	4.10	4.13	4.12
118	Chic Burl & Quincy gen M 4s 1958	4.03	4.04	4.06	4.09	4.11	4.10	4.11	4.09	4.11	4.12	4.14	4.14	4.11
119	Southern Ry 1st cons M 5s 1994	4.55	4.61	4.62	4.72	4.75	4.77	4.80	4.77	4.69	4.60	4.61	4.64	4.63
120	Un Pac RR 1st lien & ref M 4s 2008	4.10	4.11	4.11	4.12	4.15	4.17	4.19	4.18	4.16	4.12	4.14	4.15	4.13
121	Atl Coast Line (L & N coll) 4s 1952	4.34	4.34	4.32	4.44	4.47	4.51	4.54	4.49	4.39	4.37	4.40	4.40	4.35

**YIELDS OF RAILROAD BONDS**  
JAN. 1911—JAN. 1912

Ref. No.	Name of Bond	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
57	Chic St P Min & Omaha cons M 6s 1930.....	4.14	4.13	4.13	4.15	4.12	4.10	4.09	4.07	4.12	4.21	4.17	4.18	4.15
70	West Shore RR 1st M 4s 2361.....	3.95	3.97	3.97	3.98	3.96	3.95	3.96	3.99	4.04	3.99	3.98	3.96	3.98
73	St Paul Minn & Man cons M 4½s 1933.....	4.11	4.12	4.13	4.13	4.08	4.09	4.10	4.11	4.15	4.12	4.08	4.08	4.11
76	Illinois Central RR coll 4s 1952.....	4.10	4.10	4.11	4.08	4.08	4.08	4.06	4.06	4.04	4.05	4.03	4.05	4.03
78	Wabash RR Co 1st M 5s 1939.....	4.43	4.41	4.43	4.48	4.46	4.48	4.49	4.48	4.51	4.57	4.64	4.69	4.62
81	N Y Chic & St Louis 1st M 4s 1937.....	4.01	4.02	4.01	4.02	4.04	4.02	4.03	4.06	4.03	4.02	4.01	4.00	4.00
82	Ches & Ohio Ry 1st cons 5s 1939.....	4.20	4.21	4.24	4.27	4.24	4.23	4.27	4.27	4.27	4.30	4.28	4.30	4.30
83	Ill Central (L N O & T) coll 4s 1953.....	4.09	4.09	4.11	4.10	4.09	4.09	4.08	4.08	4.08	4.07	4.05	4.04	4.04
84	C & O (R & A Dv) 1st cons M 4s 1989.....	4.17	4.17	4.19	4.20	4.20	4.20	4.20	4.21	4.23	4.22	4.24	4.21	4.18
85	C C C & St L (St L Dv) 1st coll 4s 1990.....	4.27	4.28	4.30	4.35	4.34	4.35	4.36	4.36	4.45	4.35	4.39	4.32	
86	E Tenn V & G Ry cons 1st M 5s 1956.....	4.45	4.44	4.45	4.45	4.42	4.44	4.43	4.42	4.47	4.49	4.43	4.44	4.42
87	Chic Milw & St Paul gen M 4s 1989.....	4.03	4.04	4.05	4.05	4.05	4.06	4.07	4.07	4.07	4.05	4.04	4.05	4.05
88	Lake Sh & Mich So 1st M 3½s 1997.....	3.92	3.93	3.94	3.94	3.93	3.95	3.96	3.97	3.95	3.96	3.91	3.97	3.93
90	Baltimore & Ohio RR 1st M 4s 1948.....	4.08	4.07	4.08	4.07	4.08	4.09	4.09	4.09	4.10	4.07	4.06	4.09	4.10
91	Union Pac RR 1st M RR & lg 4s 1947.....	3.96	3.97	3.97	3.93	3.94	3.93	3.94	3.94	3.97	3.95	3.94	3.95	3.96
92	Chicago & Nor West gen M 3½s 1987.....	4.00	4.02	4.04	4.04	4.04	4.05	4.06	4.10	4.11	4.11	4.06	4.04	4.05
93	Chi Rock Is & Pac Ry gen M 4s 1988.....	4.11	4.15	4.16	4.13	4.11	4.12	4.14	4.16	4.17	4.17	4.15	4.17	4.16
94	Atch Top & Santa Fe gen M 4s 1995.....	4.04	4.04	4.06	4.04	4.04	4.05	4.05	4.04	4.05	4.04	4.03	4.03	
95	N Y Cent & Hudson River M 3½s 1997.....	3.93	3.98	3.99	3.97	3.97	4.00	4.01	4.00	4.02	4.00	3.98	3.99	4.02
97	Lehigh Valley (N Y) 1st M 4½s 1940.....	4.09	4.12	4.15	4.16	4.16	4.14	4.18	4.19	4.17	4.17	4.19	4.18	
98	Louisville & Nash unified 4s 1940.....	4.08	4.08	4.09	4.08	4.08	4.08	4.04	4.07	4.09	4.07	4.05	4.05	4.05
99	Oregon RR & Nav Co cons M 4s 1946.....	4.18	4.22	4.25	4.19	4.18	4.22	4.25	4.32	4.36	4.29	4.25	4.25	4.24
100	Chi Bur & Q M 3½s 1949.....	4.12	4.13	4.15	4.14	4.12	4.14	4.13	4.14	4.15	4.15	4.12	4.13	4.15
101	Central Pacific 1st ref M 4s 1949.....	4.16	4.18	4.20	4.20	4.14	4.15	4.16	4.16	4.18	4.17	4.15	4.18	4.17
102	Nor Pac Ry prior lien lg M 4s 1997.....	4.02	4.00	4.03	4.02	4.01	4.04	4.04	4.06	4.05	4.02	4.02	4.04	4.01
103	Norf & West Ry 1st cons M 4s 1996.....	4.04	4.04	4.06	4.05	4.07	4.08	4.09	4.09	4.08	4.05	4.04	4.08	4.06
104	Central RR of N J gen M 5s 1987.....	4.04	4.03	4.04	4.03	4.03	4.05	4.06	4.09	4.03	4.11	4.06	4.07	4.05
105	Hocking Valley 1st cons M 4½s 1999.....	4.39	4.39	4.40	4.37	4.35	4.37	4.38	4.42	4.43	4.42	4.39	4.38	4.40
106	N & W Ry Div 1st & gen M 4s 1944.....	4.40	4.38	4.39	4.42	4.39	4.41	4.43	4.44	4.47	4.39	4.38	4.35	4.36
107	Ore Sh Line RR cons 1st M 5s 1946.....	4.31	4.30	4.30	4.29	4.30	4.32	4.32	4.39	4.45	4.33	4.36	4.37	4.35
108	Southern Pac 1st ref M of 4s 1955.....	4.26	4.25	4.26	4.23	4.21	4.24	4.25	4.27	4.30	4.28	4.26	4.26	4.25
109	A T & S Fe Ry adj M 4s stamped 1995.....	4.35	4.36	4.39	4.37	4.37	4.37	4.36	4.36	4.38	4.37	4.36	4.37	4.35
110	Northern Pac Ry gen lien 3s 2047.....	4.27	4.27	4.25	4.26	4.25	4.25	4.24	4.27	4.37	4.36	4.33	4.35	4.35
111	Atl Coast Line 1st cons M 4s 1952.....	4.30	4.30	4.32	4.26	4.23	4.23	4.26	4.23	4.23	4.26	4.22	4.23	4.21
112	Del & Hudson Co 1st & ref M 4s 1943.....	4.01	4.07	4.09	4.08	4.06	4.07	4.08	4.10	4.08	4.07	4.07	4.07	4.07
113	Central of Georgia cons M 5s 1945.....	4.56	4.52	4.52	4.51	4.51	4.51	4.47	4.47	4.50	4.52	4.48	4.45	4.45
114	Pennsylvania RR cons M 4s 1948.....	3.82	3.80	3.82	3.83	3.81	3.83	3.83	3.86	3.88	3.85	3.86	3.84	3.82
115	Kansas City So Ry 1st M 3s 1950.....	4.40	4.41	4.42	4.45	4.45	4.41	4.39	4.37	4.38	4.42	4.43	4.41	4.44
116	L & N (Atl Knox & Cin Div) 4s 1955.....	4.41	4.35	4.36	4.35	4.33	4.33	4.37	4.38	4.39	4.40	4.37	4.39	4.37
117	Illinois Central RR ref M 4s 1955.....	4.12	4.14	4.17	4.16	4.15	4.16	4.17	4.18	4.18	4.17	4.18	4.18	4.19
118	Chic Burl & Quincy gen M 4s 1958.....	4.11	4.12	4.14	4.14	4.13	4.17	4.16	4.18	4.20	4.19	4.16	4.17	4.15
119	Southern Ry 1st cons M 5s 1994.....	4.63	4.63	4.66	4.66	4.60	4.61	4.61	4.66	4.72	4.67	4.62	4.63	4.63
120	Un Pac RR 1st lien & ref M 4s 2008.....	4.13	4.14	4.15	4.13	4.09	4.11	4.13	4.14	4.15	4.13	4.11	4.11	
121	Atl Coast Line (L & N coll) 4s 1952.....	4.35	4.27	4.31	4.30	4.29	4.30	4.30	4.37	4.41	4.37	4.28	4.27	4.25

## APPENDIX

**YIELDS OF RAILROAD BONDS**  
JAN. 1912-JAN. 1913

Ref. No.	Name of Bond	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
70	West Shore RR 1st M 4s 2361.....	3.98	3.97	3.99	3.98	3.99	4.00	4.00	4.01	4.05	4.06	4.07	4.10	4.06
73	St Paul Minn & Man cons M 4½s 1933.....	4.11	4.11	4.12	4.14	4.15	4.17	4.18	4.23	4.24	4.22	4.19	4.22	4.21
76	Illinois Central RR coll 4s 1952.....	4.03	4.00	4.05	4.04	4.02	4.12	4.09	4.07	4.04	4.05	4.09	4.19	4.24
78	Wabash RR Co 1st M 5s 1939.....	4.62	4.53	4.54	4.52	4.54	4.59	4.55	4.56	4.61	4.60	4.59	4.67	4.61
81	N Y Chic & St Louis 1st M 4s 1937.....	4.00	3.98	3.98	4.00	4.01	4.00	4.02	4.06	4.13	4.14	4.09	4.05	4.06
82	Chee & Ohio Ry 1st cons 5s 1939.....	4.30	4.27	4.33	4.31	4.31	4.37	4.36	4.37	4.40	4.42	4.38	4.39	4.39
83	Ill Central (L N O & T) col 4s 1953.....	4.04	4.07	4.07	4.12	4.13	4.17	4.18	4.22	4.22	4.24	4.24	4.21	4.23
85	C C C & St L (St L Dv) 1st col 4s 1990.....	4.32	4.34	4.37	4.44	4.45	4.44	4.44	4.43	4.38	4.44	4.45	4.38	4.41
86	E. Tenn V & G Ry cons 1st M 5s 1956.....	4.42	4.43	4.42	4.41	4.41	4.44	4.48	4.47	4.48	4.48	4.50	4.51	4.50
87	Chic Milw & St Paul gen M 4s 1989.....	4.05	4.06	4.06	4.07	4.07	4.07	4.11	4.13	4.12	4.10	4.10	4.08	4.07
88	Lake Sh & Mich So 1st M 3½s 1997.....	3.93	3.96	3.99	3.99	3.97	3.99	3.96	4.00	4.00	3.97	4.00	4.02	4.00
90	Baltimore & Ohio RR 1st M 4s 1948.....	4.10	4.06	4.05	4.09	4.09	4.10	4.13	4.13	4.20	4.16	4.15	4.15	4.14
91	Union Pac RR 1st M RR & lg 4s 1947.....	3.96	3.97	3.96	3.91	3.93	3.98	3.98	4.02	4.04	4.01	4.02	4.05	4.05
92	Chicago & Nor West gen M 3½s 1987.....	4.05	4.07	4.05	4.11	4.12	4.13	4.13	4.18	4.21	4.19	4.19	4.22	4.18
93	Chi Rock I & Pac Ry gen M 4s 1988.....	4.16	4.17	4.19	4.18	4.17	4.17	4.23	4.23	4.24	4.23	4.25	4.31	4.29
94	Atch Top & Santa Fe gen M 4s 1995.....	4.03	4.01	4.02	4.03	4.03	4.07	4.10	4.13	4.11	4.10	4.12	4.13	4.11
95	N Y Cent & Hudson River M 3½s 1997.....	4.02	3.99	4.02	4.05	4.05	4.03	4.08	4.11	4.09	4.07	4.10	4.06	
97	Lehigh Valley (N Y) 1st M 4½s 1940.....	4.18	4.18	4.16	4.17	4.18	4.19	4.19	4.23	4.24	4.25	4.28	4.24	
98	Louisville & Nash unified 4s 1940.....	4.05	4.03	4.05	4.05	4.04	4.06	4.09	4.13	4.13	4.13	4.16	4.15	4.08
99	Oregon RR & Nav Co cons M 4s 1946.....	4.24	4.22	4.25	4.25	4.25	4.27	4.33	4.42	4.41	4.39	4.38	4.43	4.38
100	Chi Bur & Q (Ill Div) M 3½s 1949.....	4.15	4.15	4.17	4.18	4.18	4.18	4.17	4.25	4.34	4.32	4.28	4.30	4.30
101	Central Pacific 1st ref M 4s 1949.....	4.17	4.17	4.19	4.23	4.22	4.20	4.25	4.28	4.29	4.26	4.27	4.30	4.24
102	Nor Pac Ry prior lien lg M 4s 1997.....	4.01	4.01	4.03	4.04	4.04	4.05	4.07	4.11	4.11	4.09	4.09	4.10	4.09
103	Nor & West Ry 1st cons M 4s 1996.....	4.06	4.05	4.05	4.02	4.04	4.05	4.08	4.13	4.12	4.13	4.12	4.15	4.09
104	Central RR of N J gen M 5s 1987.....	4.05	4.04	4.06	4.07	4.08	4.12	4.11	4.13	4.18	4.18	4.19	4.20	4.18
105	Hocking Valley 1st cons M 4½s 1999.....	4.40	4.40	4.39	4.41	4.43	4.44	4.47	4.48	4.47	4.45	4.48	4.48	4.45
106	N & W Ry Div 1st I & gen M 4s 1944.....	4.36	4.37	4.39	4.41	4.43	4.45	4.46	4.46	4.48	4.48	4.46	4.45	4.45
107	Ore Sh Line RR cons 1st M 5s 1946.....	4.35	4.37	4.39	4.39	4.40	4.41	4.41	4.42	4.46	4.46	4.49	4.49	4.50
108	Southern Pac 1st ref M 4s 1955.....	4.25	4.25	4.25	4.25	4.25	4.26	4.28	4.31	4.33	4.33	4.32	4.34	4.35
109	A T & S Fe Ry adj M 4s stamped 1995.....	4.35	4.34	4.38	4.40	4.42	4.43	4.46	4.49	4.53	4.54	4.55	4.58	4.57
110	Northern Pac Ry gen lien 3s 2047.....	4.35	4.32	4.33	4.33	4.35	4.37	4.38	4.39	4.38	4.37	4.40	4.44	4.44
111	Atl Coast Line 1st cons M 4s 1952.....	4.21	4.19	4.24	4.24	4.25	4.25	4.26	4.29	4.27	4.27	4.25	4.25	4.26
112	Del & Hudson Co 1st & ref M 4s 1943.....	4.07	4.05	4.05	4.07	4.04	4.04	4.03	4.06	4.12	4.09	4.12	4.12	4.08
113	Central of Georgia cons M 5s 1945.....	4.45	4.42	4.45	4.45	4.41	4.46	4.46	4.46	4.54	4.52	4.50	4.56	4.52
114	Pennsylvania RR cons M 4s 1948.....	3.82	3.80	3.85	3.83	3.82	3.82	3.81	3.85	3.85	3.92	3.87	3.90	3.90
115	Kansas City So Ry 1st M 3s 1950.....	4.44	4.43	4.44	4.48	4.52	4.52	4.48	4.52	4.57	4.57	4.56	4.55	4.60
116	L & N (Atl Knox & Cin Div) 4s 1955.....	4.37	4.36	4.37	4.38	4.40	4.39	4.39	4.40	4.42	4.44	4.43	4.43	
117	Illinois Central RR ref M 4s 1955.....	4.19	4.18	4.21	4.22	4.22	4.21	4.23	4.29	4.34	4.31	4.24	4.26	
118	Chic Burl & Quincy gen M 4s 1958.....	4.15	4.16	4.19	4.19	4.20	4.20	4.20	4.21	4.24	4.24	4.25	4.27	4.22
119	Southern Ry 1st cons M 5s 1994.....	4.63	4.61	4.63	4.64	4.65	4.65	4.65	4.68	4.71	4.70	4.71	4.72	4.68
120	Un Pac RR 1st lien & gen M 4s 2008.....	4.11	4.10	4.11	4.15	4.15	4.14	4.13	4.15	4.19	4.19	4.17	4.18	4.20
121	Atl Coast Line (N & Coll) 4s 1952.....	4.25	4.25	4.27	4.29	4.31	4.33	4.31	4.26	4.32	4.37	4.42	4.44	4.45
122	Nor & West (P C & C) Joint 4s 1941.....	4.43	4.37	4.40	4.41	4.49	4.49	4.52	4.56	4.60	4.58	4.56	4.52	
123	Grt Nor Ry 1st & ref M 4½s 1961.....	4.19	4.18	4.19	4.21	4.22	4.21	4.23	4.23	4.24	4.24	4.25	4.24	

**YIELDS OF RAILROAD BONDS**  
JAN. 1913—JAN. 1914

Ref. No.	Name of Bond	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
70	West Shore RR 1st M 4s 2361.....	4.06	4.08	4.10	4.17	4.26	4.26	4.26	4.20	4.21	4.24	4.35	4.40	4.34
73	St Paul Minn & Man cons M 4½s 1933.....	4.21	4.24	4.33	4.26	4.39	4.52	4.48	4.40	4.38	4.42	4.42	4.46	4.40
76	Illinois Central RR coll 4s 1952.....	4.24	4.27	4.24	4.26	4.28	4.33	4.36	4.34	4.32	4.35	4.55	4.60	4.55
78	Wabash RR Co 1st M 5s 1939.....	4.61	4.64	4.74	4.76	4.84	4.87	4.85	4.83	4.77	4.76	4.86	4.89	4.80
81	N Y Chic & St Louis 1st M 4s 1937.....	4.06	4.10	4.10	4.28	4.35	4.34	4.39	4.36	4.26	4.22	4.29	4.31	4.34
82	Ches & Ohio Ry 1st cons 5s 1939.....	4.39	4.41	4.43	4.51	4.58	4.70	4.74	4.71	4.65	4.63	4.67	4.66	4.61
83	Ill Central (L N O & T) coll 4s 1953.....	4.23	4.24	4.34	4.32	4.35	4.38	4.37	4.32	4.23	4.45	4.71	4.59	4.52
86	E Tenn V & G Ry cons 1st M 5s 1956.....	4.50	4.51	4.56	4.55	4.54	4.68	4.72	4.70	4.69	4.75	4.73	4.71	4.66
87	Chic Milw & St Paul gen M 4s 1989.....	4.07	4.10	4.12	4.24	4.39	4.39	4.36	4.35	4.27	4.31	4.40	4.43	4.29
88	Lake Sh & Mich So 1st M 3½s 1997.....	4.00	4.00	4.06	4.09	4.09	4.05	4.08	4.09	4.02	4.01	4.06	4.11	4.09
90	Baltimore & Ohio RR 1st M 4s 1948.....	4.14	4.17	4.24	4.33	4.44	4.50	4.53	4.47	4.44	4.47	4.53	4.52	4.40
91	Union Pac RR 1st M RR & lg 4s 1947.....	4.05	4.06	4.17	4.21	4.21	4.23	4.24	4.22	4.13	4.21	4.30	4.28	4.19
92	Chicago & Nor' West gen M 3½s 1987.....	4.18	4.19	4.26	4.39	4.42	4.31	4.34	4.32	4.31	4.30	4.35	4.39	4.31
93	Chi Rock Is & Pac Ry gen M 4s 1988.....	4.29	4.30	4.34	4.46	4.62	4.74	4.68	4.61	4.64	4.75	4.68	4.79	4.68
94	Atch Top & Santa Fe gen M 4s 1995.....	4.11	4.11	4.18	4.25	4.27	4.30	4.24	4.21	4.23	4.28	4.32	4.33	4.24
95	N Y Cent & Hudson River M 3½s 1997.....	4.06	4.12	4.17	4.15	4.17	4.21	4.31	4.26	4.18	4.26	4.32	4.35	4.24
97	Lehigh Valley (N Y) 1st M 4½s 1940.....	4.24	4.24	4.38	4.42	4.46	4.48	4.42	4.37	4.38	4.47	4.50	4.46	4.46
98	Louisville & Nash unified 4s 1940.....	4.08	4.14	4.23	4.33	4.40	4.48	4.48	4.44	4.42	4.40	4.48	4.51	4.38
99	Oregon RR & Nav Co cons M 4s 1946.....	4.38	4.36	4.45	4.50	4.47	4.53	4.50	4.53	4.43	4.47	4.69	4.53	4.44
100	Chi Bur & Q (Ill Div) M 3½s 1949.....	4.30	4.32	4.36	4.36	4.42	4.40	4.47	4.41	4.32	4.42	4.53	4.55	4.43
101	Central Pacific 1st ref M 4s 1949.....	4.24	4.25	4.35	4.43	4.48	4.52	4.47	4.36	4.39	4.45	4.54	4.52	4.41
102	Nor' Pac Ry prior lien lg M 4s 1997.....	4.09	4.12	4.19	4.25	4.30	4.34	4.37	4.28	4.25	4.24	4.30	4.37	4.29
103	Nor' & West Ry 1st cons M 4s 1996.....	4.09	4.09	4.21	4.25	4.30	4.44	4.33	4.29	4.27	4.31	4.30	4.31	4.22
104	Central RR of N J gen M 5s 1987.....	4.18	4.18	4.22	4.26	4.32	4.35	4.37	4.37	4.34	4.37	4.39	4.37	4.32
105	Hocking Valley 1st cons M 4½s 1999.....	4.45	4.46	4.54	4.59	4.62	4.64	4.60	4.59	4.53	4.50	4.51	4.59	4.55
106	N & W Ry Div 1st & gen M 4s 1944.....	4.45	4.47	4.51	4.51	4.62	4.69	4.71	4.68	4.66	4.69	4.70	4.72	4.63
107	Ore Sh Liné RR cons 1st M 5s 1946.....	4.50	4.58	4.64	4.70	4.70	4.74	4.74	4.67	4.61	4.62	4.64	4.64	4.60
108	Southern Pac 1st ref M of 4s 1955.....	4.35	4.35	4.43	4.52	4.58	4.64	4.59	4.49	4.45	4.50	4.52	4.60	4.48
109	A T & S Fe Ry adj M 4s stamped 1995.....	4.57	4.60	4.70	4.73	4.73	4.80	4.75	4.71	4.63	4.65	4.75	4.78	4.65
110	Norther Pac Ry gen lien 3s 2047.....	4.44	4.43	4.54	4.52	4.56	4.67	4.69	4.57	4.47	4.51	4.61	4.65	4.56
111	Atl Coast Line 1st cons M 4s 1952.....	4.26	4.28	4.42	4.46	4.56	4.60	4.65	4.50	4.46	4.49	4.57	4.52	4.39
112	Del & Hudson Co 1st & ref M 4s 1943.....	4.08	4.06	4.15	4.25	4.23	4.31	4.36	4.35	4.27	4.25	4.32	4.35	4.34
113	Central of Georgia cons M 5s 1945.....	4.52	4.57	4.61	4.65	4.72	4.88	4.82	4.82	4.75	4.76	4.81	4.88	4.81
114	Pennsylvania RR cons M 4s 1948.....	3.90	3.90	3.95	4.00	4.03	4.03	4.02	4.02	4.00	4.01	4.07	4.06	4.01
115	Kansas City So Ry 1st M 3s 1950.....	4.60	4.61	4.69	4.75	4.80	4.80	4.73	4.73	4.77	4.78	4.89	4.86	4.85
116	L & N (Atl Knox & Cin Div) 4s 1955.....	4.43	4.40	4.45	4.58	4.61	4.62	4.67	4.58	4.63	4.67	4.70	4.66	4.60
117	Illinois Central RR ref M 4s 1955.....	4.24	4.22	4.31	4.39	4.50	4.50	4.58	4.52	4.43	4.50	4.58	4.57	4.45
118	Chic Burl & Quincy gen M 4s 1958.....	4.22	4.23	4.20	4.36	4.38	4.37	4.42	4.36	4.33	4.36	4.47	4.50	4.38
119	Southern Ry 1st cons M 5s 1994.....	4.68	4.71	4.76	4.78	4.81	4.88	4.90	4.86	4.81	4.83	4.85	4.87	4.82
120	Un Pac RR 1st lien & ref M 4s 2008.....	4.20	4.25	4.32	4.34	4.40	4.45	4.36	4.33	4.32	4.34	4.39	4.45	4.34
121	Atl Coast Line (L & N coll) 4s 1952.....	4.45	4.51	4.54	4.59	4.66	4.72	4.67	4.65	4.59	4.64	4.67	4.75	4.49
122	Nor' & West (P C & C) Joint 4s 1944.....	4.52	4.56	4.74	4.72	4.78	5.01	5.01	4.92	4.84	4.80	4.79	4.75	4.66
123	Grt Nor Ry 1st & ref M 4½s 1961.....	4.24	4.25	4.27	4.33	4.36	4.35	4.36	4.35	4.37	4.34	4.33	4.32	4.23

RAILROAD BOND YIELDS

A85

YIELDS OF RAILROAD BONDS  
JAN. 1914—JAN. 1915

Ref. No.	Name of Bond	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
70	West Shore RR 1st M 4s 2361.	4.34	4.26	4.30	4.27	4.29	4.28	4.30					4.49	4.41
76	Illinois Central RR coll 4s 1952.	4.55	4.40	4.52	4.53	4.54	4.54	4.64					4.86	4.77
78	Wabash RR Co 1st M 5s 1939.	4.80	4.69	4.74	4.74	4.75	4.75	4.80					5.15	5.11
81	N Y Chic & St Louis 1st M 4s 1937.	4.34	4.23	4.26	4.31	4.35	4.36	4.40					4.49	4.50
82	Ches & Ohio Ry 1st cons 5s 1939.	4.61	4.49	4.58	4.53	4.54	4.52	4.55					4.85	4.76
83	III Central (L N O & T) col 4s 1953.	4.52	4.49	4.55	4.61	4.67	4.58	4.67					4.80	4.80
86	E Tenn V & C Ry cons 1st M 5s 1956.	4.66	4.60	4.59	4.57	4.59	4.56	4.58					4.82	4.80
87	Chic Milw & St Paul gen M 4s 1980.	4.29	4.18	4.25	4.24	4.24	4.19	4.19					4.43	4.48
88	Lake Sh & Mich So 1st M 3½s 1997.	4.09	4.17	4.14	4.10	4.06	4.04	4.15					4.26	4.22
90	Baltimore & Ohio RR 1st M 4s 1948.	4.40	4.27	4.34	4.32	4.34	4.35	4.40					4.68	4.56
91	Union Pac RR 1st M RR & Ig 4s 1947.	4.19	4.16	4.16	4.17	4.17	4.15	4.13					4.29	4.23
92	Chicago & Nor West gen M 3½s 1987.	4.31	4.23	4.26	4.29	4.27	4.25	4.30					4.49	4.43
93	Chi Rock Is & Pac Ry gen M 4s 1988.	4.68	4.60	4.59	4.60	4.61	4.54	4.75					4.94	4.86
94	Atch Top & Santa Fe gen M 4s 1995.	4.24	4.20	4.20	4.18	4.18	4.19	4.28					4.39	4.28
95	N Y Cent & Hudson River M 3½s 1997.	4.24	4.24	4.29	4.26	4.24	4.24	4.34					4.45	4.39
97	Lehigh Valley (N Y) 1st M 4½s 1940.	4.46	4.42	4.41	4.43	4.42	4.42	4.42					4.56	4.51
98	Louisville & Nash unified 4s 1940.	4.38	4.33	4.35	4.30	4.31	4.28	4.35					4.57	4.47
99	Oregon RR & Nav Co cons M 4s 1946.	4.44	4.37	4.45	4.41	4.39	4.41	4.42					4.57	4.56
100	Chi Bur & Q (III Div) M 3½s 1949.	4.43	4.35	4.41	4.34	4.29	4.29	4.39					4.64	4.55
101	Central Pacific 1st ref M 4s 1949.	4.41	4.35	4.40	4.35	4.35	4.33	4.47					4.83	4.70
102	Nor Pac Ry prior lien lg M 4s 1997.	4.29	4.23	4.24	4.22	4.23	4.23	4.30					4.53	4.43
103	Norf & West Ry 1st come M 4s 1996.	4.22	4.23	4.25	4.21	4.23	4.20	4.21					4.34	4.31
104	Central RR of N J gen M 5s 1987.	4.32	4.26	4.26	4.23	4.23	4.23	4.25					4.42	4.37
105	Hocking Valley 1st cons M 4½s 1999.	4.55	4.49	4.50	4.51	4.53	4.49	4.51					4.79	4.78
106	N & W Ry Div 1st & gen M 4s 1944.	4.63	4.54	4.58	4.59	4.60	4.58	4.56					4.83	4.76
107	Ore Sh Line RR cons 1st M 5s 1946.	4.60	4.53	4.54	4.55	4.53	4.56	4.58					4.82	4.75
108	Southern Pac 1st ref M of 4s 1955.	4.48	4.39	4.40	4.41	4.40	4.40	4.51					4.87	4.75
109	A T & S Fe Ry adj M 4s stamped 1995.	4.65	4.56	4.61	4.58	4.60	4.58	4.63					4.88	4.76
110	Northern Pac Ry gen lien 3s 2047.	4.56	4.45	4.43	4.46	4.47	4.43	4.51					4.78	4.73
111	Atl Coast Line 1st cons M 4s 1952.	4.39	4.34	4.35	4.31	4.30	4.34	4.39					4.79	4.57
112	Del & Hudson Co 1st & ref M 4s 1943.	4.34	4.22	4.26	4.26	4.20	4.16	4.23					4.57	4.37
113	Central of Georgia cons M 5s 1945.	4.81	4.74	4.75	4.77	4.76	4.72	4.74					4.98	4.89
114	Pennsylvania RR cons M 4s 1948.	4.01	3.98	3.91	3.93	3.90	3.96	4.00					4.12	4.12
115	Kansas City So Ry 1st M 3s 1950.	4.85	4.76	4.78	4.79	4.77	4.81	4.79					4.74	4.94
116	L & N (Atl Knox & Cin Div) 4s 1955.	4.60	4.54	4.52	4.52	4.51	4.51	4.51					4.85	4.74
117	Illinois Central RR ref M 4s 1955.	4.45	4.34	4.32	4.35	4.40	4.40	4.45					4.79	4.76
118	Chic Burl & Quincy gen M 4s 1958.	4.38	4.33	4.31	4.35	4.35	4.34	4.39					4.56	4.49
119	Southern Ry 1st cons M 5s 1994.	4.82	4.74	4.73	4.75	4.75	4.76	4.82					5.07	5.01
120	Un Pac RR 1st lien & ref M 4s 2008.	4.34	4.27	4.27	4.27	4.26	4.23	4.25					4.52	4.48
121	Atl Coast Line (L & N coll) 4s 1952.	4.49	4.34	4.38	4.50	4.53	4.50	4.56					4.85	4.80
122	Norf & West (P C & C) Joint 4s 1941.	4.66	4.68	4.70	4.78	4.82	4.74	4.73					4.81	4.67
123	Grt Norr Ry 1st & ref M 4½s 1961.	4.23	4.22	4.24	4.24	4.23	4.22	4.21					4.27	4.24
124	Canada So 1st & ref cons 5s 1962.	4.74	4.66	4.67	4.66	4.65	4.65	4.67					4.89	4.88

**YIELDS OF RAILROAD BONDS**  
JAN. 1915—JAN. 1916

Ref. No.	Name of Bond	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
70	West Shore RR 1st M 4s 2361.....	4.41	4.41	4.40	4.34	4.44	4.45	4.47	4.53	4.52	4.41	4.38	4.36	4.34
76	Illinois Central RR coll 4s 1952.....	4.77	4.81	4.87	4.82	4.83	4.87	5.08	5.13	5.04	4.94	4.84	4.63	4.65
78	Wabash RR Co 1st M 5s 1939.....	5.11	5.03	5.11	4.96	4.89	4.94	4.95	4.95	4.94	4.86	4.74	4.76	4.71
81	N Y Chic & St Louis 1st M 4s 1937.....	4.50	4.46	4.53	4.50	4.58	4.58	4.73	4.82	4.81	4.63	4.50	4.45	4.43
82	Ches & Ohio Ry 1st cons 5s 1939.....	4.70	4.74	4.75	4.75	4.70	4.69	4.80	4.83	4.84	4.73	4.62	4.60	4.59
83	Ill Central (L N O & T) col 4s 1953.....	4.80	4.80	5.01	4.96	5.01	4.90	5.18	5.18	5.19	4.99	4.83	4.81	4.80
86	E Tenn V & G Ry cons 1st M 5s 1956.....	4.80	4.76	4.79	4.76	4.78	4.80	4.85	4.89	4.89	4.81	4.72	4.73	4.70
87	Chic Milw & St Paul gen M 4s 1989.....	4.48	4.39	4.46	4.43	4.43	4.49	4.63	4.69	4.68	4.60	4.41	4.34	4.33
88	Lake Sh & Mich So 1st M 3½s 1997.....	4.22	4.24	4.27	4.28	4.24	4.27	4.29	4.30	4.30	4.29	4.15	4.15	4.13
90	Baltimore & Ohio RR 1st M 4s 1948.....	4.56	4.65	4.69	4.60	4.65	4.73	4.85	4.84	4.83	4.72	4.55	4.51	4.46
91	Union Pac RR 1st M RR & lg 4s 1947.....	4.23	4.26	4.30	4.24	4.24	4.26	4.35	4.39	4.34	4.30	4.18	4.15	4.14
92	Chicago & Nor West gen M 3½s 1987.....	4.43	4.44	4.39	4.38	4.37	4.42	4.44	4.40	4.47	4.45	4.31	4.26	4.25
93	Chi Rock Is & Pac Ry gen M 4s 1988.....	4.80	4.83	4.87	4.83	4.87	4.87	4.92	5.02	5.04	4.92	4.76	4.75	4.76
94	Atch Top & Santa Fe gen M 4s 1995.....	4.28	4.32	4.35	4.26	4.30	4.37	4.44	4.41	4.41	4.34	4.26	4.27	4.24
95	N Y Cent & Hudson River M 3½s 1997.....	4.39	4.41	4.42	4.39	4.41	4.42	4.54	4.56	4.55	4.46	4.30	4.26	4.25
98	Louisville & Nash unified 4s 1940.....	4.47	4.48	4.53	4.41	4.47	4.51	4.66	4.59	4.66	4.54	4.41	4.37	4.33
99	Oregon RR & Nav Co cons M 4s 1946.....	4.56	4.54	4.61	4.56	4.62	4.69	4.72	4.71	4.75	4.61	4.46	4.48	4.48
100	Chi Bur & Q (Ill Div) M 3½s 1949.....	4.55	4.51	4.46	4.42	4.45	4.46	4.46	4.52	4.50	4.43	4.32	4.30	4.27
101	Central Pacific 1st ref M 4s 1949.....	4.70	4.76	4.76	4.67	4.71	4.77	4.84	4.94	4.90	4.79	4.61	4.56	4.55
102	Nor Pac Ry prior lien lg M 4s 1997.....	4.43	4.45	4.42	4.35	4.39	4.44	4.46	4.50	4.48	4.40	4.33	4.34	4.31
103	Norf & West Ry 1st cons M 4s 1996.....	4.31	4.34	4.36	4.33	4.35	4.42	4.55	4.58	4.48	4.37	4.31	4.29	4.28
104	Central RR of N J gen M 5s 1987.....	4.37	4.33	4.34	4.32	4.34	4.38	4.42	4.43	4.45	4.40	4.34	4.25	4.24
105	Hocking Valley 1st cons M 4½s 1999.....	4.78	4.85	4.94	4.79	4.81	4.87	4.87	5.02	5.08	5.03	4.80	4.84	4.82
106	N & W Ry Div 1st & gen M 4s 1944.....	4.76	4.73	4.75	4.74	4.78	4.79	4.86	4.90	4.93	4.72	4.59	4.62	4.61
107	Ore Sh Line RR cons 1st M 5s 1946.....	4.75	4.75	4.77	4.77	4.71	4.71	4.76	4.81	4.86	4.89	4.68	4.63	4.62
108	Southern Pac 1st ref M 4s 1955.....	4.75	4.81	4.86	4.73	4.72	4.81	4.83	4.88	4.88	4.78	4.59	4.53	4.52
109	T & S Fe Ry adj M 4s stamped 1995.....	4.76	4.78	4.80	4.71	4.78	4.83	4.90	4.89	4.93	4.78	4.64	4.60	4.58
110	Northern Pac Ry gen lien 3s 2047.....	4.73	4.77	4.76	4.67	4.67	4.75	4.82	4.82	4.82	4.72	4.60	4.59	4.56
111	Atl Coast Line 1st cons M 4s 1952.....	4.57	4.45	4.51	4.49	4.49	4.52	4.59	4.73	4.84	4.60	4.39	4.40	4.35
112	Del & Hudson Co 1st & ref M 4s 1943.....	4.37	4.28	4.35	4.37	4.35	4.43	4.54	4.55	4.51	4.35	4.23	4.24	4.19
113	Central of Georgia cons M 5s 1945.....	4.89	4.91	4.91	4.92	4.97	5.04	5.04	5.09	5.20	5.10	4.94	4.94	4.94
114	Pennsylvania RR cons M 4s 1948.....	4.12	4.12	4.11	4.13	4.12	4.13	4.09	4.17	4.17	4.08	4.02	4.03	4.02
115	Kansas City So Ry 1st M 3s 1950.....	4.94	4.90	4.93	4.93	4.93	4.95	4.98	4.99	5.02	4.92	4.72	4.77	4.77
116	L & N (Atl Knox & Cin Div) 4s 1955.....	4.74	4.63	4.66	4.72	4.71	4.72	4.85	4.89	4.92	4.88	4.65	4.70	4.62
117	Illinois Central RR ref M 4s 1955.....	4.76	4.74	4.78	4.70	4.70	4.73	4.75	4.80	4.95	4.80	4.56	4.54	4.57
118	Chic Burl & Quincy gen M 4s 1958.....	4.49	4.49	4.49	4.45	4.47	4.46	4.50	4.55	4.58	4.46	4.33	4.35	4.36
119	Southern Ry 1st cons M 5s 1994.....	5.01	5.03	5.06	5.03	5.01	5.03	5.04	5.07	5.15	5.02	4.88	4.85	4.85
120	Un Pac RR 1st lien & ref M 4s 2008.....	4.48	4.46	4.49	4.42	4.41	4.54	4.66	4.67	4.71	4.63	4.47	4.44	4.43
121	Atl Coast Line (L & N coll) 4s 1952.....	4.80	4.79	4.83	4.84	4.83	4.91	5.06	5.15	5.12	4.88	4.69	4.77	4.76
122	Norf & West (P C & C) Joint 4s 1941.....	4.67	4.73	4.77	4.77	4.75	4.80	4.85	4.88	4.91	4.86	4.66	4.69	4.68
123	Grt Nor Ry 1st & ref M 4¾s 1961.....	4.24	4.28	4.42	4.32	4.28	4.28	4.44	4.46	4.52	4.37	4.26	4.28	4.26
124	Canada So 1st & ref cons 5s 1962.....	4.88	4.83	4.86	4.83	4.83	4.83	4.87	4.93	4.96	4.90	4.78	4.77	4.76
125	Morris & Essex 1st ref M 3½s 2000.....	4.17	4.16	4.16	4.12	4.12	4.11	4.13	4.13	4.14	4.14	4.09	4.06	4.05

RAILROAD BOND YIELDS

YIELDS OF RAILROAD BONDS  
JAN. 1916—JAN. 1917

Ref. No.	Name of Bond	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
70	West Shore RR 1st M 4s 2361.....	4.34	4.36	4.34	4.37	4.40	4.40	4.42	4.48	4.43	4.36	4.33	4.35	4.30
76	Illinoi Central RR coll 4s 1952.....	4.65	4.53	4.55	4.57	4.61	4.64	4.66	4.66	4.66	4.56	4.55	4.56	4.52
78	Wabash RR Co 1st M 5s 1939.....	4.71	4.67	4.68	4.72	4.72	4.69	4.73	4.75	4.73	4.65	4.60	4.60	4.56
82	Che & Ohio Ry 1st cons 5s 1939.....	4.59	4.54	4.60	4.59	4.56	4.60	4.61	4.59	4.59	4.54	4.50	4.59	4.49
83	Ill Central (L N O & T) col 4s 1953.....	4.80	4.77	4.81	4.81	4.81	4.81	4.83	4.86	4.85	4.80	4.71	4.75	4.67
86	E Tenn V & G Ry cons 1st M 5s 1956.....	4.70	4.69	4.68	4.67	4.69	4.67	4.68	4.69	4.69	4.63	4.61	4.59	4.56
87	Chic Milv & St Paul gen M 4s 1989.....	4.33	4.32	4.36	4.36	4.35	4.40	4.44	4.47	4.42	4.36	4.36	4.32	4.25
88	Lake Sh & Mich So 1st M 3½s 1997.....	4.13	4.13	4.14	4.16	4.17	4.18	4.16	4.16	4.21	4.16	4.11	4.07	4.02
90	Baltimore & Ohio RR 1st M 4s 1948.....	4.46	4.47	4.50	4.51	4.51	4.54	4.55	4.58	4.57	4.50	4.46	4.49	4.40
91	Union Pac RR 1st M RR & Ig 4s 1947.....	4.14	4.14	4.15	4.19	4.19	4.16	4.18	4.19	4.21	4.13	4.05	4.08	4.04
92	Chicago & Nor West gen M 3½s 1987.....	4.25	4.30	4.33	4.38	4.36	4.35	4.35	4.36	4.38	4.31	4.27	4.23	4.14
93	Chic Rock Is & Pac Ry gen M 4s 1988.....	4.76	4.69	4.69	4.72	4.73	4.74	4.76	4.84	4.86	4.73	4.61	4.63	4.55
94	Atch Top & Santa Fe gen M 4s 1995.....	4.24	4.23	4.25	4.30	4.30	4.31	4.32	4.33	4.33	4.27	4.24	4.24	4.19
95	N Y Cent & Hudson River M 3½s 1997.....	4.25	4.24	4.26	4.28	4.28	4.27	4.27	4.28	4.27	4.20	4.14	4.12	4.08
98	Louisville & Nash unified 4s 1940.....	4.33	4.30	4.35	4.40	4.39	4.36	4.38	4.42	4.44	4.32	4.31	4.25	4.20
99	Oregon RR & Nav Co cons M 4s 1946.....	4.48	4.54	4.49	4.49	4.48	4.46	4.46	4.50	4.47	4.48	4.43	4.40	4.36
100	Chi Bur & Q (III Div) M 3½s 1949.....	4.27	4.28	4.33	4.33	4.35	4.35	4.41	4.42	4.41	4.41	4.30	4.28	4.18
101	Central Pacific 1st ref M 4s 1949.....	4.55	4.55	4.56	4.62	4.64	4.65	4.68	4.73	4.65	4.59	4.56	4.53	4.41
102	Nor Pac Ry prior lien lg M 4s 1997.....	4.31	4.29	4.31	4.35	4.36	4.37	4.38	4.41	4.38	4.33	4.28	4.27	4.21
103	Norf & West Ry 1st cons M 4s 1996.....	4.28	4.29	4.29	4.31	4.31	4.31	4.33	4.33	4.28	4.23	4.21	4.20	4.17
104	Central RR of N J gen M 5s 1987.....	4.24	4.22	4.21	4.23	4.23	4.22	4.26	4.27	4.27	4.25	4.22	4.22	4.13
105	Hocking Valley 1st cons M 4½s 1999.....	4.82	4.74	4.73	4.74	4.76	4.86	4.93	4.97	4.94	4.92	4.87	4.89	4.84
106	N & W Ry Div 1st l & gen M 4s 1944.....	4.61	4.59	4.60	4.62	4.65	4.70	4.69	4.72	4.59	4.61	4.54	4.52	4.46
107	Ore St Line RR cons 1st M 5s 1940.....	4.62	4.58	4.57	4.58	4.63	4.62	4.62	4.57	4.62	4.60	4.55	4.55	4.50
108	Southern Pac 1st ref M 4s 1955.....	4.52	4.52	4.53	4.55	4.54	4.55	4.55	4.55	4.55	4.49	4.42	4.41	4.33
109	A T & S Fe Ry adj M 4s stamped 1995.....	4.58	4.57	4.60	4.66	4.70	4.72	4.75	4.80	4.77	4.69	4.66	4.69	4.60
110	Northern Pac Ry gen lien 3s 2047.....	4.56	4.54	4.56	4.57	4.56	4.59	4.57	4.59	4.58	4.54	4.51	4.52	4.43
111	Atl Coast Line 1st cons M 4s 1952.....	4.35	4.40	4.42	4.41	4.46	4.47	4.43	4.43	4.45	4.39	4.35	4.35	4.26
112	Del & Hudson Co 1st & ref M 4s 1943.....	4.19	4.19	4.18	4.15	4.19	4.15	4.07	4.12	4.08	4.10	4.06	4.10	4.05
113	Central of Georgia cons M 5s 1945.....	4.94	4.90	4.95	4.96	4.95	4.95	4.98	4.98	4.96	4.89	4.85	4.88	4.84
114	Pennsylvania RR cons M 4s 1948.....	4.02	4.05	4.06	4.03	4.03	4.02	4.03	4.07	4.08	4.01	4.03	4.02	3.99
115	Kansas City So Ry 1st M 3s 1950.....	4.77	4.75	4.82	4.85	4.88	4.86	4.94	5.02	4.94	4.87	4.78	4.85	4.77
116	L & N (Atl Knox & Cin Div) 4s 1955.....	4.62	4.60	4.66	4.71	4.77	4.75	4.77	4.77	4.76	4.65	4.60	4.65	4.55
117	Illinois Central RR ref M 4s 1955.....	4.57	4.58	4.56	4.58	4.60	4.67	4.62	4.63	4.62	4.49	4.44	4.45	4.34
118	Chic Burl & Quincy gen M 4s 1958.....	4.36	4.32	4.36	4.36	4.37	4.38	4.40	4.34	4.36	4.32	4.33	4.23	
119	Southern Ry 1st cons M 5s 1994.....	4.85	4.87	4.87	4.94	4.93	4.93	4.94	4.95	4.95	4.91	4.91	4.92	4.89
120	Un Pac RR 1st lien & ref M 4s 2008.....	4.43	4.41	4.43	4.43	4.45	4.47	4.46	4.46	4.43	4.38	4.35	4.38	4.28
121	Atl Coast Line (L & N coll) 4s 1952.....	4.76	4.77	4.79	4.80	4.82	4.84	4.84	4.95	4.96	4.79	4.74	4.75	4.68
122	Norf & West (P C & C) Joint 4s 1941.....	4.68	4.69	4.69	4.70	4.71	4.73	4.79	4.80	4.75	4.72	4.66	4.64	4.50
123	Grt Nor Ry 1st & ref M 4½s 1961.....	4.26	4.26	4.27	4.27	4.28	4.27	4.26	4.26	4.28	4.24	4.23	4.23	4.18
124	Canada So 1st & ref cons 5s 1962.....	4.76	4.76	4.78	4.79	4.81	4.84	4.86	4.88	4.87	4.78	4.83	4.82	4.76
125	Morris & Essex 1st ref M 3½s 2000.....	4.05	4.00	4.00	4.01	4.02	4.03	4.04	4.08	4.06	4.05	4.05	4.04	4.00
126	Pennsylvania RR cons M 4½s 1960.....	4.22	4.20	4.22	4.24	4.25	4.25	4.26	4.27	4.25	4.21	4.20	4.18	4.15

**YIELDS OF RAILROAD BONDS**  
JAN. 1917—JAN. 1918

Ref. No.	Name of Bond	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
70	West Shore RR 1st M 4s 2361.....	4.30	4.40	4.46	4.51	4.58	4.75	4.85	4.88	4.93	4.96	4.98	5.06	5.10
76	Illinois Central RR coll 4s 1952.....	4.52	4.56	4.64	4.76	4.85	5.03	5.21	5.39	5.62	5.39	5.56	5.67	5.60
78	Wabash RR Co 1st M 5s 1939.....	4.56	4.61	4.65	4.80	4.94	4.96	5.00	4.98	5.02	5.15	5.37	5.41	5.46
82	Chee & Ohio Ry 1st cons 5s 1939.....	4.49	4.48	4.59	4.65	4.80	4.86	4.90	4.94	4.98	5.00	5.06	5.28	5.18
83	Ill Central (L N O & T) col 4s 1953.....	4.67	4.74	4.79	4.99	5.06	5.06	5.11	5.37	5.59	5.63	5.72	5.78	5.69
86	E Tenn V & G Ry cons 1st M 5s 1936.....	4.56	4.59	4.62	4.63	5.01	4.99	5.00	5.08	5.21	5.08	5.40	5.47	5.31
88	Lake Sh & Mich So 1st M 3½s 1997.....	4.02	4.14	4.13	4.24	4.41	4.44	4.44	4.50	4.61	4.70	4.71	4.79	4.74
91	Union Pac RR 1st M RR & Ig 4s 1947.....	4.04	4.15	4.15	4.21	4.40	4.44	4.51	4.57	4.64	4.80	4.71	4.87	4.76
92	Chicago & Nor West gen M 3½s 1987.....	4.14	4.22	4.28	4.37	4.47	4.54	4.73	4.73	4.63	4.66	4.96	4.97	4.94
93	Chi Rock Is & Pac Ry gen M 4s 1988.....	4.55	4.53	4.58	4.77	4.90	5.01	4.99	5.00	5.09	5.19	5.40	5.41	5.36
94	Atch Top & Santa Fe gen M 4s 1995.....	4.19	4.23	4.26	4.35	4.40	4.48	4.55	4.59	4.68	4.68	4.85	4.90	4.78
95	N Y Cent & Hudson River M 3½s 1997.....	4.08	4.25	4.21	4.35	4.41	4.44	4.48	4.55	4.68	4.72	4.90	5.05	4.86
98	Louisville & Nash unified 4s 1940.....	4.20	4.33	4.37	4.45	4.59	4.59	4.64	4.78	4.96	4.90	5.02	5.11	5.00
99	Oregon RR & Nav Co cons M 4s 1946.....	4.36	4.39	4.54	4.55	4.77	4.80	4.87	4.90	4.90	4.92	5.38	5.45	5.32
100	Chi Bur & Q (Ill Div) M 3½s 1949.....	4.18	4.28	4.37	4.48	4.64	4.64	4.71	4.74	4.92	4.97	5.00	5.18	5.22
101	Central Pacific 1st ref M 4s 1949.....	4.41	4.56	4.61	4.78	4.82	4.96	5.06	5.08	5.23	5.27	5.33	5.43	5.31
102	Nor Pac Ry prior lien Ig M 4s 1997.....	4.21	4.25	4.30	4.41	4.49	4.60	4.63	4.68	4.77	4.81	4.93	4.89	4.81
103	Norf & West Ry 1st cons M 4s 1996.....	4.17	4.22	4.25	4.31	4.39	4.48	4.56	4.58	4.69	4.63	4.68	4.89	4.78
104	Central RR of N J gen M 5s 1987.....	4.13	4.21	4.23	4.30	4.40	4.57	4.54	4.55	4.55	4.59	4.69	4.90	4.92
105	Hocking Valley 1st cons M 4½s 1999.....	4.84	4.95	4.96	5.10	5.37	5.48	5.57	5.50	5.49	5.57	5.80	5.98	5.90
106	N & W Ry Div 1st I & gen M 4s 1944.....	4.46	4.48	4.56	4.69	4.86	4.98	4.95	5.13	5.37	5.55	5.33	5.71	5.95
107	Ore Sh Line RR cons 1st M 5s 1946.....	4.50	4.59	4.54	4.57	4.75	4.81	4.81	4.81	4.81	5.00	5.26	5.27	5.27
108	Southern Pac 1st ref M 4s 1955.....	4.33	4.42	4.48	4.61	4.76	4.82	4.81	4.80	4.94	4.95	5.16	5.36	5.17
109	A T & S Fe Ry adj M 4s stamped 1995.....	4.60	4.68	4.73	4.85	4.93	4.90	4.90	4.92	5.04	5.10	5.47	5.44	5.37
110	Northern Pac Ry gen lien 3s 2047.....	4.43	4.53	4.53	4.66	4.76	4.84	4.82	4.84	4.95	4.97	5.08	5.19	4.99
111	Atl Coast Line 1st cons M 4s 1952.....	4.26	4.38	4.45	4.54	4.68	4.71	4.69	4.71	4.84	5.11	5.12	5.17	5.02
112	Del & Hudson Co 1st & ref M 4s 1943.....	4.05	4.17	4.20	4.29	4.74	4.53	4.60	4.63	4.96	4.98	4.94	4.92	5.02
113	Central of Georgia cons M 5s 1945.....	4.84	4.93	5.00	5.07	5.19	5.19	5.15	5.21	5.20	5.50	5.87	5.84	5.78
114	Pennsylvania RR cons M 4s 1948.....	3.99	3.98	4.02	4.04	4.22	4.31	4.44	4.47	4.49	4.47	4.68	4.68	4.68
115	Kansas City So Ry 1st M 3½s 1950.....	4.77	4.80	4.91	5.08	5.29	5.65	5.63	5.60	5.70	5.60	5.70	5.79	5.86
116	L & N (Atl Knox & Cin Div) 4s 1955.....	4.55	4.63	4.73	4.94	5.04	4.99	5.04	5.08	5.10	5.15	5.41	5.61	5.37
117	Illinois Central RR ref 4s 1955.....	4.34	4.39	4.48	4.73	4.79	4.77	4.84	4.89	5.04	5.22	5.25	5.25	5.25
118	Chic Burl & Quincy gen M 4s 1958.....	4.23	4.28	4.32	4.48	4.54	4.52	4.53	4.68	4.82	4.84	4.97	5.05	5.03
119	Southern Ry 1st cons M 5s 1994.....	4.89	4.93	4.95	5.03	5.11	5.08	5.12	5.13	5.22	5.38	5.39	5.47	5.46
120	Un Pac RR 1st lien & ref M 4s 2008.....	4.28	4.31	4.34	4.43	4.50	4.62	4.68	4.70	4.84	4.94	5.09	5.17	5.18
121	Atl Coast Line (L & N coll) 4s 1952.....	4.68	4.88	4.94	5.04	5.11	5.15	5.40	5.29	5.38	5.39	5.65	5.90	6.02
122	Nor & West (P C & C) Joint 4s 1942.....	4.50	4.64	4.73	4.84	4.94	4.96	4.93	5.00	5.15	5.10	5.13	5.18	5.17
123	Crt Nor Ry 1st & ref M 4½s 1961.....	4.18	4.24	4.26	4.42	4.57	4.54	4.48	4.44	4.48	4.73	4.85	4.96	4.98
124	Canada So 1st & ref cons 5s 1962.....	4.76	4.78	4.82	4.97	5.00	5.01	5.06	5.01	5.07	5.13	5.44	5.70	5.83
125	Morris & Essex 1st ref M 3½s 2000.....	4.00	4.04	4.07	4.10	4.18	4.20	4.39	4.39	4.44	4.54	4.55	4.51	4.81
126	Pennsylvania RR cons M 4½s 1960.....	4.15	4.21	4.25	4.27	4.33	4.44	4.44	4.43	4.48	4.49	4.63	4.64	4.61

**YIELDS OF RAILROAD BONDS**  
JAN. 1918—JAN. 1919

Ref. No.	Name of Bond	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
70	West Shore RR 1st M 4s 2361	5.10	5.17	5.13	5.21	5.15	5.33	5.43	5.40	5.50	5.26	4.92	4.88	4.91
76	Illinois Central RR coll 4s 1952	5.60	5.40	5.40	5.64	5.49	5.47	5.42	5.46	5.54	5.44	5.18	5.28	5.38
78	Wabash RR Co 1st M 5s 1939	5.46	5.43	5.51	5.57	5.49	5.46	5.65	5.71	5.76	5.53	5.28	5.31	5.20
82	Chez & Ohio Ry 1st cons 5s 1939	5.18	5.12	5.26	5.34	5.27	5.25	5.33	5.41	5.38	5.31	5.10	4.99	5.09
83	Ill Central (L N O & T) col 4s 1953	5.69	5.59	5.57	5.65	5.62	5.66	5.83	5.71	5.82	5.65	5.30	5.30	5.54
86	E Tenn V & G Ry cons 1st M 5s 1956	5.31	5.18	5.15	5.34	5.34	5.52	5.49	5.50	5.50	5.51	5.34	5.30	5.30
88	Lake Sh & Mich So 1st M 3½s 1997	4.74	4.84	4.82	4.92	4.84	4.84	4.84	4.95	4.96	4.94	4.84	4.65	4.84
91	Union Pac RR 1st M RR & Ig 1947	4.76	4.81	4.86	4.87	4.77	4.94	4.98	4.90	4.91	4.87	4.69	4.75	4.78
92	Chicago & Nor West gen M 3½s 1987	4.94	4.89	5.00	5.07	5.00	5.05	5.08	5.25	5.23	5.15	4.83	4.83	5.00
93	Chi Rock Is & Pac Ry gen M 4s 1988	5.36	5.23	5.37	5.39	5.35	5.44	5.45	5.36	5.54	5.40	4.97	5.03	5.22
94	Atch Top & Santa Fe gen 4 4s 1995	4.78	4.79	4.93	4.98	4.94	4.98	4.97	4.96	5.03	4.85	4.62	4.71	4.76
95	N Y Cent & Hudson River M 3½s 1997	4.86	4.90	4.93	5.01	5.00	5.04	4.99	5.02	5.06	4.95	4.68	4.81	4.91
98	Louisville & Nash unified 4s 1940	5.00	4.96	5.19	5.23	4.98	5.11	5.26	5.25	5.35	5.22	4.95	4.92	5.04
99	Oregon RR & Nav Co cons M 4s 1946	5.32	5.20	5.39	5.40	5.39	5.40	5.53	5.51	5.49	5.43	5.09	4.97	4.97
100	Chi Bur & Q (Ill Div) M 3½s 1949	5.22	5.16	5.19	5.22	5.13	5.24	5.36	5.33	5.33	5.25	4.92	4.86	5.09
101	Central Pacific 1st ref M 4s 1949	5.31	5.25	5.30	5.41	5.25	5.33	5.46	5.48	5.61	5.38	4.96	5.09	5.22
102	Nor Pac Ry prior lien Ig M 4s 1997	4.81	4.85	5.01	5.04	4.99	5.01	5.00	5.00	5.00	4.90	4.65	4.69	4.76
103	Norf & West Ry 1st cons M 4s 1996	4.78	4.78	4.89	4.87	4.85	5.01	4.95	5.01	5.04	4.88	4.58	4.63	4.79
104	Central RR of N J gen M 5s 1987	4.87	4.82	4.82	4.82	4.92	4.92	4.95	4.96	4.92	4.92	4.65	4.82	4.82
105	Hocking Valley 1st cons M 4½s 1999	5.90	5.89	5.90	5.96	5.96	5.96	5.90	6.00	5.98	5.86	5.37	5.36	5.57
106	N & W Ry Div 1st 1 & gen M 4s 1944	5.95	5.83	5.77	5.80	5.64	5.60	6.11	5.78	5.70	5.59	5.06	5.04	5.29
107	Or Sh Line RR cons 1st M 5s 1946	5.27	5.24	5.37	5.33	5.23	5.27	5.29	5.32	5.39	5.28	5.21	5.05	5.11
108	Southern Pac 1st ref M 4s 1955	5.17	5.10	5.32	5.42	5.28	5.33	5.38	5.44	5.49	5.30	4.96	4.94	5.04
109	A T & S Fe Ry adj M 4s stamped 1995	5.37	5.21	5.50	5.45	5.32	5.41	5.40	5.37	5.66	5.34	5.01	5.03	5.18
110	Northern City Ry gen lien 3s 2047	4.99	5.02	5.19	5.28	5.15	5.13	5.03	5.14	5.25	5.09	4.88	4.93	4.97
111	Atl Coast Line 1st cons M 4s 1952	5.02	4.98	5.05	5.08	5.10	5.27	5.39	5.32	5.31	5.14	4.81	4.95	4.95
112	Del & Hudson Co 1st & ref M 4s 1943	5.02	5.22	5.13	5.36	5.23	5.25	5.31	5.46	5.50	5.30	4.90	5.01	5.07
113	Central of Georgia cons M 5s 1945	5.78	5.74	5.81	5.88	5.81	5.95	6.06	5.89	6.02	5.77	5.45	5.44	5.40
114	Pennsylvania RR cons M 4s 1948	4.68	4.78	4.85	4.96	4.90	4.95	4.98	5.01	5.05	5.06	4.49	4.70	4.82
115	Kansas City So Ry 1st M 3½s 1950	5.86	5.67	5.81	5.80	5.62	5.56	5.80	5.70	5.84	5.63	5.44	5.42	5.54
116	L & N (Atl Knox & Cin Div) 4s 1955	5.37	5.41	5.41	5.69	5.42	5.23	5.38	5.38	5.54	5.53	5.16	5.06	5.37
117	Illinois Central RR ref M 4s 1955	5.25	5.04	5.15	5.26	5.28	5.30	5.38	5.40	5.40	5.25	4.93	4.92	4.99
118	Chic Burl & Quincy gen M 4s 1958	5.03	4.95	4.99	5.09	5.04	5.15	5.16	5.19	5.27	5.07	4.77	4.94	5.04
119	Southern Ry 1st cons M 5s 1994	5.46	5.41	5.46	5.43	5.41	5.59	5.59	5.61	5.70	5.46	5.16	5.22	5.24
120	Un Pac RR 1st lien & ref M 4s 2008	5.18	5.01	5.03	5.08	5.05	5.16	5.09	5.09	5.14	4.99	4.71	4.75	4.91
121	Atl Coast Line (L & N coll) 4s 1952	6.02	5.89	5.99	5.96	5.85	6.04	6.03	5.92	6.00	5.74	5.29	5.33	5.40
122	Norf & West (P C & C) Joint 4s 1941	5.17	5.09	5.25	5.41	5.45	5.56	5.63	5.73	5.87	5.92	5.24	5.09	5.11
123	Grt Nor Ry 1st & ref M 4½s 1961	4.98	4.89	4.92	4.98	4.84	4.98	4.99	4.97	5.02	4.98	4.76	4.76	4.97
124	Canada So 1st & ref cons 5s 1962	5.83	5.56	5.56	5.62	5.53	5.53	5.83	5.86	5.89	5.65	5.13	5.27	5.26
125	Morris & Essex 1st ref M 3½s 2000	4.81	4.71	4.69	4.67	4.60	4.66	4.68	4.68	4.73	4.63	4.36	4.43	4.56
126	Pennsylvania RR cons M 4½s 1960	4.61	4.62	4.67	4.67	4.67	4.73	4.77	4.79	4.85	4.80	4.60	4.66	4.74

**YIELDS OF RAILROAD BONDS**  
JAN. 1919—JAN. 1920

Ref. No.	Name of Bond	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
70	West Shore RR 1st M 4s 2361.....	4.91	5.05	5.25	5.32	5.14	5.04	5.14	5.48	5.52	5.29	5.54	5.50	5.51
76	Illinois Central RR coll 4s 1952.....	5.38	5.50	5.53	5.56	5.49	5.46	5.45	5.47	5.77	5.63	5.87	5.90	5.89
78	Wabash RR Co 1st M 5s 1939.....	5.20	5.23	5.39	5.49	5.36	5.33	5.47	5.82	5.85	5.60	5.80	5.91	5.86
82	Ches & Ohio Ry 1st cons 5s 1939.....	5.09	5.15	5.18	5.12	5.16	5.14	5.25	5.37	5.46	5.33	5.50	5.60	5.51
83	Ill Central (L N O & T) col 4s 1953.....	5.54	5.56	5.69	5.78	5.60	5.57	5.72	6.04	5.97	5.87	6.10	6.15	6.13
86	E Tenn V & G Ry cons 1st M 5s 1956.....	5.30	5.28	5.34	5.25	5.24	5.30	5.24	5.65	5.64	5.47	5.58	5.66	5.64
88	Lake Sh & Mich St 1st M 3½s 1997.....	4.84	4.85	4.88	4.89	4.88	4.77	4.87	4.98	5.10	4.91	5.01	5.10	5.07
91	Union Pac RR 1st M RR & Ig 4s 1947.....	4.78	4.88	4.92	4.89	4.89	4.93	5.00	5.05	5.09	4.97	5.05	5.11	5.14
92	Chicago & Nor West gen M 3½s 1987.....	5.00	5.04	4.94	5.04	5.02	5.03	5.07	5.32	5.19	5.11	5.20	5.25	5.34
93	Chi Rock Is & Pac Ry gen M 4s 1988.....	5.22	5.22	5.14	5.29	5.31	5.31	5.44	5.61	5.56	5.40	5.55	5.57	5.47
94	Atch Top & Santa Fe gen M 4s 1995.....	4.76	4.86	4.86	4.94	4.88	4.93	5.01	5.17	5.13	5.03	5.18	5.09	5.05
95	N Y Cent & Hudson River M 3½s 1997.....	4.91	4.90	4.90	4.98	4.94	4.95	4.98	5.04	5.11	4.98	5.12	5.23	5.22
98	Louisville & Nash unified 4s 1940.....	5.04	5.15	5.22	5.21	5.11	5.15	5.19	5.30	5.37	5.26	5.36	5.48	5.45
99	Oregon RR & Nav Co cons M 4s 1946.....	4.97	5.01	5.29	5.45	5.26	5.31	5.42	5.65	5.74	5.42	5.57	5.62	5.51
100	Chi Bur & Q (III Div) M 3½s 1949.....	5.09	5.12	5.25	5.21	5.06	5.10	5.18	5.39	5.25	5.14	5.21	5.22	5.26
101	Central Pacific 1st ref M 4s 1949.....	5.22	5.29	5.42	5.41	5.34	5.37	5.55	5.82	5.71	5.58	5.77	5.66	5.73
102	Nor Pac prior llen Ig M 4s 1997.....	4.76	4.78	4.84	4.90	4.87	4.93	5.04	5.19	5.24	5.12	5.27	5.18	5.22
103	Norf & West Ry 1st cons M 4s 1996.....	4.79	4.76	4.78	4.85	4.92	4.97	4.98	5.04	5.13	5.04	5.11	5.17	5.17
104	Central RR of N J gen M 5s 1987.....	4.82	4.87	4.87	4.87	4.89	4.87	4.89	4.95	4.96	4.93	4.95	4.95	4.99
105	Hocking Valley 1st cons M 4½s 1999.....	5.57	5.70	5.74	5.79	5.89	5.76	5.82	6.05	6.31	6.16	6.39	6.44	6.37
106	N & W Ry Div 1st & gen M 4s 1944.....	5.29	5.36	5.44	5.48	5.42	5.38	5.41	5.77	5.76	5.60	5.52	5.68	5.78
107	Ore Sh Line RR cons 1st M 5s 1946.....	5.11	5.09	5.22	5.20	5.16	5.13	5.30	5.34	5.49	5.41	5.45	5.55	5.53
108	Southern Pac 1st ref M 4s 1955.....	5.04	5.11	5.17	5.24	5.20	5.17	5.26	5.40	5.46	5.27	5.50	5.51	5.42
109	A T & S Fe Ry adj M 4s stamped 1995.....	5.18	5.31	5.33	5.35	5.36	5.32	5.44	5.54	5.63	5.48	5.63	5.78	5.69
110	Northern Pac Ry gen llen 3s 2047.....	4.97	5.06	5.11	5.17	5.08	5.08	5.16	5.33	5.32	5.26	5.46	5.53	5.53
111	Atl Coast Line 1st cons M 4s 1952.....	4.95	5.05	5.08	5.20	5.14	5.16	5.25	5.47	5.42	5.28	5.42	5.45	5.45
112	Del & Hudso Co 1st & ref M 4s 1943.....	5.07	5.13	5.16	5.16	5.12	5.18	5.16	5.35	5.53	5.29	5.39	5.61	5.67
113	Central of Georgia cons M 5s 1945.....	5.40	5.58	5.69	5.72	5.53	5.64	5.75	5.86	6.04	5.96	5.91	6.05	6.03
114	Pennsylvania RR cons M 4s 1948.....	4.82	4.75	4.66	4.86	4.87	4.90	4.82	5.00	5.10	4.90	5.04	5.04	5.01
115	Kansas City St Ry 1st M 3s 1950.....	5.54	5.38	5.72	5.77	5.75	5.75	5.76	6.37	6.42	5.97	6.14	6.31	6.10
116	L & N (Atl Knox & Cin Div) 4s 1955.....	5.37	5.49	5.39	5.32	5.35	5.40	5.51	5.72	5.84	5.44	5.78	5.75	5.81
117	Illinois Central RR ref M 4s 1955.....	4.09	5.05	5.19	5.29	5.17	5.18	5.27	5.33	5.43	5.20	5.35	5.55	5.68
118	Chic Bur & Quincy gen M 4s 1958.....	5.04	5.04	5.13	5.15	5.08	5.07	5.08	5.39	5.24	5.14	5.27	5.31	5.24
119	Southern Ry 1st cons M 5s 1994.....	5.24	5.28	5.33	5.37	5.33	5.31	5.43	5.54	5.65	5.65	5.79	5.84	5.84
120	Un Pac RR 1st llen & ref M 4s 2008.....	4.91	4.89	4.92	5.01	4.98	4.98	5.11	5.16	5.19	5.08	5.25	5.19	5.17
121	Atl Coast Line (L & N coll) 4s 1952.....	5.40	5.51	5.71	5.73	5.59	5.53	5.68	6.01	5.98	5.75	5.93	6.18	6.10
122	Norf & West (P C & C) Joint 4s 1941.....	5.11	5.12	5.16	5.21	5.21	5.22	5.28	5.28	5.28	5.27	5.31	5.57	5.67
123	Grt Nor Ry 1st & ref M 4½s 1961.....	4.97	5.05	5.04	5.07	5.03	5.01	5.07	5.18	5.17	5.12	5.28	5.31	5.14
124	Canada So 1st & ref cons 5s 1962.....	5.26	5.34	5.37	5.61	5.41	5.36	5.35	5.73	5.61	5.62	5.88	5.95	5.83
125	Morris & Essex 1st ref M 3½s 2000.....	4.56	4.64	4.72	4.81	4.79	4.84	4.83	4.93	4.94	4.86	4.90	4.96	4.98
126	Pennsylvania RR cons M 4½s 1960.....	4.74	4.74	4.76	4.85	4.83	4.76	4.76	4.76	4.90	4.95	4.97	5.00	4.99

RAILROAD BOND YIELDS

**YIELDS OF RAILROAD BONDS**  
JAN. 1920—JAN. 1921

Ref. No.	Name of Bond	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
70	West Shore RR 1st M 4s 2361.....	5.51	5.54	5.58	5.90	5.98	5.95	5.83	5.62	5.41	5.44	5.56	5.84	5.59
76	Illinois Central RR coll 4s 1952.....	5.89	6.18	6.14	6.43	6.85	6.85	6.57	6.28	6.09	5.87	5.93	6.13	5.93
78	Wabash RR Co 1st M 5s 1939.....	5.86	6.05	6.06	6.42	6.76	6.58	6.63	6.53	6.17	5.99	6.18	6.46	6.16
82	Chee & Ohio Ry 1st cons 5s 1939.....	5.51	5.88	5.87	6.10	6.38	6.27	6.08	6.05	5.81	5.68	5.61	5.90	5.70
83	Ill Central (L N O & T) col 4s 1953.....	6.15	6.37	6.35	6.81	6.96	6.99	6.71	6.44	6.20	5.90	6.21	6.40	6.09
86	E Tenn V & G Ry cons 1st M 5s 1956.....	5.64	5.94	5.81	5.97	6.24	6.24	6.38	6.30	6.04	5.75	5.72	5.97	5.87
88	Lake Sh & Mich So 1st M 3½s 1997.....	5.07	5.17	5.19	5.36	5.43	5.41	5.39	5.20	5.22	5.03	5.11	5.20	5.08
91	Union Pac RR 1st M RR & Ig 4s 1947.....	5.14	5.30	5.25	5.38	5.67	5.55	5.47	5.40	5.37	5.32	5.38	5.50	5.25
92	Chicago & Nor West gen M 3½s 1987.....	5.34	5.59	5.46	5.59	5.89	5.76	5.64	5.42	5.28	5.15	5.28	5.42	5.27
93	Chi Rock Is & Pac Ry gen M 4s 1988.....	5.47	5.64	5.58	5.92	6.05	5.89	6.03	5.80	5.59	5.44	5.58	5.84	5.63
94	Atch Top & Santa Fe gen M 4s 1995.....	5.05	5.27	5.23	5.51	5.62	5.57	5.55	5.35	5.29	5.21	5.25	5.40	5.20
95	N Y Cent & Hudson River M 3½s 1997.....	5.22	5.25	5.39	5.41	5.60	5.57	5.57	5.43	5.23	5.09	5.11	5.30	5.15
98	Louisville & Nash unified 4s 1940.....	5.45	5.66	5.55	5.84	6.23	6.06	5.98	5.82	5.74	5.44	5.60	5.76	5.48
99	Oregon RR & Nav Co cons M 4s 1946.....	5.51	5.77	5.84	6.21	6.57	6.28	6.65	6.09	5.78	5.61	5.68	5.85	5.71
100	Chi Bur & Q (Ill Div) M 3½s 1949.....	5.26	5.48	5.50	5.38	6.10	5.88	5.92	5.77	5.66	5.39	5.48	5.58	5.32
101	Central Pacific 1st ref M 4s 1949.....	5.73	6.10	5.98	6.41	6.47	6.36	6.33	6.25	5.96	5.84	5.97	6.04	5.91
102	Nor Pac Ry prior lien lg M 4s 1997.....	5.22	5.46	5.40	5.62	5.31	5.71	5.58	5.43	5.33	5.22	5.48	5.23	
103	Norf & West Ry 1st cons M 4s 1996.....	5.17	5.40	5.37	5.66	5.72	5.59	5.57	5.44	5.33	5.24	5.30	5.40	5.15
104	Central RR of N J gen M 5s 1987.....	4.99	5.05	5.05	5.16	5.36	5.32	5.40	5.32	5.15	5.09	5.03	5.19	5.16
105	Hocking Valley 1st cons M 4½s 1999.....	6.37	6.50	6.46	6.90	7.25	7.26	7.04	6.63	6.31	5.97	5.99	6.38	6.23
106	N & W Ry Div 1st 1 & gen M 4s 1944.....	5.78	5.87	5.87	5.91	6.29	6.28	6.44	6.41	6.15	5.81	5.88	6.02	5.89
107	Ore Sh Line RR cons 1st M 5s 1946.....	5.53	5.57	5.60	5.88	6.42	6.40	6.21	6.11	5.94	5.79	5.86	5.87	5.78
108	Southern Pac 1st ref M 4s 1955.....	5.42	5.59	5.67	5.89	6.13	6.10	5.94	5.74	5.64	5.52	5.65	5.78	5.52
109	A T & S Fe Ry adj M 4s stamped 1995.....	5.69	5.81	5.87	6.01	6.28	6.19	6.16	6.02	5.72	5.50	5.67	5.80	5.63
110	Northern Pac Ry gen lien 3s 2047.....	5.53	5.71	5.65	5.84	5.86	5.79	5.86	5.66	5.44	5.23	5.43	5.58	5.47
111	Atl Coast Line 1st cons M 4s 1952.....	5.45	5.68	5.67	5.79	5.95	5.97	6.09	5.84	5.67	5.47	5.48	5.65	5.40
112	Del & Hudson Co 1st & ref M 4s 1943.....	5.67	5.75	5.67	5.81	6.38	6.43	6.50	5.94	5.62	5.51	5.67	5.96	5.67
113	Central of Georgia cons M 5s 1945.....	6.03	6.19	6.39	6.70	7.05	6.94	6.74	6.73	6.41	6.14	6.05	6.35	6.06
114	Pennsylvania RR cons M 4s 1948.....	5.01	5.21	5.26	5.21	5.48	5.67	5.71	5.57	5.38	5.23	5.25	5.29	5.16
115	Kansas City So Ry 1st M 3s 1950.....	6.10	6.26	6.38	6.67	6.80	6.75	6.70	6.64	6.44	6.41	6.60	6.62	6.41
116	L & N (Atl Knox & Cin Div) 4s 1955.....	5.81	6.23	6.16	6.27	6.52	6.67	6.81	6.37	5.90	5.68	5.87	6.06	5.90
117	Illinois Central RR ref M 4s 1955.....	5.68	6.04	5.87	6.12	6.44	6.18	6.07	5.98	5.69	5.46	5.62	5.76	5.54
118	Chic Burl & Quincy gen M 4s 1958.....	5.24	5.40	5.45	5.60	6.05	5.87	5.68	5.46	5.31	5.15	5.27	5.59	5.26
119	Southern Ry 1st cons M 5s 1994.....	5.84	5.97	5.93	6.18	6.34	6.29	6.30	6.09	5.92	5.65	5.71	6.05	5.73
120	Un Pac RR 1st lien & ref M 4s 2008.....	5.17	5.47	5.57	5.80	5.79	5.76	5.74	5.44	5.31	5.23	5.36	5.40	5.12
121	Atl Coast Line (L & N coll) 4s 1952.....	6.10	6.29	6.35	6.75	7.02	6.96	7.01	6.73	6.20	6.03	5.94	6.30	6.10
122	Norf & West (P C & C) Joint 4s 1941.....	5.67	5.84	5.85	6.09	6.34	6.06	6.27	6.21	5.91	5.63	5.98	6.03	5.81
123	Grt Nor Ry 1st & ref M 4½s 1961.....	5.14	5.26	5.27	5.66	6.10	5.82	5.78	5.62	5.55	5.21	5.35	5.57	5.38
124	Canada So 1st & ref cons 5s 1962.....	5.83	6.16	6.22	6.11	6.54	6.54	6.56	6.36	5.96	5.69	5.76	6.04	5.88
125	Morris & Essex 1st ref M 3½s 2000.....	4.98	5.02	5.11	5.32	5.35	5.57	5.32	5.20	5.11	4.97	5.03	5.23	5.07
126	Pennsylvania RR cons M 4½s 1960.....	4.99	5.03	5.04	5.26	5.48	5.45	5.31	5.18	5.13	5.12	5.11	5.16	5.06

**YIELDS OF RAILROAD BONDS**  
JAN. 1921—JAN. 1922

Ref No.	Name of Bond	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
70	West Shore RR 1st M 4s 2361.....	5.59	5.46	5.63	5.71	5.63	5.76	5.63	5.51	5.47	5.47	5.08	5.03	4.97
76	Illinois Central RR coll 4s 1952.....	5.93	6.00	6.09	6.05	6.08	6.32	6.14	5.84	5.78	5.73	5.44	5.31	5.12
78	Wabash RR Co 1st M 5s 1939.....	6.16	6.04	6.24	6.35	6.32	6.54	6.41	6.23	6.10	6.10	5.71	5.66	5.40
82	Ches & Ohio Ry 1st cons 5s 1939.....	5.70	5.70	5.72	5.68	5.69	5.94	5.94	5.83	5.66	5.66	5.50	5.30	5.04
83	Ill Central (L N O & T) coll 4s 1953.....	6.09	6.10	6.10	6.18	6.19	6.40	6.19	5.95	5.86	5.85	5.52	5.44	5.37
86	E Tenn V & G Ry cons 1st M 5s 1956.....	5.87	5.76	5.81	5.76	5.79	5.91	5.91	5.92	5.73	5.75	5.59	5.45	5.43
88	Lake Sh & Mich So 1st M 3½s 1997.....	5.08	5.20	5.18	5.16	5.19	5.31	5.35	5.25	5.13	5.05	4.98	4.67	4.51
91	Union Pac RR 1st M RR & lg 4s 1947.....	5.25	5.31	5.40	5.42	5.40	5.54	5.33	5.32	5.26	5.27	4.83	4.86	4.75
92	Chicago & Nor West gen M 3½s 1987.....	5.27	5.37	5.37	5.39	5.51	5.60	5.46	5.34	5.33	5.27	5.15	4.91	4.63
93	Chi Rock I & Pac Ry gen M 4s 1988.....	5.63	5.71	5.90	5.78	5.75	5.86	5.71	5.64	5.49	5.44	5.14	5.07	4.97
94	Atch Top & Santa Fe gen M 4s 1995.....	5.20	5.17	5.21	5.25	5.27	5.41	5.22	5.19	5.13	5.13	4.85	4.70	4.60
95	N Y Cent & Hudson River M 3½s 1997.....	5.15	5.23	5.25	5.21	5.33	5.51	5.36	5.31	5.26	5.18	4.96	4.73	4.64
98	Louisville & Nash unified 4s 1940.....	5.48	5.55	5.55	5.62	5.64	5.80	5.60	5.47	5.45	5.40	5.19	4.98	4.89
99	Oregon RR & Nav Co cons M 4s 1946.....	5.71	5.60	5.56	5.65	5.64	5.78	5.82	5.67	5.52	5.44	5.32	5.17	5.06
100	Chi Bus & Q (Ill Div) M 3½s 1949.....	5.32	5.49	5.43	5.47	5.34	5.70	5.33	5.36	5.23	5.24	5.08	4.98	4.87
101	Central Pacific 1st ref M 4s 1949.....	5.91	6.03	6.07	6.00	5.99	6.17	6.04	5.94	5.78	5.72	5.40	5.25	5.13
102	Nor Pac Ry prior lien lg M 4s 1997.....	5.23	5.30	5.36	5.35	5.40	5.48	5.27	5.26	5.23	5.24	4.97	4.81	4.72
103	Norf & West Ry 1st cons M 4s 1996.....	5.15	5.22	5.27	5.28	5.30	5.39	5.23	5.19	5.09	5.14	4.89	4.68	4.62
104	Central RR of N J gen M 5s 1987.....	5.16	5.09	5.19	5.22	5.30	5.35	5.27	5.23	5.15	5.17	4.99	4.84	4.75
105	Hocking Valley 1st cons M 4½s 1999.....	6.23	6.07	6.12	6.24	6.30	6.59	6.38	6.16	6.12	6.07	5.80	5.50	5.46
106	N & W Ry Div 1st & gen M 4s 1944.....	5.89	5.92	5.90	5.99	5.97	6.01	5.57	5.79	5.76	5.77	5.66	5.36	5.15
107	Ore Sh Line RR cons 1st M 5s 1946.....	5.78	5.71	5.67	5.74	5.84	5.98	5.90	5.78	5.50	5.48	5.38	5.09	5.13
108	Southern Pac 1st ref M of 4s 1955.....	5.52	5.51	5.51	5.57	5.60	5.63	5.76	5.58	5.51	5.46	5.12	4.95	4.92
109	A T & S Fe Ry adj M 4s stamped 1995.....	5.63	5.72	5.81	5.77	5.79	5.84	5.65	5.61	5.53	5.51	5.26	5.11	5.04
110	Northern Pac Ry gen lien 3s 2047.....	5.47	5.51	5.57	5.52	5.46	5.61	5.45	5.35	5.23	5.27	5.04	5.00	4.94
111	Atl Coast Line 1st cons M 4s 1952.....	5.40	5.48	5.55	5.64	5.60	5.78	5.54	5.49	5.34	5.40	5.16	4.99	4.81
112	Del & Hudson Co 1st & ref M 4s 1943.....	5.67	5.65	5.69	5.70	5.86	6.03	5.76	5.66	5.55	5.47	5.18	5.06	4.90
113	Central of Georgia cons M 5s 1945.....	6.06	6.17	6.17	6.32	6.28	6.54	6.43	6.30	6.08	6.10	5.90	5.82	5.65
114	Pennsylvania RR cons M 4s 1948.....	5.16	5.16	5.41	5.52	5.53	5.54	5.55	5.32	5.37	5.23	5.11	4.92	4.84
115	Kansas City So Ry 1st M 3s 1950.....	6.41	6.43	6.47	6.35	6.34	6.43	6.28	6.27	6.12	6.03	5.70	5.49	5.54
116	L & N (Atl Knox & Clin Div) 4s 1955.....	5.90	6.05	6.00	6.24	5.94	6.07	5.93	5.85	5.84	5.65	5.56	5.24	5.18
117	Illinois Central RR ref M 4s 1955.....	5.54	5.61	5.65	5.71	5.73	5.84	5.65	5.50	5.42	5.45	5.24	5.07	4.96
118	Chi Burl & Quincy gen M 4s 1958.....	5.26	5.17	5.29	5.37	5.49	5.58	5.34	5.31	5.26	5.30	4.98	4.86	4.70
119	Southern Ry 1st cons M 5s 1994.....	5.73	5.82	5.96	6.04	6.02	6.18	6.00	5.93	5.87	5.85	5.69	5.65	5.63
120	Un Pac RR 1st lien & ref M 4s 2008.....	5.12	5.18	5.30	5.37	5.33	5.43	5.29	5.17	5.13	5.14	4.94	4.82	4.76
121	Atl Coast Line (L & N coll) 4s 1952.....	6.10	6.09	6.36	6.36	6.31	6.45	6.21	6.02	5.91	5.90	5.67	5.54	5.52
122	Norf & West (P C & C) Joint 4s 1941.....	5.81	5.83	5.97	5.99	6.10	6.42	6.14	6.07	5.74	5.69	5.52	5.38	5.30
123	Grt Nor Ry 1st & ref M 4½s 1961.....	5.38	5.38	5.40	5.48	5.54	5.67	5.57	5.26	5.38	5.38	5.23	4.94	4.89
124	Canada So 1st & ref cons 5s 1962.....	5.88	5.91	5.97	5.98	6.00	6.15	5.94	5.86	5.84	5.77	5.46	5.42	5.33
125	Morris & Essex 1st ref M 3½s 2000.....	5.07	5.03	5.17	5.16	5.18	5.22	5.24	5.14	5.11	5.13	4.75	4.57	4.48
126	Pennsylvania RR cons M 4½s 1960.....	5.06	5.16	5.27	5.35	5.37	5.47	5.38	5.27	5.30	5.29	4.97	4.88	4.83

**RAILROAD BOND YIELDS**

**YIELDS OF RAILROAD BONDS**  
JAN. 1922—JAN. 1923

Ref. No.	Name of Bond	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
70	West Shore RR 1st M 4s 2361.....	4.97	5.04	4.99	4.94	4.81	4.82	4.79	4.74	4.71	4.80	4.82	4.87	4.83
76	Illinois Central RR coll 4s 1952.....	5.12	5.23	5.17	5.14	5.05	5.03	5.04	4.90	4.87	4.96	5.00	4.94	5.01
78	Wabash RR Co 1st M 5s 1939.....	5.40	5.40	5.35	5.24	5.22	5.22	5.08	5.03	4.95	5.11	5.26	5.24	5.15
82	Ches & Ohio Ry 1st cons 5s 1939.....	5.04	5.31	5.11	5.00	4.91	4.88	4.80	4.73	4.76	4.91	4.93	4.91	4.90
83	Illi Central (L N O & T) col 4s 1953.....	5.37	5.44	5.33	5.15	5.20	5.28	5.14	5.05	5.07	5.14	5.26	5.23	5.21
86	E Tenn V & G Ry cons 1st M 5s 1956.....	5.43	5.33	5.24	5.18	5.15	5.12	5.11	5.05	5.03	5.07	5.12	5.16	5.09
88	Lake Sh & Mich So 1st M 3½s 1997.....	4.51	4.60	4.57	4.46	4.44	4.48	4.45	4.51	4.48	4.52	4.52	4.65	4.56
91	Union Pac RR 1st M RR & Ig 4s 1947.....	4.75	4.59	4.62	4.57	4.58	4.47	4.33	4.37	4.55	4.54	4.61	4.54	
92	Chicago & Nor West gen M 3½s 1987.....	4.65	4.76	4.77	4.73	4.72	4.70	4.65	4.51	4.54	4.61	4.66	4.72	4.74
93	Chi Rock Is & Pac Ry gen M 4s 1988.....	4.97	4.92	4.89	4.89	4.86	4.92	4.82	4.78	4.75	4.86	4.91	4.92	5.03
94	Atch Top & Santa Fe gen M 4s 1995.....	4.60	4.57	4.58	4.54	4.53	4.46	4.33	4.32	4.35	4.50	4.53	4.49	4.52
95	N V Cent & Hudson River M 3½s 1997.....	4.64	4.66	4.64	4.58	4.57	4.59	4.47	4.37	4.42	4.55	4.57	4.59	4.62
98	Louisville & Nash unified 4s 1940.....	4.89	4.84	4.79	4.71	4.76	4.74	4.56	4.55	4.57	4.75	4.86	4.79	4.81
99	Oregon RR & Nav Co cons M 4s 1940.....	5.06	5.07	5.00	4.89	4.87	4.83	4.80	4.74	4.61	4.84	4.91	4.90	4.93
100	Chi Bur & Q (Illi Div) M 3½s 1949.....	4.87	4.87	4.86	4.62	4.67	4.67	4.59	4.57	4.48	4.73	4.77	4.71	4.75
101	Central Pacific 1st ref M 4s 1949.....	5.13	5.17	5.11	4.94	4.85	4.82	4.64	4.65	4.65	4.80	4.99	4.90	4.91
102	Nor Pac Ry prior lien lg M 4s 1997.....	4.72	4.79	4.76	4.68	4.62	4.65	4.54	4.52	4.47	4.61	4.71	4.70	4.72
103	Norf & West Ry 1st cons M 4s 1996.....	4.62	4.63	4.69	4.60	4.58	4.49	4.32	4.33	4.32	4.46	4.56	4.48	4.38
104	Central RR of N J gen M 5s 1987.....	4.75	4.71	4.69	4.63	4.61	4.63	4.58	4.52	4.54	4.55	4.59	4.66	4.63
105	Hocking Valley 1st cons M 4½s 1999.....	5.46	5.42	5.36	5.26	5.26	5.28	5.23	5.11	5.07	5.21	5.33	5.30	
106	N & W Ry Div 1st 1 & gen M 4s 1944.....	5.15	5.19	5.12	5.07	5.06	4.94	4.82	4.80	4.70	4.84	5.01	4.97	5.06
107	Ore Sh Line RR cons 1st M 5s 1946.....	5.13	5.16	4.97	4.96	4.88	4.82	4.68	4.64	4.66	4.74	4.82	4.79	4.73
108	Southern Pac 1st ref M 4s 1955.....	4.92	4.96	4.89	4.71	4.80	4.73	4.62	4.51	4.53	4.67	4.82	4.81	4.76
109	A T & S Fe Ry adj M 4s stamped 1995.....	5.04	4.99	4.96	4.86	4.85	4.87	4.80	4.73	4.75	4.89	4.95	4.88	4.92
110	Northern Pac Ry gen lien 3s 2047.....	4.94	5.00	4.92	4.82	4.82	4.92	4.82	4.74	4.70	4.85	4.95	4.92	4.92
111	Atl Coast Line 1st cons M 4s 1952.....	4.81	4.78	4.77	4.70	4.75	4.68	4.57	4.54	4.54	4.67	4.83	4.78	4.78
112	Del & Hudson Co 1st & ref M 4s 1943.....	4.90	4.93	5.06	4.78	4.74	4.79	4.74	4.61	4.60	4.82	4.91	4.91	4.93
113	Central of Georgia cons M 5s 1945.....	5.65	5.53	5.33	5.26	5.12	5.20	5.20	5.07	4.96	5.13	5.23	5.22	5.25
114	Pennsylvania RR cons M 4s 1948.....	4.84	4.79	4.89	4.70	4.60	4.62	4.50	4.47	4.52	4.54	4.62	4.53	4.70
115	Kansas City So Ry 1st M 3s 1950.....	5.54	5.51	5.43	5.33	5.17	5.08	4.93	4.92	4.94	5.08	5.10	5.15	5.20
116	L & N (Atl Knox & Cin Div) 4s 1955.....	5.18	5.14	4.98	4.90	4.86	4.90	4.79	4.77	4.82	4.83	4.93	4.89	4.90
117	Illinois Central RR ref M 4s 1955.....	4.96	4.93	4.89	4.75	4.78	4.78	4.66	4.56	4.58	4.75	4.86	4.80	4.82
118	Chic Burl & Quincy gen M 4s 1958.....	4.70	4.75	4.76	4.65	4.66	4.61	4.47	4.51	4.50	4.57	4.76	4.67	4.68
119	Southern Ry 1st cons M 5s 1994.....	5.63	5.55	5.41	5.26	5.23	5.28	5.18	5.07	5.06	5.10	5.21	5.17	5.17
120	Un Pac RR 1st lien & ref M 4s 2008.....	4.76	4.75	4.67	4.58	4.67	4.65	4.53	4.49	4.50	4.65	4.71	4.68	4.57
121	Atl Coast Line (L & N coll) 4s 1952.....	5.52	5.48	5.32	5.22	5.19	5.24	5.10	5.00	5.07	5.18	5.30	5.22	5.20
122	Norf & West (P C & C) Joint 4s 1941.....	5.30	5.27	5.25	5.15	5.07	5.04	5.04	5.02	4.90	4.99	5.10	5.09	
123	Grt Nor Ry 1st & ref M 4½s 1961.....	4.89	4.89	4.90	4.85	4.77	4.73	4.69	4.72	4.50	4.70	4.82	4.81	4.74
124	Canada So 1st & ref cons 5s 1962.....	5.33	5.29	5.26	5.12	5.14	5.12	5.05	4.95	4.97	5.05	5.07	5.08	5.03
125	Morris & Essex 1st ref M 3½s 2000.....	4.48	4.52	4.55	4.50	4.36	4.44	4.36	4.34	4.35	4.45	4.62	4.55	4.52
126	Pennsylvania RR cons M 4½s 1960.....	4.83	4.76	4.77	4.74	4.67	4.65	4.54	4.54	4.48	4.47	4.59	4.66	4.63

**YIELDS OF RAILROAD BONDS**  
JAN. 1923—JAN. 1924

Ref. No.	Name of Bond	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
70	West Shore RR 1st M 4s 2361.....	4.83	4.92	5.06	5.08	4.98	5.03	5.04	5.02	5.10	5.07	5.06	5.04	5.01
76	Illinois Central RR coll 4s 1952.....	5.01	5.02	5.13	5.24	5.06	5.18	5.12	5.12	5.02	5.20	5.03	4.98	4.99
78	Wabash RR Co 1st M 5s 1939.....	5.15	5.15	5.37	5.41	5.38	5.43	5.47	5.47	5.50	5.40	5.35	5.33	5.26
82	Che & Ohio Ry 1st cons 5s 1939.....	4.90	4.83	5.06	5.10	5.00	4.99	4.99	4.97	5.04	5.00	4.98	4.99	4.99
83	Ill Central (L N O & T) coll 4s 1953.....	5.21	5.28	5.40	5.43	5.34	5.36	5.33	5.32	5.31	5.37	5.37	5.37	5.30
86	E Tenn V & G Ry cons 1st M 5s 1956.....	5.09	5.13	5.21	5.14	5.15	5.15	5.12	5.11	5.14	5.09	5.09	5.08	5.09
88	Lake Sh & Mich So 1st M 3½s 1997.....	4.56	4.68	4.81	4.69	4.62	4.64	4.67	4.68	4.73	4.64	4.67	4.69	4.56
91	Union Pac RR 1st M RR & Ig 4s 1947.....	4.54	4.44	4.66	4.73	4.65	4.62	4.58	4.48	4.59	4.55	4.67	4.65	4.58
92	Chicago & Nor West gen M 3½s 1987.....	4.74	4.83	4.86	4.97	4.83	4.86	4.97	4.95	4.98	5.00	5.03	5.10	5.06
93	Chi Rock Is & Pac Ry gen M 4s 1988.....	5.03	5.00	5.14	5.16	5.15	5.15	5.12	5.14	5.21	5.24	5.19	5.16	5.09
94	Atch Top & Santa Fe gen M 4s 1995.....	4.52	4.54	4.67	4.68	4.58	4.59	4.56	4.47	4.57	4.55	4.58	4.62	4.58
95	N Y Cent & Hudson River M 3½s 1997.....	4.62	4.75	4.85	4.82	4.74	4.78	4.79	4.78	4.83	4.79	4.75	4.70	4.69
98	Louisville & Nash unified 4s 1940.....	4.81	4.78	5.00	4.92	4.78	4.90	4.80	4.84	5.00	4.90	4.92	4.90	4.86
99	Oregon RR & Nav Co cons M 4s 1946.....	4.93	4.90	5.01	5.08	4.95	4.95	4.97	5.00	5.01	4.98	4.97	4.98	4.98
100	Chi Bur & Q (Ill Div) M 3½s 1949.....	4.75	4.79	4.89	4.86	4.78	4.86	4.69	4.84	4.90	4.86	4.89	4.91	4.87
101	Central Pacific 1st ref M 4s 1949.....	4.91	4.94	4.91	5.27	5.01	5.05	4.98	4.88	4.97	4.98	4.87	4.95	4.94
102	Nor Pac Ry prior lien Ig M 4s 1997.....	4.72	4.71	4.88	4.88	4.81	4.85	4.86	4.81	4.86	4.92	4.92	4.96	4.93
103	Norf & West Ry 1st cons M 4s 1996.....	4.38	4.41	4.59	4.61	4.58	4.62	4.54	4.42	4.44	4.52	4.48	4.58	4.58
104	Central RR of N J gen M 5s 1987.....	4.63	4.74	4.74	4.79	4.74	4.72	4.77	4.74	4.71	4.82	4.84	4.81	4.75
105	Hocking Valley 1st cons M 4½s 1999.....	5.30	5.35	5.51	5.50	5.47	5.42	5.51	5.39	5.45	5.44	5.39	5.37	5.29
106	N & W Ry Div 1st I & gen M 4s 1944.....	5.06	5.05	5.25	5.23	5.09	5.08	5.07	4.93	4.93	5.01	4.97	4.94	4.95
107	Ore Sh Line RR cons 1st M 5s 1946.....	4.73	4.86	4.98	4.95	4.91	4.85	4.86	4.81	4.86	4.92	4.92	4.86	4.82
108	Southern Pac 1st ref M 4s 1955.....	4.76	4.84	4.98	4.98	4.82	4.88	4.88	4.82	4.87	4.90	4.78	4.85	4.82
109	A T & S Fe Ry adj M 4s stamped 1995.....	4.92	4.98	5.10	5.15	5.02	5.03	5.03	5.04	5.05	5.09	5.01	5.02	5.02
110	Northern Pac Ry gen lien 3s 2047.....	4.92	4.93	4.82	5.07	5.01	5.04	5.07	5.05	5.08	5.14	5.14	5.25	5.17
111	Atl Coast Line 1st cons M 4s 1952.....	4.78	4.80	4.98	5.01	4.90	4.93	4.90	4.85	4.93	4.92	4.85	4.85	4.81
112	Del & Hudson Co 1st & ref M 4s 1943.....	4.93	4.95	5.16	5.21	5.08	5.08	5.23	5.18	5.27	5.33	5.34	5.36	5.18
113	Central of Georgia cons M 5s 1945.....	5.25	5.21	5.42	5.40	5.32	5.36	5.35	5.35	5.39	5.37	5.42	5.32	
114	Pennsylvania RR cons M 4s 1948.....	4.70	4.65	4.77	4.76	4.75	4.73	4.81	4.75	4.84	4.83	4.85	4.84	4.83
115	Kansas City So Ry 1st M 3s 1950.....	5.20	5.24	5.33	5.42	5.36	5.43	5.49	5.22	5.09	5.10	5.00	5.17	5.19
116	L & N (Atl Knox & Cin Div) 4s 1955.....	4.90	4.88	5.16	5.13	5.05	5.02	5.20	5.07	5.16	5.00	5.10	4.99	4.94
117	Illinois Central RR ref M 4s 1955.....	4.82	4.83	5.03	5.00	4.93	4.87	4.88	4.86	4.98	5.04	4.93	4.87	
118	Chic Burl & Quincy gen M 4s 1958.....	4.68	4.73	4.94	4.95	4.82	4.80	4.84	4.80	4.90	4.93	4.85	4.83	4.78
119	Southern Ry 1st cons M 5s 1994.....	5.17	5.22	5.35	5.29	5.30	5.24	5.24	5.29	5.31	5.31	5.24	5.23	5.19
120	Un Pac RR 1st lien & ref M 4s 2008.....	4.57	4.74	4.90	4.88	4.79	4.82	4.81	4.78	4.90	4.94	4.84	4.87	4.85
121	Atl Coast Line (L & N coll) 4s 1952.....	5.20	5.25	5.39	5.49	5.37	5.41	5.29	5.29	5.27	5.23	5.23	5.21	5.15
122	Norf & West (P C & C) Joint 4s 1941.....	5.01	5.10	5.24	5.20	5.18	5.22	5.23	5.22	5.23	5.18	5.15	5.07	
123	Cat Nor Ry 1st & ref M 4½s 1961.....	4.74	4.78	4.87	4.85	4.82	4.83	4.87	4.97	5.01	5.06	5.08	5.06	5.02
124	Canada So 1st & ref cons 5s 1962.....	5.03	5.06	5.20	5.23	5.19	5.18	5.13	5.08	5.17	5.14	5.09	5.10	5.11
125	Morris & Essex 1st ref M 3½s 2000.....	4.52	4.54	4.60	4.66	4.59	4.61	4.67	4.71	4.73	4.75	4.63	4.67	4.63
126	Pennsylvania RR cons M 4½s 1960.....	4.63	4.66	4.78	4.84	4.76	4.75	4.78	4.78	4.68	4.84	4.81	4.81	4.79

**RAILROAD BOND YIELDS**

A.95

## APPENDIX

YIELDS OF RAILROAD BONDS  
JAN. 1924—JAN. 1925

Ref. No.	Name of Bond	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Octr.	Nov.	Dec.	Jan.
70	West Shore RR 1st M 4s 2361.....	5.01	4.87	4.97	4.96	4.96	4.87	4.81	4.78	4.84	4.85	4.83	4.85	4.86
76	Illinois Central RR coll 4s 1952.....	4.99	5.05	5.06	5.12	4.97	4.92	4.88	4.83	4.91	4.86	4.94	4.88	4.87
78	Wabash RR Co 1st M 5s 1939.....	5.24	5.21	5.20	5.14	5.05	5.04	4.96	4.94	4.96	4.92	4.94	4.95	4.93
82	Ches & Ohio Ry 1st cons 5s 1939.....	4.99	4.99	4.96	4.94	4.86	4.94	4.79	4.85	4.81	4.69	4.80	4.76	4.75
83	Ill Central (L N O & T) col 4s 1953.....	5.30	5.31	5.28	5.22	5.08	5.01	4.99	5.05	5.06	5.05	5.04	5.10	5.08
86	E Tenn V & G Ry cons 1st M 5s 1956.....	5.09	5.09	5.10	5.07	5.02	5.03	4.99	4.98	4.99	4.96	4.93	4.98	4.96
88	Lake Sh & Mich St 1st M 3½s 1997.....	4.56	4.60	4.58	4.52	4.52	4.45	4.47	4.59	4.48	4.47	4.48	4.52	4.50
91	Union Pac RR 1st M RR & Ig 4s 1947.....	4.58	4.71	4.73	4.69	4.63	4.59	4.49	4.55	4.55	4.57	4.55	4.61	4.60
92	Chicago & Nor West gen M 3½s 1987.....	5.06	5.04	5.03	5.01	4.98	4.91	4.79	4.79	4.81	4.79	4.79	4.80	4.83
93	Chi Rock Is & Pac Ry gen M 4s 1988.....	5.09	5.06	5.05	5.03	4.98	4.95	4.87	4.87	4.86	4.87	4.86	4.84	4.84
94	Atch Top & Santa Fe gen M 4s 1995.....	4.58	4.63	4.82	4.60	4.57	4.52	4.45	4.49	4.50	4.49	4.48	4.53	4.52
	N Y Cent & Hudson River M 3½s 1997.....	4.69	4.73	4.72	4.68	4.60	4.56	4.51	4.65	4.61	4.54	4.61	4.60	4.63
98	Louisville & Nash unified 4s 1940.....	4.86	4.95	4.90	4.83	4.74	4.64	4.64	4.76	4.64	4.63	4.61	4.69	4.69
99	Oregon RR & Nav Co cons M 4s 1946.....	4.98	5.06	5.01	4.98	4.98	4.90	4.84	4.83	4.83	4.82	4.85	4.93	4.86
100	Chi Bur & Q (Ill Div) M 3½s 1949.....	4.87	4.87	4.90	4.85	4.80	4.73	4.73	4.74	4.71	4.71	4.75	4.76	4.73
101	Central Pacific 1st ref M 4s 1949.....	4.94	4.98	4.97	4.96	4.96	4.86	4.79	4.89	4.87	4.86	4.85	4.88	4.86
102	Nor Pac Ry prior lien lg M 4s 1997.....	4.93	4.95	5.00	4.98	4.91	4.83	4.73	4.76	4.73	4.73	4.76	4.80	4.78
103	Norf & West Ry 1st cons M 4s 1996.....	4.58	4.62	4.62	4.59	4.58	4.50	4.43	4.48	4.48	4.47	4.47	4.53	4.52
104	Central RR of N J gen M 5s 1987.....	4.73	4.75	4.76	4.75	4.72	4.68	4.67	4.72	4.72	4.70	4.64	4.64	4.62
105	Hocking Valley 1st cons M 4½s 1999.....	5.29	5.32	5.32	5.25	5.18	5.11	5.05	5.08	5.10	5.08	5.06	5.01	
106	N & W Ry Div 1st I & gen M 4s 1944.....	4.98	5.02	5.03	4.99	4.99	4.88	4.82	4.78	4.86	4.78	4.85	4.85	4.86
107	Ore Sh Line RR cons 1st M 5s 1946.....	4.82	4.83	4.87	4.83	4.80	4.72	4.65	4.71	4.70	4.63	4.59	4.68	4.67
108	Southern Pac 1st ref M of 4s 1955.....	4.82	4.88	4.87	4.85	4.78	4.69	4.61	4.70	4.67	4.62	4.66	4.75	4.70
109	A T & S Fe Ry adj M 4s stamped 1995.....	5.02	5.00	4.91	4.96	4.92	4.88	4.79	4.85	4.86	4.84	4.80	4.86	4.84
110	Northern Pac Ry gen lien 3s 2047.....	5.17	5.20	5.28	5.27	5.20	5.02	4.91	4.98	4.93	4.95	4.97	5.00	4.96
111	Atl Coast Line 1st cons M 4s 1952.....	4.81	4.84	4.84	4.79	4.69	4.62	4.52	4.59	4.60	4.55	4.61	4.66	4.66
112	Dcl & Hudson Co 1st & ref M 4s 1943.....	5.18	5.17	5.12	5.10	5.03	4.90	4.84	4.96	4.92	4.90	4.77	4.82	4.90
113	Central of Georgia cons M 5s 1945.....	5.32	5.28	5.33	5.24	5.14	4.99	5.00	5.02	5.05	4.97	4.95	5.04	5.01
114	Pennsylvania RR cons M 4s 1948.....	4.83	4.83	4.82	4.77	4.74	4.59	4.58	4.52	4.54	4.53	4.52	4.65	4.62
115	Kansas City So Ry 1st M 3s 1950.....	5.19	5.27	5.23	5.23	5.14	5.04	5.02	5.08	5.08	5.04	5.01	5.08	5.07
116	L & N (Atl Knox & Cin Div) 4s 1955.....	4.94	4.94	5.01	4.88	4.89	4.75	4.63	4.72	4.69	4.67	4.65	4.66	4.70
117	Illinois Central RR ref M 4s 1955.....	4.77	4.91	4.90	4.88	4.78	4.68	4.61	4.68	4.66	4.60	4.63	4.73	4.70
118	Chi Burl & Quincy gen M 4s 1958.....	4.78	4.83	4.85	4.82	4.76	4.65	4.60	4.67	4.63	4.62	4.66	4.69	4.66
119	Southern Ry 1st cons M 5s 1994.....	5.19	5.17	5.15	5.10	5.03	5.00	4.95	4.96	4.97	4.97	4.92	4.95	4.97
120	Un Pac RR 1st lien & ref M 4s 2008.....	4.85	4.80	4.84	4.85	4.77	4.64	4.60	4.69	4.64	4.65	4.68	4.73	4.72
121	Atl Coast Line (L & N coll) 4s 1952.....	5.15	5.18	5.17	5.12	5.07	5.04	4.92	4.97	4.93	4.92	4.88	4.89	4.88
122	Norf & West (P C & C) Joint 4s 1941.....	5.07	5.16	5.03	4.98	4.93	4.90	4.86	4.84	4.80	4.68	4.70	4.80	4.69
123	Grt Nor Ry 1st & ref M 4½s 1961.....	5.02	4.98	5.04	4.93	4.93	4.86	4.70	4.79	4.78	4.74	4.73	4.70	4.71
124	Canada So 1st & ref cons 5s 1962.....	5.11	5.07	5.05	5.04	5.02	4.95	4.95	4.92	4.93	4.91	4.91	4.91	4.95
125	Morris & Essex 1st ref M 3½s 2000.....	4.63	4.62	4.59	4.60	4.59	4.54	4.44	4.50	4.51	4.49	4.55	4.54	4.57
126	Pennsylvania RR cons M 4½s 1960.....	4.79	4.80	4.77	4.73	4.69	4.58	4.54	4.56	4.59	4.57	4.54	4.58	4.55

**YIELDS OF RAILROAD BONDS**  
JAN. 1925—JAN. 1926

Ref. No.	Name of Bond	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
70	West Shore RR 1st M 4s 2361.....	4.86	4.86	4.87	4.83	4.76	4.76	4.81	4.83	4.84	4.84	4.81	4.72	4.74
76	Illinois Central RR coll 4s 1952.....	4.87	4.87	4.85	4.82	4.79	4.78	4.85	4.83	4.84	4.87	4.84	4.82	4.76
83	Ill Central (L N O & T) col 4s 1953.....	5.08	5.04	5.04	5.01	4.98	4.99	5.01	5.09	5.03	5.05	5.02	5.00	4.97
88	Lake Sh & Mich So 1st M 3½s 1997.....	4.50	4.50	4.50	4.47	4.41	4.43	4.43	4.45	4.46	4.52	4.48	4.52	4.47
91	Union Pac RR 1st M RR & lg 4s 1947.....	4.60	4.56	4.51	4.46	4.43	4.47	4.58	4.61	4.57	4.59	4.61	4.58	4.50
92	Chicago & Nor West gen M 3½s 1987.....	4.83	4.79	4.78	4.83	4.74	4.76	4.78	4.83	4.73	4.81	4.82	4.77	4.71
93	Chi Rock Is & Pac Ry gen M 4s 1988.....	4.84	4.83	4.82	4.84	4.75	4.78	4.82	4.87	4.78	4.81	4.79	4.76	4.70
94	Atch Top & Santa Fe gen M 4s 1995.....	4.52	4.51	4.50	4.46	4.38	4.41	4.47	4.51	4.51	4.53	4.53	4.49	4.44
95	N Y Cent & Hudson River M 3½s 1997.....	4.63	4.63	4.58	4.54	4.48	4.51	4.55	4.54	4.54	4.60	4.56	4.56	4.56
99	Oregon RR & Nav Co cons M 4s 1946.....	4.86	4.85	4.84	4.83	4.78	4.72	4.78	4.82	4.81	4.82	4.76	4.74	4.69
100	Chi Bur & Q (III Div) M 3½s 1949.....	4.73	4.75	4.58	4.56	4.47	4.50	4.53	4.65	4.65	4.70	4.71	4.66	4.60
101	Central Pacific 1st ref M 4s 1949.....	4.86	4.90	4.83	4.80	4.74	4.77	4.84	4.90	4.86	4.88	4.81	4.76	4.71
102	Nor Pac Ry prior lien lg M 4s 1997.....	4.78	4.75	4.77	4.80	4.75	4.70	4.75	4.82	4.80	4.80	4.77	4.69	4.69
103	Norf & West Ry 1st cons M 4s 1996.....	4.52	4.52	4.45	4.45	4.37	4.37	4.44	4.51	4.47	4.53	4.52	4.45	4.43
104	Central RR of N J gen M 5s 1987.....	4.62	4.63	4.60	4.59	4.55	4.56	4.57	4.62	4.56	4.56	4.59	4.58	4.55
105	Hocking Valley 1st cons M 4½s 1999.....	5.01	5.00	5.00	4.99	4.96	4.93	4.95	5.04	5.02	5.00	4.97	4.93	4.90
106	N & W Ry Div 1st & gen M 4s 1944.....	4.86	4.88	4.90	4.78	4.72	4.74	4.81	4.81	4.76	4.77	4.75	4.72	4.74
107	Ore Sh Line RR cons 1st M 5s 1946.....	4.67	4.66	4.63	4.60	4.52	4.57	4.69	4.68	4.75	4.77	4.69	4.67	4.60
108	Southern Pac 1st ref M 5s 1955.....	4.70	4.66	4.60	4.56	4.52	4.57	4.68	4.75	4.71	4.76	4.72	4.67	4.56
109	A T & S Fe Ry adj M 4s stamped 1995.....	4.84	4.84	4.84	4.81	4.76	4.78	4.82	4.85	4.79	4.80	4.77	4.71	4.71
110	Northern Pac Ry gen lien 3s 2047.....	4.96	4.94	4.95	5.00	4.95	4.89	4.96	5.05	5.01	4.99	4.95	4.89	4.83
111	Atl Coast Line 1st cons M 4s 1952.....	4.66	4.60	4.50	4.43	4.38	4.43	4.49	4.59	4.53	4.57	4.54	4.51	4.46
114	Pennsylvania RR cons M 4s 1948.....	4.62	4.63	4.54	4.52	4.47	4.52	4.48	4.65	4.62	4.64	4.59	4.58	4.56
116	L & N (Atl Knox & Cin Div) 4s 1955.....	4.70	4.68	4.64	4.56	4.52	4.57	4.59	4.77	4.63	4.74	4.69	4.65	4.58
117	Illinois Central RR ref M 4s 1955.....	4.70	4.67	4.56	4.55	4.51	4.54	4.64	4.72	4.61	4.66	4.67	4.60	4.49
118	Chic Burl & Quincy gen M 4s 1958.....	4.66	4.62	4.57	4.54	4.49	4.53	4.62	4.64	4.62	4.66	4.65	4.58	4.51
119	Southern Ry 1st cons M 5s 1994.....	4.97	4.93	4.94	4.90	4.85	4.83	4.84	4.87	4.84	4.82	4.82	4.80	4.78
120	Un Pac RR 1st lien & ref M 4s 2008.....	4.72	4.68	4.64	4.58	4.54	4.58	4.68	4.74	4.67	4.66	4.70	4.67	4.60
123	Grt Nor Ry 1st & ref M 4½s 1961.....	4.71	4.71	4.72	4.74	4.71	4.68	4.75	4.84	4.74	4.76	4.75	4.62	4.61
124	Canada So 1st & ref cons 3s 1962.....	4.95	4.93	4.92	4.88	4.81	4.87	4.88	4.88	4.86	4.86	4.84	4.85	4.79
126	Pennsylvania RR cons M 4½s 1960.....	4.55	4.54	4.54	4.52	4.51	4.53	4.53	4.61	4.58	4.60	4.59	4.57	4.52
127	Canadian Nor Ry 25 yr sf deb 6½s 1946.....	5.20	5.16	5.12	5.15	5.09	5.08	5.15	5.14	5.10	5.11	5.13	5.12	5.13
128	Grt Nor Ry gen Series B 5½s 1952.....	5.43	5.38	5.43	5.46	5.39	5.35	5.38	5.46	5.42	5.38	5.39	5.32	5.25
129	Atl Coast Line gen unified 4½s 1964.....	5.01	5.00	5.00	4.95	4.87	4.84	4.86	4.99	4.89	4.85	4.85	4.80	4.78
130	Pennsylvania RR gen M 4½s 1965.....	4.84	4.85	4.81	4.88	4.87	4.88	4.91	4.96	4.90	4.90	4.88	4.83	4.77
131	Pennsylvania RR gen M 5s 1968.....	4.89	4.84	4.83	4.86	4.88	4.89	4.94	4.97	4.89	4.92	4.89	4.86	4.79
132	Grt Nor Ry gen Series C 5s 1973.....	5.40	5.33	5.36	5.41	5.35	5.27	5.30	5.35	5.31	5.30	5.24	5.19	5.11
133	St Louis So Western 1st M 4s 1989.....	5.02	4.98	5.01	4.97	4.88	4.88	4.88	5.02	4.89	4.85	4.85	4.80	4.78
134	Mo-Kansas-Texas Ry 1st M 4s 1990.....	4.94	4.92	4.98	4.93	4.79	4.76	4.86	4.86	4.81	4.82	4.80	4.77	4.75
135	Ches & Ohio Ry gen M 4½s 1992.....	5.10	5.04	5.06	5.05	4.95	4.91	4.97	4.95	4.92	4.94	4.92	4.88	4.84
136	Cleve Cin Chi & St L Ry gen M 4s 1993.....	4.85	4.89	4.91	4.87	4.80	4.77	4.82	4.87	4.81	4.81	4.79	4.76	4.74
137	N Y Central RR consol M 4s 1998.....	4.80	4.79	4.80	4.75	4.68	4.66	4.69	4.79	4.76	4.78	4.68	4.63	
138	Tex & Pac Ry 1st M 5s 2000.....	4.98	4.96	4.97	4.96	4.88	4.89	4.94	4.96	4.89	4.87	4.86	4.86	4.84
139	Lehigh V RR (Pa) gen cons M 4s 2003.....	5.03	5.00	5.00	4.98	4.95	4.91	4.86	5.00	4.95	4.95	4.92	4.90	4.83
140	Canadian Pac Ry 4% deb stock.....	5.03	5.02	5.04	5.02	4.98	4.97	4.98	5.00	4.97	4.98	4.97	4.97	4.95

RAILROAD BOND YIELDS

YIELDS OF RAILROAD BONDS  
JAN. 1926—JAN. 1927

Ref. No.	Name of Bond	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
70	West Shore RR 1st M 4s 2361.....	4.74	4.74	4.75	4.69	4.68	4.68	4.67	4.66	4.68	4.68	4.62	4.63	4.61
76	Illinois Central RR coll 4s 1952.....	4.76	4.75	4.75	4.66	4.56	4.56	4.54	4.66	4.67	4.65	4.68	4.67	4.61
83	III Central (L N O & T) col 4s 1953.....	4.97	4.92	4.95	4.85	4.81	4.76	4.79	4.82	4.83	4.84	4.80	4.75	4.77
88	Lake Sh & Mich Sc 1st M 3½s 1997.....	4.47	4.41	4.41	4.38	4.35	4.39	4.38	4.45	4.47	4.45	4.38	4.34	4.35
91	Union Pac RR 1st M RR & Ig 4s 1947.....	4.50	4.46	4.49	4.42	4.38	4.44	4.45	4.42	4.42	4.45	4.42	4.39	4.34
92	Chicago & Nor West gen M 3½s 1987.....	4.71	4.60	4.67	4.64	4.63	4.61	4.64	4.66	4.64	4.62	4.61	4.59	4.51
93	Chi Rock Ia & Pac Ry gen M 4s 1988.....	4.70	4.72	4.71	4.69	4.65	4.62	4.65	4.66	4.68	4.66	4.63	4.63	4.56
94	Atch Top & Santa Fe gen M 4s 1995.....	4.44	4.43	4.44	4.37	4.34	4.37	4.33	4.36	4.36	4.37	4.34	4.34	4.27
95	N V Cent & Hudson River M 3½s 1997.....	4.56	4.49	4.49	4.41	4.43	4.40	4.44	4.48	4.45	4.43	4.42	4.42	4.37
99	Oregon RR & Nav Co cons M 4s 1946.....	4.69	4.68	4.76	4.63	4.62	4.60	4.62	4.63	4.63	4.62	4.61	4.58	
100	Chi Bur & Q (III Div) M 3½s 1949.....	4.60	4.55	4.55	4.46	4.47	4.48	4.49	4.52	4.49	4.49	4.46	4.41	4.39
101	Central Pacific 1st ref M 4s 1949.....	4.71	4.65	4.74	4.66	4.62	4.62	4.65	4.65	4.64	4.64	4.57	4.57	4.57
102	Nor Pac Ry prior lien Ig M 4s 1997.....	4.65	4.59	4.57	4.54	4.49	4.53	4.55	4.56	4.54	4.49	4.47	4.44	4.39
103	Nori & West Ry 1st cons M 4s 1996.....	4.43	4.38	4.40	4.35	4.35	4.35	4.33	4.33	4.33	4.37	4.33	4.32	4.30
104	Central RR of N J gen M 5s 1987.....	4.55	4.55	4.52	4.49	4.46	4.45	4.44	4.47	4.47	4.51	4.46	4.43	4.38
105	Hocking Valley 1st cons M 4½s 1999.....	4.90	4.87	4.84	4.76	4.71	4.67	4.70	4.67	4.71	4.72	4.62	4.59	4.58
107	Ore St Line RR cons 1st M 5s 1946.....	4.60	4.54	4.57	4.51	4.46	4.47	4.53	4.51	4.54	4.57	4.48	4.45	4.43
108	Southern Pac 1st ref M of 4s 1955.....	4.56	4.55	4.55	4.48	4.47	4.51	4.55	4.54	4.52	4.48	4.41	4.40	4.37
109	A T & S Fe Ry adj M 4s stamped 1995.....	4.71	4.69	4.73	4.66	4.59	4.54	4.59	4.60	4.59	4.60	4.56	4.58	4.50
110	Northern Pac Ry gen lien 3s 2047.....	4.83	4.74	4.74	4.71	4.61	4.62	4.61	4.64	4.63	4.62	4.58	4.59	4.55
111	Atl Coast Line 1st cons M 4s 1952.....	4.46	4.45	4.40	4.38	4.38	4.44	4.46	4.45	4.46	4.44	4.39	4.37	4.32
114	Pennsylvania RR cons M 4s 1948.....	4.56	4.51	4.50	4.43	4.41	4.43	4.44	4.48	4.42	4.45	4.42	4.37	4.35
116	L & N (Atl Knox & Cin Div) 4s 1955.....	4.58	4.53	4.52	4.47	4.40	4.51	4.56	4.56	4.52	4.51	4.45	4.37	4.35
117	Illinois Central RR ref M 4s 1955.....	4.49	4.49	4.50	4.44	4.41	4.45	4.47	4.47	4.44	4.46	4.41	4.37	4.25
118	Chic Burl & Quincy gen M 4s 1958.....	4.51	4.47	4.46	4.41	4.42	4.45	4.47	4.47	4.47	4.47	4.38	4.37	4.35
119	Southern Ry 1st cons M 5s 1994.....	4.78	4.74	4.76	4.71	4.65	4.64	4.65	4.66	4.67	4.69	4.65	4.66	4.65
120	Un Pac RR 1st lien & ref M 4s 2008.....	4.60	4.54	4.55	4.49	4.45	4.45	4.48	4.47	4.46	4.47	4.43	4.40	4.36
123	Grt Nor Ry 1st & ref M 4½s 1961.....	4.61	4.59	4.56	4.49	4.43	4.43	4.52	4.52	4.47	4.41	4.44	4.38	
124	Canada So 1st & ref cons 5s 1962.....	4.79	4.81	4.79	4.78	4.75	4.73	4.72	4.77	4.76	4.75	4.72	4.71	4.68
126	Pennsylvania RR cons M 4½s 1960.....	4.52	4.47	4.47	4.43	4.43	4.45	4.48	4.46	4.45	4.44	4.44	4.39	4.38
127	Canadian Nor Ry 25 yr sf deb 6½s 1946.....	5.13	5.09	5.10	5.08	5.05	5.05	5.06	5.09	5.09	5.07	5.05	5.06	5.04
128	Grt Nor Ry gen Series B 5½s 1952.....	5.25	5.21	5.20	5.13	5.01	4.98	5.06	5.13	5.09	5.05	4.99	4.91	4.89
129	Atl Coast Line gen unified 4½s 1964.....	4.78	4.75	4.79	4.67	4.63	4.61	4.62	4.67	4.65	4.63	4.60	4.58	4.61
130	Pennsylvania RR gen M 4½s 1965.....	4.77	4.71	4.69	4.62	4.58	4.62	4.66	4.64	4.63	4.62	4.57	4.53	4.49
131	Pennsylvania RR gen M 5s 1968.....	4.79	4.75	4.72	4.68	4.67	4.66	4.71	4.70	4.70	4.64	4.60	4.55	
132	Grt Nor Ry gen Series C 5s 1973.....	5.11	5.07	5.01	4.96	4.89	4.88	4.97	4.97	4.93	4.94	4.85	4.87	4.83
133	St Louis SoWestern 1st M 4s 1989.....	4.78	4.76	4.75	4.69	4.62	4.63	4.66	4.67	4.58	4.67	4.62	4.66	4.61
134	Mo-Kansas-Texas Ry 1st M 4s 1990.....	4.75	4.71	4.72	4.68	4.62	4.62	4.64	4.65	4.68	4.67	4.62	4.65	4.64
135	Chee & Ohio Ry gen M 4½s 1992.....	4.84	4.81	4.84	4.76	4.70	4.67	4.73	4.71	4.71	4.70	4.65	4.65	4.60
136	Cleve Cin Chi & St L Ry gen M 4s 1993.....	4.74	4.71	4.72	4.65	4.64	4.60	4.63	4.65	4.63	4.57	4.52	4.50	
137	N Y Central RR consol M 4s 1998.....	4.63	4.59	4.60	4.56	4.49	4.55	4.52	4.54	4.53	4.50	4.47	4.42	
138	Tex & Pac Ry 1st M 5s 2000.....	4.84	4.80	4.83	4.77	4.74	4.71	4.70	4.78	4.73	4.74	4.71	4.68	
139	Lehigh V RR (Pa) gen cons M 4s 2003.....	4.83	4.82	4.81	4.79	4.71	4.64	4.64	4.73	4.74	4.68	4.67	4.66	4.59
140	Canadian Pac Ry 4% deb stock.....	4.95	4.89	4.86	4.77	4.72	4.73	4.75	4.70	4.70	4.65	4.69	4.73	4.71
141	Southern Ry dev & gen M 4s 1956.....	5.19	5.11	5.15	5.03	4.96	4.93	5.03	5.07	5.03	4.99	4.93	4.84	4.86

YIELDS OF RAILROAD BONDS  
JAN. 1927—JAN. 1928

Ref. No.	Name of Bond	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
70	West Shore RR 1st M 4s 2361.	4.61	4.59	4.55	4.49	4.53	4.57	4.56	4.47	4.45	4.39	4.35	4.31	4.32
76	Illinois Central RR coll 4s 1952.	4.61	4.55	4.52	4.56	4.54	4.59	4.58	4.53	4.54	4.48	4.40	4.38	4.35
83	Ill Central (L N O & T) col 4s 1953.	4.77	4.77	4.74	4.71	4.71	4.76	4.75	4.71	4.62	4.56	4.50	4.43	4.42
88	Lake Sh & Mich So 1st M 3½s 1997.	4.35	4.37	4.30	4.22	4.26	4.24	4.22	4.20	4.15	4.12	4.10	4.06	4.08
91	Union Pac RR 1st M RR & lg 4s 1947.	4.34	4.33	4.28	4.22	4.20	4.24	4.22	4.19	4.19	4.12	4.07	4.10	4.11
92	Chicago & Nor West gen M 3½s 1987.	4.51	4.49	4.43	4.31	4.30	4.31	4.38	4.31	4.28	4.23	4.20	4.17	4.16
93	Chi Rock Is & Pac Ry gen M 4s 1988.	4.56	4.52	4.50	4.47	4.45	4.49	4.47	4.41	4.43	4.40	4.35	4.26	4.26
94	Atch Top & Santa Fe gen M 4s 1995.	4.27	4.28	4.23	4.17	4.16	4.19	4.19	4.16	4.15	4.12	4.09	4.07	4.08
95	N Y Cent & Hudson River M 3½s 1997.	4.37	4.40	4.32	4.21	4.21	4.28	4.28	4.25	4.15	4.14	4.10	4.06	4.06
100	Chi Bur & Q (Ill Div) M 3½s 1949.	4.39	4.39	4.32	4.29	4.31	4.32	4.34	4.33	4.21	4.18	4.13	4.12	4.15
101	Central Pacific 1st ref M 4s 1949.	4.57	4.59	4.56	4.49	4.49	4.52	4.50	4.46	4.45	4.43	4.34	4.30	4.30
102	Nor Pac Ry prior lien lg M 4s 1997.	4.39	4.39	4.32	4.26	4.22	4.28	4.29	4.25	4.22	4.19	4.15	4.13	4.13
103	Norf & West Ry 1st cons M 4s 1996.	4.30	4.31	4.24	4.16	4.15	4.24	4.16	4.15	4.16	4.12	4.06	4.07	4.10
104	Central RR of N J gen M 5s 1987.	4.38	4.36	4.33	4.28	4.27	4.21	4.27	4.26	4.24	4.18	4.17	4.15	4.14
105	Hocking Valley 1st cons M 4½s 1999.	4.58	4.60	4.53	4.38	4.35	4.39	4.37	4.34	4.35	4.22	4.20	4.19	4.22
108	Southern Pac 1st ref M of 4s 1955.	4.37	4.39	4.31	4.24	4.21	4.31	4.33	4.27	4.23	4.17	4.14	4.13	4.15
109	A T & S Fr Ry adj M 4s stamped 1995.	4.50	4.49	4.52	4.49	4.52	4.48	4.47	4.47	4.41	4.30	4.30	4.31	4.31
110	Northern Pac Ry gen lien 3s 2047.	4.55	4.53	4.44	4.41	4.41	4.49	4.51	4.42	4.37	4.33	4.23	4.15	4.24
111	Atl Coast Line 1st cons M 4s 1952.	4.32	4.35	4.30	4.23	4.22	4.22	4.17	4.25	4.15	4.12	4.07	4.09	4.12
114	Pennsylvania RR cona M 4s 1948.	4.35	4.35	4.34	4.26	4.21	4.18	4.19	4.19	4.15	4.17	4.11	4.08	4.04
116	L & N (Atl Knox & Cin Div) 4s 1955.	4.35	4.35	4.30	4.23	4.24	4.25	4.33	4.26	4.23	4.19	4.15	4.11	4.11
117	Illinois Central RR ref M 4s 1955.	4.35	4.39	4.30	4.24	4.20	4.31	4.32	4.22	4.22	4.15	4.12	4.11	4.13
118	Chi Bur & Quincy gen M 4s 1958.	4.35	4.36	4.28	4.23	4.21	4.24	4.25	4.23	4.19	4.16	4.10	4.11	4.13
120	Un Pac RR 1st lien & ref M 4s 2008.	4.36	4.31	4.27	4.22	4.20	4.26	4.26	4.23	4.19	4.15	4.09	4.10	4.12
124	Canada So 1st & ref cons 5a 1962.	4.68	4.69	4.66	4.62	4.60	4.62	4.60	4.58	4.56	4.51	4.44	4.43	4.45
126	Pennsylvania RR cons M 4½s 1960.	4.38	4.35	4.32	4.25	4.28	4.28	4.29	4.28	4.23	4.24	4.15	4.14	4.14
127	Canadian Nor Ry 25 yr st deb 6½s 1946.	5.04	5.01	4.98	4.97	4.95	4.94	4.96	4.97	4.96	4.87	4.78	4.73	4.73
128	Grt Nor Ry gen Series B 5½s 1952.	4.80	4.87	4.82	4.75	4.75	4.79	4.83	4.74	4.69	4.65	4.61	4.60	4.55
129	Atl Coast Line gen unified 4½s 1964.	4.61	4.60	4.62	4.60	4.56	4.63	4.61	4.54	4.47	4.41	4.40	4.36	4.34
130	Pennsylvania RR gen M 4½s 1965.	4.49	4.52	4.47	4.45	4.43	4.44	4.44	4.39	4.37	4.31	4.24	4.26	4.26
131	Pennsylvania RR gen M 5s 1968.	4.55	4.51	4.48	4.47	4.46	4.54	4.52	4.44	4.39	4.36	4.29	4.30	4.28
132	Grt Nor Ry gen Series C 5s 1973.	4.83	4.82	4.78	4.73	4.70	4.75	4.79	4.69	4.66	4.60	4.58	4.58	4.61
133	St Louis SoWestern 1st M 4s 1989.	4.61	4.64	4.62	4.59	4.60	4.58	4.57	4.55	4.51	4.45	4.38	4.37	4.40
134	Mo-Kansas-Texas Ry 1st M 4s 1990.	4.64	4.62	4.61	4.55	4.56	4.55	4.59	4.52	4.48	4.43	4.36	4.34	4.35
135	Ches & Ohio Ry gen M 4½s 1992.	4.60	4.62	4.60	4.57	4.56	4.59	4.55	4.51	4.46	4.42	4.38	4.36	4.36
136	Cleve Cin Chi & St L gen M 4s 1993.	4.50	4.47	4.36	4.30	4.24	4.28	4.31	4.28	4.22	4.16	4.11	4.11	4.12
137	N Y Central RR consol M 4s 1998.	4.42	4.40	4.35	4.29	4.26	4.30	4.32	4.31	4.26	4.20	4.15	4.11	4.13
138	Tex & Pac Ry 1st M 5s 2000.	4.68	4.69	4.70	4.63	4.64	4.68	4.67	4.64	4.61	4.55	4.48	4.43	4.42
139	Lehigh V RR (Pa) gen cons M 4s 2003.	4.59	4.58	4.57	4.44	4.43	4.56	4.57	4.49	4.43	4.40	4.38	4.33	4.33
140	Canadian Pac Ry 4% deb stock.	4.71	4.76	4.73	4.67	4.68	4.71	4.69	4.65	4.64	4.58	4.56	4.45	4.39
141	Central RR dev & gen M 4s 1956.	4.86	4.86	4.82	4.74	4.74	4.82	4.83	4.75	4.69	4.59	4.51	4.46	4.48
142	Chic & West Ind RR cons M 4s 1952.	4.87	4.87	4.84	4.80	4.74	4.81	4.84	4.76	4.70	4.62	4.54	4.54	4.52
143	Pitts Cin Chi & St L gen M 5s 1975.	4.57	4.59	4.54	4.48	4.50	4.55	4.55	4.50	4.45	4.41	4.33	4.29	4.27
144	Great Nor Ry gen M 4½s 1976.	4.77	4.77	4.73	4.61	4.62	4.64	4.66	4.57	4.55	4.54	4.48	4.47	4.46

RAILROAD BOND YIELDS

**YIELDS OF RAILROAD BONDS**  
JAN. 1928—JAN. 1929

Ref. No.	Name of Bond	Jan	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
70	West Shore RR 1st M 4s 2361.....	4.32	4.35	4.33	4.31	4.36	4.41	4.52	4.63	4.61	4.59	4.48	4.59	4.62
83	Ill Central (L N O & T) col 4s 1953.....	4.42	4.46	4.44	4.50	4.55	4.69	4.72	4.69	4.75	4.74	4.66	4.83	4.80
88	Lake Sh & Mich So 1st M 3 1/2s 1997.....	4.08	4.10	4.15	4.10	4.14	4.27	4.28	4.27	4.31	4.33	4.34	4.34	4.39
91	Union Pac RR 1st M RR & Ig 4s 1947.....	4.11	4.15	4.18	4.20	4.26	4.38	4.42	4.47	4.35	4.42	4.38	4.44	4.44
93	Chi Rock Is & Pac Ry gen M 4s 1988.....	4.26	4.31	4.29	4.28	4.33	4.37	4.51	4.51	4.47	4.48	4.44	4.52	4.58
94	Atch Top & Santa Fe gen M 4s 1995.....	4.08	4.11	4.11	4.13	4.17	4.24	4.29	4.33	4.30	4.31	4.29	4.33	4.33
95	N Y Cent & Hudson River M 3 1/2s 1997.....	4.06	4.09	4.11	4.12	4.15	4.21	4.33	4.36	4.31	4.34	4.35	4.41	4.37
101	Central Pacific 1st ref M 4s 1949.....	4.30	4.37	4.30	4.33	4.43	4.55	4.59	4.73	4.63	4.63	4.52	4.68	4.72
102	Nor Pac Ry prior lien lg M 4s 1997.....	4.13	4.14	4.16	4.20	4.24	4.34	4.46	4.51	4.43	4.42	4.40	4.48	4.54
103	Norf & West Ry 1st cons M 4s 1996.....	4.10	4.12	4.12	4.14	4.18	4.24	4.34	4.43	4.33	4.32	4.30	4.36	4.39
104	Central RR of N J gen M 5s 1987.....	4.14	4.18	4.21	4.22	4.24	4.37	4.45	4.55	4.43	4.38	4.39	4.41	4.49
105	Hocking Valley 1st cons M 4 1/2s 1999.....	4.22	4.23	4.25	4.29	4.33	4.45	4.52	4.54	4.45	4.46	4.43	4.53	4.55
108	Southern Pac 1st ref M 4s 1955.....	4.15	4.15	4.22	4.23	4.29	4.36	4.46	4.52	4.46	4.44	4.41	4.52	4.52
109	A T & S Fe Ry adj M 4s stamped 1995.....	4.31	4.33	4.29	4.34	4.35	4.47	4.51	4.55	4.54	4.51	4.51	4.56	4.63
110	Norther Pac Ry gen lien 3s 2047.....	4.24	4.24	4.25	4.29	4.30	4.40	4.56	4.60	4.55	4.56	4.53	4.48	4.53
111	Atl Coast Line 1st cons M 4s 1952.....	4.12	4.17	4.15	4.23	4.23	4.35	4.44	4.52	4.37	4.46	4.48	4.54	4.62
114	Pennsylvania RR cons M 4s 1948.....	4.04	4.13	4.21	4.18	4.12	4.17	4.37	4.50	4.50	4.43	4.50	4.53	4.53
117	Illinois Central RR ref M 4s 1955.....	4.13	4.16	4.18	4.20	4.24	4.27	4.41	4.57	4.44	4.46	4.41	4.52	4.52
118	Chic Burl & Quincy gen M 4s 1958.....	4.13	4.14	4.17	4.20	4.25	4.38	4.42	4.52	4.36	4.40	4.36	4.44	4.46
119	Southern Ry 1st cons M 5s 1994.....	4.38	4.36	4.29	4.33	4.36	4.48	4.54	4.57	4.50	4.49	4.43	4.50	4.55
120	Un Pac RR 1st lien & ref M 4s 2008.....	4.12	4.11	4.16	4.16	4.22	4.31	4.38	4.45	4.41	4.41	4.39	4.46	4.47
124	Canada So 1st & ref cons 5s 1962.....	4.45	4.45	4.46	4.44	4.50	4.57	4.55	4.59	4.69	4.62	4.59	4.71	4.65
126	Pennsylvania RR cons M 4 1/2s 1960.....	4.14	4.18	4.21	4.22	4.22	4.36	4.41	4.45	4.38	4.37	4.35	4.43	4.46
127	Canadian Nor Ry 25 yr sf deb 6 1/2s 1946.....	4.73	4.71	4.68	4.63	4.80	4.93	4.93	5.09	5.03	5.01	4.98	5.10	5.17
128	Grt Nor Ry gen Series B 5 1/2s 1952.....	4.55	4.64	4.65	4.70	4.74	4.82	4.95	4.95	4.92	4.85	4.77	4.82	4.83
129	Atl Coast Line gen unified 4 1/2s 1964.....	4.34	4.36	4.37	4.38	4.42	4.50	4.47	4.66	4.59	4.56	4.56	4.66	4.64
130	Pennsylvania RR gen M 4 1/2s 1965.....	4.26	4.28	4.31	4.34	4.38	4.46	4.45	4.56	4.45	4.48	4.44	4.54	4.52
131	Pennsylvania RR gen M 5s 1968.....	4.28	4.31	4.33	4.38	4.40	4.57	4.63	4.63	4.59	4.54	4.53	4.59	4.58
132	Grt Nor Ry gen Series C 5s 1973.....	4.61	4.57	4.58	4.58	4.64	4.74	4.77	4.74	4.81	4.74	4.66	4.72	4.82
133	St Louis So Western 1st M 4s 1989.....	4.40	4.39	4.38	4.43	4.57	4.60	4.65	4.67	4.60	4.67	4.60	4.57	4.62
134	Mo-Kansas-Texas Ry 1st M 4s 1990.....	4.35	4.36	4.37	4.43	4.46	4.58	4.64	4.67	4.63	4.56	4.56	4.68	4.77
135	Ches & Ohio Ry gen M 4 1/2s 1992.....	4.36	4.35	4.34	4.41	4.44	4.51	4.52	4.58	4.63	4.54	4.52	4.54	4.58
136	Cleve Cin Chi & St L gen M 4s 1993.....	4.12	4.14	4.15	4.16	4.20	4.33	4.36	4.52	4.40	4.40	4.37	4.49	4.47
137	NY Central RR consol M 4s 1998.....	4.13	4.15	4.18	4.21	4.21	4.28	4.39	4.44	4.38	4.41	4.32	4.42	4.52
138	Tex & Pac Ry 1st M 5s 2000.....	4.42	4.45	4.40	4.36	4.45	4.55	4.53	4.63	4.60	4.53	4.45	4.52	4.59
139	Lehigh V RR (Pa) gen cons M 4s 2003.....	4.33	4.37	4.40	4.39	4.41	4.48	4.52	4.57	4.54	4.57	4.51	4.57	4.61
140	Canadian Pac Ry 4% deb stock.....	4.39	4.42	4.41	4.41	4.47	4.53	4.58	4.58	4.59	4.54	4.53	4.62	4.71
141	Southern Ry dev & gen M 4s 1956.....	4.48	4.50	4.49	4.53	4.58	4.65	4.80	4.85	4.72	4.74	4.68	4.76	4.80
142	Chic & West Ind RR cons M 4s 1952.....	4.52	4.55	4.53	4.52	4.65	4.85	4.97	4.96	4.82	4.85	4.78	4.88	4.85
143	Pitts Cin Chi & St L gen M 5s 1975.....	4.27	4.30	4.31	4.37	4.44	4.54	4.67	4.70	4.63	4.60	4.49	4.57	4.58
144	Great Nor Ry gen M 4 1/2s 1976.....	4.46	4.51	4.50	4.49	4.49	4.56	4.60	4.64	4.60	4.56	4.55	4.66	4.73
145	Chi Mil & St Paul Ry gen M 4s 1989.....	4.35	4.34	4.34	4.35	4.40	4.53	4.63	4.71	4.67	4.65	4.60	4.64	4.74
146	Erie RR cons prior lien 4s 1996.....	4.48	4.46	4.46	4.49	4.53	4.69	4.73	4.82	4.70	4.69	4.65	4.77	4.73

**YIELDS OF RAILROAD BONDS**  
JAN. 1929—JAN. 1930

Ref. No.	Name of Bond	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
70	West Shore RR 1st M 4s 2361.....	4.62	4.65	4.69	4.64	4.63	4.72	4.73	4.59	4.68	4.69	4.62	4.56	4.57
83	Ill Central (L N O & T) col 4s 1953.....	4.80	4.89	5.05	4.94	4.97	5.07	5.08	5.10	5.07	4.87	4.85	4.85	4.84
88	Lake Sh & Mich So 1st M 3 1/2s 1997.....	4.39	4.43	4.49	4.45	4.49	4.66	4.59	4.46	4.57	4.55	4.49	4.42	4.37
91	Union Pac RR 1st M RR & 1g 4s 1947.....	4.44	4.49	4.61	4.59	4.62	4.60	4.56	4.56	4.59	4.63	4.53	4.48	4.49
93	Chi Rock Is & Pac Ry gen M 4s 1988.....	4.58	4.60	4.67	4.67	4.63	4.67	4.71	4.76	4.91	4.64	4.61	4.56	4.55
94	Atch Top & Santa Fe gen M 4s 1995.....	4.33	4.39	4.40	4.35	4.38	4.41	4.42	4.42	4.44	4.39	4.32	4.29	4.32
95	N Y Cent & Hudson River M 3 1/2s 1997.....	4.37	4.51	4.47	4.47	4.50	4.61	4.61	4.55	4.71	4.58	4.44	4.37	4.42
101	Central Pacific 1st ref M 4s 1949.....	4.72	4.70	4.73	4.66	4.72	4.82	4.84	4.77	4.85	4.76	4.83	4.67	4.60
102	Nor Pac Ry prior lien lg M 4s 1997.....	4.54	4.54	4.59	4.58	4.65	4.69	4.72	4.73	4.77	4.69	4.60	4.47	4.50
103	Norf & West Ry 1st cons M 4s 1996.....	4.39	4.41	4.47	4.43	4.42	4.43	4.42	4.46	4.46	4.46	4.45	4.37	4.36
104	Central RR of N J gen M 5s 1987.....	4.49	4.53	4.59	4.57	4.54	4.58	4.67	4.65	4.67	4.59	4.59	4.55	4.58
105	Hocking Valley RR 1st cons M 4 1/2s 1999.....	4.55	4.57	4.64	4.70	4.77	4.76	4.75	4.88	4.87	4.77	4.64	4.63	
108	Southern Pac 1st ref M sf 4s 1955.....	4.52	4.54	4.61	4.59	4.61	4.70	4.75	4.82	4.86	4.77	4.75	4.63	4.55
109	A T & S Fe Ry adj M 4s stamped 1995.....	4.63	4.70	4.72	4.70	4.60	4.57	4.63	4.61	4.71	4.62	4.50	4.45	4.42
110	Northern Pac Ry gen lien 3s 2047.....	4.53	4.59	4.66	4.71	4.80	4.77	4.72	4.73	4.80	4.80	4.68	4.65	4.67
111	At <sup>1</sup> Coast Line 1st cons M 4s 1952.....	4.62	4.58	4.62	4.68	4.71	4.70	4.71	4.62	4.74	4.79	4.54	4.46	4.53
114	Pennsylvania RR cons M 4s 1948.....	4.53	4.54	4.54	4.57	4.60	4.66	4.73	4.68	4.68	4.62	4.61	4.59	4.48
117	Illinois Central RR ref M 4s 1955.....	4.55	4.53	4.61	4.62	4.63	4.67	4.77	4.82	4.83	4.79	4.64	4.60	4.59
118	Chic Burl & Quincy gen M 4s 1958.....	4.46	4.51	4.52	4.56	4.56	4.61	4.66	4.72	4.69	4.63	4.55	4.49	4.57
119	Southern Ry 1st cons M 5s 1994.....	4.55	4.58	4.64	4.65	4.66	4.73	4.75	4.73	4.72	4.71	4.68	4.65	4.61
120	Un Pac RR 1st lien & ref M 4s 2008.....	4.47	4.53	4.58	4.56	4.57	4.64	4.66	4.63	4.65	4.59	4.47	4.44	4.45
124	Canada So 1st & ref cons 5s 1962.....	4.65	4.75	4.77	4.74	4.79	4.90	4.90	4.91	4.90	4.93	4.86	4.77	4.82
126	Pennsylvania RR cons M 4 1/2s 1960.....	4.46	4.46	4.46	4.47	4.52	4.56	4.56	4.49	4.59	4.63	4.46	4.48	4.44
127	Canadian Nor Ry 25 yr sf deb 6 1/2s 1946.....	5.17	5.14	5.17	5.20	5.24	5.31	5.28	5.27	5.27	5.19	5.26	5.13	5.23
128	Grt Nor Ry gen Series B 5 1/2s 1952.....	4.83	4.95	5.02	5.00	4.96	5.02	5.05	5.02	5.05	4.98	5.00	4.89	4.85
129	Atl Coast Line gen unified 4 1/2s 1964.....	4.64	4.76	4.85	4.73	4.62	4.71	4.85	4.86	4.83	4.80	4.64	4.57	4.65
130	Pennsylvania RR gen M 4 1/2s 1965.....	4.52	4.53	4.59	4.57	4.61	4.66	4.79	4.76	4.76	4.70	4.68	4.63	4.58
131	Pennsylvania RR M 5s 1968.....	4.58	4.63	4.62	4.64	4.70	4.74	4.80	4.75	4.73	4.69	4.73	4.65	4.60
132	Grt Nor Ry gen Series C 5s 1973.....	4.82	4.85	4.94	4.86	4.81	4.89	4.90	4.93	4.90	4.87	4.85	4.76	4.77
133	St Louis SoWestern 1st M 4s 1989.....	4.62	4.59	4.74	4.83	4.82	4.90	4.90	4.94	5.00	4.88	4.76	4.67	4.67
134	Mo-Kansas-Texas Ry 1st M 4s 1990.....	4.77	4.77	4.88	4.79	4.86	4.87	4.83	4.91	4.96	4.86	4.74	4.64	4.67
135	Ches & Ohio Ry gen M 4 1/2s 1992.....	4.58	4.70	4.73	4.66	4.62	4.69	4.65	4.74	4.76	4.70	4.66	4.59	4.59
136	Cleve Cin Chi & St L gen M 4s 1993.....	4.47	4.56	4.53	4.57	4.57	4.67	4.75	4.73	4.72	4.69	4.67	4.51	4.40
137	N Y Central RR consol M 4s 1998.....	4.52	4.54	4.59	4.60	4.61	4.68	4.66	4.52	4.65	4.63	4.45	4.49	4.50
138	Tex & Pac Ry 1st M 5s 2000.....	4.59	4.61	4.72	4.69	4.69	4.77	4.81	4.82	4.89	4.78	4.73	4.67	4.65
139	Lehigh V RR (Pa) gen cons M 4s 2003.....	4.61	4.73	4.75	4.72	4.71	4.75	4.76	4.79	4.77	4.68	4.71	4.53	4.54
140	Canadian Pac Ry 4% deb stock.....	4.71	4.75	4.76	4.68	4.80	4.81	4.85	4.83	4.92	4.82	4.84	4.71	4.71
141	Southern Ry deb & gen M 4s 1956.....	4.80	4.93	5.05	4.89	4.89	4.96	4.98	4.94	5.00	4.92	4.80	4.67	4.71
142	Chic & West Ind RR consol M 4s 1952.....	4.85	4.93	5.08	5.04	5.07	5.16	5.19	5.14	5.10	5.05	5.02	4.86	4.95
143	Fitts Cin Chi & St L gen M 5s 1975.....	4.58	4.61	4.65	4.62	4.69	4.81	4.81	4.76	4.78	4.73	4.82	4.67	4.63
144	Great Nor Ry gen M 4 1/2s 1976.....	4.73	4.82	4.84	4.80	4.82	4.84	4.85	4.91	4.84	4.75	4.77	4.68	4.68
145	Chi Mil & St Paul Ry gen M 4s 1989.....	4.74	4.83	4.91	4.83	4.93	4.95	4.92	4.99	5.00	4.91	4.85	4.73	4.70
146	Erie RR cons prior lien 4s 1996.....	4.73	4.75	4.79	4.89	4.87	4.92	4.92	4.97	4.94	4.89	4.83	4.67	4.66

YIELDS OF RAILROAD BONDS  
JAN. 1930—JAN. 1931

Ref. No.	Name of Bond	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
70	West Shore RR 1st M 4s 2361.	4.57	4.59	4.46	4.51	4.51	4.49	4.39	4.40	4.28	4.26	4.31	4.60	4.32
83	Ill Central (L N O & T) col 4s 1953.	4.84	4.82	4.70	4.73	4.75	4.73	4.69	4.64	4.66	4.74	4.84	5.18	4.97
88	Lake Sh & Mich So 1st M 3½s 1997.	4.37	4.46	4.38	4.40	4.39	4.39	4.37	4.30	4.16	4.17	4.19	4.31	4.13
91	Union Pac RR 1st M RR & Ig 4s 1947.	4.49	4.49	4.40	4.43	4.41	4.31	4.25	4.19	4.11	4.21	4.11	4.17	4.17
93	Chi Rock Is & Pac Ry gen M 4s 1988.	4.55	4.56	4.47	4.50	4.47	4.45	4.40	4.31	4.24	4.23	4.30	4.44	4.28
94	Atch Top & Santa Fe gen M 4s 1995.	4.32	4.33	4.25	4.29	4.26	4.23	4.16	4.13	4.11	4.08	4.13	4.14	4.07
95	N Y Cent & Hudson River M 3½s 1997.	4.42	4.47	4.39	4.43	4.41	4.40	4.31	4.22	4.18	4.13	4.14	4.27	4.13
101	Central Pacific 1st ref M 4s 1949.	4.60	4.63	4.52	4.50	4.45	4.47	4.41	4.31	4.25	4.25	4.39	4.48	4.28
102	Nor Pac prior lien Ig M 4s 1997.	4.50	4.53	4.48	4.44	4.48	4.41	4.36	4.24	4.21	4.21	4.27	4.37	4.25
103	Norf & West Ry 1st com M 4s 1996.	4.36	4.37	4.33	4.30	4.33	4.29	4.21	4.15	4.14	4.12	4.13	4.15	4.09
104	Central RR of N J gen M 5s 1987.	4.58	4.53	4.47	4.45	4.44	4.44	4.43	4.39	4.29	4.35	4.40	4.55	4.35
105	Hocking Valley 1st cons M 4½s 1999.	4.63	4.65	4.58	4.61	4.57	4.60	4.55	4.48	4.42	4.40	4.46	4.59	4.32
108	Southern Pac 1st ref M 4s 1955.	4.53	4.56	4.49	4.53	4.50	4.44	4.38	4.28	4.23	4.27	4.35	4.42	4.23
109	A T & S Fe Ry adj M 4s stamped 1995.	4.42	4.52	4.39	4.44	4.45	4.43	4.37	4.36	4.23	4.24	4.35	4.36	4.19
110	Northern Pac Ry gen lien 3s 2047.	4.67	4.59	4.44	4.55	4.58	4.57	4.52	4.38	4.33	4.38	4.46	4.55	4.37
111	Atl Coast Line 1st com M 4s 1952.	4.53	4.57	4.48	4.58	4.49	4.36	4.31	4.27	4.24	4.27	4.32	4.59	4.26
114	Pennsylvania RR cons M 4s 1948.	4.48	4.61	4.42	4.41	4.47	4.43	4.30	4.21	4.15	4.12	4.22	4.27	4.13
117	Illinois Central RR ref M 4s 1955.	4.59	4.60	4.44	4.53	4.48	4.44	4.42	4.40	4.39	4.57	4.66	4.90	4.56
118	Chi Burl & Quincy gen M 4s 1958.	4.57	4.48	4.45	4.46	4.38	4.30	4.30	4.23	4.19	4.17	4.21	4.33	4.14
119	Southern Ry 1st cons M 5s 1994.	4.61	4.62	4.53	4.56	4.54	4.55	4.49	4.47	4.45	4.56	4.66	4.68	4.54
120	Us Pac RR 1st lien & ref M 4s 2008.	4.45	4.46	4.40	4.43	4.44	4.38	4.33	4.26	4.17	4.17	4.31	4.31	4.19
124	Canada So 1st & ref cons 5s 1962.	4.82	4.77	4.73	4.70	4.77	4.72	4.65	4.63	4.50	4.46	4.56	4.71	4.60
126	Pennsylvania RR cons M 4½s 1960.	4.44	4.49	4.43	4.41	4.42	4.42	4.38	4.34	4.21	4.20	4.28	4.27	4.13
128	Grt Nor Ry gen Series B 5½s 1952.	4.85	4.81	4.81	4.73	4.73	4.69	4.68	4.70	4.66	4.71	4.80	5.01	4.78
129	Atl Coast Line gen unified 4½s 1964.	4.65	4.67	4.57	4.62	4.59	4.54	4.50	4.39	4.39	4.42	4.54	4.70	4.47
130	Pennsylvania RR gen M 4½s 1965.	4.58	4.58	4.52	4.51	4.51	4.50	4.45	4.38	4.33	4.33	4.45	4.46	4.30
131	Pennsylvania RR gen M 5s 1968.	4.60	4.65	4.58	4.58	4.55	4.50	4.47	4.45	4.38	4.48	4.51	4.59	4.48
132	Grt Nor Ry gen Series C 5s 1973.	4.77	4.78	4.72	4.64	4.67	4.67	4.65	4.62	4.62	4.65	4.74	4.92	4.74
133	St Louis SoWestern 1st M 4s 1989.	4.67	4.68	4.59	4.62	4.66	4.60	4.57	4.51	4.43	4.46	4.48	4.64	4.71
134	Mo-Kansas-Texas Ry 1st M 4s 1990.	4.67	4.69	4.62	4.62	4.61	4.59	4.59	4.48	4.43	4.48	4.51	4.56	4.48
135	Che & Ohio Ry gen M 4½s 1992.	4.59	4.61	4.49	4.54	4.54	4.52	4.46	4.38	4.31	4.31	4.35	4.41	4.27
136	Cleve Cin Chi & St L gen M 4s 1993.	4.49	4.50	4.43	4.49	4.44	4.43	4.37	4.27	4.18	4.22	4.29	4.39	4.21
137	N Y Central RR consol M 4s 1998.	4.50	4.54	4.44	4.40	4.39	4.38	4.35	4.26	4.18	4.17	4.19	4.34	4.17
138	Tex & Pac Ry 1st M 5s 2000.	4.65	4.63	4.59	4.57	4.53	4.55	4.53	4.46	4.45	4.51	4.58	4.71	4.48
139	Lehigh V RR (Pa) gen cons M 4s 2003.	4.54	4.59	4.49	4.52	4.50	4.51	4.47	4.37	4.33	4.36	4.52	4.79	4.58
140	Canadian Pac Ry 4% deb stock.	4.71	4.76	4.64	4.66	4.63	4.56	4.50	4.45	4.46	4.48	4.51	4.58	4.54
141	Southern Ry dev & gen M 4s 1956.	4.71	4.70	4.59	4.65	4.60	4.68	4.68	4.70	4.68	4.83	5.05	5.16	4.95
142	Chic & West Ind Ry cons M 4s 1957.	4.95	5.01	4.79	4.81	4.79	4.78	4.72	4.57	4.51	4.62	4.74	5.08	4.77
143	Pitts Cin Chi & St L gen M 5s 1975.	4.63	4.64	4.58	4.56	4.54	4.52	4.52	4.45	4.43	4.46	4.56	4.63	4.50
144	Great Nor Ry gen M 4½s 1976.	4.68	4.71	4.66	4.63	4.61	4.63	4.56	4.53	4.47	4.54	4.62	4.71	4.57
145	Chi Mil & St Paul Ry gen M 4s 1989.	4.70	4.79	4.69	4.74	4.72	4.70	4.75	4.71	4.65	4.71	4.79	5.01	4.79
146	Erie RR cons prior lien 4s 1996.	4.66	4.66	4.65	4.71	4.64	4.61	4.62	4.67	4.53	4.56	4.76	4.91	4.66

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APPENDIX

**YIELDS OF RAILROAD BONDS**  
JAN. 1931—JAN. 1932

Ref. No.	Name of Bond	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
70	West Shore RR 1st M 4s 2361.....	4.32	4.34	4.35	4.35	4.33	4.35	4.36	4.54	4.76	4.80	5.08	5.76	5.63
88	Lake Sh & Mich So 1st M 3 1/2s 1997.....	4.13	4.14	4.14	4.17	4.11	4.19	4.15	4.34	4.30	4.61	4.73	4.96	4.86
91	Union Pac RR 1st M RR & Ig 4s 1947.....	4.17	4.02	4.09	4.08	3.92	3.93	3.89	3.94	4.08	4.50	4.50	5.02	4.91
93	Chi Rock Is & Pac Ry gen M 4s 1988.....	4.28	4.35	4.32	4.45	4.40	4.58	4.50	4.60	4.86	5.20	5.33	6.12	5.52
94	Atch Top & Santa Fe gen M 4s 1995.....	4.07	4.05	4.06	4.03	4.00	4.01	4.01	4.02	4.15	4.36	4.43	4.73	4.65
95	N Y Cent & Hudson River M 3 1/2s 1997.....	4.13	4.15	4.15	4.18	4.14	4.18	4.22	4.31	4.33	4.68	4.70	5.01	4.94
101	Central Pacific 1st ref M 4s 1949.....	4.28	4.30	4.26	4.27	4.17	4.21	4.14	4.20	4.45	5.07	5.45	6.08	5.95
102	Nor Pac Ry prior lien Ig M 4s 1997.....	4.25	4.28	4.27	4.33	4.29	4.26	4.27	4.42	4.46	4.85	4.92	5.25	5.11
103	Norl & West Ry 1st cons M 4s 1996.....	4.09	4.10	4.09	4.05	4.01	4.00	4.01	4.01	4.12	4.32	4.37	4.57	4.57
104	Central RR of N J gen M 5s 1987.....	4.35	4.35	4.35	4.36	4.32	4.35	4.36	4.51	4.62	4.79	4.90	4.71	5.34
105	Hocking Valley 1st cons M 4 1/2s 1999.....	4.32	4.34	4.32	4.33	4.27	4.32	4.31	4.38	4.67	5.14	5.05	5.35	5.44
108	Southern Pac 1st ref M 4s 1955.....	4.23	4.24	4.25	4.27	4.18	4.24	4.24	4.43	4.60	5.11	5.13	5.69	5.59
109	A T & S Fe Ry adj M 4s stamped 1995.....	4.19	4.20	4.21	4.24	4.15	4.17	4.15	4.19	4.42	4.69	4.91	5.22	4.99
110	Northern Pac Ry gen lien 3s 2047.....	4.37	4.44	4.43	4.51	4.53	4.44	4.45	4.62	4.86	5.12	5.14	5.74	5.38
111	Atl Coast Line 1st cons M 4s 1952.....	4.26	4.27	4.24	4.31	4.22	4.28	4.20	4.25	4.33	4.80	5.07	5.85	5.88
114	Pennsylvania RR cons M 4s 1948.....	4.13	4.09	4.13	4.07	4.00	4.04	4.03	4.02	4.22	4.70	4.73	5.08	4.85
118	Chic Burl & Quincy gen M 4s 1958.....	4.14	4.14	4.14	4.16	4.06	4.03	4.05	4.13	4.33	4.58	4.69	4.98	4.96
119	Southern Ry 1st cons M 5s 1994.....	4.54	4.56	4.53	4.63	4.65	4.64	4.65	4.75	4.99	5.34	5.51	6.76	6.07
120	Un Pac RR 1st lien & ref M 4s 2008.....	4.19	4.21	4.20	4.23	4.13	4.13	4.13	4.16	4.37	4.70	4.79	5.33	5.24
124	Canada So 1st & ref cons 5s 1962.....	4.60	4.55	4.52	4.58	4.55	4.58	4.58	4.62	4.87	5.37	5.24	6.79	6.38
126	Pennsylvania RR cons M 4 1/2s 1960.....	4.13	4.15	4.16	4.12	4.11	4.13	4.17	4.24	4.33	4.56	4.73	4.94	5.02
128	Grt Nor Ry gen Series B 5 1/2s 1952.....	4.78	4.80	4.76	4.82	4.75	4.81	4.88	5.38	6.10	6.49	6.69	8.17	7.55
129	Atl Coast Line gen unified 4 1/2s 1964.....	4.47	4.53	4.50	4.52	4.46	4.47	4.49	4.44	4.59	4.73	5.89	5.97	6.07
130	Pennsylvania RR gen M 4 1/2s 1965.....	4.30	4.37	4.39	4.44	4.39	4.43	4.42	4.56	4.72	5.21	5.38	6.36	5.60
131	Pennsylvania RR gen M 5s 1968.....	4.48	4.45	4.46	4.51	4.47	4.52	4.52	4.64	5.05	5.10	5.23	5.95	5.61
132	Grt Nor Ry gen Series C 5s 1973.....	4.74	4.68	4.69	4.78	4.72	4.86	4.88	5.35	5.85	6.78	6.26	7.14	6.88
133	St Lou's SoWestern 1st M 4s 1989.....	4.71	4.71	4.68	4.90	5.21	5.36	5.28	5.44	5.44	6.77	6.82	7.70	6.60
134	Mo-Kansas-Texas Ry 1st M 4s 1990.....	4.48	4.44	4.44	4.53	4.56	4.58	4.55	4.63	4.91	5.41	5.31	5.58	5.24
135	Che & Ohio Ry gen M 4 1/2s 1992.....	4.27	4.28	4.26	4.25	4.25	4.25	4.21	4.22	4.41	4.73	4.79	5.31	5.03
136	Cleve Cin Chi & St L gen M 4s 1993.....	4.21	4.25	4.23	4.31	4.25	4.31	4.35	4.47	4.62	5.00	5.16	5.59	5.59
137	N Y Central RR consol M 4s 1998.....	4.17	4.16	4.19	4.27	4.25	4.28	4.27	4.45	4.62	4.86	5.08	5.90	5.87
138	Tex & Pac Ry 1st M 5s 2000.....	4.48	4.45	4.48	4.51	4.54	4.61	4.60	4.82	4.87	5.16	5.81	5.87	
139	Lehigh V RR (Pa) gen cons M 4s 2003.....	4.58	4.54	4.63	4.70	4.70	4.70	4.66	4.94	5.45	6.29	6.32	7.88	7.72
140	Canadian Pac Ry 4% deb stock.....	4.54	4.59	4.56	4.54	4.53	4.62	4.73	4.85	5.70	6.34	5.82	6.52	6.52
142	Chi & West Ind RR cons M 4s 1952.....	4.77	4.74	4.68	4.69	4.72	4.76	4.67	5.00	5.49	5.96	6.36	7.41	6.55
143	Pitts Chi Chi & St L gen M 5s 1975.....	4.50	4.53	4.51	4.55	4.52	4.57	4.54	4.88	4.90	5.09	5.19	5.65	5.54
144	Great Nor Ry gen M 4 1/2s 1976.....	4.57	4.56	4.57	4.69	4.63	4.66	4.77	5.09	5.78	6.37	6.15	7.40	6.63
145	Chi Mill & St Paul Ry gen M 4s 1989.....	4.70	4.68	4.71	5.05	4.93	4.90	4.90	4.97	5.34	6.07	6.46	7.42	6.58
146	Erie RR cons prior lien 4s 1996.....	4.66	4.70	4.58	4.61	4.60	4.60	4.64	4.58	4.90	5.54	5.71	6.73	5.89

**RAILROAD BOND YIELDS**

**YIELDS OF RAILROAD BONDS**  
Jan. 1932—Jan. 1933

Ref. No.	Name of Bond	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
70	West Shore RR 1st M 4s 2361.....	5.63	5.52	5.44	5.93	5.82	5.84	5.80	5.38	5.25	5.33	5.59	5.84	5.52
88	Lake Sh & Mich So 1st M 3½s 1997.....	4.86	4.89	4.78	4.81	4.94	5.10	4.96	4.74	4.62	4.55	4.71	4.78	4.50
94	Atch Top & Santa Fe gen M 4s 1995.....	4.65	4.70	4.56	4.77	5.06	5.04	4.79	4.50	4.34	4.35	4.42	4.32	4.20
95	N Y Cent & Hudson River M 3½s 1997.....	4.94	4.92	4.84	4.98	4.98	5.00	5.01	4.67	4.34	4.69	4.89	4.81	4.55
101	Central Pacific 1st ref M 4s 1949.....	5.95	6.00	5.72	6.66	8.36	8.57	7.06	5.72	5.39	5.57	5.84	6.08	5.62
102	Nor Pac Ry prior lien lg M 4s 1997.....	5.11	5.16	5.14	5.43	5.62	5.63	5.15	4.85	4.79	4.85	4.96	4.93	4.74
103	Norf & West Ry 1st cons M 4s 1996.....	4.57	4.71	4.49	4.68	4.76	4.84	4.64	4.33	4.25	4.24	4.27	4.13	4.06
104	Central RR of N J gen M 5s 1987.....	5.34	5.52	5.46	6.28	6.47	6.38	6.34	5.37	5.46	5.41	5.46	5.41	5.41
105	Hocking Valley 1st cons M 4½s 1999.....	5.44	5.28	5.01	5.42	6.54	6.01	5.77	5.17	4.95	4.94	5.02	5.08	4.67
108	Southern Pac 1st ref M 4s 1955.....	5.59	5.75	5.48	6.28	7.66	7.73	6.88	5.80	5.48	5.64	5.99	6.28	5.98
109	A T & S Fe Ry adj M 4s stamped 1995.....	4.99	5.23	4.95	5.18	5.61	5.74	5.22	4.90	4.84	4.88	4.94	4.89	4.68
110	Northern Pac Ry gen lien 3s 2047.....	5.38	5.13	5.13	5.45	5.74	5.71	5.28	4.89	4.95	4.86	5.02	5.38	5.11
114	Pennsylvania RR cons M 4s 1948.....	4.85	4.92	5.01	5.10	5.15	5.25	5.06	4.49	4.66	4.52	4.61	4.31	4.08
118	Chi Burl & Quincy gen M 4s 1958.....	4.96	5.11	4.93	5.12	5.25	5.48	5.14	4.75	4.61	4.69	4.77	4.78	4.59
120	Un Pac RR 1st lien & ref M 4s 2008.....	5.24	5.07	4.95	5.30	5.40	5.45	5.14	4.82	4.67	4.69	4.82	4.80	4.44
124	Canada So 1st & ref cons 5s 1962.....	6.38	6.28	5.93	6.45	6.69	6.76	7.01	6.28	5.82	5.80	5.97	6.50	6.23
126	Pennsylvania RR cons M 4½s 1960.....	5.02	5.00	4.79	4.96	4.97	5.20	5.06	4.78	4.66	4.63	4.57	4.46	4.29
130	Pennsylvania RR gen M 4½s 1965.....	5.60	5.87	5.91	6.45	7.76	7.81	6.75	5.98	5.62	5.71	5.87	5.91	5.51
131	Pennsylvania RR gen M 5s 1968.....	5.61	5.72	5.83	6.33	7.56	7.96	6.76	5.91	5.51	5.63	5.81	5.95	5.56
133	St Louis SoWestern 1st M 4s 1989.....	6.60	6.34	6.41	6.95	7.82	7.88	7.08	5.79	5.10	6.12	6.07	6.68	6.66
134	Mo-Kansas-Texas Ry 1st M 4s 1990.....	5.24	5.41	5.56	5.81	6.54	6.53	5.80	5.28	5.31	5.28	5.40	5.48	5.11
135	Che & Ohio Ry gen M 4½s 1992.....	5.03	5.10	5.16	5.27	5.73	5.86	5.30	4.90	4.73	4.72	4.74	4.65	4.42
136	Cleve Cin Chi & St L gen M 4s 1993.....	5.59	5.87	5.94	5.79	5.78	6.26	6.23	5.64	5.34	5.32	5.37	5.41	5.44
137	N Y Central RR consol M 4s 1998.....	5.87	5.54	5.46	5.90	6.18	6.59	6.53	5.56	5.41	5.76	6.39	6.88	6.24
138	Tex & Pac Ry 1st M 5s 2000.....	5.87	5.60	5.70	6.38	6.07	6.01	5.94	5.80	5.49	5.60	5.70	5.90	5.24
140	Canadian Pac Ry 4% deb stock.....	6.52	6.67	6.15	6.61	7.51	7.65	6.82	5.78	5.67	5.68	6.08	6.18	6.15
143	Pitt Cin Chi & St L gen M 5s 1975.....	5.54	5.75	5.54	6.30	6.99	8.29	7.42	5.73	5.72	5.76	5.83	5.90	5.80
146	Erie RR cons prior lien 4s 1996.....	5.89	5.62	6.03	6.60	6.59	7.08	6.15	5.53	5.33	5.41	5.49	6.00	5.58
147	Pennsylvania RR gen M 4½s 1981.....	5.83	5.98	5.89	6.14	7.45	7.76	6.69	5.77	5.57	5.64	5.80	6.07	5.50
148	Chicago & Erie 1st 5s 1982.....	6.29	6.07	5.97	6.15	6.40	6.33	6.32	5.98	5.63	5.60	5.56	5.58	5.45
149	C & O (Rich & All Div) 1st 4s 1989.....	5.23	5.14	5.03	5.47	5.39	5.40	5.35	4.94	4.93	4.68	4.52	4.57	4.31
150	C C C & St L (St L Div) 1st 4s 1990.....	6.25	5.98	5.55	5.60	5.72	6.06	6.10	5.98	5.57	5.36	5.40	5.40	5.42

## RAILROAD BOND YIELDS

A105

### YIELDS OF RAILROAD BONDS Jan. 1933—Jan. 1934

Ref. No.	Name of Bond	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oc	Nov.	Dec.	Jan.
70	West Shore RR 1st M 4s 2361.....	5.52	5.30	5.45	5.73	5.42	5.11	4.88	4.75	4.89	4.93	5.48	5.67	5.37
88	Lake Sh & Mich So 1st M 3 1/2s 1907.....	4.50	4.47	4.61	4.76	4.53	4.53	4.27	4.18	4.19	4.39	4.31	4.40	4.23
94	Atch Top & Santa Fe gen M 4s 1995.....	4.20	4.36	4.45	4.68	4.50	4.31	4.22	4.17	4.33	4.27	4.56	4.40	4.23
95	N Y Cent & Hudson River M 3 1/2s 1997.....	4.55	4.59	4.73	4.98	4.80	4.60	4.39	4.28	4.39	4.34	4.55	4.56	4.34
101	Central Pacific 1st ref M 4s 1949.....	5.62	6.29	6.92	7.46	6.45	5.73	5.28	5.41	6.13	6.27	7.26	6.72	5.80
102	Nor Pac Ry prior lien lg M 4s 1997.....	4.74	4.81	4.97	5.25	5.13	4.78	4.62	4.63	4.85	4.86	5.10	5.02	4.67
103	Norf & West Ry 1st cons M 4s 1996.....	4.06	4.18	4.39	4.45	4.23	4.06	4.13	4.04	4.13	4.08	4.24	4.15	4.01
104	Central RR of N J gen M 5s 1987.....	5.41	5.45	5.72	6.04	5.65	5.23	5.05	4.95	5.03	5.12	5.37	5.40	5.08
105	Hocking Valley 1st cons M 4 1/2s 1999.....	4.67	4.65	5.14	5.17	4.88	4.69	4.55	4.52	4.63	4.58	4.75	4.70	4.52
108	Southern Pac 1st ref M of 4s 1955.....	5.98	6.33	7.14	7.18	6.58	6.03	5.50	5.62	6.42	6.48	7.21	6.99	5.99
109	A T & S Pe Ry adj M 4s stamped 1995.....	4.68	4.71	4.93	5.00	4.97	4.67	4.61	4.55	4.67	4.67	5.03	4.96	4.63
110	Northern Pac Ry gen lien 3s 2047.....	5.11	5.27	5.48	5.94	5.31	4.98	5.05	5.04	5.29	5.22	5.64	5.22	4.81
118	Chic Burl & Quincy gen M 4s 1958.....	4.59	4.67	4.74	5.32	4.88	4.78	4.45	4.43	4.54	4.59	4.91	4.66	4.36
120	Un Pac RR 1st lien & ref M 4s 2008.....	4.44	4.57	4.79	4.82	4.85	4.58	4.50	4.34	4.53	4.44	4.73	4.59	4.35
124	Canada So 1st & ref cons 5s 1962.....	6.23	6.10	6.35	6.34	6.36	5.90	5.38	5.39	5.65	5.74	6.20	5.87	5.31
126	Pennsylvania RR cons M 4 1/2s 1960.....	4.20	4.36	4.58	4.71	4.50	4.28	4.30	4.23	4.37	4.28	4.42	4.30	4.22
130	Pennsylvania RR gen M 4 1/2s 1965.....	5.51	5.54	5.86	6.20	5.64	5.28	4.94	4.91	5.22	5.20	5.60	5.38	5.03
131	Pennsylvania RR gen M 5s 1968.....	5.56	5.48	6.04	6.06	5.66	5.31	5.08	5.02	5.14	5.13	5.49	5.22	5.02
132	St Louis SoWestern 1st M 4s 1989.....	6.66	6.98	7.38	7.72	7.06	6.48	6.15	5.80	6.31	6.04	7.50	6.89	5.90
134	Mo-Kansas-Texas Ry 1st M 4s 1990.....	5.11	5.00	5.27	5.69	5.28	4.70	4.65	4.83	5.32	5.11	5.63	5.42	4.92
135	Ches & Ohio Ry gen M 4 1/2s 1992.....	4.42	4.54	4.73	5.00	4.51	4.40	4.37	4.37	4.49	4.44	4.67	4.56	4.41
136	Cleve Cin Chi & St L gen M 4s 1993.....	5.44	5.33	5.41	5.88	5.39	5.30	4.94	4.87	5.04	5.27	5.88	5.00	5.05
137	N Y Central RR consol M 4s 1998.....	6.24	6.16	6.45	6.70	5.90	5.31	4.98	4.95	5.27	5.34	5.76	5.72	5.12
138	Tex & Pac Ry 1st M 5s 2000.....	5.24	5.29	5.51	5.61	5.48	5.20	5.06	5.04	5.28	5.34	5.77	5.74	5.24
140	Canadian Pac Ry 4% deb stock.....	6.15	7.27	7.62	7.45	6.40	5.99	6.04	6.06	6.71	6.38	6.98	6.75	5.87
143	Pitts Cin Chi & St L gen M 5s 1975.....	5.80	5.96	6.20	6.86	6.05	5.52	5.20	5.07	5.18	5.34	5.64	5.54	5.20
146	Erie RR cons prior lien 4s 1996.....	5.58	5.49	5.72	5.81	5.17	4.80	4.81	4.95	5.17	5.14	5.56	5.28	4.90
147	Pennsylvania RR gen M 4 1/2s 1981.....	5.50	5.53	5.94	6.09	5.60	5.23	4.90	4.93	5.21	5.14	5.47	5.36	4.99
148	Chicago & Erie 1st 5s 1982.....	5.45	5.47	5.67	5.72	5.64	5.50	5.14	5.06	5.30	5.36	5.78	5.60	5.26
149	C & O (Rich & All Div) 1st 4s 1989.....	4.31	4.36	4.79	4.78	4.57	4.33	4.17	4.06	4.02	4.27	4.40	4.37	4.06
150	C C C & St L (St L Div) 1st 4s 1990.....	5.42	5.50	5.82	6.07	5.50	5.41	5.44	5.31	5.27	5.42	5.80	5.82	5.18

**YIELDS OF RAILROAD BONDS**  
Jan. 1934—Jan. 1935

Ref. No.	Name of Bond	Jan.	Feb	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
70	West Shore RR 1st M 4s 2361.....	5.37	4.95	4.80	4.76	4.73	4.72	4.75	4.93	5.09	4.88	4.87	4.80	4.75
88	Lake Sh & Mich So 1st M 3½s 1997.....	4.23	4.04	3.95	3.91	3.81	3.64	3.73	3.84	3.85	3.78	3.70	3.62	3.57
94	Atch Top & Santa Fe gen M 4s 1995.....	4.23	4.09	4.01	3.95	3.95	3.88	3.82	3.90	3.96	3.88	3.82	3.74	3.67
95	N Y Cent & Hudson River M 3½s 1997.....	4.34	4.14	4.08	3.99	3.85	3.73	3.81	3.95	4.01	3.91	3.82	3.72	3.65
102	Nor Pac Ry prior lien lg M 4s 1997.....	4.67	4.35	4.20	4.13	4.10	4.06	4.06	4.20	4.23	4.12	4.04	3.96	3.86
103	Norf & West Ry 1st cons M 4s 1996.....	4.01	3.93	3.91	3.85	3.78	3.75	3.73	3.76	3.83	3.79	3.68	3.62	3.55
104	Central RR of N J gen M 5s 1987.....	5.08	4.82	4.81	4.76	4.66	4.60	4.61	4.71	4.87	4.85	4.75	4.67	4.60
105	Hocking Valley 1st cons M 4½s 1999.....	4.52	4.39	4.29	4.28	4.22	4.14	4.09	4.08	4.20	4.15	4.08	4.00	3.93
108	Southern Pac 1st ref M of 4s 1955.....	5.99	5.05	4.99	4.92	4.83	4.88	4.86	5.14	5.37	5.05	4.89	4.74	4.53
109	A T & S Fe Ry adj M 4s stamped 1995.....	4.63	4.33	4.26	4.22	4.26	4.12	4.06	4.18	4.30	4.14	4.02	3.93	3.90
110	Northern Pac Ry gen lien 3s 2047.....	4.81	4.55	4.49	4.36	4.43	4.40	4.39	4.62	4.64	4.49	4.35	4.22	4.03
118	Chic Burl & Quincy gen M 4s 1958.....	4.36	4.14	4.04	3.90	3.84	3.79	3.77	3.78	3.95	3.80	3.71	3.61	3.51
120	Un Pac RR 1st lien & ref M 4s 2008.....	4.35	4.19	4.13	4.03	4.03	3.98	3.92	3.97	4.06	4.00	3.92	3.86	3.77
124	Canada So 1st & ref cons 5s 1962.....	5.31	4.97	4.95	4.70	4.78	4.62	4.46	4.54	4.71	4.65	4.48	4.46	4.38
126	Pennsylvania RR cons M 4½s 1960.....	4.22	4.16	4.09	4.03	3.95	3.86	3.83	3.89	3.98	3.84	3.77	3.69	3.56
130	Pennsylvania RR gen M 4½s 1965.....	5.03	4.69	4.56	4.46	4.39	4.34	4.37	4.44	4.51	4.44	4.33	4.23	4.11
131	Pennsylvania RR gen M 5s 1968.....	5.02	4.79	4.73	4.66	4.62	4.50	4.48	4.61	4.65	4.56	4.50	4.42	4.32
135	Chee & Ohio Ry gen M 4½s 1992.....	4.41	4.24	4.19	4.17	4.12	4.06	4.03	4.05	4.09	4.07	3.99	3.91	3.81
136	Cleve Cin Chi & St L gen M 4s 1993.....	5.05	4.54	4.46	4.28	4.34	4.23	4.21	4.38	4.67	4.47	4.34	4.24	4.04
137	N Y Central RR consol M 4s 1998.....	5.12	4.69	4.59	4.57	4.60	4.62	4.61	4.79	4.96	4.88	4.81	4.71	4.66
138	Tex & Pac Ry 1st M 5s 2000.....	5.24	4.90	4.79	4.72	4.63	4.59	4.52	4.55	4.61	4.59	4.50	4.37	4.25
140	Canadian Pac Ry 4% deb stock.....	5.87	5.25	5.11	4.99	4.88	4.84	4.84	5.03	5.22	5.00	4.87	4.69	4.64
143	Pitts Cin Chi & St L gen M 5s 1975.....	5.20	4.91	4.74	4.69	4.65	4.54	4.52	4.60	4.66	4.60	4.54	4.46	4.30
146	Erie RR cons prior lien 4s 1996.....	4.90	4.65	4.53	4.41	4.28	4.27	4.20	4.42	4.38	4.25	4.20	4.14	4.05
147	Pennsylvania RR gen M 4½s 1981.....	4.99	4.69	4.54	4.48	4.44	4.38	4.39	4.54	4.55	4.46	4.39	4.29	4.17
148	Chicago & Erie 1st 5s 1982.....	5.26	4.93	4.84	4.68	4.64	4.61	4.50	4.56	4.62	4.50	4.52	4.46	4.37
149	C & O (Rich & All Div) 1st 4s 1989.....	4.06	4.05	3.98	3.97	3.92	3.86	3.87	3.90	3.96	3.92	3.85	3.80	3.78
150	C C C & St L (St L Div) 1st 4s 1990.....	5.18	4.86	4.56	4.52	4.37	4.33	4.29	4.46	4.55	4.66	4.57	4.41	4.35

**YIELDS OF RAILROAD BONDS**  
Jan. 1935—Jan. 1936

Ref. No.	Name of Bond	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
70	West Shore RR 1st M 4s 2361.....	4.75	4.72	5.01	5.18	4.99	5.00	4.85	4.87	4.96	4.99	5.04	4.82	4.53
88	Lake Sh & Mich So 1st M 3½s 1997.....	3.51	3.50	3.52	3.52	3.50	3.46	3.44	3.51	3.53	3.55	3.55	3.61	3.45
94	Atch Top & Santa Fe gen M 4s 1995.....	3.67	3.62	3.63	3.64	3.64	3.62	3.58	3.64	3.63	3.67	3.66	3.61	3.54
95	N Y Cent. & Hudson River M 3½s 1997.....	3.65	3.59	3.71	3.72	3.74	3.67	3.63	3.72	3.73	3.74	3.73	3.65	3.54
102	Nor Pac Ry prior lien lg M 4s 1997.....	3.86	3.82	3.85	3.88	3.87	3.83	3.79	3.90	3.91	3.92	3.91	3.85	3.76
103	Norf & West Ry 1st cons M 4s 1996.....	3.55	3.48	3.47	3.46	3.42	3.40	3.40	3.43	3.42	3.44	3.44	3.42	3.36
104	Central RR of N J gen M 5s 1987.....	4.60	4.60	4.79	4.86	4.80	4.82	4.88	4.93	4.92	4.92	4.96	5.06	4.96
105	Hocking Valley 1st cons M 4½s 1999.....	3.93	3.86	3.88	3.85	3.87	3.81	3.80	3.81	3.86	3.88	3.89	3.84	3.78
108	Southern Pac 1st ref M st 4s 1955.....	4.53	4.39	4.60	4.61	4.43	4.29	4.13	4.23	4.20	4.26	4.19	4.10	3.90
109	A T & S Fe Ry adj M 4s stamped 1995.....	3.90	3.82	3.80	3.86	3.87	3.83	3.79	3.85	3.88	3.87	3.85	3.82	3.74
110	Northern Pac Ry gen lien 3s 2047.....	4.03	4.04	4.11	4.19	4.09	4.01	4.06	4.18	4.19	4.26	4.31	4.12	3.96
118	Chic Burl & Quincy gen M 4s 1958.....	3.51	3.46	3.44	3.45	3.52	3.52	3.51	3.55	3.60	3.68	3.60	3.50	3.44
120	Un Pac RR 1st lien & ref M 4s 2008.....	3.77	3.73	3.72	3.74	3.74	3.72	3.72	3.75	3.76	3.80	3.79	3.73	3.66
124	Canada So 1st & ref cons 5s 1962.....	4.38	4.34	4.39	4.48	4.43	4.35	4.28	4.21	4.34	4.45	4.41	4.34	4.18
126	Pennsylvania RR cons M 4½s 1960.....	3.56	3.46	3.47	3.50	3.50	3.49	3.41	3.49	3.50	3.49	3.43	3.40	3.36
130	Pennsylvania RR gen M 4½s 1965.....	4.11	4.09	4.12	4.14	4.11	4.05	4.01	4.06	4.09	4.09	4.05	3.99	3.92
131	Pennsylvania RR gen M 5s 1968.....	4.32	4.21	4.31	4.34	4.26	4.22	4.15	4.23	4.29	4.29	4.22	4.16	4.05
135	Ches & Ohio Ry gen M 4½s 1992.....	3.81	3.73	3.73	3.74	3.77	3.76	3.74	3.79	3.81	3.71	3.70	3.69	3.65
136	Cleva Cin Chi & St L gen M 4s 1993.....	4.04	4.01	4.23	4.36	4.21	4.23	4.12	4.14	4.18	4.23	4.33	4.17	4.07
137	N Y Central RR consol M 4s 1998.....	4.66	4.79	5.17	5.23	4.94	4.86	4.70	4.77	4.73	4.74	4.84	4.64	4.34
138	Tex & Pac Ry 1st M 5s 2000.....	4.25	4.17	4.24	4.34	4.29	4.26	4.22	4.32	4.33	4.34	4.32	4.27	4.18
140	Canadian Pac Ry 4% deb stock.....	4.64	4.63	4.74	4.75	4.60	4.55	4.56	4.55	4.73	4.80	4.74	4.64	4.50
143	Pitts Cin Chi & St L gen M 5s 1975.....	4.30	4.23	4.27	4.31	4.29	4.28	4.22	4.26	4.33	4.34	4.31	4.24	4.13
146	Erie RR cons prior lien 4s 1996.....	4.05	4.01	3.99	4.06	4.01	3.95	4.04	4.08	4.12	4.14	4.08	3.96	
147	Pennsylvania RR gen M 4½s 1981.....	4.17	4.10	4.10	4.11	4.06	3.99	3.95	4.01	4.09	4.08	4.05	4.00	3.95
148	Chicago & Erie 1st 5s 1982.....	4.37	4.24	4.28	4.32	4.29	4.27	4.21	4.28	4.25	4.28	4.27	4.23	4.20
149	C & O (Rich. & All Div) 1st 4s 1989.....	3.78	3.55	3.53	3.51	3.49	3.55	3.53	3.53	3.56	3.58	3.51	3.50	3.49
150	C C C & St L (St L Div) 1st 4s 1990.....	4.35	4.26	4.45	4.37	4.29	4.26	4.32	4.22	4.34	4.51	4.48	4.36	4.10

RAILROAD BOND YIELDS

## APPENDIX

TABLE 4

AMERICAN RAILROAD BOND YIELDS,  
JANUARY INDEX NUMBERS

1. An unadjusted chain index number based on simple geometric averages of the yields each January.

2. An unadjusted chain index number based on simple arithmetic averages of the yields each January.

In both the index numbers (geometric and arithmetic), the chaining is backwards and forwards from January 1925. In each case the index number for January 1925 is the average (geometric or arithmetic) of the yields in January 1925 of the bonds used from January 1924 to January 1925.

Date	(1) Geometric Index	(2) Arithmetic Index
January 1857	9.517	9.644
" 1858	10.204	10.376
" 1859	8.671	8.776
" 1860	8.788	8.920
" 1861	8.662	8.781
" 1862	8.412	8.513
" 1863	6.136	6.189
" 1864	6.658	6.702
" 1865	6.867	6.908
" 1866	8.108	8.143
" 1867	7.786	7.822
" 1868	7.822	7.859
" 1869	7.992	8.036
" 1870	8.215	8.263
" 1871	7.849	7.890
" 1872	7.527	7.562
" 1873	7.624	7.658
" 1874	7.649	7.685
" 1875	7.213	7.255
" 1876	6.753	6.795
" 1877	6.564	6.607
" 1878	6.506	6.543
" 1879	6.157	6.188
" 1880	5.797	5.824
" 1881	5.169	5.194
" 1882	5.213	5.242
" 1883	5.182	5.205
" 1884	5.123	5.149
" 1885	5.049	5.076
" 1886	4.620	4.643
" 1887	4.543	4.564
" 1888	4.621	4.643
" 1889	4.473	4.499
" 1890	4.451	4.472

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TABLE 4—(Concluded)

Date	(1) Geometric Index	(2) Arithmetic Index
January 1891	%	
" 1892	4.600	4.622
" 1893	4.557	4.577
" 1894	4.510	4.531
" 1895	4.525	4.547
" 1896	4.288	4.310
" 1897	4.308	4.331
" 1898	4.200	4.222
" 1899	3.976	3.996
" 1900	3.841	3.859
" 1901	3.903	3.923
" 1902	3.806	3.824
" 1903	3.795	3.810
" 1904	3.905	3.918
" 1905	4.023	4.035
" 1906	3.874	3.885
" 1907	3.902	3.912
" 1908	4.056	4.065
" 1909	4.302	4.316
" 1910	4.049	4.058
" 1911	4.108	4.116
" 1912	4.167	4.174
" 1913	4.179	4.187
" 1914	4.269	4.276
" 1915	4.442	4.451
" 1916	4.586	4.595
" 1917	4.468	4.476
" 1918	4.367	4.376
" 1919	5.202	5.215
" 1920	5.070	5.077
" 1921	5.506	5.517
" 1922	5.573	5.584
" 1923	5.002	5.011
" 1924	4.853	4.857
" 1925	4.945	4.949
" 1926	4.774	4.776
" 1927	4.643	4.645
" 1928	4.451	4.454
" 1929	4.184	4.187
" 1930	4.500	4.501
" 1931	4.503	4.504
" 1932	4.315	4.322
" 1933	5.591	5.637
" 1934	5.222	5.290
" 1935	4.944	4.997
" 1936	4.171	4.209
	4.008	4.047

TABLE 5

**AMERICAN RAILROAD BOND YIELDS, SIX INDEX NUMBERS OF BEST 5 AND WORST 5 BONDS**

In this table are six index numbers for the yields of American railroad bonds annually (each January). These six index numbers fall into two groups of three each; one group based on operations performed on the 'best five bonds' each year and the other group based on operations performed on the 'worst five bonds' each year.

The index number in column 1 was constructed in the following manner: Out of the total number of bonds whose yields were used in our monthly index numbers from January 1857 to January 1858 there were selected the five bonds having the lowest yields in January 1857. The average of the yields of this particular group of five bonds was then calculated for January 1857 and the average of the yields of the same five bonds calculated for January 1858. The percentage change in this average from January 1857 to January 1858 was then taken as the percentage change in the index number of column 1 from January 1857 to January 1858. For the next year the five bonds having the lowest yields in January 1858 were chosen and the same procedure repeated. Such annual percentage changes were then 'chained' to make the index in column 1.

Column 2 was constructed as follows: Out of the total number of bonds whose yields were used in our monthly index numbers for the period January 1857 to January 1858 there were selected the five bonds having the lowest yields in January 1858. The average of the yields of this particular group of five bonds was then calculated for January 1857 and the average of the yields of the same group calculated for January 1858. The percentage change in this average was then taken as the percentage change in the index number of column 2 from January 1857 to January 1858. Succeeding years were calculated in the same manner. Annual percentage changes were then 'chained' to make the index in column 2.

Column 3 was constructed by selecting from the total number of bonds used in the monthly index numbers from January 1857 to January 1858 the five bonds having the lowest yields in January 1857 and also the five bonds having the lowest yields in January 1858 without any consideration as to whether these two groups (of five bonds each) were or were not composed of the same five bonds. The percentage that the average yield of the January 1858 group of five bonds was of the average yield of the January 1857 group of five bonds was then taken as the percentage that the January 1858 index figure in column 3 was of the January 1857 index figure in the same column. Percentages were chained together as in columns 1 and 2.

The construction of columns 4, 5 and 6 can be easily understood from the preceding explanation, remembering simply that in each case the bonds chosen were those having the *highest* yields instead of the *lowest* yields.

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Each of the six index numbers was 'chained' backward from January 1936. The three index numbers based on the yields of the 'best five bonds' show, therefore, the same yield in January 1936 as the average of the yields of the best five bonds in January 1936. Similarly, the three index numbers based on the yields of the 'worst five bonds' show in January 1936 the same yield as the average of the yields of the worst five bonds in that month.

All averaging was geometric.

Six index numbers, three based on the 5 bonds each year having the lowest yields and three based on the 5 bonds each year having the highest yields.

	Best 5 Bonds			Worst 5 Bonds		
	(1) Earlier January	(2) Later January	(3) Either January	(4) Earlier January	(5) Later January	(6) Either January
Jan. 1857	4.35	13.65	7.63	20.33	6.02	11.15
" 1858	4.59	14.00	7.98	22.36	6.64	12.28
" 1859	4.15	12.31	7.14	17.90	5.52	9.99
" 1860	4.16	11.98	6.94	18.55	5.82	10.38
" 1861	4.12	11.78	6.86	17.87	5.72	10.11
" 1862	4.11	11.70	6.82	17.19	5.59	9.78
" 1863	3.11	8.78	5.12	12.19	4.00	7.00
" 1864	3.50	9.79	5.73	12.72	4.21	7.36
" 1865	3.58	9.82	5.76	12.62	4.38	7.43
" 1866	4.51	11.64	7.13	14.07	5.15	8.53
" 1867	4.36	11.03	6.83	13.49	5.04	8.29
" 1868	4.42	11.10	6.92	13.53	5.05	8.31
" 1869	4.48	11.09	6.95	13.85	5.27	8.59
" 1870	4.57	11.18	7.05	14.05	5.41	8.80
" 1871	4.51	10.66	6.90	13.10	5.21	8.35
" 1872	4.43	10.07	6.66	12.29	5.10	8.02
" 1873	4.52	10.26	6.79	12.46	5.17	8.13
" 1874	4.50	10.11	6.71	12.55	5.21	8.19
" 1875	4.26	9.16	6.22	12.13	5.03	7.91
" 1876	3.97	8.46	5.78	11.32	4.70	7.39
" 1877	3.94	7.90	5.52	10.92	4.53	7.13
" 1878	3.98	7.90	5.55	10.65	4.47	6.98
" 1879	3.82	7.51	5.30	9.89	4.19	6.50
" 1880	3.62	7.11	5.02	9.22	3.97	6.12
" 1881	3.23	6.30	4.48	8.23	3.59	5.49
" 1882	3.26	6.22	4.45	8.41	3.69	5.62
" 1883	3.34	6.24	4.53	8.06	3.59	5.40
" 1884	3.28	6.06	4.41	7.99	3.57	5.36
" 1885	3.24	5.80	4.29	7.85	3.53	5.28
" 1886	3.01	5.81	3.94	7.03	3.24	4.78
" 1887	2.99	5.27	3.92	6.82	3.17	4.65
" 1888	3.06	5.40	4.01	6.96	3.27	4.78

## APPENDIX

TABLE 5—(Concluded)

	Best 5 Bonds			Worst 5 Bonds		
	(1) Earlier January	(2) Later January	(3) Either January	(4) Earlier January	(5) Later January	(6) Either January
Jan. 1889	2.92	5.06	3.82	6.96	3.28	4.79
" 1890	3.00	5.05	3.87	6.68	3.14	4.59
" 1891	3.16	5.25	4.05	6.91	3.31	4.80
" 1892	3.13	5.13	3.98	6.64	3.20	4.62
" 1893	3.10	5.08	3.94	6.63	3.21	4.62
" 1894	3.11	5.04	3.94	6.66	3.24	4.65
" 1895	2.96	4.75	3.74	6.27	3.12	4.41
" 1896	2.94	4.70	3.71	6.26	3.19	4.44
" 1897	2.90	4.60	3.64	6.06	3.11	4.31
" 1898	2.79	4.32	3.46	5.77	2.97	4.11
" 1899	2.72	4.06	3.29	5.51	2.84	3.93
" 1900	2.74	4.05	3.29	5.53	2.90	3.99
" 1901	2.72	4.02	3.28	5.31	2.80	3.83
" 1902	2.74	3.98	3.28	5.26	2.79	3.81
" 1903	2.91	4.15	3.47	5.35	2.84	3.89
" 1904	3.07	4.35	3.64	5.51	2.95	4.00
" 1905	3.02	4.23	3.57	5.20	2.82	3.81
" 1906	3.09	4.26	3.61	5.21	2.86	3.84
" 1907	3.23	4.45	3.77	5.36	2.96	3.97
" 1908	3.40	4.69	3.97	5.69	3.32	4.35
" 1909	3.27	4.50	3.82	5.14	3.02	3.95
" 1910	3.35	4.58	3.91	5.16	3.06	3.98
" 1911	3.40	4.65	3.97	5.18	3.14	4.01
" 1912	3.42	4.66	3.99	5.18	3.15	4.03
" 1913	3.49	4.75	4.07	5.27	3.22	4.10
" 1914	3.62	4.86	4.20	5.48	3.40	4.27
" 1915	3.69	4.93	4.27	5.67	3.52	4.42
" 1916	3.62	4.80	4.18	5.49	3.48	4.30
" 1917	3.55	4.70	4.09	5.45	3.48	4.29
" 1918	4.24	5.43	4.80	6.52	4.38	5.26
" 1919	4.31	5.40	4.81	5.96	4.11	4.88
" 1920	4.63	5.69	5.10	6.67	4.60	5.47
" 1921	4.75	5.72	5.19	6.70	4.66	5.51
" 1922	4.32	5.10	4.66	5.90	4.25	4.95
" 1923	4.27	5.00	4.59	5.54	4.04	4.65
" 1924	4.35	5.09	4.68	5.56	4.07	4.68
" 1925	4.31	4.98	4.62	5.30	3.90	4.47
" 1926	4.25	4.85	4.53	5.11	3.79	4.34
" 1927	4.12	4.69	4.39	4.87	3.60	4.13
" 1928	3.91	4.42	4.15	4.55	3.37	3.85
" 1929	4.22	4.72	4.46	4.86	3.60	4.12
" 1930	4.22	4.68	4.45	4.90	3.66	4.16
" 1931	3.98	4.39	4.18	4.82	3.69	4.16
" 1932	4.62	5.08	4.85	6.90	5.57	6.17
" 1933	4.14	4.38	4.25	6.41	5.63	6.01
" 1934	4.07	4.26	4.15	5.78	5.44	5.56
" 1935	3.56	3.59	3.57	4.73	4.61	4.65
" 1936	3.42	3.42	3.42	4.51	4.51	4.51

TABLE 6

**INDEX NUMBERS OF THE YIELDS OF AMERICAN RAILROAD BONDS  
BASED ON SIGMA EQUATIONS**

(Quarterly January 1857—January 1879;  
Monthly January 1879—January 1936)

- Col. 1. The Sigma index number whose yield in January 1925 was 4.50 per cent (4.4998%).
- Col. 2. A cumulation of the logarithms of the slopes of the lines fitted by Sigma ratios  $\frac{\sigma_y}{\sigma_x}$ .
- Col. 3. Logarithms of the Sigma index number whose yield in January 1925 was 5.00 per cent (5.0009%).
- Col. 4. Logarithms of the Sigma index number whose yield in January 1925 was 4.50 per cent (4.4998%).
- Col. 5. A cyclical curve (see Appendix D) fitted to the logarithms of the 4.50 Sigma index (Col. 4).

The figures in column 3 are not introduced in this table because they have any great significance of their own. They are introduced primarily because, if they are used with the figures in column 4, any sigma index whatever may be quickly obtained. The relation between the figures in column 3 and those in column 4 is such that any other sigma index falls, at each date, the same proportion of the distance between the figures of column 3 and those of column 4. For example, if for each month we take a figure which is half way between the figure in column 3 and the figure in column 4, we obtain a new sigma index.

## APPENDIX

TABLE 6

Date	1 Sigma "4.50" in Jan. 1925	2 Cum. Log. of sigma slopes	3 Log. "5.00"	4 Log. "4.50"	5 Cyclical curve to Log. "4.50"
1857					
J	6.745		1.24366	.82900	
A	6.745	1.99551	1.23938	.82899	
J	6.868	.03825	1.28966	.83683	
O	7.972	.09254	1.41591	.90159	
1858					
J	7.006	.07342	1.33762	.84545	
A	6.591	.01258	1.24678	.81894	
J	6.385	.02982	1.25134	.80514	
O	6.310	1.96854	1.18749	.80001	
1859					
J	6.258	1.95204	1.16947	.79644	
A	6.183	1.96828	1.17843	.79119	
J	6.409	1.98462	1.20891	.80682	
O	6.278	1.98401	1.19931	.79779	
1860					
J	6.139	.03437	1.23898	.78809	
A	6.137	1.97054	1.17722	.78795	
J	5.923	1.94691	1.14115	.77250	
O	5.898	1.97022	1.15972	.77074	
1861					
J	6.135	.00118	1.20556	.78784	
A	6.104	1.98600	1.18896	.78560	
J	6.148	.00429	1.20947	.78875	
O	6.346	1.99099	1.21056	.80252	
1862					
J	6.099	1.94065	1.14865	.78528	
A	5.962	1.89995	1.10627	.77539	
J	5.627	1.85798	1.05067	.75027	
O	5.089	1.86484	1.01177	.70660	
1863					
J	4.609	1.85633	.96286	.66361	
A	4.772	1.82670	.95819	.67867	
J	4.825	1.83981	.97159	.68352	
O	4.942	1.75906	.93309	.69390	
1864					
J	5.222	1.74356	.94862	.71781	
A	4.774	1.76412	.92086	.67585	
J	4.065	1.92929	.96304	.60905	
O	4.947	1.82602	.97341	.69433	
1865					
J	5.402	1.73380	.95827	.73259	
A	5.985	1.70119	.98642	.77706	
J	6.045	1.72200	1.00103	.78139	
O	6.344	1.63154	.98072	.80238	

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TABLE 6 (Continued)

Date	1 Sigma "4.50" in Jan. 1925	2 Cum. Log. of sigma slopes	3 Log. "5.00"	4 Log. "4.50"	5 Cyclical curve to Log. "4.50"
1866					
J	6.649	I.57803	.98041	.82274	
A	6.548	I.65817	1.00575	.81613	
J	6.370	I.61284	.97498	.80416	
O	6.164	I.65649	.97876	.78987	
1867					
J	6.342	I.60403	.96962	.80222	
A	6.344	I.64366	.98577	.80238	
J	6.204	I.66270	.98429	.79268	
O	6.283	I.65879	.98809	.79819	
1868					
J	6.359	I.61149	.97366	.80336	
A	6.243	I.64012	.97731	.79541	
J	6.245	I.59944	.96117	.79553	
O	6.281	I.65740	.98735	.79806	
1869					
J	6.382	I.67317	1.00127	.80499	
A	6.542	I.62815	.99264	.81569	
J	6.460	I.65201	.99720	.81025	
O	6.556	I.67570	1.01410	.81667	
1870					
J	6.519	I.69528	1.02068	.81415	
A	6.395	I.62365	.98097	.80584	
J	6.377	I.55900	.95549	.80458	
O	6.374	I.62055	.97831	.80443	
1871					
J	6.383	I.60991	.97470	.80502	
A	6.439	I.52420	.94808	.80879	
J	6.398	I.50781	.94017	.80604	
O	6.280	I.62558	.97384	.79793	
1872					
J	6.159	I.58512	.94976	.78950	
A	6.295	I.51999	.93694	.79899	
J	6.028	I.61239	.95090	.78025	
O	6.214	I.60527	.96122	.79335	
1873					
J	6.249	I.57862	.95367	.79579	
A	6.222	I.60949	.96338	.79387	
J	6.152	I.59581	.95330	.78904	
O	6.391	I.70236	1.01553	.80560	
1874					
J	6.180	I.62845	.96808	.79100	
A	5.984	I.67444	.97388	.77703	
J	5.845	I.74453	.99809	.76676	
O	5.716	I.76504	.99963	.75710	

## APPENDIX

TABLE 6 (Continued)

Date	1. Sigma "4.50" in Jan. 1925	2. Cum. Log. of sigma slopes	3. Log. "5.00"	4. Log. "4.50"	5. Cyclical curve to Log. "4.50"
1875					
J	5.627	.73536	.97679	.75029	
A	5.414	.77829	.98355	.73351	
J	5.414	.75095	.96831	.73353	
O	5.363	.76477	.97179	.72942	
1876					
J	5.247	.74612	.95209	.71991	
A	5.252	.70881	.93339	.72032	
J	5.094	.75308	.94302	.70708	
O	5.254	.69445	.92666	.72051	
1877					
J	5.050	.77163	.94950	.70327	
A	5.349	.67745	.92654	.72831	
J	5.153	.69357	.91785	.71212	
O	5.204	.70061	.92534	.71626	
1878					
J	5.107	.71931	.92653	.70824	
A	5.174	.67905	.91273	.71377	
J	5.037	.69691	.90955	.70224	
O	5.025	.70359	.91161	.70108	
1879					
J	4.933	.66360	.88507	.69307	.6958
F	4.883	.60920	.85810	.68870	.6925
M	4.947	.61950	.86785	.69438	.6893
A	4.947	.61940	.86774	.69431	.6861
M	4.805	.63732	.86242	.68169	.6832
J	4.731	.65443	.86293	.67493	.6807
J	4.670	.66654	.86260	.66929	.6785
A	4.677	.65790	.85947	.66997	.6767
S	4.791	.63975	.86217	.68043	.6753
O	4.757	.65370	.86495	.67727	.6741
N	4.717	.66571	.86658	.67364	.6729
D	4.710	.64739	.85798	.67301	.6717
1880					
J	4.673	.64438	.85331	.66962	.6702
F	4.635	.63266	.84489	.66609	.6682
M	4.622	.63263	.84361	.66481	.6658
A	4.657	.61955	.84157	.66809	.6628
M	4.652	.61728	.84019	.66761	.6594
J	4.551	.65277	.84542	.65815	.6555
J	4.419	.68509	.84701	.64526	.6513
A	4.391	.67441	.83945	.64261	.6468
S	4.387	.66101	.83305	.64219	.6421
O	4.349	.65940	.82856	.63841	.6373
N	4.255	.65577	.81749	.62891	.6327
D	4.183	.65911	.81153	.62150	.6283

## RAILROAD BOND YIELDS

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TABLE 6 (Continued)

Date	1 Sigma "4.50" in Jan. 1925	2 Cum. Log. of sigma slopes	3 Log. "5.00"	4 Log. "4.50"	5 Cyclical curve to Log. "4.50"
1881					
J	4.160	.64866	.80465	.61914	.6242
F	4.258	.61812	.80214	.62923	.6208
M	4.276	.63296	.80994	.63101	.6179
A	4.224	.65322	.81314	.62567	.6156
M	4.067	.67834	.80789	.60926	.6140
J	4.019	.66942	.79866	.60407	.6129
J	3.988	.68651	.80319	.60078	.6122
A	4.019	.68698	.80671	.60408	.6119
S	4.138	.66277	.80844	.61679	.6117
O	4.170	.66867	.81435	.62009	.6118
N	4.109	.68826	.81693	.61371	.6121
D	4.119	.69474	.82102	.61474	.6126
1882					
J	4.107	.69759	.82116	.61352	.6132
F	4.098	.71308	.82777	.61259	.6139
M	4.147	.69910	.82606	.61770	.6146
A	4.130	.68515	.81770	.61592	.6155
M	4.114	.68064	.81395	.61426	.6163
J	4.148	.66407	.81004	.61782	.6170
J	4.096	.68153	.81250	.61240	.6178
A	4.132	.67788	.81462	.61620	.6187
S	4.184	.65928	.81175	.62164	.6198
O	4.157	.66712	.81238	.61881	.6211
N	4.206	.65174	.81069	.62385	.6227
D	4.265	.61689	.80236	.62993	.6246
1883					
J	4.233	.61496	.79824	.62658	.6266
F	4.219	.63868	.80655	.62525	.6287
M	4.261	.62286	.80434	.62952	.6306
A	4.233	.59982	.79744	.63166	.6321
M	4.278	.59961	.79690	.63120	.6332
J	4.278	.59751	.79616	.63126	.6337
J	4.285	.58999	.79412	.63205	.6336
A	4.334	.58078	.79559	.63692	.6331
S	4.364	.56289	.79220	.63993	.6322
O	4.329	.57913	.79444	.63637	.6312
N	4.322	.56372	.78824	.63568	.6301
D	4.263	.58614	.79033	.62969	.6290
1884					
J	4.154	.63299	.79741	.61847	.6282
F	4.184	.58949	.78348	.62159	.6275
M	4.184	.56771	.77554	.62157	.6271
A	4.173	.55843	.77108	.62037	.6267
M	4.217	.57972	.78327	.62498	.6265
J	4.250	.62031	.80214	.62835	.6261
J	4.242	.63026	.80545	.62763	.6255
A	4.237	.59541	.79114	.62704	.6245
S	4.234	.60159	.79316	.62670	.6231
O	4.209	.61289	.79501	.62417	.6210
N	4.202	.61894	.79674	.62350	.6182
D	4.196	.60126	.78915	.62282	.6148

## APPENDIX

TABLE 6 (Continued)

Date	1 Sigma "4.50" in Jan. 1925	2 Cum. Log. of sigma slopes	3 Log. "5.00"	4 Log. "4.50"	5 Cyclical curve to Log. "4.50"
1885					
J	4.059	I. 65353	.79603	.60842	.6108
F	4.007	I. 66278	.79442	.60277	.6064
M	3.957	I. 67031	.79232	.59733	.6018
A	3.938	I. 67408	.79199	.59529	.5972
M	3.889	I. 69234	.79494	.58980	.5928
J	3.847	I. 68920	.78880	.58513	.5888
J	3.826	I. 68513	.78445	.58268	.5852
A	3.817	I. 68497	.78338	.58169	.5821
S	3.807	I. 68329	.78150	.58058	.5795
O	3.798	I. 66792	.77351	.57958	.5773
N	3.800	I. 65193	.76664	.57973	.5755
D	3.776	I. 65363	.76465	.57700	.5739
1886					
J	3.757	I. 62669	.75112	.57475	.5726
F	3.706	I. 61610	.74106	.56894	.5715
M	3.706	I. 60719	.73756	.56894	.5707
A	3.727	I. 59990	.73718	.57136	.5700
M	3.719	I. 60328	.73749	.57038	.5696
J	3.717	I. 58310	.72974	.57022	.5694
J	3.658	I. 60452	.73087	.56328	.5694
A	3.657	I. 61315	.73405	.56310	.5696
S	3.745	I. 59044	.73568	.57344	.5701
O	3.747	I. 58972	.73564	.57367	.5708
N	3.763	I. 57745	.73296	.57550	.5718
D	3.789	I. 57629	.73560	.57856	.5729
1887					
J	3.746	I. 59105	.73605	.57358	.5743
F	3.746	I. 59722	.73832	.57353	.5757
M	3.762	I. 59703	.74018	.57546	.5773
A	3.794	I. 59738	.73725	.57909	.5788
M	3.787	I. 57507	.73492	.57832	.5802
J	3.797	I. 57204	.73496	.57945	.5815
J	3.762	I. 60871	.74459	.57537	.5826
A	3.805	I. 60193	.74700	.58041	.5834
S	3.902	I. 58631	.75195	.59124	.5838
O	3.920	I. 59226	.75617	.59325	.5839
N	3.868	I. 60262	.75431	.58746	.5836
D	3.801	I. 63486	.75965	.57994	.5828
1888					
J	3.795	I. 60210	.74581	.57915	.5815
F	3.758	I. 61030	.74483	.57500	.5797
M	3.781	I. 60789	.74649	.57760	.5774
A	3.782	I. 60934	.74713	.57767	.5746
M	3.752	I. 61754	.74690	.57422	.5715
J	3.683	I. 64733	.75111	.56616	.5679
J	3.617	I. 66105	.74923	.55835	.5641
A	3.616	I. 65876	.74809	.55821	.5601
S	3.595	I. 68788	.75871	.55567	.5561
O	3.578	I. 70148	.76324	.55373	.5523
N	3.572	I. 69716	.76034	.55290	.5487
D	3.586	I. 68385	.75576	.55459	.5456

## RAILROAD BOND YIELDS

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TABLE 6 (Continued)

Date	1 Sigma "4.50" in Jan. 1925	2 Cum. Log. of sigma slopes	3 Log. "5.00"	4 Log. "4.50"	5 Cyclical curve to Log. "4.50"
1889					
J	3.513	.70187	.75537	.54567	.5431
F	3.458	.70963	.75234	.53886	.5412
M	3.402	.74482	.76317	.53168	.5400
A	3.455	.71246	.75331	.53843	.5395
M	3.428	.70490	.74616	.53500	.5398
J	3.424	.68524	.73630	.53448	.5406
J	3.483	.66071	.73273	.54199	.5420
A	3.522	.64154	.72933	.54683	.5438
S	3.547	.62818	.72680	.54983	.5459
O	3.570	.63863	.73399	.55270	.5483
N	3.568	.65887	.74236	.55243	.5507
D	3.595	.64986	.74173	.55570	.5532
1890					
J	3.617	.62620	.73458	.55841	.5555
F	3.600	.63784	.73721	.55626	.5577
M	3.613	.63993	.73973	.55791	.5596
A	3.628	.63135	.73793	.55966	.5612
M	3.617	.63773	.73921	.55830	.5626
J	3.684	.62312	.73776	.56284	.5638
J	3.673	.61835	.73803	.56502	.5651
A	3.688	.62853	.74391	.56680	.5664
S	3.699	.63451	.74770	.56813	.5679
O	3.739	.62414	.74803	.57270	.5696
N	3.743	.64964	.75911	.57317	.5715
D	3.781	.65331	.76513	.57762	.5737
1891					
J	3.742	.62430	.74848	.57309	.5759
F	3.757	.61382	.74598	.57477	.5782
M	3.763	.63806	.75650	.57546	.5804
A	3.798	.62375	.75472	.57955	.5824
M	3.819	.62902	.75920	.58189	.5841
J	3.873	.62666	.76432	.58798	.5855
J	3.874	.62258	.76290	.58821	.5864
A	3.891	.61289	.76091	.59007	.5868
S	3.872	.61183	.75828	.58786	.5867
O	3.884	.57977	.74763	.58933	.5861
N	3.872	.56983	.74261	.58789	.5851
D	3.862	.55010	.73461	.58677	.5836
1892					
J	3.776	.57998	.73536	.57698	.5818
F	3.761	.57254	.73102	.57534	.5799
M	3.775	.56709	.73063	.57689	.5779
A	3.764	.56308	.72797	.57565	.5760
M	3.758	.55281	.72364	.57488	.5744
J	3.728	.56369	.72403	.57149	.5729
J	3.713	.56626	.72319	.56975	.5718
A	3.715	.56968	.72461	.56995	.5710
S	3.737	.58000	.73087	.57250	.5707
O	3.739	.57707	.73015	.57284	.5708
N	3.765	.56447	.72862	.57581	.5713
D	3.768	.57303	.73198	.57613	.5722

## APPENDIX

TABLE 6 (Continued)

Date	1 Sigma "4.50" in Jan. 1925	2 Cum. Log. of sigma slopes	3 Log. "5.00"	4 Log. "4.50"	5 Cyclical curve to Log. "4.50"
1893					
J	3.749	.57182	.72931	.57390	.5734
F	3.740	.55794	.72338	.57285	.5749
M	3.743	.57802	.73083	.57318	.5766
A	3.740	.58159	.73185	.57289	.5782
M	3.749	.60543	.74181	.57389	.5797
J	3.785	.62073	.75207	.57813	.5809
J	3.830	.66581	.77621	.58325	.5818
A	3.865	.69460	.79330	.58710	.5821
S	3.857	.63559	.76625	.58625	.5819
O	3.865	.60024	.75307	.58714	.5811
N	3.826	.57113	.73785	.58268	.5797
D	3.798	.55056	.72757	.57957	.5776
1894					
J	3.730	.59308	.73487	.57165	.5750
F	3.706	.57958	.72709	.56887	.5719
M	3.698	.56142	.71970	.56796	.5684
A	3.627	.53179	.71861	.55959	.5649
M	3.612	.59561	.72188	.55771	.5615
J	3.621	.59290	.72192	.55878	.5584
J	3.616	.60546	.72614	.55821	.5559
A	3.591	.60820	.72415	.55516	.5538
S	3.571	.60479	.72048	.55281	.5522
O	3.554	.59405	.71431	.55074	.5510
N	3.512	.60443	.71313	.54559	.5501
D	3.507	.60775	.71376	.54494	.5492
1895					
J	3.520	.60316	.71359	.54654	.5483
F	3.553	.60430	.71808	.55059	.5472
M	3.561	.60715	.72018	.55159	.5461
A	3.566	.60744	.72092	.55222	.5448
M	3.512	.61337	.71651	.54549	.5435
J	3.476	.60070	.70724	.54113	.5421
J	3.477	.58287	.70066	.54124	.5408
A	3.411	.59950	.69854	.53290	.5395
S	3.427	.59314	.69810	.53486	.5385
O	3.450	.58402	.69763	.53778	.5378
N	3.470	.58037	.69885	.54035	.5376
D	3.430	.64060	.71738	.53530	.5378
1896					
J	3.478	.64093	.72354	.54132	.5386
F	3.458	.62969	.71641	.53885	.5399
M	3.489	.61288	.71352	.54270	.5416
A	3.501	.60270	.71108	.54422	.5434
M	3.487	.60036	.70847	.54250	.5450
J	3.451	.61812	.71081	.53791	.5464
J	3.484	.64607	.72650	.54211	.5471
A	3.585	.68164	.75462	.55449	.5472
S	3.578	.65017	.73986	.55372	.5465
O	3.543	.65041	.73567	.54942	.5451
N	3.512	.61675	.71790	.54555	.5430
D	3.487	.60537	.71041	.54251	.5402

## RAILROAD BOND YIELDS

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TABLE 6 (Continued)

Date	1 Sigma "4.50" in Jan. 1925	2 Cum. Log. of sigma slopes	3 Log. "5.00"	4 Log. "4.50"	5 Cyclical curve to Log. "4.50"
1897					
J	3.429	.61534	.70704	.53525	.5378
F	3.392	.62527	.70620	.53043	.5341
M	3.367	.62493	.70292	.52729	.5303
A	3.343	.63263	.70296	.52418	.5264
M	3.330	.63302	.70132	.52239	.5229
J	3.289	.64127	.69937	.51701	.5189
J	3.264	.63763	.69459	.51375	.5165
A	3.298	.62598	.69439	.51834	.5149
S	3.265	.65377	.70161	.51392	.5142
O	3.285	.64162	.69908	.51657	.5146
N	3.293	.62560	.69348	.51758	.5152
D	3.249	.62660	.68809	.51178	.5164
1898					
J	3.253	.61051	.68222	.51232	.5179
F	3.260	.60802	.68214	.51322	.5195
M	3.314	.62285	.69513	.52034	.5208
A	3.378	.63236	.70724	.52858	.5217
M	3.402	.59100	.69412	.53169	.5220
J	3.353	.58966	.68737	.52544	.5217
J	3.265	.62409	.68918	.51389	.5205
A	3.285	.59101	.67904	.51661	.5186
S	3.310	.58359	.67952	.51983	.5160
O	3.285	.58201	.67574	.51664	.5129
N	3.235	.59560	.67406	.50990	.5094
D	3.198	.60005	.67073	.50488	.5059
1899					
J	3.150	.60510	.66613	.49834	.5026
F	3.158	.60261	.66621	.49938	.4996
M	3.150	.60973	.66785	.49826	.4973
A	3.113	.61296	.66402	.49316	.4957
M	3.095	.60553	.65866	.49070	.4948
J	3.095	.59959	.65634	.49067	.4945
J	3.110	.60014	.65864	.49275	.4947
A	3.128	.60008	.66112	.49526	.4953
S	3.148	.60701	.66656	.49803	.4961
O	3.176	.60804	.67086	.50193	.4971
N	3.196	.60657	.67294	.50458	.4980
D	3.177	.64488	.68584	.50195	.4990
1900					
J	3.174	.62550	.67748	.50162	.4997
F	3.156	.61825	.67215	.49920	.5004
M	3.143	.62001	.67099	.49734	.5008
A	3.141	.60938	.66655	.49709	.5010
M	3.148	.62285	.67291	.49812	.5010
J	3.154	.62615	.67503	.49890	.5008
J	3.164	.61708	.67283	.50034	.5006
A	3.172	.61082	.67146	.50145	.5004
S	3.179	.60683	.67077	.50231	.5003
O	3.200	.59044	.66746	.50524	.5008
N	3.189	.58193	.66283	.50375	.5004
D	3.170	.57612	.65797	.50101	.5007

## APPENDIX

TABLE 6 (Continued)

Date	1 Sigma "4.50" in Jan. 1925	2 Cum. Log. of sigma slopes	3 Log. "5.00"	4 Log. "4.50"	5 Cyclical curve to Log. "4.50"
1901					
J	3.166	.56987	.65526	.50054	.5011
F	3.143	.57452	.65383	.49745	.5015
M	3.149	.56808	.65232	.49824	.5018
A	3.158	.56539	.65254	.49941	.5021
M	3.179	.56645	.65577	.50226	.5023
J	3.179	.55744	.65269	.50234	.5024
J	3.200	.55236	.65375	.50515	.5025
A	3.202	.56066	.65683	.50536	.5025
S	3.196	.56906	.65900	.50457	.5026
O	3.206	.55763	.65644	.50602	.5027
N	3.190	.55133	.65206	.50381	.5029
D	3.189	.55170	.65207	.50369	.5031
1902					
J	3.185	.54536	.64936	.50314	.5037
F	3.168	.55282	.64959	.50082	.5043
M	3.179	.54216	.64742	.50227	.5052
A	3.179	.53686	.64565	.50226	.5063
M	3.208	.52136	.64455	.50619	.5077
J	3.243	.50027	.64274	.51093	.5095
J	3.270	.48748	.64254	.51455	.5116
A	3.292	.47834	.64274	.51742	.5141
S	3.306	.47601	.64397	.51932	.5169
O	3.327	.48492	.64923	.52201	.5200
N	3.344	.47480	.64857	.52427	.5234
D	3.347	.49045	.65353	.52467	.5268
1903					
J	3.363	.46779	.64896	.52865	.5303
F	3.388	.45454	.64863	.53000	.5335
M	3.434	.44832	.65272	.53578	.5366
A	3.487	.42346	.65284	.54240	.5394
M	3.455	.43963	.65303	.53840	.5419
J	3.463	.45831	.65917	.53950	.5441
J	3.551	.41181	.65779	.55027	.5459
A	3.622	.37617	.65803	.55899	.5474
S	3.595	.40814	.66228	.55567	.5486
O	3.531	.43419	.66112	.54792	.5494
N	3.493	.44386	.65892	.54317	.5499
D	3.508	.43446	.65885	.54507	.5500
1904					
J	3.510	.42173	.65527	.54527	.5498
F	3.519	.42087	.65622	.54643	.5492
M	3.560	.38975	.65358	.55139	.5485
A	3.551	.37433	.64899	.55037	.5476
M	3.557	.35281	.64494	.55108	.5468
J	3.533	.35401	.64231	.54819	.5459
J	3.503	.35071	.63778	.54438	.5450
A	3.482	.36201	.63767	.54181	.5441
S	3.483	.36442	.63841	.54201	.5431
O	3.491	.34741	.63555	.54286	.5422
N	3.491	.33523	.63310	.54297	.5411
D	3.476	.34079	.63236	.54107	.5402

## RAILROAD BOND YIELDS

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TABLE 6 (Continued)

Date	1 Sigma "4.50" in Jan. 1925	2 Cum. Log. of sigma slopes	3 Log. "5.00"	4 Log. "4.50"	5 Cyclical curve to Log. "4.50"
1905					
J	3.438	1.35499	.63067	.53634	.5393
F	3.443	1.33941	.62790	.53690	.5385
M	3.452	1.34158	.62960	.53814	.5378
A	3.455	1.34467	.63064	.53853	.5374
M	3.461	1.34481	.63133	.53919	.5373
J	3.450	1.35166	.63136	.53776	.5374
J	3.445	1.34474	.62934	.53722	.5378
A	3.451	1.34124	.62938	.53799	.5384
S	3.457	1.33465	.62873	.53872	.5393
O	3.466	1.32579	.62797	.53979	.5404
N	3.491	1.32300	.63055	.54292	.5417
D	3.491	1.33500	.63294	.54286	.5431
1906					
J	3.485	1.32985	.63118	.54216	.5446
F	3.516	1.31489	.63207	.54606	.5464
M	3.558	1.30139	.63461	.55124	.5483
A	3.553	1.32718	.63911	.55064	.5503
M	3.576	1.31744	.63994	.55843	.5523
J	3.569	1.31375	.63831	.55254	.5543
J	3.583	1.31247	.63978	.55426	.5561
A	3.623	1.28769	.63988	.55910	.5578
S	3.663	1.27180	.64173	.56385	.5594
O	3.651	1.27450	.64073	.56237	.5608
N	3.637	1.28415	.64083	.56071	.5622
D	3.655	1.27896	.64209	.56291	.5637
1907					
J	3.651	1.29639	.64482	.56240	.5652
F	3.679	1.28744	.64647	.56573	.5669
M	3.741	1.28814	.65390	.57303	.5686
A	3.716	1.31615	.65639	.57014	.5703
M	3.712	1.34247	.66124	.56960	.5718
J	3.726	1.37452	.66992	.57125	.5734
J	3.719	1.37989	.67026	.57037	.5747
A	3.755	1.39052	.67700	.57463	.5757
S	3.761	1.42687	.68659	.57529	.5765
O	3.823	1.43157	.69487	.58235	.5770
N	3.895	1.48795	.71858	.59047	.5769
D	3.828	1.46519	.70459	.58302	.5765
1908					
J	3.739	1.42687	.68413	.57283	.5758
F	3.680	1.46653	.68772	.56577	.5749
M	3.718	1.45852	.69005	.57033	.5737
A	3.769	1.44271	.68473	.56929	.5723
M	3.726	1.39654	.67509	.57129	.5709
J	3.713	1.40395	.67533	.56974	.5695
J	3.692	1.40307	.67272	.56735	.5683
A	3.715	1.34457	.66196	.56987	.5672
S	3.698	1.32798	.65669	.56805	.5664
O	3.696	1.32033	.65480	.56771	.5658
N	3.678	1.30297	.64924	.56556	.5655
D	3.672	1.28964	.64606	.56491	.5654

## APPENDIX

TABLE 6 (Continued)

Date	1 Sigma "4.50" in Jan. 1925	2 Cum. Log. of sigma slopes	3 Log. "5.00"	4 Log. "4.50"	5 Cyclical curve to Log. "4.50"
1909					
J	3.672	I 26265	.64119	.56493	.5654
F	3.672	I 23288	.63611	.56490	.5656
M	3.681	I 23431	.63739	.56595	.5659
A	3.668	I 25493	.63927	.56436	.5663
M	3.678	I 23567	.63730	.56563	.5669
J	3.702	I 22535	.63837	.56839	.5677
J	3.695	I 22764	.63794	.56759	.5686
A	3.722	I 20460	.63754	.57082	.5698
S	3.754	I 18528	.63834	.57452	.5711
O	3.736	I 22791	.64280	.57240	.5724
N	3.738	I 24172	.64524	.57257	.5738
D	3.753	I 22653	.64461	.57443	.5752
1910					
J	3.761	I 21753	.64401	.57528	.5765
F	3.773	I 20742	.64387	.57672	.5776
M	3.801	I 19514	.64516	.57989	.5786
A	3.812	I 23232	.65217	.58106	.5794
M	3.797	I 26822	.65664	.57940	.5800
J	3.809	I 27206	.65871	.58078	.5806
J	3.827	I 27304	.66097	.58287	.5811
A	3.827	I 26511	.65960	.58291	.5816
S	3.818	I 22396	.65153	.58177	.5820
O	3.796	I 22178	.64874	.57983	.5824
N	3.819	I 22534	.65201	.58203	.5829
D	3.818	I 22516	.65172	.58177	.5833
1911					
J	3.824	I 20565	.64938	.58250	.5838
F	3.844	I 18183	.64807	.58476	.5842
M	3.857	I 18248	.64959	.58619	.5846
A	3.843	I 19405	.64978	.58467	.5850
M	3.841	I 18137	.64772	.58448	.5852
J	3.851	I 17787	.64838	.58565	.5854
J	3.858	I 17496	.64872	.58641	.5854
A	3.868	I 17817	.65030	.58752	.5854
S	3.862	I 20659	.65380	.58677	.5853
O	3.849	I 21454	.65352	.58525	.5852
N	3.833	I 21059	.65111	.58347	.5851
D	3.839	I 21066	.65182	.58417	.5851
1912					
J	3.838	I 20217	.65044	.58410	.5851
F	3.841	I 18775	.64862	.58444	.5852
M	3.857	I 18733	.65034	.58623	.5855
A	3.857	I 19718	.65192	.58633	.5858
M	3.850	I 21290	.65354	.58553	.5863
J	3.865	I 21078	.65488	.58720	.5870
J	3.875	I 20957	.65577	.58828	.5878
A	3.908	I 19431	.65719	.59204	.5889
S	3.918	I 20733	.66025	.59312	.5902
O	3.917	I 20587	.65991	.59299	.5917
N	3.916	I 20704	.65987	.59278	.5934
D	3.929	I 20654	.66134	.59432	.5953

## RAILROAD BOND YIELDS

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TABLE 6 (Continued)

Date	1 Sigma "4.50" in Jan. 1925	2 Cum. Log. of sigma slopes	3 Log. "5.00"	4 Log. "4.50"	5 Cyclical curve to Log. "4.50"
1913					
J	3.914	1.20959	.66010	.59261	.5973
F	3.921	1.21995	.66252	.59340	.5995
M	3.975	1.23115	.67026	.59934	.6017
A	4.041	1.20603	.67348	.60655	.6039
M	4.083	1.21215	.67892	.61103	.6060
J	4.077	1.26758	.68746	.61033	.6078
J	4.092	1.25085	.68608	.61186	.6092
A	4.063	1.23889	.68103	.60883	.6102
S	4.027	1.23804	.67702	.60496	.6107
O	4.064	1.23416	.68037	.60895	.6107
N	4.130	1.21986	.68496	.61585	.6103
D	4.149	1.21017	.68548	.61790	.6098
1914					
J	4.075	1.20759	.67732	.61014	.6091
F	4.035	1.18055	.66897	.60584	.6086
M	4.043	1.19548	.67200	.60666	.6083
A	4.027	1.21383	.67318	.60502	.6082
M	4.013	1.23229	.67458	.60347	.6085
J	4.013	1.21810	.67238	.60355	.6090
J	4.061	1.21308	.67665	.60862	.6099
A	*				.6111
S	*				.6126
O	*				.6143
N	*				.6161
D	4.212	1.26312	.70080	.62446	.6180
1915					
J	4.155	1.26387	.69509	.61861	.6198
F	4.152	1.26270	.69456	.61829	.6213
M	4.168	1.27835	.69894	.61987	.6224
A	4.134	1.27126	.69420	.61641	.6229
M	4.148	1.26853	.69506	.61775	.6229
J	4.178	1.27041	.69869	.62105	.6223
J	4.232	1.28088	.70603	.62649	.6214
A	4.250	1.29273	.71017	.62843	.6202
S	4.249	1.30734	.71279	.62826	.6189
O	4.179	1.28736	.70180	.62107	.6177
N	4.091	1.24865	.68562	.61177	.6164
D	4.069	1.25808	.68494	.60948	.6152
1916					
J	4.048	1.26399	.68374	.60724	.6140
F	4.050	1.24936	.68151	.60754	.6127
M	4.063	1.25195	.68322	.60881	.6112
A	4.071	1.26014	.68556	.60973	.6097
M	4.078	1.26515	.68707	.61036	.6082
J	4.071	1.27807	.68868	.60966	.6067
J	4.066	1.29502	.69134	.60918	.6053
A	4.078	1.30182	.69384	.61038	.6042
S	4.077	1.29103	.69169	.61028	.6034
O	4.039	1.27487	.68478	.60634	.6031
N	4.011	1.26793	.68051	.60332	.6033
D	3.997	1.28618	.68223	.60172	.6041

\*Stock Exchange closed.

TABLE 6 (Continued)

Date	1 Sigma "4.50" in Jan. 1925	2 Cum. Log. of sigma slopes	3 Log. "5.00"	4 Log. "4.50"	5 Cyclical curve to Log. "4.50"
1917					
J	3.939	.1.28312	.67536	.59542	.6057
F	4.008	.1.28093	.68248	.60294	.6081
M	4.039	.1.29113	.68770	.60627	.6114
A	4.103	.1.32028	.70023	.61315	.6156
M	4.227	.1.31435	.71188	.62598	.6205
J	4.264	.1.32253	.71738	.62985	.6261
J	4.316	.1.31386	.72089	.63509	.6322
A	4.351	.1.31092	.72387	.63865	.6385
S	4.416	.1.33063	.73417	.64498	.6448
O	4.474	.1.32072	.73788	.65071	.6509
N	4.582	.1.33741	.75172	.66113	.6566
D	4.624	.1.36621	.76177	.66497	.6615
1918					
J	4.577	.1.37692	.75981	.66059	.6656
F	4.596	.1.32606	.75069	.66244	.6688
M	4.669	.1.31930	.75604	.66915	.6711
A	4.718	.1.32530	.76187	.67377	.6724
M	4.676	.1.30730	.75440	.66988	.6730
J	4.745	.1.29462	.75825	.67617	.6731
J	4.730	.1.34939	.76798	.67486	.6727
A	4.779	.1.31316	.76492	.67925	.6720
S	4.811	.1.32888	.77102	.68219	.6714
O	4.733	.1.29706	.75770	.67515	.6707
N	4.484	.1.26379	.72819	.65172	.6702
D	4.555	.1.21358	.72659	.65848	.6699
1919					
J	4.656	.1.20078	.73414	.66800	.6698
F	4.683	.1.22016	.73968	.67053	.6699
M	4.688	.1.26991	.74852	.67097	.6703
A	4.750	.1.25401	.75149	.67672	.6711
M	4.740	.1.21804	.74459	.67577	.6724
J	4.754	.1.20293	.74352	.67706	.6743
J	4.784	.1.23438	.75126	.67980	.6768
A	4.835	.1.33104	.77363	.68436	.6800
S	4.865	.1.33530	.77724	.68709	.6836
O	4.785	.1.29828	.76265	.67986	.6877
N	4.874	.1.32605	.77618	.68793	.6918
D	4.894	.1.35332	.78370	.68973	.6959
1920					
J	4.900	.1.33551	.78042	.69023	.6997
F	5.025	.1.36562	.79780	.70113	.7030
M	5.030	.1.36159	.79741	.70164	.7058
A	5.149	.1.40705	.81804	.71170	.7079
M	5.308	.1.43869	.83933	.72495	.7092
J	5.315	.1.41046	.83265	.72547	.7097
J	5.257	.1.42581	.83178	.72074	.7098
A	5.116	.1.41463	.81713	.70891	.7095
S	5.049	.1.34026	.79442	.70324	.7088
O	4.939	.1.30480	.77763	.69360	.7081
N	4.995	.1.32348	.78619	.69846	.7075
D	5.130	.1.34100	.80139	.71005	.7071

## RAILROAD BOND YIELDS

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TABLE 6 (Continued)

Date	1 Sigma "4.50" in Jan. 1925	2 Cum. Log. of sigma slopes	3 Log. "5.00"	4 Log. "4.50"	5 Cyclical curve to Log. "4.50"
1921					
J	4.959	I .33680	.78590	.69544	.7067
F	4.998	I .32362	.78657	.69881	.7066
M	5.058	I .32046	.79114	.70402	.7066
A	5.087	I .32223	.79400	.70653	.7063
M	5.138	I .29515	.79299	.71080	.7055
J	5.213	I .33226	.80660	.71709	.7041
J	5.087	I .32334	.79418	.70648	.7016
A	5.028	I .30269	.78506	.70144	.6979
S	4.998	I .26502	.77543	.69875	.6931
O	4.992	I .24958	.77233	.69833	.6870
N	4.749	I .27731	.75545	.67658	.6800
D	4.588	I .29542	.74380	.66156	.6724
1922					
J	4.477	I .31413	.73684	.65098	.6646
F	4.497	I .29874	.73577	.65290	.6571
M	4.523	I .23441	.72685	.65538	.6505
A	4.439	I .22991	.71806	.64734	.6451
M	4.429	I .21253	.71426	.64631	.6411
J	4.407	I .22966	.71475	.64406	.6387
J	4.286	I .26457	.70870	.63210	.6378
A	4.281	I .22471	.70135	.63147	.6382
S	4.282	I .20623	.69858	.63161	.6396
O	4.407	I .18853	.70836	.64406	.6417
N	4.478	I .19842	.71692	.65114	.6444
D	4.470	I .18827	.71456	.65031	.6473
1923					
J	4.457	I .19983	.71498	.64899	.6502
F	4.492	I .19415	.71750	.65237	.6529
M	4.611	I .19856	.72956	.66376	.6556
A	4.629	I .20403	.73217	.66553	.6579
M	4.547	I .21140	.72544	.65767	.6598
J	4.562	I .21089	.72685	.65915	.6615
J	4.556	I .22301	.72816	.65855	.6627
A	4.526	I .22426	.72556	.65575	.6635
S	4.587	I .20043	.72762	.66154	.6638
O	4.614	I .18964	.72855	.66409	.6637
N	4.593	I .17569	.72448	.66205	.6633
D	4.615	I .16127	.72461	.66422	.6627
1924					
J	4.587	I .14648	.71985	.66148	.6619
F	4.621	I .12292	.71995	.66467	.6609
M	4.634	I .10766	.71941	.66604	.6599
A	4.590	I .11913	.71662	.66182	.6588
M	4.560	I .09339	.71062	.65897	.6576
J	4.483	I .10494	.70461	.65157	.6562
J	4.422	I .10952	.69919	.64559	.6547
A	4.486	I .07062	.70088	.65187	.6531
S	4.469	I .08697	.70109	.65020	.6514
O	4.441	I .09117	.69889	.64750	.6499
N	4.460	I .06929	.69817	.64931	.6486
D	4.507	I .04649	.70025	.65389	.6477

## APPENDIX

TABLE 6 (Continued)

Date	1 Sigma "4.50" in Jan. 1925	2 Cum. Log. of sigma slopes	3 Log. "5.00"	4 Log. "4.50"	5 Cyclical curve to Log. "4.50"
1925					
J	4.500	I .04167	.69904	.65320	.6471
F	4.495	I .02640	.69697	.65271	.6470
M	4.437	I .07922	.69707	.64708	.6472
A	4.396	I .10644	.69626	.64303	.6475
M	4.338	I .11191	.69122	.63733	.6479
J	4.379	I .06747	.69001	.64135	.6481
J	4.436	I .05035	.69373	.64695	.6482
A	4.499	I .03552	.69837	.65316	.6481
S	4.465	I .02654	.69413	.64985	.6477
O	4.510	I .98531	.69440	.65413	.6471
N	4.493	I .98297	.69258	.65253	.6465
D	4.457	I .98238	.68909	.64909	.6457
1926					
J	4.409	I .99371	.68541	.64435	.6449
F	4.372	I .99718	.68204	.64066	.6439
M	4.376	I .99935	.68268	.64109	.6429
A	4.323	I .99353	.67678	.63575	.6417
M	4.306	I .96204	.67225	.63408	.6404
J	4.337	I .91439	.67136	.63718	.6391
J	4.342	I .94484	.67438	.63770	.6377
A	4.346	I .95869	.67600	.63813	.6364
S	4.343	I .95548	.67543	.63783	.6350
O	4.349	I .93573	.67427	.63335	.6336
N	4.307	I .93992	.67045	.63418	.6322
D	4.283	I .95229	.66904	.63172	.6305
1927					
J	4.243	I .96750	.66637	.62772	.6285
F	4.244	I .96464	.66615	.62776	.6262
M	4.184	I .99441	.66267	.62155	.6236
A	4.114	I .01769	.65677	.61428	.6206
M	4.100	I .02674	.65705	.61275	.6175
J	4.132	I .02584	.66040	.61620	.6143
J	4.134	I .02772	.66076	.61636	.6114
A	4.113	I .00086	.65591	.61417	.6089
S	4.076	I .00448	.65231	.61023	.6069
O	4.043	I .98701	.64713	.60670	.6057
N	4.005	I .97114	.64157	.60260	.6052
D	3.996	I .95107	.63887	.60165	.6055
1928					
J	4.010	I .93225	.63881	.60318	.6065
F	4.039	I .91727	.64077	.60634	.6082
M	4.068	I .87495	.64062	.60939	.6104
A	4.086	I .87368	.64244	.61130	.6131
M	4.100	I .92420	.64767	.61269	.6161
J	4.178	I .94415	.65762	.62100	.6193
J	4.259	I .91910	.66388	.62930	.6226
A	4.329	I .89723	.66931	.63644	.6260
S	4.263	I .92070	.66439	.62969	.6294
O	4.276	I .88321	.66288	.63105	.6326
N	4.260	I .84641	.65860	.62938	.6357
D	4.312	I .88210	.66640	.63465	.6385

## RAILROAD BOND YIELDS

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TABLE 6 (Continued)

Date	1 Sigma "4.50" in Jan. 1925	2 Cum. Log. of sigma slopes	3 Log. "5.00"	4 Log. "4.50"	5 Cyclical curve to Log. "4.50"
1929					
J	4.343	2.88250	.66959	.63781	.6411
F	4.382	2.89393	.67432	.64170	.6432
M	4.407	2.93376	.67986	.64410	.6451
A	4.406	2.90420	.67741	.64401	.6466
M	4.423	2.90522	.67920	.64573	.6477
J	4.464	2.91976	.68432	.64969	.6485
J	4.490	2.90909	.68604	.65225	.6489
A	4.451	2.95525	.68609	.64852	.6488
S	4.521	2.89924	.68823	.65520	.6482
O	4.492	2.85834	.68245	.65239	.6470
N	4.387	2.93611	.67818	.64223	.6452
D	4.349	2.87776	.66979	.63836	.6428
1930					
J	4.333	2.90365	.67018	.63682	.6399
F	4.317	2.94954	.67227	.63519	.6367
M	4.244	2.94058	.66415	.62783	.6334
A	4.304	2.86676	.66452	.63388	.6300
M	4.268	2.89753	.66313	.63023	.6268
J	4.234	2.91729	.66121	.62679	.6237
J	4.182	2.93964	.65766	.62142	.6208
A	4.113	2.96978	.65305	.61420	.6178
S	4.062	2.94580	.64545	.60869	.6146
O	4.034	2.01166	.64845	.60567	.6112
N	4.066	2.06928	.65801	.60916	.6077
D	4.116	2.12235	.66984	.61452	.6041
1931					
J	4.012	2.03688	.64875	.60341	.6008
F	4.018	2.03138	.64878	.60401	.5981
M	4.033	2.00677	.64791	.60561	.5964
A	4.007	2.08989	.65402	.60279	.5960
M	3.918	2.14265	.65174	.59309	.5971
J	3.927	2.16878	.65557	.59414	.5999
J	3.920	2.17315	.65532	.59327	.6042
A	3.950	2.24538	.66985	.59657	.6100
S	3.980	2.36195	.69572	.59988	.6169
O	4.174	2.43658	.73444	.62063	.6246
N	4.321	2.40774	.74214	.63564	.6325
D	4.496	2.53738	.79637	.65283	.6403
1932					
J	4.537	2.45138	.77456	.65680	.6472
F	4.609	2.41490	.77190	.66364	.6527
M	4.509	2.41929	.76346	.65409	.6564
A	4.604	2.51631	.79988	.66314	.6580
M	4.526	2.66061	.84634	.65570	.6573
J	4.556	2.68234	.85900	.65858	.6546
J	4.522	2.59600	.81960	.65532	.6502
A	4.340	2.47676	.76238	.63753	.6444
S	4.274	2.44163	.74593	.63079	.6379
O	4.268	2.45832	.74980	.63015	.6311
N	4.280	2.49997	.76313	.63143	.6245
D	4.119	2.60227	.78147	.61480	.6184

## APPENDIX

TABLE 6 (Concluded)

Date	1 Sigma "4.50" in Jan. 1925	2 Cum. Log. of sigma slopes	3 Log. "5.00"	4 $x$ Log. "4.50"	5 Cyclical curve to Log. "4.50"
1933					
J	3.933	.59726	.75948	.59471	.6132
F	3.912	.63219	.77097	.59241	.6090
M	4.051	.65622	.79632	.60760	.6056
A	4.220	.65371	.81293	.62529	.6032
M	4.113	.58383	.77392	.61417	.6013
J	3.996	.53102	.74302	.60156	.5999
J	3.944	.48171	.72218	.59591	.5986
A	3.890	.49248	.71933	.58988	.5971
S	3.870	.58324	.74724	.58771	.5954
O	3.878	.59322	.74997	.58861	.5932
N	3.956	.66751	.78879	.59734	.5907
D	3.939	.63457	.77292	.59545	.5879
1934					
J	3.884	.52847	.72833	.58933	.5848
F	3.845	.41357	.69154	.58486	.5817
M	3.782	.40198	.68158	.57770	.5783
A	3.726	.39331	.67304	.57122	.5747
M	3.671	.40439	.66924	.56478	
J	3.582	.43042	.66502	.55411	
J	3.579	.41824	.66165	.55381	
A	3.613	.45778	.67606	.55794	
S	3.659	.47808	.68719	.56342	
O	3.603	.46245	.67606	.55666	
N	3.522	.46837	.66781	.54678	
D	3.459	.46112	.65790	.53887	
1935					
J	3.374	.46468	.64812	.52810	
F	3.283	.49297	.64430	.51621	
M	3.229	.56042	.65871	.50909	
A	3.224	.57781	.66417	.50845	
M	3.269	.52906	.65365	.51446	
J	3.251	.52391	.64960	.51204	
J	3.236	.51338	.64429	.51003	
A	3.291	.50275	.64832	.51730	
S	3.303	.51264	.65289	.51886	
O	3.311	.52135	.65673	.51998	
N	3.270	.53964	.65714	.51451	
D	3.250	.52014	.64828	.51191	
1936					
J	3.210	.48775	.63302	.50645	
F	3.177				
M	3.113				
A	3.100				
M	3.066				
J	3.052				
J	3.075				
A	3.101				
S	3.073				
O	3.064				
N	3.034				
D	2.989				
1937					
J	3.011				

## TABLES 7 AND 8

## CERTAIN MATHEMATICAL FUNCTIONS AND EQUATIONS DERIVED FROM THE LOGARITHMS OF THE YIELDS OF THE RAILROAD BONDS USED IN INDEXES

The information in each horizontal line of these tables refers to a definite group of bonds, each bond in the group having either actual or interpolated quotations on both the dates given in the first two columns. The bonds from which the tables are constructed are, year by year, the same bonds which were used in constructing the bond index numbers. The groups in two horizontal lines may or may not be the same. The names of the bonds used in any particular period may be found by referring to Table 3.

The x's of the table refer in all cases to the logarithms of the yields in the earlier date (first column of table). The y's refer to the logarithms of the yields in the later date (second column of table). All functions and equations are in terms of logarithms; for example, the x's and y's of the equations are in all cases *logarithms* of yields. Thus the first equation in the last column of Table 7 might read "The logarithm of the yield in the later January equals 1.18693 times the logarithm of the yield in the earlier January, minus .13852."

The origin for all equations is zero. At the origin actual yields in both the earlier and the later dates are therefore unity, as  $\log 1 = 0$ .

The Least Squares Straight Line Equations of Table 7 need no particular description. In the eighth column the earlier January (x) has been considered the independent variable, in the ninth column the later January (y) has been considered the independent variable. In statistical nomenclature, they are the two regression equations.

In the equations which we have termed Sigma Equations *neither* variable is considered independent. They are equations of theoretical linear relationship between x and y, fitted by the method of least squares, the assumption having been made that the tendency to deviation from theory in the x and y elements of each observation is in proportion to the respective x and y standard deviations. For a fuller discussion of the significance of these Sigma Equations see Ch. IV.

Table 7 contains a column entitled 'Root-Mean-Square-Displacement'. These figures give a measure of scatter of the observations about the Sigma line ( $y = \frac{\sigma}{\alpha}x$ ). This measure of scatter, unlike the coefficient of correlation (r), is not necessarily affected by the mere inclusion or exclusion of bonds of lower and lower grade—in other words by the mere range of the observations.

TABLE 7—AMERICAN RAILROAD BOND  
MATHEMATICAL FUNCTIONS

DATES OF IDENTICAL GROUPS OF BONDS <sup>1</sup>		ARITHMETIC AVERAGES OF LOGS OF YIELDS		STANDARD DEVIATIONS OF LOGS OF YILDTS		ROOT-MEAN SQUARE DISPLACEMENT
x (earlier date)	y (later date)	M <sub>x</sub>	M <sub>y</sub>	$\sigma_x$	$\sigma_y$	$\sqrt{\sigma_x \sigma_y (1-r)}$
Jan. 1857	Jan. 1858	.90277	.93300	.05577	.06620	.0163
Jan. 1858	Jan. 1859	.93493	.86427	.06473	.04906	.0263
Jan. 1859	Jan. 1860	.86427	.87007	.04906	.05930	.0138
Jan. 1860	Jan. 1861	.87007	.86380	.05930	.05494	.0088
Jan. 1861	Jan. 1862	.86600	.85327	.05407	.04704	.0097
Jan. 1862	Jan. 1863	.87218	.73518	.04985	.04106	.0234
Jan. 1863	Jan. 1864	.74552	.78100	.04625	.03567	.0096
Jan. 1864	Jan. 1865	.77968	.79309	.03537	.03458	.0150
Jan. 1865	Jan. 1866	.79232	.86447	.03662	.02559	.0198
Jan. 1866	Jan. 1867	.86932	.85168	.02700	.02867	.0116
Jan. 1867	Jan. 1868	.85230	.85430	.02851	.02901	.0082
Jan. 1868	Jan. 1869	.85390	.86325	.02916	.03361	.0102
Jan. 1869	Jan. 1870	.85852	.87048	.02922	.03075	.0106
Jan. 1870	Jan. 1871	.87376	.85400	.02716	.02231	.0133
Jan. 1871	Jan. 1872	.85400	.83576	.02331	.02108	.0145
Jan. 1872	Jan. 1873	.84043	.84596	.02454	.02418	.0054
Jan. 1873	Jan. 1874	.84652	.84790	.02355	.02641	.0047
Jan. 1874	Jan. 1875	.84576	.82033	.02553	.02666	.0089
Jan. 1875	Jan. 1876	.82057	.79195	.03334	.03418	.0094
Jan. 1876	Jan. 1877	.79195	.77967	.03418	.03624	.0139
Jan. 1877	Jan. 1878	.78145	.77755	.03623	.03212	.0098
Jan. 1878	Jan. 1879	.78045	.75659	.03216	.02829	.0065
Jan. 1879	Jan. 1880	.75752	.73126	.02458	.02352	.0057
Jan. 1880	Jan. 1881	.74288	.69312	.03275	.03307	.0072
Jan. 1881	Jan. 1882	.69692	.70058	.03510	.03929	.0104
Jan. 1882	Jan. 1883	.70379	.70121	.03939	.03256	.0076
Jan. 1883	Jan. 1884	.70145	.69652	.03227	.03363	.0060
Jan. 1884	Jan. 1885	.69647	.69019	.03310	.03471	.0088
Jan. 1885	Jan. 1886	.69103	.65241	.03480	.03272	.0063
Jan. 1886	Jan. 1887	.65216	.64489	.03281	.03023	.0076
Jan. 1887	Jan. 1888	.64508	.65249	.03030	.03108	.0085
Jan. 1888	Jan. 1889	.65414	.64003	.02817	.03545	.0073
Jan. 1889	Jan. 1890	.63850	.63639	.03523	.02960	.0089
Jan. 1890	Jan. 1891	.63089	.65421	.02969	.03956	.0068
Jan. 1891	Jan. 1892	.65500	.65095	.02958	.02671	.0075
Jan. 1892	Jan. 1893	.65090	.64644	.02730	.02679	.0057
Jan. 1893	Jan. 1894	.64649	.64789	.02724	.02861	.0075
Jan. 1894	Jan. 1895	.64783	.62450	.02910	.02979	.0072
Jan. 1895	Jan. 1896	.62650	.62853	.03076	.03356	.0070
Jan. 1896	Jan. 1897	.62735	.61635	.03323	.03133	.0072
Jan. 1897	Jan. 1898	.61525	.59144	.03139	.03104	.0075
Jan. 1898	Jan. 1899	.58980	.57486	.03353	.03312	.0092
Jan. 1899	Jan. 1900	.57368	.58059	.03341	.03501	.0078
Jan. 1900	Jan. 1901	.58276	.57192	.03561	.03133	.0041
Jan. 1901	Jan. 1902	.57192	.57059	.03133	.02961	.0065
Jan. 1902	Jan. 1903	.57124	.58361	.02948	.02466	.0055
Jan. 1903	Jan. 1904	.58338	.59630	.02437	.02191	.0055
Jan. 1904	Jan. 1905	.59697	.58067	.02183	.01872	.0048
Jan. 1905	Jan. 1906	.58465	.58775	.02115	.01996	.0060
Jan. 1906	Jan. 1907	.58872	.60551	.02001	.01853	.0041
Jan. 1907	Jan. 1908	.60551	.63105	.01853	.02502	.0074
Jan. 1908	Jan. 1909	.63105	.60482	.02502	.01714	.0061
Jan. 1909	Jan. 1910	.60709	.61327	.02068	.01864	.0042
Jan. 1910	Jan. 1911	.61355	.61975	.01889	.01838	.0033
Jan. 1911	Jan. 1912	.61975	.62105	.01838	.01824	.0040
Jan. 1912	Jan. 1913	.62170	.63086	.01861	.01893	.0037
Jan. 1913	Jan. 1914	.63056	.64793	.01904	.01895	.0056
Jan. 1914	Jan. 1915	.64870	.66251	.01940	.02208	.0049
Jan. 1915	Jan. 1916	.66172	.65037	.02296	.02297	.0055
Jan. 1916	Jan. 1917	.64988	.63998	.02328	.02433	.0041
Jan. 1917	Jan. 1918	.64020	.71617	.02484	.03083	.0099
Jan. 1918	Jan. 1919	.71617	.70505	.03083	.02055	.0079
Jan. 1919	Jan. 1920	.70505	.74076	.02055	.02802	.0067
Jan. 1920	Jan. 1921	.74076	.74612	.02802	.02811	.0063
Jan. 1921	Jan. 1922	.74612	.69907	.02811	.02668	.0083
Jan. 1922	Jan. 1923	.69907	.68595	.02668	.02050	.0067
Jan. 1923	Jan. 1924	.68595	.69417	.02050	.01813	.0055
Jan. 1924	Jan. 1925	.69417	.67888	.01813	.01423	.0044
Jan. 1925	Jan. 1926	.68471	.67258	.01854	.01660	.0033
Jan. 1926	Jan. 1927	.67344	.65511	.01774	.01670	.0039
Jan. 1927	Jan. 1928	.65687	.63004	.01749	.01613	.0033
Jan. 1928	Jan. 1929	.63144	.66302	.01638	.01460	.0052
Jan. 1929	Jan. 1930	.66302	.66328	.01460	.01533	.0049
Jan. 1930	Jan. 1931	.65593	.62939	.00936	.01272	.0041
Jan. 1931	Jan. 1932	.64041	.75290	.02114	.05491	.0132
Jan. 1932	Jan. 1933	.73806	.70841	.04199	.05875	.0172
Jan. 1933	Jan. 1934	.71155	.68790	.05698	.04807	.0142
Jan. 1934	Jan. 1935	.68211	.60821	.04557	.03934	.0128
Jan. 1935	Jan. 1936	.60821	.59093	.03934	.04149	.0106

Note 1. These are the yields in Table 3.

Note 2. The variables are the logarithms of bond yields. The first two columns give, of course, only the dates to which yields relate.

Note 3. For a description of the nature of these equations see Ch. IV.

**YIELDS<sup>1</sup>, JANUARIES 1857-1936  
AND EQUATIONS**

**EQUATIONS OF LEAST SQUARES STRAIGHT LINES FITTED TO LOGARITHMS  
OF YIELDS**

When  $x$  is the independent variable

$$\begin{aligned}y &= 1.10138x - .06129 \\y &= .59338x + .30925 \\y &= 1.13043x - .10692 \\y &= .90440x + .07691 \\y &= .83750x + .12800 \\y &= .60311x + .20916 \\y &= .72839x + .23797 \\y &= .79911x + .17004 \\y &= .40729x + .54177 \\y &= .87710x + .08920 \\y &= .93383x + .05840 \\y &= 1.03003x - .01629 \\y &= .92035x + .08035 \\y &= .58128x + .34611 \\y &= .52305x + .38908 \\y &= .93582x + .05947 \\y &= 1.08146x - .06758 \\y &= 1.15797x - .15903 \\y &= .94505x + .01647 \\y &= .89541x + .07055 \\y &= .81405x + .14141 \\y &= .83941x + .10147 \\y &= .90281x + .04736 \\y &= .96113x - .02088 \\y &= 1.03073x + .01775 \\y &= .78936x + .14567 \\y &= 1.00821x - .01069 \\y &= .97754x - .00936 \\y &= .06693x + .02570 \\y &= .86773x + .07899 \\y &= .94724x + .04145 \\y &= 1.19214x - .13980 \\y &= .77607x + .14087 \\y &= .94347x + .05049 \\y &= .83892x - .10146 \\y &= .93837x + .03566 \\y &= .97394x + .01823 \\y &= .96167x + .00150 \\y &= 1.03861x - .02216 \\y &= .89537x + .05452 \\y &= .93117x + .01854 \\y &= .91150x + .03726 \\y &= .99339x + .01036 \\y &= .86661x + .06690 \\y &= .90267x + .05433 \\y &= .80243x + .12523 \\y &= .84878x + .10114 \\y &= .80833x + .09812 \\y &= .86305x + .08317 \\y &= .88302x + .08566 \\y &= 1.18972x - .08933 \\y &= .62602x + .20977 \\y &= .85993x + .09121 \\y &= .94246x + .04150 \\y &= .94508x + .03534 \\y &= .97735x + .02324 \\y &= .91024x + .07397 \\y &= 1.07525x - .03500 \\y &= .94266x + .02659 \\y &= 1.01478x - .01951 \\y &= 1.08113x + .02403 \\y &= .60087x + .27473 \\y &= 1.25581x - .14465 \\y &= .95228x + .04071 \\y &= .86211x + .05583 \\y &= .70536x + .19285 \\y &= .81234x + .13695 \\y &= .72675x + .17439 \\y &= .86384x + .08110 \\y &= .89358x + .05333 \\y &= .88682x + .04751 \\y &= .79267x + .16250 \\y &= .03597x + .04272 \\y &= 1.16474x - .13460 \\y &= 2.20674x - .66032 \\y &= 1.23178x - .20072 \\y &= .78109x + .13212 \\y &= .78521x + .07261 \\y &= .98144x - .00599\end{aligned}$$

When  $y$  is the independent variable

$$\begin{aligned}x &= .78178y + .17337 \\x &= 1.03341y + .04178 \\x &= .77373y + .19107 \\x &= 1.05376y - .04017 \\x &= 1.10666y - .07828 \\x &= .88927y + .21841 \\x &= 1.22440y - .21074 \\x &= .83582y + .11680 \\x &= .83450y + .07092 \\x &= .77811y + .20662 \\x &= .90231y + .08146 \\x &= .77353y + .18458 \\x &= .83126y + .13493 \\x &= .86123y + .13827 \\x &= .58631y + .36398 \\x &= .96427y + .02470 \\x &= .85869y + .11759 \\x &= .70707y + .26520 \\x &= .89936y + .10832 \\x &= .79616y + .17121 \\x &= 1.03583y - .02396 \\x &= 1.08492y - .04039 \\x &= .98636y + .03624 \\x &= .94236y + .08971 \\x &= .82278y + .12050 \\x &= 1.15484y + .10599 \\x &= .92788y + .05516 \\x &= .88932y + .08267 \\x &= 1.02621y + .02152 \\x &= 1.02254y - .00727 \\x &= .90026y + .05767 \\x &= .75296y + .17222 \\x &= 1.09958y + .06126 \\x &= .95181y + .01721 \\x &= 1.02889y - .01476 \\x &= .97443y + .02099 \\x &= .88309y + .07435 \\x &= .91807y + .07449 \\x &= .87283y + .07790 \\x &= 1.00755y + .00633 \\x &= .95216y + .05211 \\x &= .93452y + .05258 \\x &= .90485y + .04833 \\x &= 1.11962y - .05757 \\x &= 1.01057y - .00470 \\x &= 1.14697y - .09814 \\x &= 1.04937y - .04236 \\x &= 1.09918y - .04129 \\x &= .96914y + .01504 \\x &= 1.03009y - .03501 \\x &= .65234y + .19385 \\x &= 1.33335y + .17550 \\x &= 1.05893y - .04209 \\x &= .99548y - .00340 \\x &= .96034y + .02333 \\x &= .94449y + .02586 \\x &= .91860y + .03537 \\x &= .82974y + .09899 \\x &= .94211y + .04900 \\x &= .92927y + .05517 \\x &= .70192y + .13751 \\x &= 1.35223y - .23722 \\x &= .67526y + .20484 \\x &= .94667y + .03443 \\x &= .95695y + .07715 \\x &= 1.19403y - .11997 \\x &= 1.03854y - .03497 \\x &= 1.17757y - .10526 \\x &= 1.07730y - .03986 \\x &= 1.00832y + .01288 \\x &= 1.04319y - .00038 \\x &= .99679y - .02945 \\x &= .84931y + .09669 \\x &= .63060y + .25904 \\x &= .32714y + .39410 \\x &= .62916y + .20235 \\x &= 1.09740y - .04335 \\x &= 1.05333y + .04146 \\x &= .88247y + .08672\end{aligned}$$

**SIGMA EQUATIONS<sup>3</sup> OF STRAIGHT LINES FITTED TO LOGARITHMS OF YIELDS**

$$y = a + \frac{\sigma_y}{\sigma_x} x$$

$$\begin{aligned}y &= 1.18693x - .13852 \\y &= .75793x + .15566 \\y &= 1.20872x - .17459 \\y &= .92642x + .05775 \\y &= .86993x + .09991 \\y &= .82353x + .01691 \\y &= .77130x + .20598 \\y &= .97779x + .03073 \\y &= .69861x + .31095 \\y &= 1.06171x - .07129 \\y &= 1.01732x - .01276 \\y &= 1.15259x - .12095 \\y &= 1.05222x - .03287 \\y &= .82155x + .13616 \\y &= .94451x + .02915 \\y &= .98514x + .01802 \\y &= 1.12159x - .10155 \\y &= 1.27914x - .26152 \\y &= 1.02509x - .04921 \\y &= 1.06050x - .06019 \\y &= .88651x + .08479 \\y &= .87960x + .07011 \\y &= .95671x + .00653 \\y &= 1.00991x - .05712 \\y &= 1.11926x - .07945 \\y &= .82675x + .11935 \\y &= 1.04239x + .03466 \\y &= 1.04843x - .04001 \\y &= 1.94009x + .00278 \\y &= .92120x + .04412 \\y &= 1.02576x - .00921 \\y &= 1.25828x - .18306 \\y &= .84011x + .09998 \\y &= .99561x + .01713 \\y &= .90297x + .05950 \\y &= .98132x + .00770 \\y &= 1.05018x - .03104 \\y &= 1.02347x - .03853 \\y &= 1.09084x - .05488 \\y &= .94279x + .02489 \\y &= .98892x - .01699 \\y &= .98761x - .00763 \\y &= 1.04810x - .02068 \\y &= .87978x + .05922 \\y &= .94511x + .03006 \\y &= .83643x + .10581 \\y &= .89936x + .07163 \\y &= .85755x + .06874 \\y &= .94368x + .03603 \\y &= .92586x + .06044 \\y &= 1.35047x - .18667 \\y &= .68516x + .17245 \\y &= .90131x + .06609 \\y &= .97301x + .02276 \\y &= .99202x + .00625 \\y &= 1.01725x - .00156 \\y &= .99544x + .02025 \\y &= 1.13837x - .07595 \\y &= 1.00030x - .01155 \\y &= 1.04500x - .03914 \\y &= 1.24107x - .07836 \\y &= .66660x + .22765 \\y &= 1.36372x - .22073 \\y &= 1.00206x + .00317 \\y &= .94916x - .00912 \\y &= .76860x + .14864 \\y &= .88442x + .08750 \\y &= .78559x + .13355 \\y &= .89547x + .05044 \\y &= .94139x + .02114 \\y &= .92201x + .02440 \\y &= .89175x + .09993 \\y &= 1.04977x - .03274 \\y &= 1.35006x - .26206 \\y &= 2.59721x - .91038 \\y &= 1.39922x - .32430 \\y &= .84366x + .08759 \\y &= .86340x + .01928 \\y &= 1.05459x - .05048\end{aligned}$$

TABLE 8—AMERICAN RAILROAD BOND YIELDS<sup>1</sup>, QUARTERLY, JANUARY 1857-JANUARY 1936. MATHEMATICAL FUNCTIONS AND EQUATIONS

DATES OF IDENTICAL GROUPS OF BONDS <sup>2</sup>		ARITHMETIC AVERAGES OF LOGS OF YIELDS		STANDARD DEVIATIONS OF LOGS OF YIELDS		SIGMA EQUATIONS <sup>3</sup> OF STRAIGHT LINES FITTED TO LOGARITHMS OF YIELDS
x (earlier date)	y (later date)	M <sub>x</sub>	M <sub>y</sub>	σ <sub>x</sub>	σ <sub>y</sub>	y = a + $\frac{c_x}{\sigma_x} x$
Jan. 1857	April 1857	.90277	.90200	.05577	.05520	y = .98971x + .00852
April " "	July " "	.90200	.91738	.05520	.06091	y = 1.10343x - .07791
July " "	Oct. " "	.91738	.99308	.06091	.06918	y = 1.13578x - .04886
Oct. " "	Jan. 1858	.99308	.93300	.06918	.06620	y = .95694x + .01732
Jan. 1858	April " "	.93493	.89673	.06473	.05627	y = .86929x + .08400
April " "	July " "	.89673	.88627	.05627	.05868	y = 1.04290x - .04893
July " "	Oct. " "	.88627	.87047	.05868	.05096	y = .86841x + .10082
Oct. " "	Jan. 1859	.87047	.86427	.05096	.04906	y = .96271x + .02626
Jan. 1859	April " "	.86427	.86160	.04906	.05093	y = 1.03809x - .03559
April " "	July " "	.86160	.87993	.05093	.05288	y = 1.03835x - .01471
July " "	Oct. " "	.87993	.87080	.05288	.05281	y = .99859x - .00789
Oct. " "	Jan. 1860	.87080	.87007	.05281	.05930	y = 1.12296x - .10780
Jan. 1860	April " "	.87007	.85873	.05930	.05119	y = .86331x + .10759
April " "	July " "	.85873	.83953	.05119	.04848	y = .94705x + .02627
July " "	Oct. " "	.83953	.81417	.04848	.05116	y = 1.05514x - .04436
Oct. " "	Jan. 1861	.81417	.86380	.05116	.05404	y = 1.07388x - .03984
Jan. 1861	April " "	.86380	.86107	.05404	.05222	y = .96563x + .02482
April " "	July " "	.86107	.86747	.05222	.05446	y = 1.04302x - .03064
July " "	Oct. " "	.86747	.87887	.05446	.05282	y = .96985x + .03735
Oct. " "	Jan. 1862	.87887	.85327	.05282	.04704	y = .89056x + .07058
Jan. 1862	April " "	.87218	.85453	.04985	.04539	y = .91055x + .06036
April " "	July " "	.85453	.82212	.04539	.04121	y = .90788x + .04631
July " "	Oct. " "	.82212	.77959	.04121	.04187	y = 1.01591x - .05561
Oct. " "	Jan. 1863	.77959	.73518	.04187	.04106	y = .98059x - .02928
Jan. 1863	April " "	.74552	.75519	.04625	.04320	y = .93404x + .05884
April " "	July " "	.75519	.76238	.04320	.04452	y = 1.03064x - .01595
July " "	Oct. " "	.76238	.75938	.04452	.03697	y = .83033x + .12635
Oct. " "	Jan. 1864	.75938	.78100	.03697	.03567	y = .96494x + .04824
Jan. 1864	April " "	.77968	.74373	.03537	.03708	y = 1.04849x - .07376
April " "	July " "	.74373	.70395	.03708	.05425	y = .46276x - .38395
July " "	Oct. " "	.70395	.76914	.05425	.04277	y = .78837x + .21417
Oct. " "	Jan. 1865	.76914	.79309	.04277	.03458	y = .80869x + .17109
Jan. 1865	April " "	.79323	.83247	.03458	.03398	y = .92767x + .09746
April " "	July " "	.83247	.83953	.03398	.03564	y = 1.04909x - .03381
July " "	Oct. " "	.83953	.84958	.03564	.02894	y = .81197x + .16791
Oct. " "	Jan. 1866	.84958	.86447	.02894	.02559	y = .88408x + .11337
Jan. 1866	April " "	.86932	.87216	.02700	.03247	y = 1.20266x - .17334
April " "	July " "	.87216	.85463	.03247	.02925	y = .90089x + .06891
July " "	Oct. " "	.85463	.84568	.02925	.03235	y = 1.10573x - .09931
Oct. " "	Jan. 1867	.84568	.85158	.03235	.02867	y = .88622x + .10222
Jan. 1867	April " "	.85230	.85725	.02867	.02851	y = 1.09554x - .07648
April " "	July " "	.85725	.85000	.02851	.03124	y = 1.04481x - .04566
July " "	Oct. " "	.85000	.85500	.03124	.03264	y = .99104x + .01262
Oct. " "	Jan. 1868	.85500	.85430	.03264	.03235	y = .89680x + .08754
Jan. 1868	April " "	.85390	.84940	.03235	.02901	y = 1.06815x + .06270
April " "	July " "	.84940	.84470	.02916	.03115	y = 1.06815x + .06270
July " "	Oct. " "	.84470	.84740	.03115	.02836	y = .91059x + .07124
Oct. " "	Jan. 1869	.84740	.85425	.02836	.03241	y = 1.14276x - .11104
Jan. 1869	April " "	.85425	.86325	.03241	.03361	y = 1.03697x + .02258
April " "	July " "	.86325	.86395	.03361	.02634	y = .90152x + .08998
July " "	Oct. " "	.86395	.86124	.02634	.02783	y = 1.05648x - .05151
Oct. " "	Jan. 1870	.86124	.87052	.02783	.02939	y = 1.05607x - .03901
Jan. 1870	April " "	.87052	.87048	.02939	.03075	y = 1.04612x - .04019
April " "	July " "	.87048	.87376	.02716	.02303	y = .84795x + .11548
July " "	Oct. " "	.87376	.85638	.02716	.01985	y = .86168x + .11021
Oct. " "	Jan. 1870	.85638	.84814	.01985	.02287	y = 1.15226x - .12266
Jan. 1870	April " "	.84814	.85462	.02287	.02231	y = .97580x + .02006
April " "	July " "	.85462	.85400	.02231	.01832	y = .82090x + .14795
July " "	Oct. " "	.85400	.84900	.01832	.01764	y = .96207x + .02720
Oct. " "	Jan. 1871	.84900	.84476	.01764	.02313	y = 1.31150x + .25919
Jan. 1871	April " "	.84476	.84871	.02313	.02108	y = .91104x + .06255
April " "	July " "	.84871	.83576	.02108	.02113	y = .86074x + .11944
July " "	Oct. " "	.83576	.84283	.02113	.02613	y = 1.23708x - .20817
Oct. " "	Jan. 1872	.84283	.83448	.02613	.02571	y = .98374x + .02579
Jan. 1872	April " "	.83448	.84670	.02571	.02418	y = .94048x + .04966
April " "	July " "	.84670	.84596	.02418	.02529	y = 1.07336x - .06055
July " "	Oct. " "	.84596	.84833	.02529	.02450	y = .96900x + .01978
Oct. " "	Jan. 1873	.84833	.84181	.02450	.03131	y = 1.27805x - .20283
Jan. 1873	April " "	.84181	.87305	.03131	.02641	y = .84350x + .11148
April " "	July " "	.87305	.84790	.02641	.02839	y = 1.11171x - .10234
July " "	Oct. " "	.84790	.82553	.02839	.03336	y = 1.17514x - .14636
Oct. " "	Jan. 1874	.82553	.83829	.03336	.03497	y = 1.04837x - .04674

## RAILROAD BOND YIELDS

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TABLE 8—AMERICAN RAILROAD BOND YIELDS<sup>1</sup>, QUARTERLY, JANUARY 1857-JANUARY 1936. MATHEMATICAL FUNCTIONS AND EQUATIONS—(Continued)

DATES OF IDENTICAL GROUPS OF BONDS <sup>2</sup>		ARITHMETIC AVERAGES OF LOGS OF YIELDS		STANDARD DEVIATIONS OF LOGS OF YIELDS		SIGMA EQUATIONS <sup>3</sup> OF STRAIGHT LINES FITTED TO LOGARITHMS OF YIELDS	
x (earlier date)	y (later date)	M <sub>x</sub>	M <sub>y</sub>	$\sigma_x$	$\sigma_y$	$y = a + \frac{\sigma_y}{\sigma_x} x$	
Oct. 1874	Jan. 1875	.83210	.82033	.03497	.03266	$y = .93394x + .04320$	
Jan. 1875	April " "	.82057	.81110	.03334	.03680	$y = 1.10391x - .09474$	
April " "	July " "	.81110	.80638	.03680	.03456	$y = .93899x + .04477$	
July " "	Oct. " "	.80638	.80462	.03456	.03568	$y = 1.03233x - .02783$	
Oct. " "	Jan. 1876	.80462	.79195	.03568	.03418	$y = 1.95796x + .02116$	
Jan. 1876	April " "	.79195	.78643	.03418	.03136	$y = .91768x + .05067$	
April " "	July " "	.78643	.78029	.03136	.03473	$y = 1.10732x - .09054$	
July " "	Oct. " "	.78029	.78448	.03473	.03034	$y = .87247x + .10273$	
Oct. " "	Jan. 1877	.78448	.77967	.03034	.03624	$y = 1.19449x - .15738$	
Jan. 1877	April " "	.77967	.79125	.03624	.02916	$y = .80504x + .16215$	
April " "	July " "	.79125	.77745	.02916	.03027	$y = 1.03782x - .04373$	
July " "	Oct. " "	.77745	.78265	.03027	.03076	$y = 1.01634x - .00750$	
Oct. " "	Jan. 1878	.78265	.77755	.03076	.03212	$y = 1.04401x - .03934$	
Jan. 1878	April " "	.77755	.78045	.03212	.02931	$y = .91146x + .06824$	
April " "	July " "	.78045	.77959	.02931	.03054	$y = 1.04198x - .04150$	
July " "	Oct. " "	.77959	.77082	.03054	.03101	$y = 1.01550x - .01204$	
Oct. " "	Jan. 1879	.77082	.77073	.03101	.02829	$y = .91203x + .05366$	
Jan. 1879	April " "	.77073	.75659	.02829	.02220	$y = .90323x + .06831$	
April " "	July " "	.75659	.75252	.02220	.02475	$y = 1.11466x - .10463$	
July " "	Oct. " "	.75252	.73417	.02475	.02403	$y = .97087x + .02748$	
Oct. " "	Jan. 1880	.73417	.74026	.02403	.02352	$y = .97877x + .00672$	
Jan. 1880	April " "	.74026	.73126	.02352	.03093	$y = .94442x + .03569$	
April " "	July " "	.73126	.73728	.03093	.03597	$y = 1.16290x - .13166$	
July " "	Oct. " "	.73728	.72572	.03597	.03390	$y = .94256x + .03021$	
Oct. " "	Jan. 1881	.72572	.71424	.03390	.03307	$y = .97558x - .00368$	
Jan. 1881	April " "	.71424	.69312	.03307	.03547	$y = 1.01055x$	
April " "	July " "	.69312	.70427	.03547	.03830	$y = 1.07967x - .07473$	
July " "	Oct. " "	.70427	.68565	.03830	.03676	$y = .95976x + .04348$	
Oct. " "	Jan. 1882	.68565	.70154	.03676	.03929	$y = 1.06885x - .04926$	
Jan. 1882	April " "	.70154	.70058	.03929	.03828	$y = .97177x + .01972$	
April " "	July " "	.70058	.70364	.03828	.03796	$y = .99170x + .00159$	
July " "	Oct. " "	.70364	.69939	.03796	.03672	$y = .96737x + .02639$	
Oct. " "	Jan. 1883	.69939	.70296	.03672	.03256	$y = .88682x + .07781$	
Jan. 1883	April " "	.70296	.70121	.03256	.03116	$y = .96575x + .02654$	
April " "	July " "	.70121	.70307	.03116	.03046	$y = .97761x + .01453$	
July " "	Oct. " "	.70307	.70274	.03046	.02971	$y = .97531x + .01993$	
Oct. " "	Jan. 1884	.70274	.70532	.02971	.03363	$y = 1.13203x - .10192$	
Jan. 1884	April " "	.70532	.69652	.03363	.02788	$y = .84225x + .09946$	
April " "	July " "	.69652	.68606	.02788	.03290	$y = 1.17986x - .10432$	
July " "	Oct. " "	.68606	.70513	.03290	.03161	$y = .96080x + .02114$	
Oct. " "	Jan. 1885	.70513	.69863	.03161	.03471	$y = 1.09809x + .07697$	
Jan. 1885	April " "	.69863	.69019	.03471	.03649	$y = 1.04846x - .04261$	
April " "	July " "	.69019	.68191	.03649	.03743	$y = 1.02378x - .02796$	
July " "	Oct. " "	.68191	.67153	.03743	.03598	$y = .96114x + .01954$	
Oct. " "	Jan. 1886	.67153	.66497	.03598	.03272	$y = .90944x + .04766$	
Jan. 1886	April " "	.66497	.65241	.03272	.03085	$y = .94017x + .03100$	
April " "	July " "	.65241	.64414	.03085	.03118	$y = 1.01069x - .01419$	
July " "	Oct. " "	.64414	.63684	.03118	.03014	$y = .96649x + .02926$	
Oct. " "	Jan. 1887	.63684	.64476	.03014	.03023	$y = 1.00307x - .00185$	
Jan. 1887	April " "	.64476	.64489	.03023	.02950	$y = .97349x + .02072$	
April " "	July " "	.64489	.64508	.02950	.03156	$y = 1.06987x - .04418$	
July " "	Oct. " "	.64508	.64870	.03156	.03038	$y = .96282x + .03927$	
Oct. " "	Jan. 1888	.64870	.64984	.03038	.03108	$y = 1.02291x - .02769$	
Jan. 1888	April " "	.64984	.66495	.03108	.02865	$y = 1.01682x - .01122$	
April " "	July " "	.66495	.65392	.02865	.03227	$y = 1.12645x - .09237$	
July " "	Oct. " "	.65392	.64424	.03227	.03542	$y = 1.09757x - .05910$	
Oct. " "	Jan. 1889	.64424	.64800	.03542	.03545	$y = 1.00898x - .00855$	
Jan. 1889	April " "	.64800	.64003	.03545	.03610	$y = 1.02469x - .02071$	
April " "	July " "	.64003	.63850	.03610	.03205	$y = .88767x + .06404$	
July " "	Oct. " "	.63850	.63355	.03205	.03046	$y = .95043x + .03758$	
Oct. " "	Jan. 1890	.63355	.62642	.03046	.02960	$y = .97179x + .02130$	
Jan. 1890	April " "	.62642	.63295	.02960	.03005	$y = 1.01193x - .00541$	
April " "	July " "	.63295	.63639	.03005	.02916	$y = .97049x + .02187$	
July " "	Oct. " "	.63639	.64211	.02916	.02955	$y = 1.01342x + .00010$	
Oct. " "	Jan. 1891	.64211	.64503	.02955	.02956	$y = 1.00036x + .00018$	
Jan. 1891	April " "	.64503	.65379	.02956	.02955	$y = .99872x + .00720$	
April " "	July " "	.65379	.65421	.02955	.02947	$y = .99731x + .01021$	
July " "	Oct. " "	.65421	.66136	.02947	.02670	$y = .90613x + .05634$	
Oct. " "	Jan. 1892	.66136	.66979	.02670	.02671	$y = 1.00048x - .01263$	
Jan. 1892	April " "	.66979	.66326	.02670	.02626	$y = .96181x + .02070$	

## APPENDIX

TABLE 8—AMERICAN RAILROAD BOND YIELDS<sup>1</sup>, QUARTERLY, JANUARY 1857-JANUARY 1936. MATHEMATICAL FUNCTIONS AND EQUATIONS—(Continued)

DATES OF IDENTICAL GROUPS OF BONDS <sup>2</sup>			ARITHMETIC AVERAGES OF LOGS OF YIELDS		STANDARD DEVIATIONS OF LOGS OF YIELDS		SIGMA EQUATIONS <sup>3</sup> OF STRAIGHT LINES FITTED TO LOGARITHMS OF YIELDS	
x (earlier date)	y (later date)		M <sub>x</sub>	M <sub>y</sub>	$\sigma_x$	$\sigma_y$	$y = a + \frac{\sigma_y}{\sigma_x} x$	
April 1892	July 1892		.64674	.64136	.02626	.02645	$y = -1.00733x - .01012$	
July " " Oct.	" " 1892		.64136	.64626	.02645	.02712	$y = -1.02510x - .01126$	
Oct. " Jan.	1893		.64626	.64644	.02712	.02679	$y = .98797x + .00795$	
Jan. 1893	April " "		.64649	.64714	.02724	.02786	$y = 1.02275x + .01406$	
April " July	" " "		.64714	.67338	.02786	.03382	$y = 1.21399x - .11224$	
July " Oct.	" " "		.67338	.66465	.03382	.02908	$y = .85988x + .08562$	
Oct. " Jan.	1894		.66465	.64789	.02908	.02861	$y = .98365x - .00589$	
Jan. 1894	April " "		.64783	.63381	.02910	.02836	$y = .97433x + .00261$	
April " July	" " "		.63381	.63658	.02836	.02995	$y = 1.05600x - .03272$	
July " Oct.	" " "		.63658	.62708	.02995	.02917	$y = .97408x + .00700$	
Oct. " Jan.	1895		.62708	.62450	.02917	.02979	$y = 1.02120x - .01587$	
Jan. 1895	April " "		.62650	.63297	.03076	.03107	$y = 1.00990x + .00027$	
April " July	" " "		.63297	.61755	.03107	.02936	$y = .94500x + .01939$	
July " Oct.	" " "		.61755	.61429	.02936	.02944	$y = 1.00266x - .00490$	
Oct. " Jan.	1896		.61429	.62853	.02944	.03356	$y = 1.13999x - .07175$	
Jan. 1896	April " "		.62735	.62300	.03323	.03043	$y = .91573x + .04852$	
April " July	" " "		.62300	.62916	.03043	.03362	$y = 1.10503x + .05927$	
July " Oct.	" " "		.62916	.63735	.03362	.03396	$y = 1.01006x + .00186$	
Oct. " Jan.	1897		.63735	.61635	.03396	.03133	$y = .92242x + .02845$	
Jan. 1897	April " "		.61635	.60744	.03133	.03267	$y = 1.04061x - .03280$	
April " July	" " "		.60744	.59797	.03267	.03304	$y = 1.01157x - .01650$	
July " Oct.	" " "		.59797	.60156	.03304	.03335	$y = 1.00922x - .00192$	
Oct. " Jan.	1898		.60156	.59144	.03335	.03104	$y = .93088x + .03146$	
Jan. 1898	April " "		.59144	.58980	.03104	.03526	$y = 1.05161x - .01018$	
April " July	" " "		.58980	.61006	.03526	.03460	$y = .98113x - .00472$	
July " Oct.	" " "		.61006	.59383	.03460	.03140	$y = .90766x + .05020$	
Oct. " Jan.	1899		.59383	.58920	.03140	.03312	$y = 1.05459x - .04650$	
Jan. 1899	April " "		.58920	.57486	.03312	.03402	$y = 1.01828x - .01429$	
April " July	" " "		.57486	.56988	.03402	.03303	$y = .97091x + .01394$	
July " Oct.	" " "		.56988	.56724	.03303	.03363	$y = 1.01838x + .00012$	
Oct. " Jan.	1900		.56724	.57779	.03363	.03501	$y = 1.04099x + .02058$	
Jan. 1900	April " "		.57779	.58059	.03501	.03561	$y = .96356x + .01375$	
April " July	" " "		.58059	.58276	.03561	.03431	$y = 1.01790x - .00565$	
July " Oct.	" " "		.58276	.57527	.03431	.03493	$y = .94050x + .03467$	
Oct. " Jan.	1899		.57527	.57992	.03493	.03285	$y = .95375x + .01867$	
Jan. 1901	April " "		.57992	.58008	.03285	.03133	$y = .98972x + .00401$	
April " July	" " "		.58008	.57192	.03133	.03101	$y = .97044x + .02050$	
July " Oct.	" " "		.57192	.57005	.03101	.03009	$y = 1.01221x - .00529$	
Oct. " Jan.	1900		.57005	.57370	.03009	.03046	$y = .97214x + .01121$	
Jan. 1900	April " "		.57370	.57541	.03046	.02961	$y = .98063x + .00887$	
April " July	" " "		.57541	.57059	.02961	.02891	$y = .89253x + .06627$	
July " Oct.	" " "		.57059	.57124	.02891	.02580	$y = .99410x + .01049$	
Oct. " Jan.	1902		.57124	.56905	.02580	.02565	$y = .96133x + .02483$	
Jan. 1902	April " "		.56905	.57416	.02565	.02466	$y = .90297x + .06685$	
April " July	" " "		.57416	.58126	.02466	.02200	$y = .97351x + .02244$	
July " Oct.	" " "		.58126	.58338	.02200	.02142	$y = 1.05288x - .03145$	
Oct. " Jan.	1903		.58338	.59362	.02142	.02255	$y = .97172x + .01285$	
Jan. 1903	April " "		.59362	.60014	.02255	.02191	$y = .89659x + .06148$	
April " July	" " "		.60014	.60043	.02191	.01958	$y = .94706x + .02315$	
July " Oct.	" " "		.60043	.59630	.01958	.01854	$y = .99244x + .02259$	
Oct. " Jan.	1904		.59630	.59697	.01958	.01840	$y = 1.01762x - .01608$	
Jan. 1904	April " "		.59697	.59672	.01958	.01872	$y = .97646x + .01481$	
April " July	" " "		.59672	.58828	.01872	.02066	$y = 1.00015x - .00139$	
July " Oct.	" " "		.58828	.58642	.02066	.01978	$y = .95728x + .02552$	
Oct. " Jan.	1905		.58642	.58067	.01978	.01996	$y = 1.00940x - .00270$	
Jan. 1905	April " "		.58067	.58465	.01996	.01989	$y = .99386x + .01181$	
April " July	" " "		.58465	.58570	.01989	.01923	$y = .96669x + .02196$	
July " Oct.	" " "		.58570	.58440	.01923	.01762	$y = .91628x + .05451$	
Oct. " Jan.	1906		.58440	.58495	.01762	.01853	$y = 1.05173x - .02906$	
Jan. 1906	April " "		.58495	.58775	.01853	.01939	$y = 1.04655x - .01844$	
April " July	" " "		.58775	.58845	.01939	.02246	$y = 1.15810x - .08991$	
July " Oct.	" " "		.58845	.58727	.02246	.02530	$y = 1.12637x - .06009$	
Oct. " Jan.	1906		.58727	.59692	.02530	.02502	$y = .98923x - .00325$	
Jan. 1906	April " "		.59692	.59900	.02502	.02595	$y = 1.03716x - .02483$	
April " July	" " "		.59900	.60336	.02595	.02369	$y = .91277x + .04772$	
July " Oct.	" " "		.60336	.60551	.02369	.01958	$y = .82654x + .09877$	
Oct. " Jan.	1907		.60551	.61526	.01958	.01714	$y = .87563x + .06783$	
Jan. 1907	April " "		.61526	.62262	.01714	.02068	$y = .98236x + .00939$	
April " July	" " "		.62262	.64121	.02068	.02032	$y = .93909x + .03761$	
July " Oct.	" " "		.64121	.63105	.02032	.01908	$y = 1.00064x + .00445$	
Oct. " Jan.	1908		.63105	.62967	.01908	.01909	$y = .97637x + .01640$	
Jan. 1908	April " "		.62967	.62246	.01909	.01864		

# RAILROAD BOND YIELDS

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**TABLE 8—AMERICAN RAILROAD BOND YIELDS<sup>1</sup>, QUARTERLY, JANUARY 1857-JANUARY 1936. MATHEMATICAL FUNCTIONS AND EQUATIONS—(Continued)**

DATES OF IDENTICAL GROUPS OF BONDS <sup>2</sup>	ARITHMETIC AVERAGES OF LOGS OF YIELDS		STANDARD DEVIATIONS OF LOGS OF YIELDS		SIGMA EQUATIONS <sup>3</sup> OF STRAIGHT LINES FITTED TO LOGARITHMS OF YIELDS $y = a + \frac{\sigma_y}{\sigma_x} x$
	$M_x$	$M_y$	$\sigma_x$	$\sigma_y$	
Jan. 1910	April 1910	.61355	.62066	.01889	.01955 $y = 1.03463x - .01414$
April	" July "	.62066	.62636	.01955	.02147 $y = 1.09830x - .05531$
July	" Oct. "	.62636	.61798	.02147	.01908 $y = .88867x + .06135$
Oct.	" Jan. 1911	.61798	.61973	.01908	.01838 $y = .96354x + .02430$
Jan.	1911 April	.61973	.62093	.01838	.01790 $y = .97365x + .01751$
April	" July "	.62093	.62111	.01790	.01713 $y = .95700x + .02688$
July	" Oct. "	.62111	.62327	.01713	.01877 $y = 1.09544x - .05712$
Oct.	" Jan. 1912	.62327	.62105	.01877	.01824 $y = .97189x + .01530$
Jan.	1912 April	.62105	.62350	.01861	.01839 $y = .98857x + .00891$
April	" July "	.62350	.62652	.01839	.01893 $y = 1.02894x - .01502$
July	" Oct. "	.62652	.63091	.01893	.01877 $y = .99155x + .00968$
Oct.	" Jan. 1913	.63091	.63086	.01877	.01893 $y = 1.00860x - .00548$
Jan.	1913 April	.63086	.64419	.01904	.01888 $y = .99181x + .01879$
April	" July "	.64419	.65360	.01888	.02094 $y = 1.10875x - .06065$
July	" Oct. "	.65360	.64912	.02094	.02015 $y = .96231x + .02015$
Oct.	" Jan. 1914	.64912	.64793	.02015	.01895 $y = .94067x + .03732$
Jan.	1914 April	.64793	.64870	.01940	.01968 $y = 1.01448x - .01395$
April	" July "	.64870	.64414	.01968	.01965 $y = 1.09827x + .00464$
July	" Jan. 1915	.64414	.64767	.01965	.02208
Jan.	1915 April	.64767	.66251	.01965	
April	" July "	.66172	.66026	.02296	.02336 $y = 1.01717x - .01282$
July	" Oct. "	.66026	.67133	.02336	.02388 $y = 1.02241x - .03733$
Oct.	" Jan. 1916	.67133	.66658	.02388	.02424 $y = 1.01504x - .01485$
Jan.	1916 April	.66658	.65037	.02424	.02297 $y = .94761x + .01871$
April	" July "	.65037	.64988	.02424	.02307 $y = .99116x + .00786$
July	" Oct. "	.64988	.65200	.02328	.02500 $y = 1.08362x - .05154$
Oct.	" Jan. 1917	.65200	.65498	.02307	.02387 $y = .95467x + .02478$
Jan.	1917 April	.65498	.65007	.02500	.02433 $y = 1.01917x - .02255$
April	" July "	.65007	.64020	.02387	.02706 $y = 1.08932x - .03545$
July	" Oct. "	.64020	.66193	.02433	.02706 $y = .98530x + .03095$
Oct.	" Jan. 1918	.66193	.68315	.02706	.02666 $y = 1.01395x + .00549$
Jan.	1918 April	.68315	.69594	.02666	.02708 $y = 1.13814x - .08000$
April	" July "	.69594	.71617	.02708	.03083 $y = .88793x + .08721$
July	" Oct. "	.71617	.72312	.03083	.02737 $y = 1.05705x - .03735$
Oct.	" Jan. 1919	.72312	.72702	.02737	.02893 $y = .88649x + .07689$
Jan.	1919 April	.72702	.72139	.02893	.02565 $y = .80116x + .12710$
April	" July "	.72139	.70505	.02565	.02055 $y = 1.13041x - .07839$
July	" Oct. "	.70505	.71861	.02055	.02233 $y = .95581x + .03298$
Oct.	" Jan. 1920	.71861	.71983	.02233	.02220 $y = 1.15849x - .10768$
Jan.	1920 April	.71983	.72624	.02220	.02572 $y = 1.08949x - .05047$
April	" July "	.72624	.74076	.02572	.02802 $y = 1.17909x - .10215$
July	" Oct. "	.74076	.77127	.02802	.03304 $y = 1.04413x - .02236$
Oct.	" Jan. 1921	.77127	.78295	.03304	.03450 $y = .75680x + .14814$
Jan.	1921 April	.78295	.74068	.03450	.02611 $y = 1.07646x - .05119$
April	" July "	.74068	.74612	.02611	.02811 $y = .96700x + .03404$
July	" Oct. "	.74612	.75554	.02811	.02718 $y = 1.00256x - .00186$
Oct.	" Jan. 1922	.75554	.75561	.02718	.02725 $y = .84380x + .10220$
Jan.	1922 April	.75561	.73978	.02725	.02299 $y = 1.16027x - .15927$
April	" July "	.73978	.69907	.02299	.02668 $y = .82374x + .11110$
July	" Oct. "	.69907	.68695	.02668	.02197 $y = 1.08308x - .06902$
Oct.	" Jan. 1923	.68695	.67500	.02197	.02380 $y = .83938x + .11349$
Jan.	1923 April	.67500	.68007	.02380	.01998 $y = 1.02633x - .01203$
April	" July "	.68007	.68595	.01998	.02050 $y = 1.00973x + .01023$
July	" Oct. "	.68595	.70285	.02050	.02070 $y = 1.04467x - .03671$
Oct.	" Jan. 1924	.70285	.69754	.02070	.02163 $y = .92605x + .05424$
Jan.	1924 April	.69754	.70020	.02163	.02003 $y = .90539x + .06022$
April	" July "	.70020	.69417	.02003	.01813 $y = .93896x + .04071$
July	" Oct. "	.69417	.69251	.01813	.01703 $y = .97812x - .00175$
Oct.	" Jan. 1925	.69251	.67561	.01703	.01665 $y = .95864x + .02862$
Jan.	1925 April	.67561	.67629	.01665	.01597 $y = .89228x + .07544$
April	" July "	.67629	.67888	.01597	.01425 $y = 1.16085x - .11523$
July	" Oct. "	.67888	.68471	.01425	.01213 $y = .87884x + .08183$
Oct.	" Jan. 1926	.68471	.67952	.01213	.01891 $y = .86093x + .09715$
Jan.	1926 April	.67952	.67911	.01891	.01628 $y = 1.01952x - .02255$
April	" July "	.67911	.68182	.01628	.01660 $y = .99956x - .00832$
July	" Oct. "	.68182	.67258	.01660	.01773 $y = .89394x + .06938$
Oct.	" Jan. 1927	.67258	.66482	.01773	.01585 $y = .79794x + .01389$
Jan.	1927 April	.66482	.66369	.01585	.01552 $y = 1.07589x - .05907$
April	" July "	.66369	.66380	.01552	.01670 $y = 1.12249x - .09033$
July	" Oct. "	.66380	.65211	.01670	.01963 $y = 1.02336x - .01227$
Oct.	" Jan. 1928	.65211	.64700	.01963	.02009 $y = .91052x + .04549$

TABLE 8—AMERICAN RAILROAD BOND YIELDS<sup>1</sup>, QUARTERLY, JANUARY 1857-JANUARY 1936. MATHEMATICAL FUNCTIONS AND EQUATIONS—(Concluded)

DATES OF IDENTICAL GROUPS OF BONDS <sup>2</sup>		ARITHMETIC AVERAGES OF LOGS OF YIELDS		STANDARD DEVIATIONS OF LOGS OF YIELDS		SIGMA EQUATIONS <sup>3</sup> OF STRAIGHT LINES FITTED TO LOGARITHMS OF YIELDS
x (earlier date)	y (later date)	M <sub>x</sub>	M <sub>y</sub>	$\sigma_x$	$\sigma_y$	$y = a + \frac{\sigma_y}{\sigma_x} x$
Oct. 1927	Jan. 1928	.63718	.63004	.01829	.01613	$y = .88153x + .06835$
Jan. 1928	Apr. "	.63144	.63600	.01638	.01431	$y = .87383x + .08423$
Apr. "	July "	.63600	.65672	.01431	.01589	$y = 1.11024x - .04939$
July "	Oct. "	.65672	.65630	.01589	.01463	$y = .92069x + .05166$
Oct. "	Jan. 1929	.65630	.66302	.01463	.01460	$y = .99836x + .00780$
Jan. 1929	Apr. "	.66302	.67051	.01460	.01535	$y = 1.05123x - .02648$
Apr. "	July "	.67051	.67905	.01535	.01553	$y = 1.01134x + .00094$
July "	Oct. "	.67905	.67623	.01553	.01381	$y = .88972x + .07207$
Oct. "	Jan. 1930	.67623	.66328	.01381	.01533	$y = 1.10980x - .08720$
Jan. 1930	Apr. "	.65593	.65143	.00936	.00860	$y = .91858x + .04891$
Apr. "	July "	.65143	.64218	.00860	.01017	$y = 1.18275x - .12830$
July "	Oct. "	.64218	.63018	.01017	.01200	$y = 1.18034x - .12781$
Oct. "	Jan. 1931	.63018	.62939	.01200	.01272	$y = 1.05079x - .03847$
Jan. 1931	Apr. "	.64041	.64459	.02114	.02389	$y = 1.12983x - .07896$
Apr. "	July "	.64459	.64390	.02389	.02893	$y = 1.21132x - .13690$
July "	Oct. "	.64390	.71349	.02893	.05307	$y = 1.83413x - .46751$
Oct. "	Jan. 1932	.71349	.75290	.05307	.05491	$y = 1.03468x + .01467$
Jan. 1932	Apr. "	.73806	.75750	.04199	.04876	$y = 1.16126x - .09958$
Apr. "	July "	.75750	.76869	.04876	.05858	$y = 1.20142x - .14139$
July "	Oct. "	.76869	.71272	.05858	.04266	$y = .72832x + .15287$
Oct. "	Jan. 1933	.71272	.70841	.04266	.05875	$y = 1.37703x - .27303$
Jan. 1933	Apr. "	.71155	.75835	.05698	.06489	$y = 1.13882x - .05198$
Apr. "	July "	.75835	.68545	.06489	.04367	$y = .67298x + .17510$
July "	Oct. "	.68545	.70303	.04367	.05580	$y = 1.27780x - .17284$
Oct. "	Jan. 1934	.70303	.68790	.05580	.04807	$y = .86149x + .08225$
Jan. 1934	Apr. "	.68211	.63918	.04557	.03338	$y = .73254x + .13951$
Apr. "	July "	.63918	.62579	.03338	.03535	$y = 1.05907x - .05115$
July "	Oct. "	.62579	.63636	.03535	.03914	$y = 1.10718x - .05650$
Oct. "	Jan. 1935	.63636	.60821	.03914	.03934	$y = 1.00517x - .03144$
Jan. 1935	Apr. "	.60821	.61239	.03934	.05105	$y = 1.29756x - .17680$
Apr. "	July "	.61239	.59964	.05105	.04401	$y = .86215x + .07167$
July "	Oct. "	.59964	.61125	.04401	.04483	$y = 1.01853x + .00050$
Oct. "	Jan. 1936	.61125	.59093	.04483	.04149	$y = .92555x + .02519$

Note 1. These are the yields in Table 3.

Note 2. The variables are the logarithms of bond yields. The first two columns give, of course, only the dates to which the yields relate.

Note 3. For a description of the nature of these equations see Ch. IV.

## RAILROAD BOND YIELDS

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TABLE 9  
MONTH TO MONTH SLOPES  $\left(\frac{\partial y}{\partial x}\right)$  OF 'SIGMA LINES' FITTED TO THE LOGARITHMS OF THE YIELDS OF AMERICAN RAILROAD BONDS  
JANUARY 1879-JANUARY 1936

YEAR	JAN. AND FEB.	FEB. AND MARCH	MAR. AND APRIL	APRIL AND MAY	MAY AND JUNE	JUNE AND JULY	JULY AND AUG.	AUG. AND SEPT.	SEPT. AND OCT.	OCT. AND NOV.	NOV. AND D. C.	DEC. AND JAN.
1879	.88227	1.02401	.99975	1.04212	1.04019	1.02828	.98030	.95906	1.03266	1.02803	.95869	.99310
1880	.97338	.99993	.97032	.99478	1.08514	1.07728	.97570	.96961	.99632	.99168	1.00773	.97622
1881	.93210	1.03475	1.04775	1.05954	.97966	1.04016	1.00109	.94579	1.01367	1.04615	1.01504	1.00656
1882	1.03630	.96833	.96840	.98968	.96257	1.04101	.99162	.95807	1.01825	.96521	.92289	.99555
1883	1.05614	.96423	.94834	.09981	.99518	.98281	.97902	.95965	1.03810	.96513	1.05297	1.11393
1884	.90470	.95109	.97884	1.05025	1.09796	1.02317	.92288	1.01434	1.02637	1.01402	.96010	1.12792
1885	1.02153	1.01748	1.00872	1.04293	.99280	.99069	.99964	.99613	.96521	.96385	1.00392	.93986
1886	.97592	.97969	.98334	1.00782	.95459	1.05055	1.02006	.94906	.99834	.97214	.99733	1.03458
1887	1.01431	.99957	.96017	.99012	.99305	1.08810	.98450	.96468	1.01379	1.02415	1.07705	.92735
1888	1.01907	.99447	1.00334	1.01905	1.07099	1.03211	.99474	1.06935	1.03183	.99011	.96982	1.04235
1889	1.01804	1.08439	.92820	.98275	.95575	.94507	.95681	.96970	1.02436	1.04770	.97946	.94700
1890	1.02716	1.00483	.98044	1.01481	.96611	.98907	1.02372	1.01387	.97640	1.06047	1.00848	.93539
1891	.97616	1.05739	.96759	1.01222	.99457	.99065	.97794	.99757	.92883	.97737	.95558	1.07123
1892	.98301	.98752	.99080	.97662	1.02537	1.00593	1.00791	1.02404	.99327	.97140	1.01990	.99721
1893	.96854	1.04732	1.00826	1.05642	1.03585	1.10939	1.06854	.87296	.92183	.93517	.95374	1.10286
1894	.96940	.95905	1.04801	1.03233	.99377	1.02934	1.00633	.99218	.97557	1.02418	1.00767	.98949
1895	1.00263	1.00658	1.00067	1.01375	.97125	.95977	1.03903	.98547	.97922	.99162	1.14876	1.00075
1896	.97445	.96203	.97683	.99462	1.04175	1.00648	1.08534	.93011	1.00056	.92542	.97413	1.02323
1897	1.02313	.99921	1.01788	1.00089	1.01918	.99165	.97354	1.06607	.97240	.96379	1.00230	.96363
1898	.99428	1.03473	1.02215	.90915	.99692	1.08250	.92666	.98307	.99637	1.03178	1.01030	1.01169
1899	.99429	1.01654	1.00747	.98303	.98642	1.00127	.99987	1.01609	1.00238	.99661	1.09221	.95635
1900	.98345	1.00406	.97582	1.03150	1.00763	.97934	.98568	.99085	.96297	.98060	.98672	.98572
1901	1.01076	.98527	.99382	1.00245	.97947	.98836	1.01929	1.01953	.97403	.98560	1.00085	.98550
1902	1.01733	.97575	.98787	.96495	.95260	.97097	.97017	.99464	1.02072	.97697	1.03669	.94916
1903	.96996	.98577	.94437	1.03793	1.04394	.89846	.92121	1.07639	1.06183	1.02252	.97858	.97111
1904	.99802	.93085	.96511	.95166	1.00276	.99243	1.02637	1.00536	.96160	.97234	1.01289	1.03324
1905	.94677	1.00500	1.00713	1.00032	1.01589	.98419	.99197	.98493	.97980	.99360	1.02802	.98821

TABLE 9 (Concluded)

MONTH TO MONTH SLOPES  $\left(\frac{\sigma_y}{\sigma_x}\right)$  OF 'SIGMA LINES' FITTED TO THE LOGARITHMS OF THE YIELDS OF AMERICAN RAILROAD BONDS  
JANUARY 1879-JANUARY 1936

YEAR	JAN. AND FEB.	FEB. AND MARCH	MAR. AND APRIL	APRIL AND MAY	MAY AND JUNE	JUNE AND JULY	JULY AND AUG.	AUG. AND SEPT.	SEPT. AND OCT.	OCT. AND NOV.	NOV. AND DEC.	DEC. AND JAN.
1906	.96614	.96939	1.06118	.97783	.99153	.99705	.94454	.96408	1.00623	1.02248	.98813	1.04096
1907	.97960	1.00162	1.06662	1.06249	1.07658	1.01245	1.02477	1.08730	1.01089	1.13861	.94895	.91554
1908	1.09563	.98172	.96426	.89915	1.01722	.99797	.87397	.96252	.98254	.96082	.96978	.93974
1909	.93375	1.00329	1.04862	.95662	.97651	1.00529	.94834	.95649	1.10314	1.03230	.96563	.97949
1910	.97699	.97211	1.08938	1.08617	1.00888	1.00227	.98190	.90960	.99500	1.00824	.99959	.95606
1911	.94662	1.00150	1.02701	.97123	.99198	.99332	1.00743	1.06764	1.01848	.99094	1.00015	.98063
1912	.96734	.99903	1.02294	1.03687	.96512	.99722	.96548	1.03044	.99665	1.00269	.99884	1.00705
1913	1.02414	1.02612	.94379	1.01420	1.13614	.96222	.97284	.99804	.99111	.96762	.97794	.99407
1914	.93964	1.03498	1.04315	1.04342	.96786	.98850	1.12213					1.00172
1915	.99731	1.03670	.98381	.99374	1.00433	1.02441	1.02766	1.03422	.95504	.91472	1.02196	1.01370
1916	.96687	1.00597	1.01904	1.01160	1.03020	1.03979	1.01577	.97547	.96348	.98414	1.04292	.99298
1917	.99496	1.02376	1.06942	.98643	1.01901	.98023	.99326	1.04644	.97745	1.03917	1.06856	1.02497
1918	.88949	.98456	1.01390	.95940	.97122	1.13442	.91997	1.03685	.92936	.92625	.89083	.97095
1919	1.04564	1.12138	.96406	1.02052	.96580	1.07511	1.24928	.00985	.91828	1.06603	1.06480	.95982
1920	1.07179	.99076	1.11036	1.07557	.93706	1.03597	.97458	.84261	.92159	1.04395	1.04116	.99037
1921	.97011	.99274	1.00409	.93954	1.08921	.97968	.95357	.91692	.96507	1.06594	1.04258	1.04403
1922	.96519	.86233	.98970	.96078	1.04022	1.08370	.91231	.95833	.96006	1.02303	.97689	1.02697
1923	.98701	1.01021	1.01268	1.01711	.99882	1.02831	1.00289	.94660	.97547	.96838	.96734	.96652
1924	.94719	.96548	1.02676	.94245	1.02696	1.01060	.91433	1.03837	1.00971	.95087	.94886	.98896
1925	.96545	1.12934	1.06469	1.01268	.90274	.96134	.96644	.97953	.90943	.99463	.99864	1.02642
1926	1.00802	.99500	.98668	.93005	.89608	1.07264	1.03240	.99264	.95554	1.00969	1.02890	1.03564
1927	.99344	1.07094	1.05506	1.02105	.99793	1.00434	.94002	1.00836	.96058	.96411	.95484	.95759
1928	.96609	.90716	.99707	1.12336	1.04701	.94393	.95089	1.05553	.91729	.91875	1.08564	1.00093
1929	1.02666	1.09606	.93420	1.00236	1.03405	.97574	1.11215	.87900	.91013	1.19593	.87428	1.06143
1930	1.11145	.97958	.84369	1.07343	1.04656	1.05282	1.07186	.94627	1.16375	1.14188	1.13231	.81966
1931	.98742	.94490	1.21094	1.14488	1.04745	1.01011	1.18094	1.30789	1.18749	.93575	1.34786	.82035
1932	.91943	1.01017	1.25031	1.39413	1.05130	.81971	.75991	.92230	1.03917	1.10066	1.26562	.98853
1933	1.08375	1.05690	.99424	.85138	.88551	.89266	1.02513	1.23240	1.01142	.91865	.92696	.78325
1934	.76753	.97366	.98024	1.02583	1.06176	.97235	1.09533	1.04785	.96466	1.01373	.98345	1.00823
1935	1.06731	1.16802	1.04085	.89383	.98822	.97605	.97582	1.02303	1.02026	1.04301	.95609	.92813

TABLE 10

**SHORT TIME INTEREST RATES, BOND YIELDS AND STOCK PRICES**

- Col. 1 Call Money Rates at the New York Stock Exchange.
- Col. 2 90-day Time Money Rates in New York City.
- Col. 3 Commercial Paper Rates in New York City. (January 1857 to December 1923 'choice 60-90 day two name paper'; January 1924 to January 1936 '4 to 6 month prime double and single name paper').
- Col. 4 Unadjusted Index Number of the Yields of American Railroad Bonds.
- Col. 5 Adjusted Index Number of the Yields of American Railroad Bonds.<sup>1</sup>
- Col. 6 Index Number of the Prices of American Railroad Stocks weighted by the number of shares outstanding at the beginning of each year.

<sup>1</sup>The long time economic 'drift' has been eliminated from this index number. The month to month movements are almost identical with the month to month movements of the unadjusted index given in Column 4, whereas the long time movements are the long time movements of the '4.50 Sigma' index given in Table 6.

## APPENDIX

TABLE 10

Date	1 Call Money	2 Time Money	3 Coml. Paper	4 Unadj. Bonds	5 Adjust. Bonds	6 Stock Prices
1857						
J	8.00	.....	8.81	9.644	6.621	21.22
F	8.75	.....	8.81	9.577	6.577	20.83
M	9.25	.....	9.25	9.592	6.592	20.82
A	7.88	.....	9.00	9.627	6.619	20.41
M	7.38	.....	8.19	9.731	6.696	20.10
J	6.60	.....	7.90	9.949	6.849	18.87
J	6.75	.....	8.50	9.991	6.882	18.61
A	9.50	.....	10.00	10.086	6.952	17.70
S	15.00	.....	18.00	11.128	7.674	15.14
O	18.00	.....	24.00	11.926	8.230	12.83
N	8.00	.....	11.50	11.105	7.668	14.65
D	7.00	.....	8.00	10.661	7.367	15.27
1858						
J	6.50	.....	7.50	10.376	7.175	15.69
F	4.88	.....	5.75	9.857	6.820	17.16
M	4.44	.....	5.50	9.525	6.595	17.45
A	4.20	.....	5.19	9.478	6.566	16.56
M	3.50	.....	3.64	9.377	6.500	16.82
J	3.60	.....	4.31	9.323	6.467	16.10
J	3.50	.....	3.71	9.260	6.425	16.17
A	3.50	.....	4.05	9.255	6.427	15.98
S	4.12	.....	4.44	9.149	6.356	15.78
O	3.55	.....	4.40	8.907	6.192	16.25
N	4.05	.....	4.69	8.802	6.122	16.16
D	4.00	.....	4.62	8.774	6.107	15.88
1859						
J	4.31	.....	4.62	8.776	6.111	15.93
F	5.00	.....	5.50	8.758	6.101	15.73
M	4.54	.....	5.17	8.757	6.105	15.66
A	4.50	.....	5.28	8.726	6.086	15.28
M	5.88	.....	6.47	8.887	6.202	14.80
J	5.96	.....	6.89	9.120	6.368	14.91
J	5.59	.....	6.62	9.110	6.364	14.98
A	6.38	.....	7.04	9.047	6.323	15.10
S	5.96	.....	6.54	8.868	6.199	15.70
O	6.03	.....	6.75	8.922	6.240	15.40
N	5.25	.....	6.19	8.969	6.275	15.57
D	5.81	.....	6.75	8.935	6.255	15.43
1860						
J	6.69	.....	8.00	8.920	6.247	15.11
F	5.88	.....	7.10	8.855	6.206	15.21
M	5.50	.....	5.90	8.779	6.156	15.85
A	5.25	.....	5.60	8.671	6.084	16.68
M	5.31	.....	5.80	8.507	5.973	16.97
J	4.75	.....	5.50	8.357	5.872	17.20
J	5.25	.....	5.40	8.288	5.828	17.73
A	5.63	.....	6.10	8.258	5.812	18.81
S	6.50	.....	7.00	8.274	5.828	19.28
O	6.75	.....	6.80	8.333	5.875	18.62
N	7.18	.....	11.10	8.731	6.163	16.57
D	7.25	.....	12.90	9.115	6.440	15.49

## INTEREST RATES AND STOCK PRICES

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TABLE 10 (Continued)

Date	1 Call Money	2 Time Money	3 Coml. Paper	4 Unadj. Bonds	5 Adjust. Bonds	6 Stock Prices
1861						
J	5.75	.....	8.00	8.781	6.210	17.09
F	5.50	.....	7.30	8.687	6.153	17.02
M	5.75	.....	6.10	8.604	6.101	17.41
A	5.13	.....	6.20	8.676	6.160	16.09
M	6.25	.....	8.10	9.130	6.492	14.86
J	5.50	.....	6.50	9.055	6.449	15.01
J	5.50	.....	5.50	8.812	6.285	15.63
A	4.50	.....	6.50	8.833	6.310	15.30
S	5.75	.....	6.30	8.963	6.415	15.27
O	6.50	.....	6.80	9.042	6.482	15.86
N	6.50	.....	6.30	8.971	6.442	16.06
D	6.50	.....	7.00	8.952	6.440	15.59
1862						
J	6.50	.....	6.30	8.513	6.136	16.54
F	6.00	.....	5.90	8.172	5.902	17.12
M	5.50	.....	6.30	8.235	5.959	17.65
A	5.50	.....	6.10	8.164	5.920	17.51
M	4.60	.....	5.00	7.734	5.621	18.34
J	4.10	.....	4.50	7.519	5.476	19.23
J	5.40	.....	5.50	7.569	5.525	18.80
A	4.00	.....	4.50	7.400	5.414	19.44
S	4.30	.....	5.00	7.149	5.244	20.83
O	4.60	.....	4.50	8.863	5.045	22.89
N	6.30	.....	4.70	6.700	4.939	23.08
D	6.00	.....	5.50	6.741	4.981	23.54
1863						
J	6.10	.....	5.30	6.189	4.585	26.60
F	6.30	.....	5.70	5.979	4.440	27.53
M	6.10	.....	5.30	6.059	4.510	27.04
A	5.20	.....	5.30	6.325	4.721	27.36
M	5.30	.....	5.20	6.324	4.730	29.96
J	6.10	.....	5.40	6.381	4.785	29.01
J	6.10	.....	5.60	6.432	4.835	29.69
A	6.00	.....	5.30	6.450	4.866	31.79
S	6.60	.....	5.60	6.440	4.863	31.83
O	6.50	.....	5.70	6.379	4.828	32.69
N	7.00	.....	6.60	6.506	4.935	32.78
D	7.00	.....	6.80	6.617	5.032	32.49
1864						
J	7.00	.....	7.30	6.702	5.107	33.86
F	6.10	.....	6.50	6.645	5.076	35.48
M	5.90	.....	5.60	6.424	4.917	37.99
A	6.80	.....	6.70	6.170	4.734	38.68
M	5.60	.....	6.90	6.145	4.724	36.99
J	6.70	.....	6.80	6.024	4.642	37.69
J	6.80	.....	6.50	5.651	4.363	37.34
A	6.90	.....	7.70	5.660	4.379	37.62
S	7.00	.....	9.00	6.074	4.710	35.42
O	6.80	.....	9.20	6.549	5.089	33.14
N	6.90	.....	8.30	6.480	5.045	34.88
D	6.60	.....	7.80	6.658	5.194	34.58

## APPENDIX

TABLE 10 (Continued)

Date	1 Call Money	2 Time Money	3 Coml. Paper	4 Unadj. Bonds	5 Adjust. Bonds	6 Stock Prices
1865						
J	7.00	.....	8.00	6.908	5.401	32.93
F	6.10	.....	8.50	7.100	5.562	32.16
M	7.00	.....	9.00	7.468	5.860	29.17
A	5.60	.....	8.50	7.577	5.957	28.75
M	5.40	.....	7.20	7.537	5.935	29.39
J	4.90	.....	6.70	7.846	6.190	28.83
J	5.50	.....	7.30	7.701	6.086	30.07
A	5.90	.....	7.70	7.734	6.121	29.73
S	6.00	.....	7.10	7.781	6.166	30.95
O	7.00	.....	7.60	7.871	6.247	31.84
N	6.80	.....	8.00	7.993	6.353	32.12
D	6.80	.....	7.80	8.050	6.408	31.65
1866						
J	5.50	.....	7.37	8.143	6.491	30.20
F	6.06	.....	7.28	8.189	6.534	29.44
M	5.56	.....	7.32	8.272	6.607	29.54
A	5.38	.....	6.69	8.202	6.558	30.03
M	5.40	.....	6.05	8.039	6.434	30.65
J	4.88	.....	5.56	7.990	6.400	31.05
J	4.88	.....	5.89	7.873	6.311	31.59
A	4.13	.....	5.89	7.804	6.259	32.80
S	4.19	.....	5.25	7.751	6.222	32.95
O	4.35	.....	5.45	7.718	6.197	33.95
N	6.00	.....	6.69	7.668	6.160	33.45
D	6.38	.....	6.88	7.790	6.259	32.78
1867						
J	7.18	.....	7.40	7.822	6.288	31.51
F	5.81	.....	7.06	7.844	6.307	31.22
M	6.06	.....	7.19	7.856	6.317	31.01
A	6.19	.....	7.17	7.913	6.364	30.33
M	4.80	.....	6.67	7.932	6.380	30.68
J	6.19	.....	7.38	7.928	6.375	31.74
J	4.50	.....	6.55	7.784	6.259	32.88
A	4.25	.....	6.50	7.768	6.245	33.03
S	5.63	.....	7.12	7.784	6.257	32.98
O	10.76	.....	8.40	7.875	6.330	32.91
N	7.22	.....	8.56	7.953	6.390	32.81
D	6.50	.....	7.94	7.985	6.415	33.29
1868						
J	5.65	.....	7.06	7.859	6.312	34.50
F	4.69	.....	6.50	7.770	6.239	35.30
M	9.35	.....	7.67	7.743	6.216	35.12
A	11.53	.....	8.00	7.780	6.245	34.91
M	5.50	.....	6.62	7.725	6.199	36.12
J	3.50	.....	5.72	7.699	6.176	36.71
J	4.15	.....	6.50	7.692	6.169	36.72
A	3.75	.....	6.62	7.711	6.183	36.34
S	4.87	.....	6.75	7.788	6.245	36.66
O	9.04	.....	7.44	7.869	6.308	37.21
N	17.03	.....	10.00	7.959	6.380	36.16
D	11.40	.....	8.25	8.031	6.437	36.88

## INTEREST RATES AND STOCK PRICES A145

TABLE 10 (Continued)

Date	1 Call Money	2 Time Money	3 Coml, Paper	4 Unadj. Bonds	5 Adjust. Bonds	6 Stock Prices
1869						
J	12.02	.....	8.31	8.036	6.439	38.23
F	6.74	.....	7.69	8.048	6.449	38.52
M	9.02	.....	9.40	8.103	6.494	38.23
A	9.73	.....	9.88	8.133	6.518	38.89
M	6.75	.....	7.81	8.021	6.428	40.59
J	23.67	.....	9.65	8.003	6.418	40.96
J	9.79	.....	10.25	8.084	6.483	40.87
A	6.38	.....	9.56	8.065	6.471	41.44
S	19.54	.....	10.94	8.150	6.545	38.75
O	5.63	.....	10.38	8.264	6.639	38.44
N	6.25	.....	11.94	8.305	6.676	38.16
D	7.96	.....	10.17	8.350	6.717	37.52
1870						
J	6.19	.....	9.00	8.263	6.651	38.07
F	5.50	.....	7.38	8.006	6.451	39.29
M	5.15	.....	7.50	7.901	6.371	39.05
A	5.63	.....	7.19	7.934	6.403	39.66
M	4.56	.....	6.38	7.862	6.350	41.22
J	4.20	.....	5.46	7.797	6.304	41.54
J	5.06	.....	6.38	7.781	6.297	40.27
A	4.70	.....	7.18	7.862	6.368	39.54
S	5.50	.....	7.25	7.888	6.394	39.89
O	5.25	.....	7.28	7.903	6.412	40.06
N	5.50	.....	7.25	7.919	6.431	40.06
D	11.45	.....	8.75	7.959	6.468	39.61
1871						
J	6.49	.....	7.22	7.890	6.418	39.70
F	4.13	.....	6.62	7.841	6.383	40.11
M	4.20	.....	6.25	7.819	6.369	40.97
A	5.84	.....	6.78	7.797	6.355	42.05
M	3.55	.....	5.50	7.741	6.312	43.00
J	3.00	.....	5.06	7.730	6.307	42.69
J	3.25	.....	4.90	7.720	6.301	41.91
A	2.80	.....	5.52	7.681	6.270	42.18
S	4.44	.....	6.66	7.654	6.250	42.38
O	12.36	.....	10.03	7.797	6.368	40.25
N	6.35	.....	9.28	7.850	6.412	40.58
D	10.25	.....	9.94	7.788	6.359	41.38
1872						
J	8.78	.....	8.30	7.562	6.174	42.29
F	6.93	.....	7.56	7.522	6.139	42.55
M	8.44	.....	8.62	7.614	6.213	43.87
A	13.68	.....	8.66	7.600	6.199	45.20
M	6.20	.....	7.20	7.601	6.196	45.03
J	4.50	.....	6.00	7.556	6.155	44.56
J	3.65	.....	6.45	7.462	6.074	44.19
A	3.81	.....	7.56	7.541	6.131	43.57
S	10.33	.....	10.00	7.619	6.189	43.03
O	6.43	.....	10.80	7.672	6.224	42.95
N	7.73	.....	11.62	7.727	6.262	42.68
D	20.06	.....	10.83	7.742	6.266	43.82

## APPENDIX

TABLE 10 (Continued)

Date	1 Call Money	2 Time Money	3 Coml. Pape	4 Unadj. Bonds	5 Adjust. Bonds	6 Stock Prices
1873						
J	7.20	.....	9.28	7.658	6.190	44.25
F	10.30	.....	9.38	7.640	6.166	44.79
M	13.26	.....	10.12	7.657	6.170	44.42
A	27.52	.....	11.40	7.692	6.187	43.66
M	6.09	.....	8.12	7.671	6.160	43.73
J	4.63	.....	6.83	7.631	6.118	43.36
J	3.80	.....	6.44	7.576	6.062	43.21
A	4.63	.....	7.06	7.589	6.062	42.98
S	61.23	.....	14.28	7.734	6.166	39.74
O	14.91	.....	16.50	8.150	6.486	36.42
N	9.40	.....	14.50	8.179	6.497	35.11
D	7.88	.....	9.80	7.953	6.304	38.28
1874						
J	5.50	.....	7.44	7.685	6.080	40.36
F	4.13	.....	6.00	7.570	5.979	41.47
M	4.00	.....	6.14	7.568	5.966	40.73
A	4.15	.....	6.25	7.553	5.943	39.62
M	3.13	.....	5.66	7.620	5.985	38.60
J	2.50	.....	5.56	7.557	5.927	38.23
J	2.75	.....	5.61	7.564	5.921	38.29
A	2.50	.....	5.44	7.557	5.906	38.52
S	2.70	.....	6.25	7.525	5.872	39.09
O	2.94	.....	5.81	7.456	5.809	38.96
N	3.00	.....	5.62	7.350	5.720	39.05
D	3.80	.....	6.00	7.338	5.703	39.10
1875						
J	2.75	.....	5.25	7.255	5.631	39.41
F	2.50	.....	5.19	7.214	5.595	39.27
M	3.95	.....	5.90	7.195	5.573	39.64
A	3.50	.....	5.44	7.105	5.499	40.06
M	2.75	.....	4.56	7.056	5.458	38.33
J	2.35	.....	4.55	7.091	5.480	37.62
J	2.50	.....	4.31	7.024	5.425	37.65
A	2.19	.....	4.94	7.006	5.410	37.80
S	2.35	.....	5.89	6.956	5.369	37.42
O	3.31	.....	6.31	6.998	5.400	36.90
N	4.00	.....	6.39	6.947	5.360	37.38
D	5.17	.....	6.61	6.867	5.299	37.38
1876						
J	5.83	.....	6.44	6.795	5.243	38.29
F	3.63	.....	5.33	6.722	5.188	38.87
M	3.75	.....	5.39	6.674	5.152	39.02
A	3.69	.....	5.50	6.705	5.177	37.48
M	3.20	.....	5.05	6.736	5.204	35.93
J	2.56	.....	4.75	6.699	5.178	35.60
J	2.06	.....	3.81	6.616	5.117	35.22
A	1.70	.....	3.60	6.575	5.089	33.65
S	1.94	.....	4.75	6.672	5.169	31.71
O	3.00	.....	5.67	6.675	5.175	31.39
N	3.85	.....	5.44	6.658	5.165	30.72
D	5.00	.....	5.88	6.652	5.165	30.55

## INTEREST RATES AND STOCK PRICES A147

TABLE 10 (Continued)

Date	1 Call Money	2 Time Money	3 Coml. Paper	4 Unadj. Bonds	5 Adjust. Bonds	6 Stock Prices
1877						
J	5.37	.....	5.55	6.607	5.135	30.29
F	3.31	.....	4.50	6.649	5.172	28.39
M	2.94	.....	4.44	6.737	5.247	27.05
A	3.69	.....	4.38	6.749	5.260	25.07
M	2.45	.....	4.00	6.690	5.220	24.99
J	1.75	.....	4.06	6.605	5.159	23.59
J	1.75	.....	4.14	6.538	5.112	24.39
A	3.40	.....	5.64	6.569	5.143	25.97
S	4.31	.....	6.38	6.588	5.164	27.70
O	6.10	.....	7.25	6.618	5.193	28.48
N	5.38	.....	6.19	6.596	5.182	27.97
D	6.00	.....	5.62	6.547	5.149	27.84
1878						
J	9.76	.....	5.85	6.543	5.152	27.84
F	4.75	.....	5.31	6.533	5.149	27.28
M	4.88	.....	5.12	6.534	5.156	27.75
A	6.18	.....	5.36	6.529	5.157	28.61
M	3.50	.....	4.53	6.486	5.127	28.62
J	2.56	.....	3.81	6.404	5.069	29.39
J	1.75	.....	3.60	6.399	5.069	29.91
A	1.81	.....	3.81	6.440	5.105	29.56
S	2.31	.....	4.62	6.431	5.103	30.20
O	5.00	.....	5.45	6.397	5.079	29.91
N	3.81	.....	5.12	6.349	5.043	29.80
D	4.38	.....	5.06	6.322	5.026	29.69
1879						
J	3.05	.....	4.33	6.188	4.922	31.15
F	3.06	.....	3.81	6.018	4.789	32.33
M	4.50	.....	5.06	6.118	4.869	31.66
A	4.40	.....	5.45	6.117	4.870	32.66
M	3.81	.....	4.44	5.974	4.758	34.33
J	3.31	.....	4.25	5.918	4.715	34.86
J	2.95	.....	3.90	5.864	4.673	35.46
A	7.85	.....	5.56	5.857	4.668	35.95
S	5.50	.....	5.78	5.961	4.751	37.25
O	12.34	.....	5.94	5.945	4.739	41.17
N	8.73	.....	6.25	5.921	4.720	43.29
D	5.80	.....	5.95	5.876	4.685	43.43
1880						
J	5.00	.....	5.38	5.824	4.643	45.26
F	4.63	.....	5.31	5.750	4.585	46.22
M	7.28	.....	5.50	5.734	4.571	46.97
A	6.55	.....	5.50	5.747	4.580	46.35
M	4.06	.....	5.19	5.736	4.572	42.59
J	3.00	.....	4.55	5.691	4.535	42.62
J	2.50	.....	4.44	5.600	4.463	44.61
A	2.50	.....	5.03	5.543	4.417	46.52
S	2.70	.....	5.25	5.505	4.486	46.49
O	2.88	.....	5.12	5.453	4.344	48.14
N	6.05	.....	5.44	5.326	4.243	51.12
D	11.20	.....	6.00	5.243	4.176	53.69

## APPENDIX

TABLE 10 (Continued)

Date	1 Call Money	2 Time Money	3 Coml. Paper	4 Unadj. Bonds	5 Adjust. Bonds	6 Stock Prices
1881						
J	4.81	.....	5.25	5.194	4.137	56.38
F	15.91	.....	5.38	5.249	4.181	55.77
M	7.48	.....	5.55	5.302	4.224	56.51
A	4.44	.....	5.19	5.283	4.209	56.21
M	3.38	.....	4.06	5.144	4.099	58.51
J	3.15	.....	3.50	5.064	4.036	59.00
J	3.44	.....	4.00	5.066	4.038	56.80
A	4.65	.....	4.95	5.106	4.071	55.74
S	5.25	.....	5.69	5.199	4.147	56.12
O	5.44	.....	6.25	5.250	4.189	55.25
N	5.20	.....	6.30	5.221	4.168	55.61
D	6.00	.....	6.25	5.250	4.192	54.03
1882						
J	5.43	.....	5.50	5.242	4.187	53.12
F	4.50	.....	5.47	5.273	4.214	51.89
M	4.65	.....	5.64	5.298	4.236	51.64
A	4.06	.....	5.06	5.240	4.192	51.60
M	3.00	.....	4.85	5.209	4.170	50.98
J	3.56	.....	5.12	5.212	4.174	50.68
J	3.00	.....	4.62	5.190	4.159	53.68
A	3.95	.....	5.65	5.226	4.190	55.36
S	7.25	.....	6.75	5.246	4.208	55.86
O	5.50	.....	6.67	5.232	4.200	54.46
N	7.80	.....	6.50	5.255	4.221	52.18
D	4.63	.....	5.88	5.250	4.219	52.50
1883						
J	4.50	.....	5.50	5.205	4.185	52.35
F	4.13	.....	5.38	5.241	4.217	51.05
M	10.38	.....	6.38	5.259	4.234	51.73
A	6.06	.....	5.81	5.233	4.216	52.95
M	3.55	.....	5.35	5.228	4.213	51.88
J	2.00	.....	5.50	5.223	4.211	52.36
J	2.13	.....	4.78	5.219	4.210	51.40
A	2.50	.....	5.61	5.258	4.243	49.11
S	2.44	.....	6.00	5.262	4.249	49.72
O	2.70	.....	6.00	5.249	4.240	48.45
N	2.00	.....	5.69	5.211	4.210	49.10
D	2.13	.....	5.50	5.185	4.192	48.13
1884						
J	1.90	.....	4.89	5.149	4.163	46.74
F	1.88	.....	4.75	5.095	4.120	48.01
M	1.75	.....	4.62	5.052	4.087	47.85
A	2.10	.....	4.72	5.021	4.063	46.04
M	14.98	.....	5.06	5.115	4.140	42.26
J	3.44	.....	5.75	5.238	4.239	39.20
J	1.90	.....	5.95	5.253	4.252	40.31
A	1.75	.....	5.50	5.171	4.187	42.77
S	1.75	.....	5.50	5.179	4.195	41.17
O	1.95	.....	5.50	5.172	4.190	39.84
N	1.44	.....	5.19	5.178	4.196	38.93
D	1.50	.....	5.00	5.133	4.159	38.95

## INTEREST RATES AND STOCK PRICES A149

TABLE 10 (Continued)

Date	1 Call Money	2 Time Money	3 Coml. Paper	4 Unadj. Bonds	5 Adjust. Bonds	6 Stock Prices
1885						
J	1.19	.....	4.69	5.076	4.113	38.12
F	1.44	.....	4.50	5.033	4.079	39.13
M	1.31	.....	4.47	4.987	4.042	39.29
A	1.35	.....	3.97	4.974	4.033	39.22
M	1.44	.....	3.68	4.953	4.017	38.63
J	1.19	.....	3.55	4.892	3.967	38.33
J	1.35	.....	3.50	4.856	3.939	39.98
A	1.50	.....	3.68	4.846	3.931	42.10
S	1.55	.....	3.75	4.829	3.918	41.55
O	2.13	.....	4.00	4.782	3.880	43.82
N	2.69	.....	4.44	4.749	3.853	46.61
D	2.75	.....	4.50	4.723	3.833	46.43
1886						
J	2.13	.....	4.31	4.643	3.768	46.64
F	2.06	.....	3.90	4.562	3.703	47.38
M	2.65	.....	3.87	4.546	3.690	46.60
A	2.38	.....	4.25	4.558	3.700	45.95
M	2.88	.....	4.06	4.554	3.697	45.10
J	3.35	.....	3.85	4.517	3.667	47.13
J	2.25	.....	3.94	4.482	3.638	47.84
A	5.31	.....	5.19	4.495	3.648	48.30
S	5.90	.....	5.81	4.562	3.703	49.45
O	5.06	.....	6.06	4.563	3.703	50.81
N	5.63	.....	5.92	4.562	3.702	51.88
D	8.70	.....	5.97	4.592	3.726	50.70
1887						
J	4.19	.....	5.50	4.564	3.703	50.11
F	3.56	.....	4.81	4.575	3.710	49.71
M	5.05	.....	5.35	4.595	3.725	50.85
A	6.13	.....	5.38	4.601	3.729	52.20
M	5.13	.....	5.21	4.586	3.715	53.06
J	7.20	.....	5.13	4.592	3.718	51.71
J	4.75	.....	6.19	4.615	3.735	50.38
A	5.15	.....	6.35	4.656	3.765	49.07
S	5.13	.....	6.94	4.745	3.835	48.43
O	4.19	.....	6.38	4.777	3.859	46.57
N	4.60	.....	5.75	4.734	3.821	47.26
D	5.00	.....	6.00	4.715	3.803	47.10
1888						
J	3.69	.....	5.60	4.643	3.742	47.32
F	2.70	.....	4.85	4.614	3.716	46.92
M	2.75	.....	5.22	4.638	3.732	45.16
A	2.63	.....	5.40	4.640	3.731	45.31
M	1.80	.....	4.82	4.620	3.712	45.88
J	1.50	.....	4.25	4.595	3.690	44.10
J	1.44	.....	4.08	4.541	3.644	45.40
A	1.55	.....	4.36	4.535	3.637	46.02
S	2.81	.....	5.28	4.572	3.664	47.32
O	2.60	.....	5.07	4.582	3.671	46.82
N	2.56	.....	4.75	4.564	3.655	45.39
D	4.13	.....	4.97	4.551	3.643	44.55

## APPENDIX

TABLE 10 (Continued)

Date	1 Call Money	2 Time Money	3 Coml. Paper	4 Unadj. Bonds	5 Adjust. Bonds	6 Stock Prices
1889						
J	3.30	.....	4.65	4.499	3.599	45.19
F	2.31	.....	4.25	4.445	3.555	45.56
M	3.06	.....	4.50	4.457	3.565	44.31
A	3.88	.....	4.29	4.448	3.557	44.05
M	2.55	.....	3.85	4.396	3.516	45.21
J	3.00	.....	3.88	4.347	3.476	45.71
J	3.55	.....	4.40	4.372	3.496	44.54
A	3.88	.....	5.16	4.383	3.506	45.63
S	4.81	.....	5.28	4.388	3.512	47.20
O	8.30	.....	6.00	4.437	3.551	46.74
N	7.13	.....	6.00	4.475	3.583	46.68
D	8.00	.....	6.09	4.491	3.597	46.47
1890						
J	7.70	4.80	5.35	4.472	3.584	46.93
F	4.25	4.94	5.03	4.474	3.588	46.45
M	4.25	5.06	5.50	4.494	3.607	46.14
A	4.30	4.50	5.11	4.495	3.611	47.14
M	4.88	5.20	5.06	4.494	3.613	49.03
J	4.75	5.00	5.00	4.512	3.632	48.63
J	4.60	4.85	5.05	4.525	3.645	48.14
A	11.63	6.00	5.59	4.564	3.681	46.96
S	6.75	6.25	5.75	4.590	3.705	46.07
O	5.00	6.00	5.90	4.618	3.733	43.96
N	7.00	7.00	6.75	4.676	3.784	41.11
D	5.00	7.00	7.33	4.732	3.832	40.45
1891						
J	3.90	5.22	5.83	4.622	3.747	42.32
F	2.88	4.38	5.00	4.619	3.750	42.72
M	2.88	4.75	5.25	4.677	3.800	41.76
A	3.30	4.20	5.08	4.691	3.816	43.34
M	4.38	5.58	5.38	4.727	3.849	43.30
J	3.25	4.50	5.50	4.789	3.901	42.30
J	2.20	4.55	5.60	4.782	3.899	41.81
A	2.13	5.56	5.75	4.781	3.901	43.59
S	4.50	5.78	5.78	4.755	3.883	47.45
O	4.25	5.39	5.58	4.709	3.848	47.47
N	4.38	5.00	5.06	4.675	3.823	46.50
D	2.94	4.40	4.83	4.629	3.789	48.06
1892						
J	2.40	3.31	4.16	4.577	3.749	48.62
F	2.00	3.12	3.69	4.547	3.726	48.53
M	2.00	3.55	3.98	4.554	3.734	49.14
A	2.00	2.88	3.47	4.533	3.720	48.85
M	1.50	2.62	3.16	4.508	3.701	48.68
J	1.40	2.70	2.95	4.492	3.689	48.26
J	1.88	3.00	3.47	4.477	3.679	48.32
A	2.05	2.95	3.96	4.486	3.687	48.64
S	4.13	4.50	4.71	4.531	3.725	47.08
O	5.63	5.50	5.16	4.529	3.724	47.93
N	5.15	5.38	5.14	4.538	3.732	47.39
D	6.81	5.50	5.50	4.556	3.746	46.84

## INTEREST RATES AND STOCK PRICES A151

TABLE 10 (Continued)

Date	1 Call Money	2 Time Money	3 Coml. Paper	4 Unadj. Bonds	5 Adjust. Bonds	6 Stock Prices
1893						
J	4.00	4.88	5.10	4.531	3.726	47.70
F	3.00	4.12	4.97	4.498	3.697	46.71
M	8.20	5.90	6.80	4.534	3.727	45.12
A	4.88	5.90	5.75	4.539	3.731	45.42
M	3.60	5.86	6.69	4.594	3.775	42.14
J	8.88	6.08	8.47	4.670	3.836	40.17
J	7.75	8.75	10.88	4.824	3.962	36.58
A	5.50	7.40	10.60	4.940	4.056	35.85
S	3.75	5.75	8.28	4.789	3.930	37.85
O	2.38	4.88	5.91	4.726	3.878	38.47
N	1.70	3.40	4.38	4.622	3.791	39.22
D	1.16	2.62	3.66	4.554	3.734	38.08
1894						
J	1.02	2.61	3.48	4.547	3.727	37.31
F	1.00	2.56	3.30	4.493	3.681	37.80
M	1.09	2.50	3.03	4.452	3.648	38.90
A	1.13	2.50	3.10	4.403	3.606	39.22
M	1.10	2.00	2.93	4.408	3.607	37.63
J	1.00	1.88	2.91	4.413	3.611	36.95
J	1.00	2.00	3.00	4.430	3.623	36.33
A	1.00	2.45	3.07	4.405	3.602	37.68
S	1.00	2.38	3.28	4.374	3.576	38.53
O	1.00	2.00	2.76	4.334	3.542	37.32
N	1.03	2.39	2.79	4.303	3.516	37.22
D	1.44	2.38	2.88	4.302	3.514	36.77
1895						
J	1.35	2.55	3.10	4.310	3.520	36.26
F	1.50	3.19	3.62	4.351	3.551	35.73
M	2.25	3.38	3.91	4.367	3.562	35.45
A	2.25	3.41	3.97	4.374	3.566	36.93
M	1.32	2.40	2.77	4.318	3.519	38.86
J	1.16	2.00	2.62	4.251	3.462	39.77
J	1.40	2.39	2.94	4.220	3.435	40.42
A	1.03	2.50	3.47	4.170	3.392	41.05
S	1.56	2.69	4.03	4.177	3.396	41.38
O	2.17	2.85	4.78	4.189	3.404	40.85
N	1.97	2.50	4.13	4.208	3.418	39.50
D	4.56	4.12	4.75	4.271	3.467	37.14
1896						
J	4.90	6.00	6.00	4.331	3.515	36.62
F	3.94	5.25	5.81	4.284	3.475	38.10
M	3.50	3.88	5.22	4.289	3.479	37.29
A	3.02	3.70	5.27	4.286	3.475	37.67
M	2.53	3.12	4.53	4.266	3.456	37.51
J	1.94	3.12	4.25	4.253	3.445	37.00
J	2.07	3.90	5.05	4.349	3.521	34.90
A	4.69	7.50	7.81	4.555	3.687	33.07
S	5.45	7.89	8.30	4.477	3.622	34.54
O	11.13	8.44	8.36	4.434	3.587	35.22
N	6.25	4.81	5.34	4.326	3.499	37.18
D	1.95	3.10	3.73	4.275	3.456	36.18

## APPENDIX

TABLE 10 (Continued)

Date	1 Call Money	2 Time Money	3 Coml. Paper	4 Unadj. Bonds	5 Adjust. Bonds	6 Stock Prices
1897						
J	1.78	2.62	3.31	4.222	3.413	36.09
F	1.63	2.50	3.00	4.194	3.389	35.65
M	1.62	2.83	3.33	4.135	3.342	35.81
A	1.50	2.50	3.53	4.147	3.350	34.68
M	1.41	2.50	3.53	4.131	3.338	34.84
J	1.20	2.22	3.12	4.095	3.308	36.45
J	1.19	2.00	3.40	4.059	3.279	37.85
A	1.25	2.69	3.72	4.080	3.296	40.39
S	2.22	3.20	4.10	4.090	3.304	42.21
O	2.50	3.19	4.19	4.092	3.305	41.13
N	1.81	3.00	3.38	4.072	3.289	39.73
D	2.92	3.40	3.42	4.019	3.247	40.77
1898						
J	2.50	2.88	3.25	3.996	3.228	41.72
F	1.78	2.69	3.12	4.000	3.233	41.52
M	2.17	4.60	4.65	4.093	3.308	39.63
A	2.97	5.81	5.75	4.189	3.386	38.77
M	1.95	3.72	4.65	4.145	3.351	41.16
J	1.25	2.78	3.24	4.083	3.302	42.66
J	1.25	2.56	3.66	4.033	3.262	42.67
A	1.70	2.95	3.64	4.002	3.238	44.47
S	3.78	3.69	4.11	4.021	3.254	44.65
O	2.25	2.69	3.41	3.989	3.229	43.78
N	2.10	2.90	3.30	3.949	3.197	44.73
D	2.41	3.00	3.03	3.911	3.168	47.26
1899						
J	2.72	2.89	2.90	3.859	3.127	51.25
F	2.47	3.03	3.05	3.864	3.132	53.25
M	4.10	4.00	3.86	3.865	3.134	53.07
A	5.13	3.88	3.69	3.826	3.103	53.81
M	3.52	3.19	3.60	3.793	3.078	51.90
J	2.63	3.00	3.31	3.783	3.071	51.14
J	4.47	3.62	3.66	3.803	3.089	53.08
A	3.27	4.30	4.35	3.824	3.107	54.30
S	6.38	5.56	4.94	3.859	3.138	53.69
O	7.50	5.35	5.19	3.897	3.170	53.42
N	7.60	5.96	5.42	3.918	3.190	54.52
D	11.13	6.12	5.88	3.960	3.226	51.78
1900						
J	4.15	4.80	4.93	3.923	3.197	52.30
F	2.25	4.25	4.40	3.889	3.172	53.43
M	3.94	4.56	4.88	3.875	3.164	54.77
A	3.06	3.50	4.25	3.856	3.150	55.79
M	2.00	3.00	3.70	3.886	3.178	53.57
J	1.69	3.06	3.68	3.900	3.192	52.23
J	1.53	3.36	4.03	3.898	3.192	51.95
A	1.30	3.61	4.19	3.897	3.194	52.45
S	1.61	3.88	4.34	3.898	3.199	51.53
O	3.57	4.95	5.05	3.898	3.202	53.29
N	5.06	4.33	4.40	3.870	3.183	56.90
D	5.13	4.78	4.75	3.838	3.160	61.06

## INTEREST RATES AND STOCK PRICES A153

TABLE 10 (Continued)

Date	1 Call Money	2 Time Money	3 Coml. Paper	4 Unadj. Bonds	5 Adjust. Bonds	6 Stock Prices
1901						
J	3.07	3.83	4.03	3.824	3.152	63.93
F	2.00	3.25	3.69	3.804	3.140	66.01
M	2.34	3.28	3.75	3.801	3.141	68.29
A	4.30	4.14	3.97	3.808	3.151	74.36
M	6.88	4.36	3.97	3.835	3.178	71.47
J	4.31	3.56	3.94	3.821	3.172	78.33
J	4.30	4.33	4.30	3.838	3.190	72.17
A	2.44	4.38	4.50	3.853	3.208	73.93
S	4.34	5.06	4.94	3.858	3.217	74.44
O	3.55	4.65	4.65	3.854	3.219	74.84
N	4.19	4.69	4.72	3.825	3.200	77.86
D	6.25	5.19	4.94	3.824	3.205	76.72
1902						
J	4.57	4.53	4.50	3.810	3.198	77.94
F	2.88	4.00	4.00	3.801	3.197	78.52
M	3.94	4.00	4.34	3.799	3.201	78.62
A	5.10	4.25	4.48	3.791	3.200	81.64
M	5.56	4.75	4.53	3.804	3.217	81.95
J	2.84	4.35	4.44	3.818	3.234	82.25
J	3.52	4.60	4.62	3.833	3.252	85.32
A	3.78	4.72	4.84	3.848	3.271	87.91
S	10.80	7.83	5.61	3.863	3.290	88.01
O	7.63	7.44	5.94	3.897	3.325	85.11
N	4.88	6.44	5.75	3.906	3.339	81.89
D	6.81	6.80	6.00	3.928	3.364	80.29
1903						
J	5.75	4.97	5.12	3.918	3.362	84.23
F	2.88	4.59	4.48	3.932	3.380	82.75
M	6.00	5.63	5.61	3.978	3.427	78.98
A	4.19	4.96	5.22	4.011	3.462	75.56
M	2.44	3.92	4.75	3.991	3.451	74.35
J	3.05	4.28	5.08	4.024	3.486	70.38
J	2.50	4.58	5.44	4.070	3.532	68.43
A	2.03	4.91	5.94	4.115	3.578	66.42
S	2.32	5.25	6.00	4.118	3.586	65.50
O	2.69	5.00	5.84	4.074	3.554	64.09
N	5.19	5.81	5.97	4.040	3.530	64.35
D	5.50	5.23	5.85	4.047	3.542	66.84
1904						
J	2.34	4.03	4.88	4.035	3.537	67.85
F	1.81	3.69	4.78	4.044	3.550	65.83
M	1.75	3.17	4.68	4.056	3.565	65.75
A	1.38	2.69	4.06	4.032	3.549	67.44
M	1.55	2.61	3.92	4.016	3.539	65.74
J	1.13	2.31	3.61	3.992	3.522	66.03
J	1.03	2.44	3.53	3.953	3.491	69.08
A	0.90	2.35	3.88	3.941	3.484	71.42
S	1.53	3.25	4.31	3.944	3.490	74.64
O	2.03	3.50	4.40	3.936	3.487	78.91
N	2.80	3.75	4.13	3.926	3.480	82.25
D	3.13	3.59	4.28	3.915	3.473	83.53

## APPENDIX

TABLE 10 (Continued)

Date	1 Call Money	2 Time Money	3 Coml. Paper	4 Unadj. Bonds	5 Adjust. Bonds	6 Stock Prices
1905						
J	2.25	2.93	3.97	3.885	3.449	86.05
F	2.19	3.10	3.83	3.874	3.441	90.39
M	3.20	3.24	3.93	3.886	3.453	93.01
A	3.25	3.44	3.97	3.893	3.461	91.58
M	2.42	3.18	3.98	3.899	3.467	87.13
J	2.50	3.07	3.75	3.894	3.464	88.72
J	2.31	3.09	4.12	3.882	3.455	91.53
A	2.05	3.28	4.20	3.885	3.458	95.46
S	3.56	4.28	4.72	3.886	3.459	96.30
O	5.31	4.90	4.95	3.887	3.460	97.38
N	7.70	5.71	5.58	3.912	3.483	96.18
D	16.50	6.00	5.81	3.923	3.491	96.94
1906						
J	8.65	5.08	5.05	3.912	3.482	99.84
F	4.63	5.25	5.03	3.932	3.499	99.42
M	4.88	5.22	5.28	3.966	3.529	97.61
A	9.50	5.69	5.44	3.986	3.545	96.25
M	4.15	4.95	5.32	4.003	3.559	93.78
J	3.25	4.38	5.25	3.990	3.547	95.57
J	2.97	4.50	5.46	4.005	3.558	93.73
A	4.44	5.39	5.96	4.027	3.576	100.85
S	9.38	7.19	6.56	4.056	3.600	103.95
O	5.15	6.13	6.30	4.045	3.588	102.91
N	7.50	7.19	6.25	4.038	3.581	102.46
D	14.00	7.88	6.25	4.054	3.594	101.57
1907						
J	6.15	5.78	6.15	4.065	3.602	98.16
F	4.38	5.25	5.94	4.088	3.621	94.50
M	6.38	6.22	6.18	4.159	3.683	85.02
A	2.35	4.42	5.94	4.159	3.681	85.58
M	2.31	3.97	5.47	4.181	3.700	82.88
J	3.13	4.44	5.44	4.233	3.745	80.67
J	4.55	5.10	5.75	4.231	3.742	83.71
A	3.06	6.41	6.25	4.286	3.791	78.97
S	4.00	5.72	6.81	4.340	3.840	79.01
O	21.00	8.05	7.10	4.419	3.909	72.08
N	12.25	13.50	7.25	4.590	4.062	67.87
D	14.60	10.00	7.83	4.474	3.959	71.03
1908						
J	4.75	5.36	6.47	4.316	3.820	73.71
F	1.81	4.22	5.06	4.302	3.810	70.93
M	1.85	3.57	5.68	4.335	3.841	72.98
A	1.72	2.85	4.46	4.303	3.814	76.37
M	1.66	2.91	3.94	4.261	3.779	80.74
J	1.52	2.32	3.64	4.255	3.777	80.93
J	1.22	2.29	3.75	4.230	3.757	83.18
A	1.06	2.56	3.60	4.185	3.720	85.95
S	1.35	2.57	3.93	4.151	3.693	85.40
O	1.44	3.10	4.06	4.140	3.686	86.41
N	1.75	3.31	4.03	4.102	3.657	91.76
D	2.90	3.20	3.85	4.083	3.643	94.28

## INTEREST RATES AND STOCK PRICES A155

TABLE 10 (Continued)

Date	1 Call Money	2 Time Money	3 Coml. Paper	4 Unadj. Bonds	5 Adjust. Bonds	6 Stock Prices
1909						
J	1.81	2.66	3.72	4.058	3.625	95.52
F	2.25	2.78	3.53	4.031	3.605	93.55
M	1.85	2.65	3.50	4.042	3.620	94.98
A	1.94	2.47	3.50	4.046	3.627	98.63
M	1.84	2.60	3.44	4.041	3.628	100.81
J	1.87	2.55	3.25	4.058	3.648	102.21
J	2.06	2.38	3.38	4.052	3.648	103.88
A	2.17	3.29	4.04	4.063	3.662	105.83
S	2.69	3.74	4.18	4.083	3.685	105.29
O	4.31	4.75	5.03	4.097	3.702	105.01
N	4.65	4.86	5.05	4.111	3.719	103.10
D	5.03	4.64	5.11	4.116	3.727	104.45
1910						
J	4.72	4.31	4.75	4.116	3.732	102.59
F	2.78	3.69	4.44	4.121	3.739	99.40
M	2.88	3.90	4.50	4.140	3.761	101.71
A	3.28	4.09	4.75	4.183	3.804	99.66
M	3.63	3.93	4.75	4.201	3.824	98.32
J	2.77	3.40	4.92	4.218	3.842	93.56
J	2.41	3.96	5.38	4.240	3.866	88.91
A	1.55	3.78	5.43	4.232	3.863	90.79
S	2.00	4.22	5.53	4.183	3.820	91.21
O	3.13	4.78	5.56	4.158	3.801	95.00
N	3.23	4.50	5.50	4.187	3.830	94.10
D	3.38	3.91	4.66	4.184	3.829	91.83
1911						
J	3.18	3.38	3.99	4.174	3.823	94.25
F	2.28	3.14	4.06	4.177	3.827	95.43
M	2.28	2.86	3.90	4.191	3.842	94.45
A	2.30	2.75	3.65	4.186	3.840	94.34
M	2.31	2.78	3.62	4.173	3.829	95.95
J	2.40	2.81	3.68	4.182	3.839	98.23
J	2.36	2.88	3.78	4.187	3.844	98.17
A	2.31	3.20	4.19	4.200	3.857	93.71
S	2.28	3.50	4.53	4.217	3.873	89.02
O	2.33	3.62	4.36	4.209	3.866	90.37
N	2.72	3.62	3.94	4.188	3.847	93.80
D	4.03	4.12	4.62	4.195	3.853	93.37
1912						
J	2.42	2.95	3.90	4.187	3.846	93.20
F	2.28	2.89	3.75	4.178	3.837	92.31
M	2.42	3.44	4.19	4.195	3.852	94.17
A	3.03	3.50	4.14	4.204	3.860	96.46
M	2.75	3.19	4.19	4.210	3.865	95.70
J	2.75	3.12	4.00	4.224	3.876	95.25
J	2.88	3.58	4.52	4.234	3.885	95.28
A	2.84	4.10	5.00	4.257	3.905	97.65
S	4.63	5.50	5.56	4.279	3.923	97.62
O	5.33	5.75	5.93	4.276	3.919	97.10
N	6.38	5.88	5.72	4.275	3.917	96.42
D	6.50	5.87	6.00	4.291	3.931	93.78

## APPENDIX

TABLE 10 (Continued)

Date	1 Call Money	2 Time Money	3 Coml. Paper	4 Unadj. Bonds	5 Adjust. Bonds	6 Stock Prices
1913						
J	3.01	4.11	4.81	4.276	3.916	93.22
F	3.31	4.53	4.90	4.292	3.930	90.75
M	4.19	5.37	5.76	4.362	3.992	88.94
A	3.43	4.30	5.52	4.413	4.037	88.76
M	2.75	3.94	5.35	4.464	4.083	86.25
J	2.28	4.13	5.88	4.512	4.127	82.31
J	2.22	4.54	6.04	4.510	4.124	83.35
A	2.25	4.50	6.00	4.467	4.083	84.64
S	2.89	4.62	5.81	4.427	4.045	84.96
O	3.61	5.04	5.66	4.464	4.078	82.94
N	3.75	4.94	5.56	4.521	4.128	81.08
D	4.58	5.03	5.69	4.533	4.138	80.88
1914						
J	2.57	3.67	4.53	4.451	4.062	83.38
F	1.78	3.03	3.85	4.383	3.998	83.99
M	1.90	3.00	3.84	4.405	4.016	81.68
A	1.82	2.81	3.74	4.405	4.014	79.77
M	1.78	2.44	3.88	4.406	4.012	80.28
J	1.85	2.54	3.86	4.394	4.000	79.85
J	2.74	3.66	4.44	4.441	4.041	75.72
A	6.25	7.63	6.34	*	*	*
S	6.00	6.90	6.70	*	*	*
O	6.00	6.50	6.44	*	*	*
N	5.41	5.22	5.50	*	*	*
D	3.38	3.87	4.35	4.657	4.225	72.13
1915						
J	2.13	3.19	3.85	4.595	4.166	73.23
F	1.97	2.88	3.75	4.590	4.158	71.96
M	1.93	2.85	3.38	4.624	4.187	73.25
A	2.09	2.91	3.66	4.580	4.145	77.17
M	1.94	2.84	3.72	4.591	4.152	75.09
J	1.83	2.70	3.65	4.627	4.182	74.54
J	1.85	2.78	3.25	4.697	4.243	72.84
A	1.76	2.81	3.53	4.733	4.274	75.04
S	1.79	2.75	3.28	4.748	4.285	77.00
O	1.82	2.75	3.22	4.647	4.192	81.16
N	1.88	2.72	2.99	4.507	4.064	84.70
D	1.93	2.58	3.09	4.492	4.048	84.05
1916						
J	1.88	2.75	3.12	4.476	4.032	82.63
F	1.88	2.76	3.12	4.464	4.019	80.75
M	1.90	2.82	3.12	4.480	4.032	80.29
A	2.10	2.88	3.12	4.499	4.047	79.74
M	2.28	2.88	3.12	4.510	4.055	81.95
J	2.97	3.50	3.62	4.516	4.060	83.27
J	3.13	3.97	3.97	4.530	4.070	82.38
A	2.33	3.23	3.72	4.550	4.086	81.77
S	2.78	3.32	3.38	4.537	4.074	83.03
O	2.63	3.36	3.38	4.479	4.020	85.17
N	3.04	3.42	3.49	4.441	3.984	84.53
D	4.44	4.25	3.91	4.443	3.985	82.91

\*Stock Exchange closed.

TABLE 10 (Continued)

Date	1 Call Money	2 Time Money	3 Coml. Paper	4 Unadj. Bonds	5 Adjust. Bonds	6 Stock Prices
1917						
J	2.05	3.13	3.55	4.376	3.923	81.32
F	2.41	4.06	4.09	4.450	3.988	77.04
M	2.28	3.75	4.12	4.495	4.026	77.99
A	2.47	3.97	4.28	4.601	4.121	77.14
M	3.07	4.42	4.83	4.731	4.236	74.00
J	4.69	4.91	5.00	4.784	4.282	74.96
J	3.35	4.32	4.68	4.831	4.322	74.03
A	2.99	4.49	4.79	4.867	4.354	72.96
S	4.53	5.50	5.18	4.964	4.440	69.88
O	4.00	5.57	5.38	5.016	4.486	66.85
N	4.17	5.44	5.44	5.162	4.615	61.80
D	5.16	5.56	5.50	5.252	4.695	59.74
1918						
J	4.10	5.65	5.57	5.215	4.661	62.37
F	4.99	5.81	5.68	5.162	4.612	63.12
M	5.20	6.00	5.88	5.233	4.676	62.63
A	4.22	6.00	5.91	5.297	4.732	61.39
M	5.03	6.00	5.88	5.223	4.664	63.37
J	5.00	5.78	5.88	5.283	4.718	63.74
J	5.63	5.72	5.88	5.345	4.773	63.96
A	5.88	5.91	5.94	5.347	4.773	65.51
S	6.00	6.00	6.00	5.405	4.824	65.89
O	6.00	6.00	6.00	5.274	4.705	68.60
N	5.85	6.00	5.97	4.957	4.422	70.32
D	5.39	5.68	5.81	4.979	4.440	67.51
1919						
J	4.78	5.18	5.25	5.077	4.527	65.84
F	5.06	5.31	5.18	5.126	4.570	65.86
M	4.88	5.50	5.38	5.189	4.625	66.54
A	5.40	5.80	5.38	5.239	4.669	66.77
M	5.25	5.50	5.38	5.186	4.620	70.41
J	6.63	5.78	5.53	5.185	4.617	70.55
J	6.55	6.00	5.43	5.253	4.676	70.26
A	5.13	5.94	5.38	5.435	4.837	65.77
S	5.78	5.88	5.38	5.477	4.874	64.52
O	7.94	6.18	5.38	5.333	4.746	65.26
N	11.06	6.50	5.50	5.473	4.869	63.18
D	8.85	6.60	5.88	5.538	4.927	60.42
1920						
J	8.19	7.31	6.00	5.517	4.907	60.59
F	10.00	8.12	6.40	5.706	5.073	58.14
M	8.09	8.15	6.67	5.705	5.073	61.64
A	7.29	8.12	6.82	5.923	5.265	59.44
M	7.15	8.25	7.16	6.172	5.487	57.29
J	7.50	8.10	7.72	6.121	5.443	56.80
J	8.29	8.28	7.84	6.085	5.411	57.58
A	7.23	8.72	8.00	5.899	5.247	59.50
S	7.10	8.22	7.97	5.692	5.063	63.09
O	7.75	7.94	8.00	5.513	4.905	65.89
N	7.90	7.76	7.93	5.603	4.987	64.00
D	7.00	7.32	7.88	5.784	5.149	58.11

## APPENDIX

TABLE 10 (Continued)

Date	1 Call Money	2 Time Money	3 Coml. Paper	4 Unadj. Bonds	5 Adjust. Bonds	6 Stock Prices
1921						
J	6.71	6.60	7.82	5.584	4.974	59.77
F	7.26	6.81	7.75	5.608	4.997	59.02
M	6.82	6.75	7.62	5.672	5.057	56.25
A	6.45	6.66	7.56	5.707	5.091	55.17
M	6.79	6.65	6.93	5.722	5.109	57.43
J	6.00	6.68	6.71	5.862	5.238	53.97
J	5.60	6.12	6.28	5.707	5.103	56.25
A	5.57	5.98	5.95	5.611	5.021	57.23
S	5.14	5.59	5.88	5.525	4.949	57.86
O	5.28	5.38	5.62	5.502	4.933	56.93
N	5.03	5.20	5.17	5.266	4.726	58.54
D	5.14	5.12	5.12	5.110	4.591	58.62
1922						
J	4.55	4.75	4.91	5.011	4.506	58.36
F	4.90	4.87	4.88	5.013	4.513	60.35
M	4.23	4.74	4.79	4.966	4.475	62.65
A	3.97	4.41	4.56	4.870	4.393	65.80
M	3.91	4.17	4.28	4.840	4.372	67.11
J	3.70	4.12	4.03	4.833	4.370	66.44
J	3.86	4.06	3.94	4.740	4.291	68.99
A	3.76	4.08	3.88	4.690	4.251	72.30
S	4.34	4.47	4.19	4.674	4.242	73.30
O	4.73	4.79	4.39	4.793	4.355	73.21
N	4.89	4.99	4.61	4.879	4.439	69.24
D	4.66	4.91	4.62	4.862	4.429	67.62
1923						
J	4.32	4.67	4.62	4.857	4.431	67.56
F	4.82	4.91	4.68	4.890	4.467	69.72
M	5.14	5.28	5.03	5.024	4.595	70.04
A	4.87	5.32	5.12	5.050	4.625	68.98
M	4.70	5.07	5.12	4.967	4.555	66.47
J	5.00	4.91	4.91	4.983	4.576	65.85
J	5.06	5.12	4.95	4.991	4.590	63.24
A	4.97	5.24	5.03	4.960	4.568	62.89
S	4.93	5.47	5.12	5.000	4.610	63.17
O	4.76	5.28	5.12	5.019	4.633	62.66
N	4.81	5.03	5.09	4.982	4.605	63.62
D	4.86	5.00	4.88	4.994	4.623	63.58
1924						
J	4.39	4.80	4.88	4.949	4.586	64.52
F	4.33	4.75	4.78	4.965	4.606	65.06
M	4.04	4.69	4.62	4.968	4.613	64.60
A	4.21	4.33	4.62	4.930	4.584	65.46
M	3.34	3.97	4.19	4.878	4.538	65.58
J	2.25	3.31	3.97	4.804	4.475	67.42
J	2.10	2.85	3.52	4.742	4.422	70.71
A	2.00	2.72	3.25	4.782	4.463	72.53
S	2.07	2.96	3.12	4.775	4.461	72.03
O	2.32	2.88	3.12	4.749	4.440	71.27
N	2.42	3.12	3.22	4.753	4.448	76.15
D	3.49	3.55	3.55	4.787	4.484	80.10

## INTEREST RATES AND STOCK PRICES A159

TABLE 10 (Continued)

Date	1 Call Money	2 Time Money	3 Coml. Paper	4 Unadj. Bonds	5 Adjust. Bonds	6 Stock Prices
1925						
J	3.32	3.62	3.62	4.776	4.478	80.79
F	3.60	3.65	3.62	4.759	4.466	80.93
M	3.97	4.07	3.91	4.741	4.452	78.63
A	3.86	4.01	3.93	4.724	4.440	76.46
M	3.82	3.78	3.88	4.667	4.390	78.49
J	3.97	3.85	3.88	4.670	4.396	78.89
J	4.09	3.93	3.90	4.716	4.444	79.68
A	4.19	4.35	3.97	4.772	4.500	82.32
S	4.62	4.41	4.15	4.728	4.462	83.17
O	4.87	4.82	4.38	4.744	4.479	84.34
N	4.74	4.91	4.38	4.725	4.465	86.78
D	5.32	4.99	4.38	4.687	4.432	90.59
1926						
J	4.33	4.78	4.35	4.645	4.395	90.66
F	4.85	4.64	4.15	4.609	4.364	89.09
M	4.55	4.74	4.28	4.614	4.372	85.33
A	4.06	4.22	4.19	4.554	4.318	85.84
M	3.81	4.06	4.03	4.516	4.285	86.75
J	4.15	4.13	3.88	4.517	4.283	90.29
J	4.27	4.36	3.94	4.542	4.315	92.09
A	4.52	4.66	4.22	3.555	4.331	94.67
S	5.02	4.91	4.40	4.550	4.329	97.49
O	4.75	4.99	4.53	4.543	4.325	94.54
N	4.56	4.68	4.43	4.502	4.289	95.24
D	5.16	4.67	4.40	4.485	4.278	97.05
1927						
J	4.32	4.55	4.19	4.454	4.251	98.36
F	4.03	4.42	3.91	4.452	4.253	102.61
M	4.13	4.42	4.00	4.411	4.217	103.69
A	4.18	4.38	4.09	4.355	4.168	106.14
M	4.26	4.36	4.12	4.347	4.165	108.47
J	4.33	4.40	4.12	4.380	4.200	110.22
J	4.05	4.44	4.06	4.384	4.209	112.10
A	3.68	4.08	3.90	4.342	4.174	113.47
S	3.80	4.17	3.91	4.305	4.143	115.39
O	3.90	4.34	4.00	4.257	4.101	115.15
N	3.60	4.15	3.93	4.206	4.057	114.23
D	4.38	4.19	3.97	4.183	4.040	116.58
1928						
J	4.24	4.35	3.88	4.187	4.049	114.79
F	4.38	4.55	3.99	4.208	4.073	111.84
M	4.47	4.61	4.19	4.213	4.082	115.66
A	5.08	4.88	4.31	4.231	4.104	120.49
M	5.70	5.17	4.55	4.275	4.151	122.41
J	6.32	5.76	4.72	4.371	4.249	116.52
J	6.05	5.93	5.09	4.437	4.317	114.85
A	6.87	6.34	5.42	4.496	4.377	116.57
S	7.26	7.06	5.59	4.442	4.329	119.60
O	6.98	7.10	5.51	4.435	4.322	118.42
N	6.67	6.88	5.38	4.395	4.287	124.37
D	8.60	7.47	5.44	4.468	4.360	124.91

## APPENDIX

TABLE 10 (Continued)

Date	1 Call Money	2 Time Money	3 Coml. Paper	4 Unadj. Bonds	5 Adjust. Bonds	6 Stock Prices
1929						
J	7.05	7.65	5.50	4.501	4.393	130.53
F	7.06	7.69	5.56	4.548	4.434	128.95
M	9.10	7.97	5.69	4.599	4.464	128.54
A	8.89	8.72	5.88	4.579	4.460	126.90
M	8.91	8.77	6.00	4.597	4.477	128.40
J	7.70	8.10	6.00	4.649	4.520	133.56
J	9.23	7.84	6.00	4.670	4.546	146.61
A	8.23	8.87	6.08	4.662	4.512	152.76
S	8.50	8.94	6.12	4.694	4.575	154.42
O	6.43	7.80	6.12	4.638	4.540	135.68
N	5.44	5.50	5.41	4.581	4.445	122.20
D	4.83	4.82	5.00	4.504	4.398	125.02
1930						
J	4.64	4.70	4.90	4.504	4.386	124.18
F	4.32	4.65	4.62	4.522	4.375	130.53
M	3.69	4.12	4.10	4.437	4.300	131.34
A	4.00	4.12	3.88	4.454	4.352	128.76
M	3.12	3.54	3.68	4.441	4.319	122.54
J	2.62	2.90	3.44	4.417	4.287	115.09
J	2.20	2.78	3.15	4.375	4.237	115.01
A	2.21	2.62	3.00	4.317	4.176	111.95
S	2.19	2.59	3.00	4.262	4.116	109.98
O	2.00	2.45	3.00	4.292	4.096	101.77
N	2.00	2.18	2.97	4.366	4.138	98.31
D	2.23	2.24	2.85	4.488	4.200	85.38
1931						
J	1.57	2.10	2.82	4.322	4.078	90.69
F	1.50	1.88	2.50	4.324	4.083	96.12
M	1.55	2.12	2.53	4.319	4.095	89.89
A	1.52	2.12	2.40	4.365	4.081	79.92
M	1.45	1.66	2.12	4.331	4.002	70.56
J	1.50	1.41	2.12	4.364	4.016	67.78
J	1.50	1.42	1.95	4.362	4.009	69.26
A	1.50	1.50	1.88	4.492	4.056	61.25
S	1.50	1.69	1.88	4.732	4.120	51.47
O	2.10	3.19	3.35	5.146	4.350	45.18
N	2.50	3.53	4.00	5.248	4.492	41.08
D	2.70	3.40	4.00	5.886	4.736	31.78
1932						
J	2.65	3.56	4.00	5.637	4.735	32.01
F	2.50	3.62	3.88	5.636	4.793	31.86
M	2.50	3.13	3.52	5.524	4.691	29.44
A	2.50	2.69	3.38	5.906	4.837	21.27
M	2.50	1.59	3.00	6.362	4.848	15.57
J	2.50	1.50	2.78	6.513	4.898	13.46
J	2.08	1.44	2.56	6.077	4.798	15.87
A	2.00	1.38	2.18	5.458	4.540	25.67
S	2.00	1.26	2.12	5.286	4.456	31.23
O	1.35	.97	1.94	5.319	4.456	26.16
N	1.00	.50	1.74	5.443	4.488	24.37
D	1.00	.50	1.51	5.557	4.375	23.26

## INTEREST RATES AND STOCK PRICES A161

TABLE 10 (Concluded)

Date	1 Call Money	2 Time Money	3 Coml. Paper	4 Unadj. Bonds	5 Adjust. Bonds	6 Stock Prices
1933						
J	1.00	.50	1.38	5.290	4.174	25.14
F	1.00	.66	1.38	5.390	4.173	23.81
M	3.32	2.94	2.78	5.681	4.337	23.75
A	1.37	1.25	2.56	5.907	4.515	25.46
M	1.00	1.04	2.08	5.485	4.357	34.64
J	1.00	.93	1.69	5.162	4.205	40.36
J	1.00	1.16	1.50	4.964	4.128	45.93
A	.98	1.08	1.50	4.921	4.076	45.56
S	.75	.64	1.25	5.159	4.100	42.99
O	.75	.69	1.25	5.185	4.111	35.50
N	.75	.83	1.25	5.576	4.240	35.40
D	.94	1.09	1.41	5.417	4.200	37.34
1934						
J	1.00	1.09	1.25	4.997	4.084	41.68
F	1.00	.91	1.22	4.695	3.996	46.05
M	1.00	.88	1.00	4.597	3.926	44.37
A	1.00	.88	1.00	4.515	3.865	44.87
M	1.00	.88	.90	4.467	3.812	40.31
J	1.00	.88	.75	4.402	3.728	40.32
J	1.00	.88	.75	4.379	3.721	35.93
A	1.00	.88	.75	4.494	3.771	32.82
S	1.00	.88	.75	4.592	3.826	32.08
O	1.00	.88	.75	4.491	3.762	32.95
N	1.00	.88	.75	4.401	3.680	32.53
D	1.00	.88	.75	4.307	3.611	33.47
1935						
J	1.00	.88	.75	4.209	3.523	32.39
F	1.00	.88	.75	4.148	3.438	30.55
M	1.00	.88	.75	4.225	3.409	26.73
A	.64	.56	.75	4.262	3.411	27.54
M	.25	.25	.75	4.206	3.438	29.05
J	.25	.25	.75	4.173	3.417	30.10
J	.25	.25	.75	4.129	3.397	31.71
A	.25	.25	.75	4.178	3.451	33.52
S	.25	.25	.75	4.214	3.467	34.10
O	.29	.34	.75	4.243	3.479	32.00
N	.75	1.00	.75	4.232	3.443	35.61
D	.75	1.00	.75	4.612	3.414	38.36
1936						
J	.75	1.00	.75	4.047	3.360	41.38
F	.75	1.00	.75	3.941	3.312	46.59
M	.75	1.00	.75	3.882	3.251	45.55
A	.75	1.00	.75	3.905	3.245	43.51
M	.93	1.19	.75	3.895	3.215	42.08
J	1.00	1.25	.75	3.875	3.200	44.26
J	1.00	1.25	.75	3.881	3.220	47.52
A	1.00	1.25	.75	3.877	3.240	50.10
S	1.00	1.25	.75	3.843	3.211	51.37
O	1.00	1.25	.75	3.828	3.200	54.06
N	1.00	1.25	.75	3.796	3.170	53.06
D	1.00	1.25	.75	3.747	3.125	50.31
1937						
J	1.00	1.25	.75	3.764	3.146	51.44

TABLE 11

AN ADJUSTED ARITHMETIC AVERAGE INDEX NUMBER<sup>1</sup> OF THE YIELDS OF  
AMERICAN RAILROAD BONDS,  
MONTHLY, JANUARY 1857-JANUARY 1936

Col. 1 Logarithms of Index.

Col. 2. Cyclical Curve (logarithms).

Col. 3. Trend Curve (logarithms).

Col. 4. Deviations of Cyclical Curve (logarithms) from Trend Curve  
(logarithms).

For the nature of the graduations given in columns 2 and 3 see  
Appendix D.

<sup>1</sup>See Table 10.

## RAILROAD BOND YIELDS

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TABLE 11

AN ADJUSTED ARITHMETIC INDEX NUMBER OF THE YIELDS OF  
AMERICAN RAILROAD BONDS.

Date	1	2	3	4	Date	1	2	3	4
1857					1862				
J	.8209	.8249	.8255	-.0006	J	.7879	.7920	.7452	+.0468
F	.8180	.8268	.8261	+.0007	F	.7710	.7854	.7426	+.0428
M	.8190	.8301	.8264	+.0037	M	.7752	.7775	.7397	+.0378
A	.8208	.8346	.8266	+.0080	A	.7723	.7682	.7369	+.0313
M	.8258	.8401	.8265	+.0136	M	.7498	.7578	.7343	+.0235
J	.8356	.8460	.8264	+.0196	J	.7385	.7464	.7318	+.0146
A	.8377	.8518	.8262	+.0256	J	.7423	.7344	.7292	+.0052
S	.8421	.8568	.8260	+.0308	J	.7335	.7224	.7268	-.0044
O	.8850	.8604	.8258	+.0346	S	.7197	.7109	.7245	-.0136
N	.9154	.8624	.8254	+.0370	O	.7029	.7001	.7223	-.0222
D	.8847	.8624	.8249	+.0375	N	.6936	.6905	.7203	-.0298
	.8673	.8602	.8244	+.0358	D	.6973	.6824	.7184	-.0360
1858					1863				
J	.8558	.8558	.8237	+.0321	J	.6613	.6761	.7166	-.0405
F	.8338	.8494	.8230	+.0264	F	.6474	.6719	.7152	-.0433
M	.8192	.8413	.8222	+.0191	M	.6542	.6699	.7138	-.0439
A	.8173	.8321	.8216	+.0105	A	.6740	.6700	.7126	-.0426
M	.8129	.8225	.8208	+.0017	M	.6749	.6722	.7113	-.0391
J	.8107	.8131	.8200	-.0069	J	.6799	.6759	.7105	-.0346
A	.8070	.8047	.8193	-.0146	J	.6844	.6806	.7099	-.0293
S	.8080	.7978	.8186	-.0208	A	.6872	.6854	.7097	-.0243
O	.8032	.7926	.8178	-.0252	S	.6869	.6895	.7093	-.0198
N	.7918	.7892	.8170	-.0278	O	.6838	.6923	.7093	-.0170
D	.7869	.7875	.8162	-.0287	N	.6933	.6933	.7097	-.0164
	.7858	.7870	.8155	-.0285	D	.7017	.6923	.7100	-.0177
1859					1864				
J	.7861	.7874	.8146	-.0272	J	.7082	.6895	.7104	-.0209
F	.7854	.7884	.8131	-.0253	F	.7055	.6855	.7112	-.0257
M	.7857	.7899	.8128	-.0229	M	.6917	.6810	.7121	-.0311
A	.7843	.7916	.8119	-.0203	A	.6752	.6766	.7132	-.0366
M	.7925	.7934	.8109	-.0175	M	.6943	.6734	.7148	-.0414
J	.8040	.7953	.8099	-.0146	J	.6667	.6720	.7161	-.0441
A	.8037	.7970	.8088	-.0118	J	.6398	.6728	.7178	-.0450
S	.8009	.7982	.8076	-.0094	A	.6414	.6761	.7197	-.0436
O	.7923	.7988	.8064	-.0076	S	.6730	.6821	.7221	-.0400
N	.7952	.7984	.8053	-.0069	O	.7066	.6904	.7244	-.0340
D	.7976	.7969	.8040	-.0071	N	.7029	.7009	.7269	-.0260
	.7962	.7944	.8027	-.0083	D	.7155	.7129	.7294	-.0165
1860					1865				
J	.7957	.7912	.8010	-.0098	J	.7325	.7259	.7320	-.0061
F	.7928	.7875	.7997	-.0122	F	.7452	.7391	.7348	+.0043
M	.7893	.7838	.7981	-.0143	M	.7679	.7320	.7378	+.0142
A	.7842	.7804	.7964	-.0160	A	.7750	.7640	.7407	+.0233
M	.7762	.7776	.7945	-.0169	M	.7734	.7745	.7438	+.0307
J	.7688	.7755	.7927	-.0172	J	.7917	.7835	.7469	+.0366
A	.7655	.7744	.7908	-.0164	J	.7843	.7909	.7501	+.0408
S	.7643	.7742	.7888	-.0146	A	.7868	.7968	.7532	+.0436
O	.7655	.7749	.7868	-.0119	S	.7900	.8013	.7567	+.0446
N	.7690	.7767	.7848	-.0081	O	.7957	.8047	.7599	+.0448*
D	.7898	.7793	.7825	-.0032	N	.8030	.8071	.7632	+.0439
	.8089	.7828	.7802	+.0026	D	.8067	.8087	.7666	+.0421
1861					1866				
J	.7931	.7869	.7778	+.0091	J	.8123	.8096	.7697	+.0399
F	.7891	.7914	.7754	+.0160	F	.8152	.8097	.7729	+.0368
M	.7854	.7960	.7728	+.0232	M	.8200	.8093	.7759	+.0334
A	.7896	.8001	.7703	+.0298	A	.8168	.8084	.7788	+.0296
M	.8124	.8036	.7676	+.0360	M	.8085	.8070	.7816	+.0254
J	.8095	.8061	.7649	+.0412	J	.8062	.8053	.7843	+.0210
A	.7983	.8075	.7622	+.0453	J	.8001	.8034	.7869	+.0165
S	.8000	.8076	.7595	+.0481	A	.7965	.8015	.7894	+.0121
O	.8072	.8067	.7566	+.0501	S	.7939	.7996	.7916	+.0080
N	.8090	.8046	.7539	+.0507	O	.7922	.7980	.7939	+.0041
D	.8089	.8015	.7511	+.0504	N	.7896	.7969	.7959	+.0010
		.7973	.7482	+.0491	D	.7965*	.7963	.7980	-.0017

## APPENDIX

TABLE 11 (Continued)

AN ADJUSTED ARITHMETIC INDEX NUMBER OF THE YIELDS OF  
AMERICAN RAILROAD BONDS.

Date	1	2	3	4	Date	1	2	3	4
1867					1872				
J	.7985	.7963	.7994	-.0031	J	.7906	.7947	.8018	-.0071
F	.7998	.7969	.8008	-.0039	F	.7881	.7937	.8012	-.0075
M	.8005	.7980	.8023	-.0043	M	.7933	.7929	.8006	-.0077
A	.8037	.7993	.8036	-.0043	A	.7923	.7922	.7998	-.0076
M	.8048	.8006	.8048	-.0042	M	.7921	.7918	.7992	-.0074
J	.8045	.8017	.8059	-.0042	J	.7892	.7914	.7984	-.0070
J	.7965	.8025	.8070	-.0045	J	.7835	.7911	.7977	-.0066
A	.7955	.8026	.8077	-.0051	A	.7875	.7908	.7968	-.0060
S	.7964	.8023	.8082	-.0059	S	.7916	.7906	.7959	-.0053
O	.8014	.8014	.8088	-.0074	O	.7941	.7903	.7950	-.0047
N	.8055	.8002	.8093	-.0091	N	.7967	.7903	.7939	-.0036
D	.8072	.7987	.8096	-.0109	D	.7970	.7903	.7931	-.0028
1868					1873				
J	.8002	.7973	.8098	-.0125	J	.7917	.7906	.7918	-.0012
F	.7951	.7959	.8100	-.0141	F	.7900	.7910	.7907	+.0003
M	.7935	.7949	.8102	-.0153	M	.7903	.7916	.7894	+.0022
A	.7955	.7944	.8102	-.0158	A	.7915	.7922	.7882	+.0040
M	.7923	.7942	.8101	-.0159	M	.7896	.7928	.7869	+.0059
J	.7907	.7945	.8100	-.0155	J	.7866	.7933	.7857	+.0076
J	.7902	.7952	.8100	-.0148	J	.7826	.7935	.7843	+.0092
A	.7912	.7962	.8098	-.0136	A	.7826	.7935	.7829	+.0106
S	.7955	.7975	.8095	-.0120	S	.7900	.7932	.7813	+.0119
O	.7999	.7991	.8093	-.0102	O	.8120	.7926	.7798	+.0128
N	.8048	.8009	.8091	-.0082	N	.8127	.7917	.7784	+.0133
D	.8087	.8029	.8088	-.0059	D	.7996	.7905	.7767	+.0138
1869					1874				
J	.8088	.8052	.8084	-.0032	J	.7839	.7889	.7749	+.0140
F	.8095	.8075	.8082	-.0007	F	.7766	.7868	.7732	+.0136
M	.8125	.8098	.8080	+.0018	M	.7757	.7843	.7714	+.0129
A	.8141	.8121	.8078	+.0043	A	.7740	.7814	.7697	+.0117
M	.8081	.8141	.8075	+.0066	M	.7771	.7781	.7680	+.0101
J	.8074	.8157	.8073	+.0084	J	.7728	.7746	.7661	+.0085
J	.8118	.8169	.8072	+.0097	J	.7724	.7710	.7642	+.0068
A	.8110	.8175	.8071	+.0104	A	.7713	.7674	.7624	+.0050
S	.8159	.8176	.8070	+.0106	S	.7688	.7640	.7608	+.0032
O	.8221	.8172	.8070	+.0102	O	.7641	.7608	.7589	+.0019
N	.8245	.8164	.8069	+.0095	N	.7574	.7578	.7571	+.0007
D	.8272	.8153	.8068	+.0085	D	.7561	.7549	.7553	-.0004
1870					1875				
J	.8229	.8139	.8068	+.0071	J	.7506	.7520	.7534	-.0014
F	.8096	.8124	.8068	+.0056	F	.7478	.7491	.7517	-.0026
M	.8042	.8108	.8067	+.0041	M	.7461	.7466	.7499	-.0033
A	.8064	.8092	.8067	+.0025	A	.7403	.7436	.7481	-.0045
M	.8028	.8078	.8066	+.0012	M	.7370	.7407	.7462	-.0055
J	.7996	.8064	.8065	-.0001	J	.7388	.7379	.7446	-.0067
J	.7991	.8053	.8064	-.0011	J	.7344	.7352	.7428	-.0076
A	.8040	.8045	.8063	-.0018	A	.7332	.7323	.7411	-.0088
S	.8058	.8039	.8063	-.0024	S	.7299	.7298	.7394	-.0096
O	.8070	.8038	.8062	-.0024	O	.7324	.7274	.7377	-.0103
N	.8083	.8038	.8060	-.0022	N	.7292	.7251	.7361	-.0110
D	.8108	.8041	.8059	-.0018	D	.7242	.7227	.7345	-.0118
1871					1876				
J	.8074	.8043	.8058	-.0015	J	.7196	.7204	.7330	-.0126
F	.8050	.8046	.8056	-.0010	F	.7150	.7182	.7316	-.0134
M	.8041	.8045	.8054	-.0009	M	.7120	.7161	.7301	-.0140
A	.8031	.8042	.8051	-.0009	A	.7141	.7144	.7288	-.0144
M	.8002	.8037	.8049	-.0012	M	.7163	.7130	.7272	-.0142
J	.7998	.8029	.8047	-.0018	J	.7142	.7120	.7259	-.0139
J	.7994	.8019	.8044	-.0025	J	.7090	.7115	.7245	-.0130
A	.7973	.8008	.8040	-.0032	A	.7066	.7114	.7232	-.0118
S	.7959	.7995	.8036	-.0041	S	.7134	.7117	.7220	-.0103
O	.8040	.7982	.8031	-.0049	O	.7139	.7122	.7208	-.0086
N	.8070	.7970	.8027	-.0057	N	.7131	.7128	.7198	-.0070
D	.8034	.7958	.8023	-.0065	D	.7131	.7135	.7186	-.0051

## RAILROAD BOND YIELDS

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TABLE 11 (Continued)

AN ADJUSTED ARITHMETIC INDEX NUMBER OF THE YIELDS OF  
AMERICAN RAILROAD BONDS.

Date	1	2	3	4	Date	1	2	3	4
1877					1882				
J	.7105	.7141	.7174	-.0033	J	.6219	.6208	.6248	-.0040
F	.7137	.7146	.7165	-.0019	F	.6247	.6217	.6242	-.0025
M	.7199	.7150	.7154	-.0004	M	.6270	.6224	.6238	-.0014
A	.7210	.7152	.7143	+.0009	A	.6224	.6230	.6233	-.0003
M	.7177	.7152	.7132	+.0020	M	.6201	.6232	.6230	+.0002
J	.7226	.7151	.7122	+.0029	J	.6206	.6233	.6227	+.0006
J	.7086	.7150	.7111	+.0039	J	.6190	.6232	.6223	+.0009
A	.7112	.7144	.7101	+.0043	A	.6222	.6230	.6220	+.0010
S	.7130	.7139	.7090	+.0049	S	.6241	.6229	.6218	+.0011
O	.7154	.7133	.7079	+.0054	O	.6232	.6229	.6216	+.0013
N	.7145	.7128	.7068	+.0060	N	.6254	.6232	.6213	+.0019
D	.7117	.7124	.7057	+.0067	D	.6252	.6236	.6211	+.0025
1878					1883				
J	.7120	.7121	.7044	+.0077	J	.6217	.6243	.6208	+.0035
F	.7117	.7118	.7033	+.0085	F	.6250	.6251	.6204	+.0047
M	.7123	.7116	.7020	+.0096	M	.6267	.6258	.6202	+.0056
A	.7124	.7113	.7008	+.0105	A	.6249	.6262	.6199	+.0063
M	.7099	.7107	.6992	+.0115	M	.6246	.6263	.6196	+.0067
J	.7049	.7099	.6979	+.0120	J	.6244	.6261	.6192	+.0069
J	.7049	.7086	.6965	+.0121	J	.6243	.6254	.6187	+.0067
A	.7080	.7069	.6949	+.0120	A	.6277	.6245	.6182	+.0063
S	.7078	.7046	.6931	+.0115	S	.6283	.6234	.6178	+.0056
O	.7058	.7020	.6914	+.0106	O	.6274	.6223	.6173	+.0050
N	.7027	.6991	.6897	+.0094	N	.6243	.6213	.6168	+.0045
D	.7012	.6959	.6879	+.0080	D	.6224	.6204	.6163	+.0041
1879					1884				
J	.6921	.6926	.6861	+.0065	J	.6194	.6199	.6155	+.0044
F	.6802	.6893	.6842	+.0051	F	.6149	.6196	.6149	+.0047
M	.6874	.6861	.6823	+.0038	M	.6114	.6196	.6141	+.0055
A	.6875	.6830	.6804	+.0026	A	.6088	.6197	.6133	+.0064
M	.6774	.6802	.6784	+.0018	M	.6170	.6200	.6125	+.0075
J	.6735	.6777	.6765	+.0012	J	.6273	.6204	.6116	+.0088
J	.6696	.6756	.6743	+.0013	J	.6286	.6207	.6107	+.0100
A	.6691	.6738	.6722	+.0016	A	.6219	.6209	.6098	+.0111
S	.6768	.6724	.6701	+.0023	S	.6227	.6208	.6089	+.0110
O	.6757	.6712	.6680	+.0032	O	.6222	.6203	.6080	+.0123
N	.6739	.6702	.6659	+.0043	N	.6228	.6194	.6069	+.0125
D	.6707	.6690	.6638	+.0052	D	.6190	.6180	.6058	+.0122
1880					1885				
J	.6668	.6676	.6615	+.0061	J	.6142	.6170	.6046	+.0124
F	.6613	.6658	.6594	+.0064	F	.6106	.6136	.6034	+.0102
M	.6600	.6634	.6572	+.0062	M	.6066	.6108	.6023	+.0086
A	.6609	.6606	.6551	+.0055	A	.6056	.6077	.6011	+.0066
M	.6611	.6564	.6530	+.0034	M	.6039	.6043	.5997	+.0046
J	.6566	.6526	.6508	+.0018	J	.5985	.6008	.5984	+.0024
J	.6496	.6484	.6488	-.0004	J	.5954	.5973	.5971	+.0002
A	.6451	.6440	.6467	-.0027	A	.5945	.5939	.5958	-.0019
S	.6421	.6394	.6450	-.0056	S	.5931	.5903	.5944	-.0041
O	.6379	.6357	.6430	-.0073	O	.5888	.5887	.5931	-.0064
N	.6277	.6312	.6412	-.0100	N	.5858	.5831	.5917	-.0086
D	.6208	.6269	.6396	-.0127	D	.5835	.5796	.5902	-.0106
1881					1886				
J	.6167	.6230	.6379	-.0149	J	.5761	.5762	.5889	-.0127
F	.6213	.6197	.6363	-.0166	F	.5685	.5732	.5875	-.0143
M	.6257	.6170	.6349	-.0179	M	.5670	.5707	.5862	-.0155
A	.6242	.6152	.6336	-.0184	A	.5682	.5685	.5848	-.0163
M	.6127	.6141	.6321	-.0180	M	.5678	.5669	.5835	-.0166
J	.6059	.6138	.6308	-.0170	J	.5643	.5657	.5822	-.0165
J	.6062	.6141	.6296	-.0155	J	.5609	.5650	.5808	-.0158
A	.6097	.6148	.6287	-.0139	A	.5621	.5647	.5795	-.0148
S	.6177	.6159	.6277	-.0118	S	.5685	.5650	.5782	-.0132
O	.6221	.6172	.6268	-.0096	O	.5686	.5653	.5770	-.0117
N	.6199	.6184	.6261	-.0077	N	.5684	.5660	.5758	-.0098
D	.6224	.6197	.6253	-.0056	D	.5712	.5671	.5746	-.0075

## APPENDIX

TABLE 11 (Continued)

AN ADJUSTED ARITHMETIC INDEX NUMBER OF THE YIELDS OF  
AMERICAN RAILROAD BONDS.

Date	1	2	3	4	Date	1	2	3	4
1887					1892				
J	.5685	.5684	.5732	-.0048	J	.5739	.5774	.5762	+.0012
F	.5694	.5698	.5721	-.0023	F	.5713	.5751	.5765	-.0014
M	.5711	.5713	.5709	+.0004	M	.5722	.5729	.5768	-.0039
A	.5716	.5728	.5699	+.0029	A	.5705	.5708	.5770	-.0062
M	.5699	.5743	.5688	+.0055	M	.5683	.5690	.5770	-.0080
J	.5703	.5756	.5679	+.0077	J	.5669	.5676	.5770	-.0094
J	.5723	.5766	.5669	+.0097	J	.5657	.5665	.5770	-.0105
A	.5758	.5774	.5661	+.0113	A	.5667	.5660	.5769	-.0109
S	.5838	.5779	.5652	+.0127	S	.5711	.5661	.5768	-.0107
O	.5865	.5780	.5646	+.0134	O	.5710	.5669	.5766	-.0097
N	.5822	.5778	.5639	+.0139	N	.5719	.5683	.5762	-.0079
D	.5801	.5772	.5632	+.0140	D	.5736	.5703	.5759	-.0054
1888					1893				
J	.5731	.5763	.5625	+.0138	J	.5712	.5731	.5756	-.0025
F	.5701	.5751	.5621	+.0130	F	.5679	.5760	.5751	+.0009
M	.5719	.5736	.5616	+.0120	M	.5714	.5790	.5748	+.0042
A	.5718	.5720	.5612	+.0108	A	.5718	.5818	.5742	+.0076
M	.5696	.5703	.5609	+.0094	M	.5769	.5841	.5735	+.0106
J	.5670	.5684	.5607	+.0077	J	.5839	.5858	.5729	+.0129
J	.5616	.5666	.5605	+.0061	J	.5979	.5868	.5722	+.0146
A	.5608	.5647	.5604	+.0043	A	.6081	.5869	.5714	+.0155
S	.5640	.5628	.5603	+.0025	S	.5944	.5862	.5706	+.0156
O	.5648	.5608	.5603	+.0005	O	.5886	.5846	.5698	+.0148
N	.5629	.5588	.5603	-.0015	N	.5788	.5821	.5690	+.0131
D	.5614	.5567	.5604	-.0037	D	.5722	.5789	.5681	+.0108
1889					1894				
J	.5562	.5547	.5604	-.0057	J	.5714	.5750	.5671	+.0079
F	.5509	.5528	.5606	-.0078	F	.5660	.5708	.5662	+.0046
M	.5520	.5510	.5608	-.0098	M	.5620	.5664	.5654	+.0010
A	.5511	.5494	.5609	-.0115	A	.5570	.5623	.5645	-.0022
M	.5460	.5482	.5610	-.0128	M	.5572	.5588	.5632	-.0044
J	.5411	.5474	.5613	-.0139	J	.5576	.5559	.5624	-.0065
J	.5436	.5470	.5616	-.0146	J	.5591	.5539	.5613	-.0074
A	.5448	.5470	.5618	-.0148	A	.5566	.5525	.5603	-.0078
S	.5455	.5474	.5621	-.0147	S	.5534	.5517	.5591	-.0074
O	.5504	.5482	.5623	-.0141	O	.5493	.5511	.5582	-.0071
N	.5543	.5494	.5627	-.0133	N	.5461	.5505	.5573	-.0068
D	.5560	.5509	.5630	-.0121	D	.5458	.5497	.5563	-.0066
1890					1895				
J	.5544	.5526	.5635	-.0109	J	.5465	.5486	.5551	-.0065
F	.5549	.5545	.5639	-.0094	F	.5504	.5472	.5542	-.0070
M	.5572	.5565	.5644	-.0079	M	.5517	.5455	.5533	-.0078
A	.5576	.5585	.5648	-.0063	A	.5522	.5438	.5523	-.0085
M	.5579	.5604	.5633	-.0049	M	.5464	.5419	.5512	-.0093
J	.5601	.5624	.5638	-.0034	J	.5393	.5402	.5503	-.0101
J	.5617	.5643	.5663	-.0020	J	.5359	.5385	.5493	-.0108
A	.5660	.5663	.5669	-.0006	A	.5305	.5371	.5482	-.0111
S	.5688	.5685	.5674	+.0011	S	.5310	.5360	.5471	-.0111
O	.5720	.5708	.5679	+.0029	O	.5320	.5355	.5460	-.0105
N	.5779	.5733	.5685	+.0048	N	.5338	.5356	.5450	-.0094
D	.5834	.5760	.5691	+.0069	D	.5400	.5363	.5440	-.0077
1891					1896				
J	.5737	.5788	.5698	+.0090	J	.5459	.5378	.5429	-.0051
F	.5740	.5812	.5703	+.0109	F	.5410	.5399	.5417	-.0018
M	.5798	.5835	.5710	+.0125	M	.5414	.5423	.5406	+.0017
A	.5816	.5853	.5717	+.0136	A	.5409	.5448	.5395	+.0053
M	.5853	.5866	.5723	+.0143	M	.5386	.5469	.5383	+.0086
J	.5912	.5872	.5729	+.0143	J	.5372	.5485	.5372	+.0113
J	.5910	.5873	.5736	+.0137	J	.5467	.5494	.5361	+.0133
A	.5912	.5867	.5741	+.0126	A	.5667	.5494	.5349	+.0145
S	.5892	.5856	.5746	+.0110	S	.5590	.5485	.5336	+.0149
O	.5852	.5839	.5752	+.0087	O	.5547	.5468	.5325	+.0143
N	.5824	.5819	.5756	+.0063	N	.5439	.5444	.5313	+.0131
D	.5785	.5797	.5760	+.0037	D	.5386	.5414	.5301	+.0113

## RAILROAD BOND YIELDS

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TABLE 11 (Continued)

AN ADJUSTED ARITHMETIC INDEX NUMBER OF THE YIELDS OF  
AMERICAN RAILROAD BONDS.

Date	1	2	3	4	Date	1	2	3	4
1897					1902				
J	.5331	.5380	.5290	+.0090	J	.5049	.5058	.5132	-.0074
F	.5301	.5347	.5279	+.0068	F	.5047	.5063	.5143	-.0080
M	.5240	.5308	.5268	+.0040	M	.5053	.5068	.5155	-.0087
A	.5251	.5269	.5257	+.0012	A	.5052	.5076	.5167	-.0091
M	.5235	.5233	.5245	-.0012	M	.5074	.5087	.5178	-.0091
J	.5196	.5203	.5235	-.0032	J	.5097	.5100	.5189	-.0089
J	.5157	.5174	.5225	-.0051	J	.5122	.5118	.5200	-.0082
A	.5180	.5160	.5215	-.0055	A	.5147	.5138	.5212	-.0074
S	.5190	.5153	.5204	-.0051	S	.5172	.5164	.5224	-.0060
O	.5192	.5153	.5195	-.0042	O	.5218	.5192	.5235	-.0043
N	.5171	.5159	.5185	-.0026	N	.5236	.5223	.5246	-.0023
D	.5115	.5167	.5175	-.0008	D	.5269	.5256	.5257	-.0001
1898					1903				
J	.5090	.5175	.5165	+.0010	J	.5266	.5290	.5267	+.0023
F	.5096	.5182	.5156	+.0026	F	.5289	.5323	.5277	+.0046
M	.5195	.5186	.5147	+.0039	M	.5349	.5356	.5287	+.0069
A	.5297	.5186	.5137	+.0049	A	.5393	.5386	.5296	+.0090
M	.5252	.5181	.5128	+.0052	M	.5379	.5415	.5305	+.0110
J	.5188	.5172	.5118	+.0054	J	.5423	.5441	.5314	+.0127
J	.5135	.5157	.5109	+.0048	J	.5480	.5463	.5322	+.0141
A	.5103	.5135	.5100	+.0035	A	.5336	.5482	.5330	+.0152
S	.5124	.5109	.5091	+.0018	S	.5546	.5498	.5339	+.0159
O	.5091	.5078	.5082	-.0004	O	.5507	.5509	.5347	+.0162
N	.5048	.5044	.5073	-.0028	N	.5478	.5515	.5354	+.0161
D	.5008	.5010	.5065	-.0055	D	.5492	.5517	.5360	+.0157
1899					1904				
J	.4951	.4980	.5055	-.0075	J	.5486	.5515	.5368	+.0147
F	.4958	.4954	.5048	-.0094	F	.5502	.5509	.5375	+.0134
M	.4961	.4935	.5040	-.0105	M	.5521	.5500	.5382	+.0118
A	.4918	.4923	.5031	-.0108	A	.5501	.5488	.5389	+.0099
M	.4883	.4919	.5023	-.0104	M	.5489	.5476	.5397	+.0079
J	.4873	.4922	.5017	-.0095	J	.5468	.5463	.5403	+.0060
J	.4898	.4930	.5010	-.0080	J	.5430	.5450	.5411	+.0039
A	.4924	.4943	.5003	-.0060	A	.5421	.5438	.5418	+.0020
S	.4967	.4957	.4998	-.0041	S	.5428	.5427	.5426	+.0001
O	.5011	.4973	.4994	-.0021	O	.5424	.5417	.5433	-.0016
N	.5038	.4990	.4990	.0000	N	.5416	.5408	.5440	-.0032
D	.5086	.5006	.4987	+.0019	D	.5407	.5400	.5448	-.0048
1900					1905				
J	.5048	.5020	.4983	+.0037	J	.5377	.5393	.5456	-.0063
F	.5013	.5032	.4983	+.0049	F	.5367	.5387	.5462	-.0075
M	.5002	.5040	.4982	+.0058	M	.5382	.5383	.5470	-.0087
A	.4983	.5044	.4981	+.0063	A	.5392	.5381	.5477	-.0096
M	.5021	.5044	.4981	+.0063	M	.5400	.5380	.5485	-.0105
J	.5040	.5041	.4982	+.0059	J	.5396	.5382	.5492	-.0110
J	.5041	.5035	.4984	+.0051	J	.5384	.5385	.5500	-.0115
A	.5044	.5027	.4986	+.0041	A	.5388	.5390	.5508	-.0118
S	.5050	.5020	.4992	+.0028	S	.5389	.5398	.5513	-.0115
O	.5054	.5013	.4996	+.0017	O	.5391	.5407	.5520	-.0113
N	.5028	.5008	.5002	+.0006	N	.5419	.5417	.5527	-.0110
D	.4997	.5006	.5008	-.0002	D	.5430	.5429	.5532	-.0103
1901					1906				
J	.4986	.5005	.5015	-.0010	J	.5418	.5442	.5538	-.0096
F	.4969	.5006	.5023	-.0017	F	.5439	.5455	.5543	-.0088
M	.4971	.5009	.5031	-.0022	M	.5476	.5469	.5550	-.0081
A	.4985	.5013	.5039	-.0026	A	.5496	.5481	.5556	-.0075
M	.5022	.5018	.5048	-.0030	M	.5513	.5493	.5561	-.0068
J	.5013	.5023	.5059	-.0036	J	.5498	.5503	.5567	-.0064
J	.5038	.5028	.5068	-.0040	J	.5512	.5513	.5572	-.0059
A	.5062	.5034	.5078	-.0044	A	.5534	.5521	.5578	-.0057
S	.5075	.5040	.5088	-.0048	S	.5563	.5529	.5583	-.0054
O	.5077	.5045	.5098	-.0053	O	.5549	.5538	.5590	-.0052
N	.5051	.5049	.5109	-.0060	N	.5540	.5549	.5596	-.0047
D	.5058	.5054	.5120	-.0066	D	.5556	.5564	.5601	-.0037

## APPENDIX

TABLE 11 (Continued)

AN ADJUSTED ARITHMETIC INDEX NUMBER OF THE YIELDS OF  
AMERICAN RAILROAD BONDS.

Date	1	2	3	4	Date	1	2	3	4
1907					1912				
J	.5566	.5584	.5606	-.0022	J	.5850	.5862	.5890	-.0028
F	.5588	.5609	.5613	-.0004	F	.5840	.5864	.5900	-.0036
M	.5662	.5640	.5619	+.0021	M	.5857	.5866	.5909	-.0043
A	.5660	.5675	.5625	+.0050	A	.5866	.5869	.5919	-.0050
M	.5682	.5714	.5630	+.0084	M	.5871	.5872	.5929	-.0057
J	.5735	.5753	.5637	+.0116	J	.5884	.5877	.5939	-.0062
J	.5731	.5700	.5642	+.0148	J	.5894	.5883	.5949	-.0066
A	.5788	.5825	.5649	+.0176	A	.5916	.5893	.5958	-.0065
S	.5843	.5854	.5656	+.0198	S	.5936	.5905	.5968	-.0063
O	.5921	.5876	.5661	+.0215	O	.5932	.5920	.5977	-.0057
N	.6087	.5890	.5668	+.0222	N	.5930	.5939	.5986	-.0047
D	.5976	.5896	.5672	+.0224	D	.5945	.5960	.5995	-.0035
1908					1913				
J	.5821	.5893	.5680	+.0213	J	.5928	.5983	.6003	-.0020
F	.5809	.5881	.5686	+.0195	F	.5944	.6007	.6010	-.0003
M	.5844	.5861	.5692	+.0169	M	.6012	.6032	.6018	+.0014
A	.5814	.5835	.5697	+.0138	A	.6061	.6056	.6024	+.0032
M	.5774	.5803	.5702	+.0101	M	.6110	.6078	.6030	+.0048
J	.5771	.5769	.5707	+.0062	J	.6156	.6096	.6036	+.0060
J	.5748	.5735	.5711	+.0024	J	.6153	.6109	.6040	+.0069
A	.5706	.5702	.5716	-.0014	A	.6110	.6117	.6045	+.0072
S	.5674	.5673	.5719	-.0046	S	.6069	.6118	.6049	+.0069
O	.5666	.5648	.5722	-.0074	O	.6104	.6114	.6053	+.0061
N	.5631	.5628	.5726	-.0098	N	.6157	.6105	.6058	+.0047
D	.5615	.5612	.5729	-.0117	D	.6168	.6094	.6062	+.0032
1909					1914				
J	.5593	.5602	.5731	-.0129	J	.6087	.6082	.6063	+.0019
F	.5569	.5596	.5735	-.0139	F	.6018	.6072	.6067	+.0005
M	.5587	.5593	.5738	-.0145	M	.6038	.6065	.6070	-.0005
A	.5596	.5594	.5740	-.0146	A	.6036	.6063	.6072	-.0009
M	.5597	.5598	.5740	-.0142	M	.6034	.6065	.6075	-.0010
J	.5620	.5606	.5742	-.0136	J	.6021	.6072	.6078	-.0006
J	.5620	.5618	.5746	-.0128	J	.6065	.6084	.6081	+.0003
A	.5637	.5633	.5747	-.0114	A	.6104*	.6100	.6083	+.0017
S	.5664	.5651	.5748	-.0097	S	.6143*	.6119	.6087	+.0032
O	.5684	.5672	.5749	-.0077	O	.6182*	.6141	.6090	+.0051
N	.5704	.5694	.5751	-.0057	N	.6220*	.6165	.6094	+.0071
D	.5714	.5717	.5753	-.0036	D	.6258	.6188	.6099	+.0089
1910					1915				
J	.5719	.5739	.5756	-.0017	J	.6197	.6211	.6103	+.0108
F	.5728	.5760	.5758	+.0002	F	.6189	.6229	.6108	+.0121
M	.5753	.5779	.5760	+.0019	M	.6219	.6242	.6113	+.0129
A	.5802	.5795	.5762	+.0033	A	.6175	.6248	.6117	+.0131
M	.5825	.5809	.5766	+.0043	M	.6183	.6247	.6121	+.0126
J	.5846	.5820	.5770	+.0050	J	.6214	.6239	.6127	+.0112
J	.5873	.5829	.5775	+.0054	J	.6277	.6227	.6132	+.0095
A	.5869	.5834	.5777	+.0057	A	.6308	.6211	.6136	+.0075
S	.5821	.5838	.5780	+.0058	S	.6319	.6193	.6140	+.0053
O	.5799	.5839	.5785	+.0054	O	.6224	.6176	.6146	+.0030
N	.5832	.5840	.5789	+.0051	N	.6089	.6159	.6150	+.0009
D	.5831	.5840	.5793	+.0047	D	.6072	.6143	.6156	-.0013
1911					1916				
J	.5824	.5838	.5799	+.0039	J	.6055	.6127	.6162	-.0035
F	.5829	.5838	.5805	+.0033	F	.6041	.6116	.6168	-.0052
M	.5846	.5838	.5811	+.0027	M	.6055	.6095	.6176	-.0081
A	.5843	.5839	.5818	+.0021	A	.6071	.6079	.6182	-.0103
M	.5831	.5841	.5823	+.0018	M	.6080	.6063	.6189	-.0126
J	.5842	.5844	.5830	+.0014	J	.6085	.6048	.6198	-.0150
J	.5848	.5846	.5838	+.0008	J	.6096	.6036	.6207	-.0171
A	.5863	.5849	.5846	+.0003	A	.6113	.6026	.6216	-.0190
S	.5880	.5852	.5854	-.0002	S	.6100	.6019	.6225	-.0206
O	.5873	.5854	.5862	-.0008	O	.6042	.6018	.6236	-.0218
N	.5851	.5857	.5871	-.0014	N	.6003	.6021	.6248	-.0227
D	.5858	.5859	.5880	-.0021	D	.6004	.6031	.6259	-.0228

\*Interpolated. Stock Exchange closed.

## RAILROAD BOND YIELDS

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TABLE 11 (Continued)

AN ADJUSTED ARITHMETIC INDEX NUMBER OF THE YIELDS OF  
AMERICAN RAILROAD BONDS.

Date	1	2	3	4	Date	1	2	3	4
1917					1922				
J	.5936	.6049	.6272	-.0223	J	.6538	.6633	.6773	-.0140
F	.6008	.6075	.6287	-.0212	F	.6545	.6556	.6762	-.0206
M	.6049	.6111	.6302	-.0191	M	.6508	.6487	.6750	-.0263
A	.6150	.6156	.6319	-.0163	A	.6428	.6429	.6738	-.0309
M	.6270	.6209	.6333	-.0124	M	.6407	.6386	.6725	-.0339
J	.6316	.6270	.6351	-.0081	J	.6405	.6358	.6712	-.0354
A	.6357	.6336	.6370	-.0034	J	.6326	.6346	.6700	-.0354
S	.6389	.6405	.6389	+.0016	A	.6285	.6348	.6688	-.0340
O	.6474	.6473	.6409	+.0064	S	.6276	.6361	.6677	-.0316
N	.6519	.6538	.6430	+.0108	O	.6390	.6384	.6664	-.0280
D	.6642	.6598	.6451	+.0147	N	.6473	.6413	.6653	-.0240
	.6716	.6650	.6472	+.0178	D	.6463	.6446	.6642	-.0196
1918					1923				
J	.6685	.6692	.6495	+.0197	J	.6465	.6480	.6631	-.0151
F	.6639	.6723	.6518	+.0205	F	.6500	.6515	.6620	-.0105
M	.6699	.6743	.6541	+.0202	M	.6623	.6548	.6609	-.0061
A	.6750	.6752	.6564	+.0188	A	.6651	.6578	.6599	-.0021
M	.6688	.6750	.6587	+.0163	M	.6585	.6604	.6589	+.0015
J	.6738	.6740	.6609	+.0131	J	.6605	.6626	.6579	+.0047
J	.6788	.6723	.6632	+.0091	J	.6618	.6642	.6570	+.0072
A	.6788	.6703	.6654	+.0049	A	.6597	.6652	.6562	+.0090
S	.6834	.6681	.6678	+.0003	S	.6637	.6656	.6553	+.0103
O	.6726	.6660	.6699	-.0039	O	.6659	.6654	.6545	+.0109
N	.6456	.6641	.6720	-.0079	N	.6632	.6647	.6537	+.0110
D	.6474	.6626	.6742	-.0116	D	.6649	.6637	.6530	+.0107
1919					1924				
J	.6558	.6614	.6762	-.0148	J	.6614	.6623	.6523	+.0100
F	.6599	.6608	.6782	-.0174	F	.6633	.6601	.6517	+.0092
M	.6651	.6608	.6799	-.0191	M	.6640	.6593	.6511	+.0082
A	.6692	.6615	.6817	-.0202	A	.6612	.6577	.6505	+.0072
M	.6646	.6631	.6833	-.0202	M	.6569	.6560	.6500	+.0060
J	.6644	.6658	.6848	-.0190	J	.6508	.6544	.6495	+.0049
J	.6699	.6695	.6862	-.0167	J	.6456	.6529	.6490	+.0039
A	.6846	.6742	.6874	-.0132	A	.6496	.6514	.6485	+.0029
S	.6879	.6798	.6887	-.0089	S	.6494	.6501	.6480	+.0021
O	.6763	.6859	.6896	-.0037	O	.6474	.6490	.6476	+.0014
N	.6874	.6923	.6905	+.0018	N	.6482	.6482	.6471	+.0011
D	.6926	.6986	.6915	+.0071	D	.6517	.6477	.6466	+.0011
1920					1925				
J	.6908	.7042	.6922	+.0120	J	.6511	.6476	.6461	+.0015
F	.7053	.7091	.6927	+.0164	F	.6499	.6478	.6456	+.0022
M	.7053	.7128	.6930	+.0198	M	.6486	.6482	.6451	+.0031
A	.7214	.7154	.6933	+.0221	A	.6474	.9487	.6445	+.0042
M	.7393	.7169	.6935	+.0234	M	.6425	.6491	.6439	+.0052
J	.7358	.7174	.6934	+.0240	J	.6431	.6493	.6435	+.0058
J	.7333	.7169	.6933	+.0236	J	.6478	.6492	.6429	+.0063
A	.7199	.7158	.6931	+.0227	A	.6532	.6488	.6422	+.0066
S	.7044	.7143	.6928	+.0215	S	.6495	.6481	.6416	+.0065
O	.6906	.7125	.6923	+.0202	O	.6512	.6471	.6410	+.0061
N	.6978	.7107	.6918	+.0189	N	.6498	.6460	.6403	+.0057
D	.7117	.7091	.6912	+.0179	D	.6466	.6447	.6396	+.0051
1921					1926				
J	.6967	.7078	.6903	+.0175	J	.6430	.6433	.6390	+.0043
F	.6987	.7068	.6896	+.0172	F	.6399	.6419	.6383	+.0036
M	.7039	.7061	.6888	+.0173	M	.6407	.6405	.6376	+.0029
A	.7068	.7053	.6878	+.0175	A	.6353	.6390	.6370	+.0020
M	.7083	.7043	.6866	+.0177	M	.6320	.6376	.6364	+.0012
J	.7192	.7029	.6856	+.0173	J	.6323	.6362	.6357	+.0005
J	.7078	.7005	.6845	+.0160	J	.6350	.6350	.6351	-.0001
A	.7008	.6970	.6833	+.0137	A	.6366	.6339	.6346	-.0007
S	.6945	.6922	.6822	+.0100	S	.6364	.6330	.6342	-.0012
O	.6931	.6862	.6810	+.0052	O	.6360	.6322	.6338	-.0016
N	.6745	.6791	.6798	-.0007	N	.6324	.6316	.6334	-.0018
D	.6619	.6713	.6786	-.0073	D	.6312	.6308	.6330	-.0022

## APPENDIX

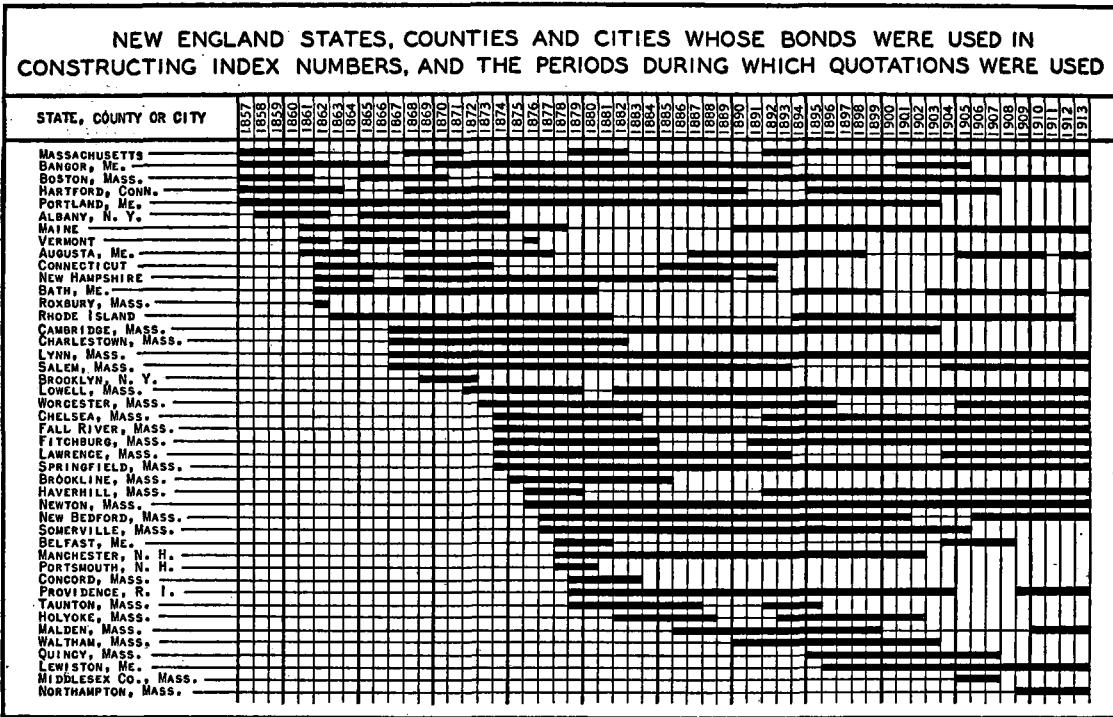
TABLE 11 (Concluded)

AN ADJUSTED ARITHMETIC INDEX NUMBER OF THE YIELDS OF  
AMERICAN RAILROAD BONDS.

Date	1	2	3	4	Date	1	2	3	4
1927					1932				
J	.6285	.6299	.6326	-.0027	J	.6753	.6668		
F	.6287	.6287	.6323	-.0036	F	.6806	.6733		
M	.6250	.6271	.6320	-.0049	M	.6713	.6778		
A	.6199	.6251	.6317	-.0066	A	.6846	.6801		
M	.6196	.6228	.6314	-.0086	M	.6856	.6800		
J	.6233	.6202	.6311	-.0109	J	.6900	.6777		
J	.6242	.6177	.6309	-.0132	J	.6811	.6736		
A	.6205	.6153	.6307	-.0154	A	.6571	.6681		
S	.6173	.6133	.6306	-.0173	S	.6489	.6618		
O	.6129	.6118	.6304	-.0186	O	.6489	.6552		
N	.6082	.6110	.6302	-.0192	N	.6521	.6488		
D	.6064	.6109	.6301	-.0192	D	.6410	.6429		
1928					1933				
J	.6073	.6115	.6300	-.0185	J	.6206	.6378		
F	.6099	.6128	.6299	-.0171	F	.6204	.6337		
M	.6109	.6146	.6298	-.0152	M	.6372	.6307		
A	.6132	.6170	.6297	-.0127	A	.6547	.6285		
M	.6181	.6199	.6296	-.0097	M	.6392	.6269		
J	.6283	.6230	.6295	-.0065	J	.6238	.6256		
J	.6352	.6264	.6294	-.0030	J	.6157	.6242		
A	.6412	.6300	.6294	+.0006	A	.6102	.6223		
S	.6364	.6335	.6295	+.0040	S	.6128	.6200		
O	.6360	.6369	.6296	+.0073	O	.6139	.6170		
N	.6322	.6402	.6297	+.0105	N	.6274	.6136		
D	.6395	.6431	.6299	+.0132	D	.6233	.6098		
1929					1934				
J	.6428	.6457	.6301	+.0156	J	.6111	.6058		
F	.6468	.6480	.6304	+.0176	F	.6016	.6017		
M	.6497	.6499	.6307	+.0192	M	.5940	.5975		
A	.6493	.6515	.6310	+.0205	A	.5872	.5932		
M	.6510	.6528	.6314	+.0214	M	.5812			
J	.6531	.6537			J	.5715			
J	.6576	.6542			J	.5707			
A	.6544	.6542			A	.5765			
S	.6604	.6536			S	.5828			
O	.6571	.6524			O	.5754			
N	.6479	.6506			N	.5658			
D	.6433	.6482			D	.5576			
1930					1935				
J	.6421	.6453			J	.5469			
F	.6410	.6421			F	.5363			
M	.6335	.6387			M	.5326			
A	.6387	.6355			A	.5329			
M	.6354	.6324			M	.5363			
J	.6322	.6294			J	.5336			
J	.6271	.6265			J	.5311			
A	.6203	.6236			A	.5379			
S	.6145	.6205			S	.5399			
N	.6124	.6172			N	.5414			
D	.6168	.6138			D	.5369			
	.6232	.6105				.5333			
1931					1936				
J	.6105	.6075			J	.5263			
F	.6110	.6053							
M	.6122	.6041							
A	.6108	.6043							
M	.6023	.6063							
J	.6038	.6100							
J	.6030	.6155							
A	.6081	.6225							
S	.6149	.6309							
O	.6385	.6401							
N	.6524	.6495							
D	.6754	.6587							

**CHART 31**

NEW ENGLAND STATES, COUNTIES AND CITIES WHOSE BONDS WERE USED IN  
CONSTRUCTING INDEX NUMBERS, AND THE PERIODS DURING WHICH QUOTATIONS WERE USED



## MUNICIPAL BOND YIELDS

## APPENDIX

TABLE 12

NEW ENGLAND MUNICIPAL BOND YIELDS,  
JANUARY INDEX NUMBERS

1. An unadjusted chain index number based on simple geometric averages of the yields each January.

2. An unadjusted chain index number based on simple arithmetic averages of the yields each January.

In both the index numbers (geometric and arithmetic), the chaining is backward from January 1914. The index numbers for January 1914 are therefore the averages (geometric or arithmetic) of the yields of the bonds used in January 1914.

Date	(1) Geometric Index %	(2) Arithmetic Index %
January 1857	5.211	5.198
" 1858	5.271	5.270
" 1859	4.854	4.843
" 1860	4.805	4.794
" 1861	4.923	4.909
" 1862	5.240	5.226
" 1863	4.410	4.403
" 1864	4.676	4.666
" 1865	5.164	5.153
" 1866	5.757	5.748
" 1867	5.265	5.255
" 1868	5.373	5.367
" 1869	5.318	5.310
" 1870	5.515	5.510
" 1871	5.439	5.432
" 1872	5.353	5.345
" 1873	5.496	5.484
" 1874	5.652	5.642
" 1875	5.336	5.327
" 1876	4.776	4.767
" 1877	4.530	4.525
" 1878	4.369	4.364
" 1879	4.287	4.285
" 1880	4.199	4.199
" 1881	3.838	3.843
" 1882	3.697	3.700
" 1883	3.619	3.621
" 1884	3.649	3.651
" 1885	3.593	3.595
" 1886	3.419	3.422
" 1887	3.409	3.407
" 1888	3.733	3.735
" 1889	3.589	3.589
" 1890	3.335	3.336
" 1891	3.640	3.646
" 1892	3.655	3.657
" 1893	3.611	3.613
" 1894	3.667	3.665
" 1895	3.470	3.470

## MUNICIPAL BOND YIELDS

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TABLE 12 (Concluded)

Date	(1) Geometric Index %	(2) Arithmetic Index %
January 1896	3.705	3.705
" 1897	3.437	3.435
" 1898	3.308	3.307
" 1899	3.123	3.121
" 1900	3.201	3.198
" 1901	3.081	3.081
" 1902	3.173	3.170
" 1903	3.253	3.250
" 1904	3.471	3.469
" 1905	3.400	3.398
" 1906	3.506	3.505
" 1907	3.759	3.760
" 1908	4.224	4.231
" 1909	3.878	3.879
" 1910	3.893	3.893
" 1911	4.008	4.007
" 1912	4.003	4.002
" 1913	4.239	4.242
" 1914	4.367	4.372

## APPENDIX

TABLE 13

NEW ENGLAND MUNICIPAL BOND YIELDS, ARITHMETIC AVERAGE  
QUARTERLY INDEX NUMBER, JANUARY 1857-JANUARY 1914

An unadjusted chain index number based on simple arithmetic averages of the yields each quarter. The January 1914 figure is the arithmetic average of the bonds used in that month.

Date	Index	Date	Index	Date	Index
1857	%	1866	%	1875	%
J	5.198	J	5.748	J	5.327
A	5.118	A	5.603	A	5.128
J	5.102	J	5.502	J	4.966
O	5.382	O	5.230	O	4.868
1858		1867		1876	
J	5.270	J	5.255	J	4.767
A	5.006	A	5.349	A	4.637
J	4.957	J	5.411	J	4.497
O	4.921	O	5.362	O	4.476
1859		1868		1877	
J	4.843	J	5.367	J	4.525
A	4.818	A	5.275	A	4.466
J	4.833	J	5.245	J	4.384
O	4.798	O	5.258	O	4.407
1860		1869		1878	
J	4.794	J	5.310	J	4.364
A	4.800	A	5.366	A	4.381
J	4.767	J	5.394	J	4.330
O	4.806	O	5.462	O	4.301
1861		1870		1879	
J	4.909	J	5.510	J	4.285
A	4.878	A	5.452	A	4.256
J	5.102	J	5.400	J	4.191
O	5.270	O	5.409	O	4.146
1862		1871		1880	
J	5.226	J	5.432	J	4.199
A	5.064	A	5.337	A	3.959
J	4.864	J	5.291	J	3.994
O	4.508	O	5.243	O	3.937
1863		1872		1881	
J	4.403	J	5.345	J	3.843
A	4.201	A	5.314	A	3.713
J	4.426	J	5.360	J	3.653
O	4.457	O	5.458	O	3.654
1864		1873		1882	
J	4.666	J	5.484	J	3.700
A	4.678	A	5.541	A	3.639
J	4.903	J	5.512	J	3.579
O	5.060	O	5.675	O	3.611
1865		1874		1883	
J	5.153	J	5.642	J	3.621
A	5.617	A	5.470	A	3.632
J	5.664	J	5.420	J	3.621
O	5.736	O	5.412	O	3.665

## MUNICIPAL BOND YIELDS

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TABLE 13—(Continued)

Date	Index	Date	Index	Date	Index
1884	%	1893	%	1902	%
J	3.651	J	3.613	J	3.170
A	3.591	A	3.631	A	3.189
J	3.633	J	3.829	J	3.262
O	3.627	O	3.887	O	3.251
1885		1894		1903	
J	3.595	J	3.665	J	3.250
A	3.540	A	3.753	A	3.305
J	3.505	J	3.700	J	3.483
O	3.465	O	3.651	O	3.462
1886		1895		1904	
J	3.422	J	3.470	J	3.469
A	3.366	A	3.451	A	3.474
J	3.363	J	3.469	J	3.459
O	3.393	O	3.465	O	3.409
1887		1896		1905	
J	3.407	J	3.705	J	3.398
A	3.441	A	3.432	A	3.386
J	3.535	J	3.579	J	3.458
O	3.749	O	3.719	O	3.503
1888		1897		1906	
J	3.735	J	3.435	J	3.505
A	3.687	A	3.407	A	3.552
J	3.654	J	3.380	J	3.661
O	3.615	O	3.349	O	3.754
1889		1898		1907	
J	3.589	J	3.307	J	3.760
A	3.482	A	3.608	A	3.847
J	3.410	J	3.279	J	3.905
O	3.349	O	3.191	O	4.101
1890		1899		1908	
J	3.336	J	3.121	J	4.231
A	3.378	A	3.106	A	3.977
J	3.427	J	3.068	J	3.994
O	3.540	O	3.144	O	3.926
1891		1900		1909	
J	3.646	J	3.198	J	3.879
A	3.591	A	3.165	A	3.807
J	3.674	J	3.139	J	3.845
O	3.641	O	3.105	O	3.893
1892		1901		1910	
J	3.657	J	3.081	J	3.893
A	3.611	A	3.109	A	3.991
J	3.583	J	3.136	J	4.085
O	3.580	O	3.168	O	4.048

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APPENDIX

TABLE 13—(Concluded)

Date	Index	Date	Index	Date	Index
1911 J	% 4.007	1912 J	% 4.002	1913 J	% 4.242
A	4.007	A	4.019	A	4.391
J	4.000	J	4.093	J	4.572
O	4.011	O	4.162	O	4.403
				1914 J	4.372

CHART 32

## AMERICAN RAILROADS

THE PERIODS DURING WHICH THEIR COMMON STOCK PRICES  
WERE USED IN CONSTRUCTING INDEX NUMBERS

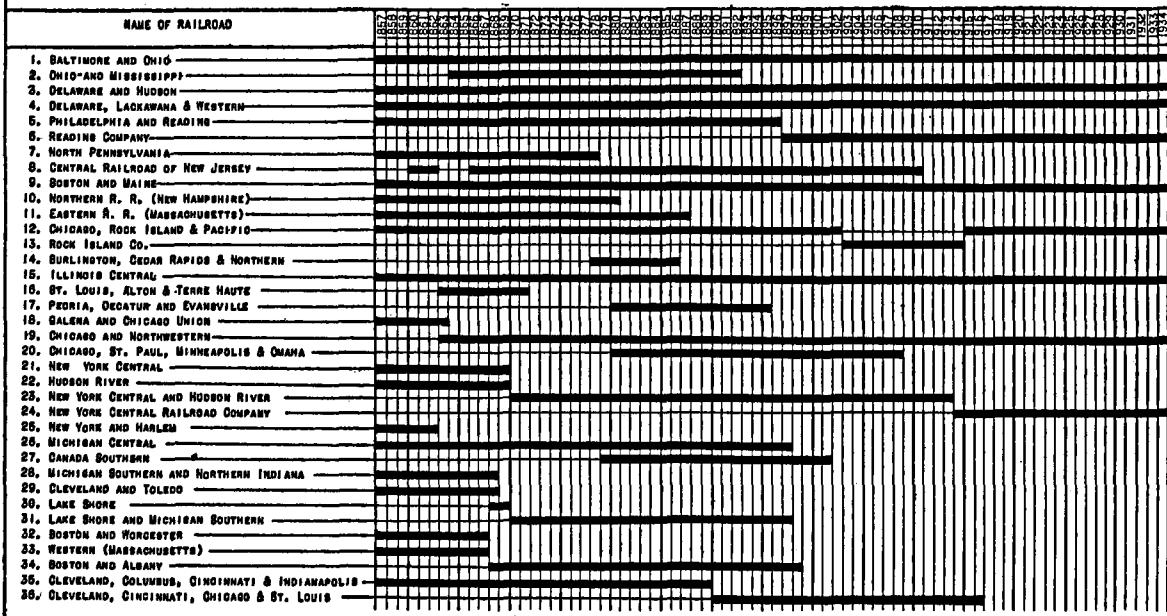
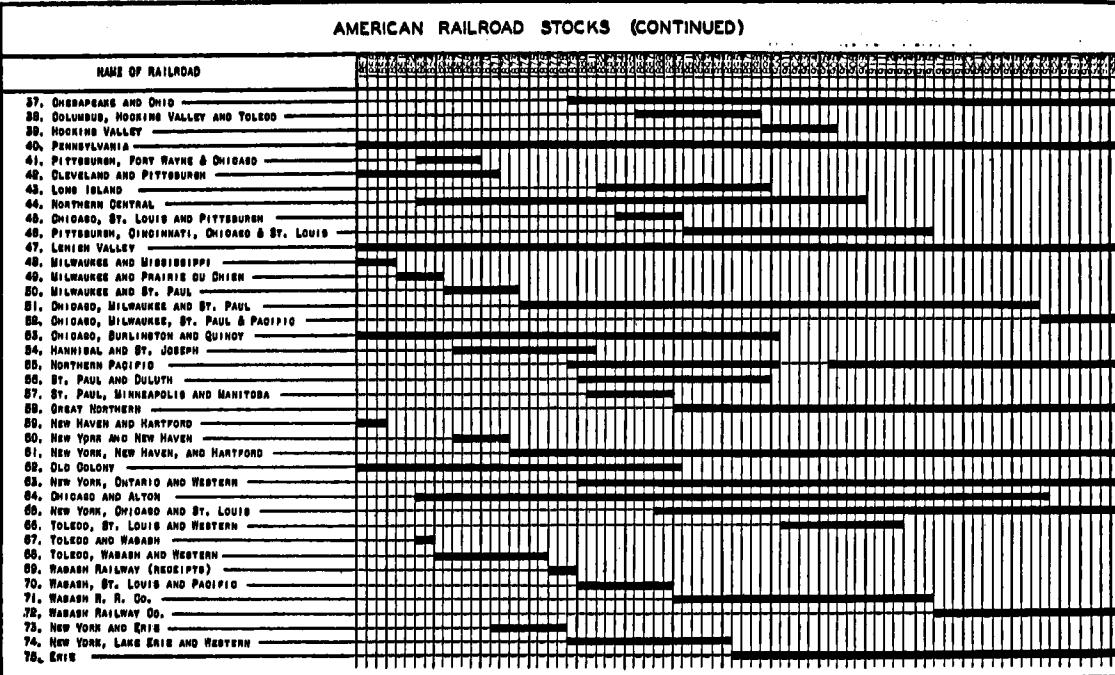


CHART 32

## AMERICAN RAILROAD STOCKS (CONTINUED)



**CHART 32**

## **AMERICAN RAILROAD STOCKS (CONCLUDED)**

AMERICAN RAILROAD STOCKS (CONCLUDED)	
NAME OF RAILROAD	
76. NEW YORK, SUSQUEHANNA AND WESTERN	
77. ST. LOUIS, IRON MOUNTAIN AND SOUTHERN	
78. TEXAS AND PACIFIC	
79. MISSOURI PACIFIC	
80. DENVER AND RIO GRANDE	
81. WESTERN PACIFIC	
82. WESTERN MARYLAND	
83. WHEELING AND LAKE ERIE	
84. PITTSBURGH AND WEST VIRGINIA	
85. ATCHISON, TOPEKA AND SANTA FE	
86. KANSAS CITY SOUTHERN	
87. MISSOURI, KANSAS & TEXAS	
88. ST. LOUIS SOUTHWESTERN	
89. LOUISVILLE & NASHVILLE	
90. NASHVILLE, CHATTANOOGA AND ST. LOUIS	
91. ATLANTIC COAST LINE	
92. UNION PACIFIC	
93. OREGON SHORT LINE	
94. OREGON SHORT LINE AND UTAH NORTHERN	
95. SOUTHERN PACIFIC	
96. MOBILE AND OHIO	
97. SOUTHERN RAILWAY	
98. WISCONSIN CENTRAL	
99. CANADIAN PACIFIC	
100. DULUTH, SOUTH SHORE AND ATLANTIC	
101. MINNEAPOLIS, ST. PAUL AND SAULT STE. MARIE	
102. FLINT AND PERR MARQUETTE	
103. PERR MARQUETTE	
104. ST. LOUIS, SAN FRANCISCO	
105. OHIO SOUTHERN	
106. BIRNEAPOLIS AND ST. LOUIS	
107. IOWA CENTRAL	
108. NORFOLK AND WESTERN	
109. CHICAGO GREAT WESTERN	
110. SEABOARD AIR LINE	
111. GULF, MOBILE AND NORTHERN	

TABLE 14

**RAILROAD COMMON STOCK PRICE RELATIVES,  
JANUARY 1857-JANUARY 1936**

The numbers at the heads of columns are the numbers assigned to the various railroads in Chart 32. For example, the figures of Column 1 refer to the Baltimore and Ohio Railroad. The figures in the single column entitled '51 to 52' refer first to the Chicago, Milwaukee and St. Paul Railway (January 1874 to January 1928) and then (lower down) they refer to the Chicago, Milwaukee, St. Paul and Pacific Railroad (January 1928 to January 1936).

Each relative price in Table 14 is the ratio of the average price of a specified stock in a particular January to the average price of the same stock in the preceding January, after all adjustments have been made for stock dividends, rights, assessments, etc. For example, the first number in the table is .5855. This means that the average price of Baltimore and Ohio Railroad common stock in January 1858 was a little less than three-fifths (.5855) its average price in January 1857.

The blank spaces in the table correspond to periods in which particular stocks were not used in constructing the stock price index numbers.

## **APPENDIX**

TABLE 14—RAILROAD COMMON STOCK PRICE RELATIVES

January Dates	1	2	3	4	5	6	7	8	9	10	11
1857-1858	.5855	.....	.9201	.8093	.6706	.....	.6176	.....	1.0464	.9402	1.0664
1858-1859	1.8481	.....	.9098	1.1551	.8968	.....	1.0337	.....	1.1746	1.2685	1.0551
1859-1860	1.2045	.....	.9235	1.0909	.7766	.....	.8947	.....	1.0593	.9947	1.2100
1860-1861	.8469	.....	.9619	1.5000	1.0483	.....	1.0294	1.0985	1.0500	1.0932	1.2523
1861-1862	.8606	.....	.9965	.9039	.9289	.....	.7566	1.0713	.9671	.9634	.8092
1862-1863	1.7239	.....	1.4236	1.8164	2.2465	.....	1.7191	1.4901	1.2084	1.4028	1.7640
1863-1864	1.2056	.....	1.4253	1.4662	1.5063	.....	2.5704	.....	.9767	1.0297	.9592
1864-1865	1.0585	8137	1.2703	1.1463	1.1064	.....	.9166	.....	.9941	1.2832	1.0588
1865-1866	1.0266	.9055	.8284	.6686	.9292	.....	1.2613	.....	.9281	.9891	.9647
1866-1867	1.0426	.8838	1.0469	.9505	1.0012	.....	1.1424	1.0686	1.1225	1.1639	1.0864
1867-1868	1.0967	1.3280	1.0016	.8369	.9450	.....	.8221	.9317	1.0116	1.0498	1.0383
1868-1869	.9451	1.1324	.8714	1.0790	1.1130	.....	1.0745	.....	.9881	1.0191	1.0123
1869-1870	1.0447	.6998	.9515	.8736	1.0678	.....	1.0551	.....	.8432	1.0668	.9789
1870-1871	1.0804	1.2817	.9775	.9947	1.0404	.....	1.3280	1.0607	1.0278	1.738	1.0380
1871-1872	1.0681	1.4184	1.0156	1.0067	1.1482	.....	1.0797	1.0780	1.0387	1.0817	.8877
1872-1873	1.0688	1.0440	.9641	.9282	1.0055	.....	1.1205	.9255	.9022	.9730	.9783
1873-1874	1.0193	.6991	1.0600	1.0515	.9835	.....	.9542	.9854	.8353	.9545	.7489
1874-1875	1.2053	.8908	.9602	1.0515	.9822	.....	1.1585	1.0544	1.1094	.8512	.7062
1875-1876	.9070	.6961	1.0671	1.1064	.9650	.....	1.0177	.....	.9883	.9350	.7978
1876-1877	.8764	.3303	.5350	.6074	.3149	.....	.9177	.....	.2802	.9229	.8614
1877-1878	.6018	1.1382	.7472	.6860	.9815	.....	.7630	.5424	.....	.9888	1.2067
1878-1879	1.0747	1.2414	.8504	.9952	.8139	.....	1.0476	2.4843	1.1135	1.1416	2.5990
1879-1880	1.7430	3.1967	1.8289	1.7338	2.5598	.....	2.0549	1.0902	1.0044	2.5639	1.0044
1880-1881	1.2451	1.3253	1.3065	1.3574	.8690	.....	1.0802	1.2365	1.1064	1.2241	1.0044
1881-1882	1.0294	.8726	1.0730	1.0760	1.0426	.....	1.0539	.....	.9848	1.0044	.9380
1882-1883	1.0254	.9210	1.0146	1.0170	.8763	.....	1.0783	1.0335	1.0335	1.0624	1.0044
1883-1884	.9912	.7139	.9838	.9301	1.0012	.....	1.1987	1.0673	1.0673	1.0722	1.0044
1884-1885	.8496	.7485	.6596	.7360	.3077	.....	1.4186	1.0700	1.0700	1.2277	1.0044
1885-1886	1.1013	1.3286	1.3131	1.3829	1.2379	.....	1.2117	1.0814	1.0814	1.6661	1.0044
1886-1887	.9191	1.1424	1.1179	1.1269	1.8493	.....	1.4077	1.1238	1.1238	1.6819	1.0044
1887-1888	.6173	.9036	1.0426	.9659	1.6692	.....	1.2552	1.0060	1.0060	1.0941	1.0044
1888-1889	.8456	.9117	1.2517	1.0854	.9764	.....	1.2526	.....	.8500	1.0044	.9380
1889-1890	1.1207	.9881	1.1156	.9604	.7781	.....	1.2656	1.1771	1.1771	1.0624	1.0044
1890-1891	.9298	.8760	.9799	.9909	.8650	.....	1.0987	1.0998	1.0998	1.0998	1.0044
1891-1892	1.1564	1.2145	.9367	1.0593	1.2323	.....	1.0278	.....	.8836	1.2277	1.0044
1892-1893	1.0698	1.0191	1.0824	1.0659	1.2671	.....	1.1174	1.0693	1.0693	1.0693	1.0044
1893-1894	.7216	.....	.9805	1.0869	.3754	.....	1.8910	1.7507	1.7507	1.0044	1.0044
1894-1895	.9320	.....	1.0079	.9778	.5686	.....	.7854	1.2621	1.2621	1.0044	1.0044
1895-1896	.6351	.....	.9623	.9877	.2504	.....	1.1363	1.0100	1.0100	1.0100	1.0044
1896-1897	.4005	.....	.9143	.9637	.6662	.....	.9901	.....	.9879	1.0044	.9380
1897-1898	.8921	.....	.9863	.9924	.....	.8386	.....	.9417	1.0335	1.0335	1.0044
1898-1899	1.6162	.....	.9961	1.0445	.....	1.0170	.....	1.0725	1.0088	1.0088	1.0044
1899-1900	1.0233	.....	1.0363	1.1064	.....	.7914	.....	1.1776	1.1682	1.1682	1.0044
1900-1901	1.5185	.....	1.2448	1.1023	1.6746	.....	1.3026	1.9712	1.9712	1.0044	1.0044
1901-1902	1.1904	.....	1.2308	1.3826	1.8578	.....	1.2650	1.9897	1.9897	1.0044	1.0044
1902-1903	.9948	.....	.9883	.9990	1.1492	.....	.9567	1.0021	1.0021	1.0021	1.0044
1903-1904	.7960	.....	.9438	1.0000	1.7079	.....	.8750	1.0707	1.0707	1.0707	1.0044
1904-1905	1.2717	.....	1.1256	1.2615	.8535	.....	1.1945	1.0426	1.0426	1.0426	1.0044
1905-1906	1.1102	.....	1.2212	1.3699	1.7608	.....	1.1725	1.9936	1.9936	1.0044	1.0044
1906-1907	1.0323	.....	.9847	1.0629	.....	.8663	.....	.9482	.9251	1.0044	1.0044
1907-1908	.7248	.....	.7233	.9293	1.7939	.....	1.0933	1.0934	.8093	.8434	1.0044
1908-1909	1.2894	.....	1.1319	1.1923	1.3449	.....	1.3332	1.9982	1.9982	1.0044	1.0044
1909-1910	1.0566	.....	1.0000	1.2474	1.1801	.....	1.3189	1.0899	1.0899	1.0899	1.0044
1910-1911	.9170	.....	.9337	.8962	.9485	.....	.8832	1.0837	1.0837	1.0837	1.0044
1911-1912	.9791	.....	1.0214	1.0877	.9964	.....	.8507	1.0044	1.0044	1.0044	1.0044
1912-1913	.9927	.....	.9735	1.0474	1.0703	.....	.9624	1.0044	1.0044	1.0044	1.0044
1913-1914	.8956	.....	.9343	.9011	1.0290	.....	.5104	1.0044	1.0044	1.0044	1.0044
1914-1915	.7593	.....	.9507	1.0402	.8760	.....	.5612	1.0044	1.0044	1.0044	1.0044
1915-1916	1.2906	.....	1.0349	1.0862	1.0757	.....	1.3456	1.0044	1.0044	1.0044	1.0044
1916-1917	.9049	.....	.9914	1.0491	1.2624	.....	1.1148	1.0044	1.0044	1.0044	1.0044
1917-1918	.6303	.....	.7253	.7447	.7295	.....	.5212	1.0044	1.0044	1.0044	1.0044
1918-1919	.9018	.....	.9417	1.0249	1.0849	.....	1.3839	1.0044	1.0044	1.0044	1.0044
1919-1920	.6862	.....	.9181	.0125	.9545	.....	1.1765	1.0044	1.0044	1.0044	1.0044
1920-1921	1.1125	.....	.0668	1.1784	1.1182	.....	.6714	1.0044	1.0044	1.0044	1.0044
1921-1922	.9599	.....	.0750	1.0585	.8583	.....	.6489	1.0044	1.0044	1.0044	1.0044
1922-1923	1.2957	.....	.0167	1.0897	1.0676	.....	1.1601	1.0044	1.0044	1.0044	1.0044
1923-1924	1.3195	.....	.9932	.8905	.8639	.....	.6077	1.0044	1.0044	1.0044	1.0044
1924-1925	1.3568	.....	.12741	1.2584	1.3712	.....	1.5059	1.0044	1.0044	1.0044	1.0044
1925-1926	1.1532	.....	.1434	1.0491	.1099	.....	2.7868	1.0044	1.0044	1.0044	1.0044
1926-1927	1.1921	.....	.0952	.9680	1.1262	.....	1.1636	1.0044	1.0044	1.0044	1.0044
1927-1928	1.0779	.....	.0322	1.1591	1.0370	.....	1.0048	1.0048	1.0048	1.0048	1.0048
1928-1929	1.0506	.....	.0995	.9528	1.0866	.....	1.7382	1.0044	1.0044	1.0044	1.0044
1929-1930	.9787	.....	.8474	1.0707	1.1521	.....	.9012	1.0044	1.0044	1.0044	1.0044
1930-1931	.6472	.....	.8690	.6535	.6860	.....	.6106	1.0044	1.0044	1.0044	1.0044
1931-1932	.2273	.....	.5103	.2582	.4170	.....	.2026	1.0044	1.0044	1.0044	1.0044
1932-1933	.5730	.....	.6929	1.0187	.7769	.....	.7514	1.0044	1.0044	1.0044	1.0044
1933-1934	2.7329	.....	.12181	1.1328	1.7132	.....	1.6216	1.0044	1.0044	1.0044	1.0044
1934-1935	.4804	.....	.6242	.6291	.8054	.....	.4500	1.0044	1.0044	1.0044	1.0044
1935-1936	1.3633	.....	.0206	.9783	.9985	.....	1.4252	1.0044	1.0044	1.0044	1.0044

# RAILROAD STOCK PRICES

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JANUARY 1857 TO JANUARY 1936

12	13	14	15	16	17	18	19	20	21	22	January Dates
.7232			.7368			.6819			.8480		.6011 1857-1858
.8548			.7395			.8963			1.0747	1.7583	1858-1859
1.0464			1.2630			.9353			.8695	1.2437	1859-1860
.9177			1.4269			1.1158			1.0760	1.1151	1860-1861
.9224			.7669			.9782			1.0363	.8312	1861-1862
1.6047			1.4302			1.3400			1.4181	2.3227	1862-1863
1.5209			1.3409	1.6807		1.2289	2.6026		1.4524	1.5125	1863-1864
.7126			1.0193	.6860			.7143		.8270	.7714	1864-1865
1.0600			1.1382	.7952			.8759		.8529	.9893	1865-1866
1.2379			.9245	1.0529			1.2382		1.1087	1.2238	1866-1867
.9904			1.1706	1.5035			1.7002		1.1956	1.6025	1867-1868
1.3056			1.1468	.7824			1.5101		1.2826	.9571	1868-1869
.8274			.9788	.5900			.8581		1.1202	1.2114	1869-1870
1.0179			.9829	1.2505			1.0273				1870-1871
1.0235			.9605	.7735			.9710				1871-1872
1.0275			.9408				1.1596				1872-1873
.9241			.8235				.7280				1873-1874
.9976			.9803				.7672				1874-1875
1.0375			.9962				.8870				1875-1876
.9463			.5852				.8805				1876-1877
.9821			1.2776				1.0035				1877-1878
1.2414		1.5279	1.1382				1.5974				1878-1879
1.2246		2.4683	1.2131				1.5783				1879-1880
.8281		1.3277	1.2636		1.4727		1.4282	.9697			1880-1881
.9620		1.0812	1.0212		1.0617		.9841	.7475			1881-1882
.5408		.9910	1.0912		.7572		1.0435	1.4408			1882-1883
.9326		.9091	1.0280		.5301		.8700	.5997			1883-1884
.9170		.7212	.8998		.9298		.7598	.8245			1884-1885
1.2045		1.3864	1.1537		1.5470		1.2238	1.5130			1885-1886
.9767		.6667	.9544		1.6099		1.0493	1.2665			1886-1887
.8982			.9475		.6364		.9596	.8086			1887-1888
.8717			.9644		1.1161		.9931	.8188			1888-1889
.7979			1.0349		.8426		1.0297	1.0404			1889-1890
.7269			.8444		.8182		.9594	.7482			1890-1891
1.3020			1.0834		1.3065		1.0993	1.8789			1891-1892
.9390			.9333		.8212		.9690	1.0619			1892-1893
.7589			.8990		.2428		.8903	.6997			1893-1894
.9579			.9376		.7953		.9485	.9291			1894-1895
1.0532			1.0942		.9231		1.0209	1.0459			1895-1896
1.0342			1.0028				1.0619	1.4525			1896-1897
1.3431			1.1259				1.1880	1.5087			1897-1898
1.3948			.9166				1.1918	1.2773			1898-1899
.9054			.9544				1.0977	1.2697			1899-1900
1.1521			1.1744				1.0700	1.0802			1900-1901
1.3721			1.0755				1.2173	1.0693			1901-1902
1.3459		.4752	1.1468				1.0532	1.1453			1902-1903
			.8881				.8113	.9006			1903-1904
		1.4987	1.1885				1.3552	1.2930			1904-1905
		.6898	1.1355				1.1156	1.0347			1905-1906
		1.1158	.9270				.9167	.8505			1906-1907
		.5293	.7758				.8214	.7742			1907-1908
		1.7004	1.1692				1.2465	1.2173			1908-1909
		1.9222	.9914				.9791				1909-1910
		.6558	.9341				.9017				1910-1911
		.7812	1.0399				.9768				1911-1912
		.9210	.8903				.9634				1912-1913
		.6463	.8898				.9652				1913-1914
		.0554	.9775				.9545				1914-1915
		.9574	.9885				1.0493				1915-1916
		1.8055	.9842				.9256				1916-1917
		.4167	.8905				.7677				1917-1918
		1.1825	1.0332				1.0114				1918-1919
		1.1107	.9203				.9024				1919-1920
		1.0186	.9957				.7977				1920-1921
		1.1545	1.1236				.9093				1921-1922
		1.0433	1.1176				1.2871				1922-1923
		.7642	.9195				.6385				1923-1924
		1.8523	1.1358				1.4253				1924-1925
		1.2266	1.0375				1.0619				1925-1926
		1.2500	1.0118				1.0486				1926-1927
		1.5320	1.1286				1.0602				1927-1928
		1.2276	1.0271				1.0358				1928-1929
		.8632	.9133				.9641				1929-1930
		.4868	.6106				.4493				1930-1931
		.2206	.1753				.2418				1931-1932
		.3714	.9366				.5306				1932-1933
		.8528	2.5531				1.8603				1933-1934
		.5711	.4577				.5441				1934-1935
		.9772	1.3904				.7500				1935-1936

## APPENDIX

TABLE 14—RAILROAD COMMON STOCK PRICE RELATIVES

## RAILROAD STOCK PRICES

A185

JANUARY 1857 TO JANUARY 1936

34	35	36	37	38	39	40	41	42	43	44	January Dates
	.8959					.8240		.1775			1857-1858
	1.0515					1.0817		.9500			1858-1859
	.9434					.8723		.7242			1859-1860
	1.0464					1.0184		1.4362			1860-1861
	1.1458					1.0097		1.6316			1861-1862
	1.4635					1.6734		4.0170			1862-1863
	1.1179					1.1074	1.2584	1.7374		2.067	1863-1864
	1.1668					.9706	1.1207	.8022		1.1855	1864-1865
	.6657					.8672	1.0170	.8947		.8626	1865-1866
	.9271					1.0138	1.0102	1.0332		1.0414	1866-1867
	.9224					1.0198	1.0202	1.1161		.9287	1867-1868
1.0371	.8968					1.0799	1.1752	1.0676		1.1094	1868-1869
1.0051	1.0271					1.0049	1.3080	1.1205		.8924	1869-1870
1.0887	1.1184					1.1355		1.1981		.9571	1870-1871
.9811	1.0767					.9875		1.2193		.9503	1871-1872
.9882	1.0259					.9643				.9796	1872-1873
.9448	.8507					.9637				.8472	1873-1874
.9712	.8622					1.1277				1.0457	1874-1875
.9806	.8800					1.0014				1.0634	1875-1876
.9565	.6118					.8755				.7111	1876-1877
.9615	.9964					.6554				.6250	1877-1878
1.0760	1.1474					1.0696				.8345	1878-1879
1.0690	1.9156			8.4411		1.5364				2.4615	1879-1880
1.1945	1.1709			1.0728		1.2812				1.3893	1880-1881
.9821	.8715			1.0544		.9252				1.0619	1881-1882
1.0578	.9938			.9435		.9974				1.2255	1.1089 1882-1883
1.1182	.7826			.6311		.9700				1.0702	1.0812 1883-1884
.9646	.5079			4.155		.8632				.9664	.9313 1884-1885
1.0522	1.7266			1.9802		1.0595				1.2682	1.2817 1885-1886
1.1511	1.1403			.7475	1.1709	1.0457				1.1447	1.0852 1886-1887
.9925	.8333			.4786	.6627	.9776				.9574	1.2294 1887-1888
1.0214	1.1285			.7553	1.0483	.9930				1.0235	.8902 1888-1889
1.0704	1.4233			1.8109	.8271	1.0000				.9743	.9229 1889-1890
1.0342				.8745	.6887	1.2921				.9707	.9359 1890-1891
1.0095				1.1585	1.4488	1.1943				1.1048	1.0418 1891-1892
1.0529				.8047	.8793	.9816				1.1636	1.0109 1892-1893
.9603				.5893	.7419	.6516				.8873	.9711 1893-1894
1.0321				1.1089	.9855	.8577				.8692	.9777 1894-1895
1.0067				.8003	.8641	.9855				.9609	1.0266 1895-1896
.9952				.8309	1.1744	.7436				.5873	1.0009 1896-1897
1.0585				1.2656	1.3222	.5248				.8205	1.1471 1897-1898
1.1363				1.4578	1.2249	.4756				1.6719	1.1741 1898-1899
				1.2003	1.0780	1.1787	1.0177			.7663	1.0522 1899-1900
				1.2368	1.3177	1.3388	1.1490				.9928 1900-1901
				1.2642	1.1811	1.5867	1.0787				
				.9943	1.0854	1.4727	1.0351				1.1644 1901-1902
				.8111	.6682	.7378	.7916				1.1171 1902-1903
				1.2184	1.4246	1.1912	1.1439				.7644 1903-1904
				1.1179	1.2089	1.3125	1.0554				1.2494 1904-1905
				.8377	.8965	.9866	.9364				1.0193 1905-1906
				.6139	.5857						1.0025 1906-1907
				1.2761	1.9656						
				1.1321	1.4250						
				.8082	.9594						
				.8915	.8752						
				.9304	1.0770						
				.7312	.8169						
				.5368	.6886						
				2.0922	1.4494						
				1.1492	1.0109						
				.8140							
				1.0622							
				1.0021							
				1.0877							
				.9236							
				1.3008							
				1.0069							
				1.3237							
				1.2543							
				1.2942							
				1.2734							
				1.0831							
				1.0743							
				.9001							
				.6686							
				.9912							
				1.5068							
				1.0384							
				1.2497							
				1.4479							

## APPENDIX

TABLE 14—RAILROAD COMMON STOCK PRICE RELATIVES

January Dates	45	46	47	48	49	50	51 & 52	53	54	55	56
1857-1858			.8182	.4073				.5889			
1858-1859			1.4132	.4098				.8697			
1859-1860			.8942	.1904				.7730			
1860-1861			1.2957	5.2012				1.8001			
1861-1862			1.0849		1.6155			.8299			
1862-1863			1.3274		2.0749			2.1111			
1863-1864			1.3219		1.3855			1.4099			
1864-1865			.8834		.7261			1.0421			
1865-1866			8354		.9289			1.1447			
1866-1867			1.0363		.8578			1.1692			
1867-1868			.8066		1.2391			1.2942	.9825		
1868-1869			1.0740		1.4679			1.3677	1.7857		
1869-1870			.9594		1.1479			.9339	1.1051		
1870-1871			1.1316		.8015			1.0067	.7783		
1871-1872			1.0207		1.1008			.9442	.6221		
1872-1873			.9715		.9316			.9360	.8995		
1873-1874			.9968		.8674			.8442	.6403		
1874-1875			1.0325		.8228	1.0812	.7264				
1875-1876			1.0264			1.0332	1.0534	.9245			
1876-1877			.7652			1.4895	1.0174	.6824			
1877-1878			.8446			1.9907	.8736	.8230			
1878-1879			.8618			1.0955	1.1125	1.2377			
1879-1880			1.4914			1.8741	1.2598	2.6345	6.4032		
1880-1881			1.1264			1.4990	1.4578	1.3465	1.0330	.9822	
1881-1882			1.0498			.9671	.8622	1.8763	1.0141	.7632	
1882-1883			1.0351			1.1371	.9316		1.3721	1.3909	
1883-1884			1.1102			.8424	.9822		.4681	.7865	
1884-1885			.6993			.8241	.9930		.7045	.7327	
1885-1886			1.7048			1.2694	1.1687		1.6823	1.7330	
1886-1887			1.2394			.9558	1.0023		1.0000	1.4747	
1887-1888			.7857			.8493	.9369		.8134	1.2017	
1888-1889			1.0634			.8391	.8498		1.1647	.6468	
1889-1890			1.1156			1.0935	.9767		1.2382	.8392	
1890-1891			.8210			.8201	.8371		.8787	.7444	
1891-1892			2.0086	1.0188		1.4122	1.2100		.9612	1.8811	
1892-1893			.7105	1.1671		.9914	.9250		.6946	.9583	
1893-1894			.6637	.6420		.7181	.7533		.2652	.5365	
1894-1895			1.1332	.9035		.9738	.9389		.7127	.8177	
1895-1896			1.0445	1.0671		1.2184	1.0600		1.1722	1.3070	
1896-1897			.8184	.8043		1.1038	.9750		.4068	.8307	
1897-1898			3.1089	.8417		1.2656	1.3580		1.7081	1.0705	
1898-1899			1.8450	1.0325		1.3170	1.3348		1.9616	1.7914	
1899-1900			.9572	.9755		.9391	.9339		1.0927	1.3020	
1900-1901			.8179	1.2671		1.2957	1.1790		1.5963		
1901-1902			1.4391	1.1617		1.1156					
1902-1903			1.0745	1.1353		1.0930					
1903-1904			.7052	.8894		.8036					
1904-1905			1.1869	1.5035		1.2098					
1905-1906			1.1071	1.4652		1.0661					
1906-1907			.8879	.9048		1.0824					
1907-1908			.8522	.7837		.7315					
1908-1909			1.3916	1.2782		1.3483					
1909-1910			1.0975	1.4123		1.0172					
1910-1911			1.0018	1.0292		.8349					
1911-1912			1.0235	.9712		.8506					
1912-1913			1.0100	.9485		1.0556					
1913-1914			.8358	.9304		.9050					
1914-1915			.8299	.8867		.8749					
1915-1916			1.1413	1.1676		1.0942					
1916-1917			1.0032	.9920		.9075					
1917-1918			.7312			.4959					
1918-1919			.9727			.8718					
1919-1920			.7705			.9548					
1920-1921			1.2674			.7933					
1921-1922			1.0785			.6256					
1922-1923			1.1763			1.2274					
1923-1924			.9692			.7039					
1924-1925			1.9156			.9326					
1925-1926			1.0549			.8400					
1926-1927			1.3549			.8441					
1927-1928			.8315			1.7857					
1928-1929			1.0595			1.4844					
1929-1930			.7335			.6856					
1930-1931			.7849			.2846					
1931-1932			.2456			.3541					
1932-1933			.9064			.7520					
1933-1934			1.3097			3.0585					
1934-1935			.5945			.4556					
1935-1936			.9423			.8092					

## RAILROAD STOCK PRICES

A187

JANUARY 1857 TO JANUARY 1936.

57	58	59	60	61	62	63	64	65	66	67	January Dates
		.9419			1.0271						1857-1858
		1.0750			1.1492						1858-1859
		1.0226			1.0624						1859-1860
					.9993						1860-1861
					.9886						1861-1862
					1.2921						1862-1863
					1.1615		1.4031		1.1413		1863-1864
					1.0500		1.0430		.8947		1864-1865
					.8330		1.1487				1865-1866
					.9763		1.3970				1866-1867
		1.1869			.8903		1.2328				1867-1868
		1.0952			1.0889		1.2092				1868-1869
		9.114			1.0065		.9698				1869-1870
		1.0605			.9981		1.0585				1870-1871
		9879			1.1329		1.0479				1871-1872
		.9670			1.0462		.9440				1872-1873
			.9000		.9807		.9363				1873-1874
			1.0715		.9724		.9883				1874-1875
			1.1000		.9826		.9691				1875-1876
			1.0219		.9688		.9878				1876-1877
					1.0174	.9263	.7704				1877-1878
					1.0330	1.0304	1.0772				1878-1879
					.9797	1.1218	1.2520				1879-1880
					1.1403	1.1620	1.2972	1.4568			1880-1881
1.2549		.9542			.9785	.7531	.8623				1881-1882
1.2779		1.0069			.0872	.9884	1.0583				1882-1883
.8680		1.0290			1.0233	.4810	1.0065				1883-1884
.9113		1.0028			1.0580	.9062	.9497				1884-1885
1.3351		1.1556			1.0867	1.7390	1.0897				1885-1886
1.0354		1.0481			1.1228	.9375	1.0151				1886-1887
.9696		1.0186			.9756	.9365	.9547				1887-1888
.9060		1.1358			.9736	.9505	1.0074	1.0549			1888-1889
1.1771		1.1125			1.0294	1.1647	.9710	.9690			1889-1890
		1.0233			.9711	1.2578	1.0902	1.6680			1890-1891
		1.6151				.9237	1.0373	.9214			1891-1892
		1.2170			1.1490	.7232	.8178	.9509	.7945		1892-1893
		7764									1893-1894
		1.0000			1.0399		1.0486	1.1023	.8637		1894-1895
		1.1133			1.0186		.8721	1.0476	.9908		1895-1896
		1.0664			.9840		1.0580	1.0715	.9277		1896-1897
		1.1202			1.0525		1.1251	.9996	1.1866		1897-1898
		1.9147			1.0792		1.2903	1.0306	1.1795		1898-1899
		1.0691			1.0678		1.0172	.9861	.7701		1899-1900
		1.1782			.9904		1.4421	1.1593	1.6199		1900-1901
		1.0874			.9941		1.0904	.9009	2.3388	1.6757	1901-1902
		1.0957			1.0597		.9657	1.0160	.8731	1.5206	1902-1903
		.8639			.8747		.6773	1.0000	.6832	.8851	1903-1904
		1.3842			1.0275		1.8867	1.1695	1.5063	1.3586	1904-1905
		1.2844			1.0273		1.2674	.8146	1.5707	1.0486	1905-1906
		1.0116			.9287		.8376	.7634	.8741	.8509	1906-1907
		7321			.7411		.7537	.5288	.4793	.4514	1907-1908
		1.1992			1.1992		1.3759	4.7457	1.8374	3.4562	1908-1909
		9.502			1.0055		.9934	.9549	1.1543	.9814	1909-1910
		9.190			.9584		.8919	.4815	1.0445	.4637	1910-1911
		1.0242			.9215		.9056	.5833	.9225	.5918	1911-1912
		1.0454			.9325		.8580	.9966	1.0188	.8889	1912-1913
		9076			.5867		.8881	.6055	.6805		1913-1914
		.8952			.7020		.8004	.8883	.8606		1914-1915
		1.0688			1.3490		1.2411	1.1194	1.2112		1915-1916
		.9448			.6460		.9741	1.8151	.8460		1916-1917
		7639			.6536		.7084	.4690	.4123		1917-1918
		1.0435			1.0083		1.0000	.8322	1.9333		1918-1919
		.8533			.8788		.8547	1.0337	.9827		1919-1920
		.9724			.7873		1.1031	1.0404	.6842		1920-1921
		.9359			.6828		1.1277	.4225	1.1251		1921-1922
		1.0191			1.3561		.9495	.7396	1.5000		1922-1923
		7755			.8944		.9248	1.7002	.9687		1923-1924
		1.2238			1.7632		1.3630	1.9552	1.6244		1924-1925
		1.0869			1.3983		1.0700	.9483	1.3848		1925-1926
		1.1082			1.0421		.9717	.8096	1.0715		1926-1927
		1.1474			1.4533		1.1199	1.1914	1.5173		1927-1928
		1.1419			1.3777		.9723	2.0186	1.0534		1928-1929
		.8785			1.2584		.5032		.8777		1929-1930
		.6613			.7576		.4675		.6097		1930-1931
		.3216			.2966		1.1121		.0827		1931-1932
		.4621			.6219		1.2850		.4267		1932-1933
		2.5526			1.2123		.9874		.62917		1933-1934
		.6392			4.0009		.5826		.6209		1934-1935
		2.1958			.6384		1.1127		.27070		1935-1936

## APPENDIX

TABLE 14—RAILROAD COMMON STOCK PRICE RELATIVES

January Dates	68	69	70	71	72	73	74	75	76	77	78
1857-1858											
1858-1859											
1859-1860											
1860-1861											
1861-1862											
1862-1863											
1863-1864											
1864-1865											
1865-1866	.8235										
1866-1867	1.0104										
1867-1868	1.0544										
1868-1869	1.4135										
1869-1870	.8360										
1870-1871	.9586										
1871-1872	1.4511					1.5353					
1872-1873	1.0009					1.8231					
1873-1874	.7123					.7848					
1874-1875	.3410					.5943					
1875-1876	.2690					.5752					
1876-1877	1.3763					.6048					
1877-1878		2.4077				.8697					
1878-1879		1.4309				1.8806					
1879-1880		2.7315					1.8531				
1880-1881		1.0275					1.1153				
1881-1882		.7796					.8119				
1882-1883		.9412					.9678				
1883-1884		.4725					.6699				
1884-1885		.3027					.5163				
1885-1886		2.2151					1.8497				
1886-1887		.7530					1.2856				
1887-1888		.9390					.8743				
1888-1889		.8452					.9890				
1889-1890		1.2601					.9600				
1890-1891		.7671					.8096				
1891-1892		1.3636					.9960				
1892-1893		.8179					.9900				
1893-1894		.5869					.9870				
1894-1895		.8978					.9840				
1895-1896		1.1139					.9806				
1896-1897		.9807					.9960				
1897-1898		1.1043					.9786				
1898-1899		1.1463					1.0259				
1899-1900		.8807					.7707				
1900-1901		1.7195					2.4055				
1901-1902		1.7824					1.4832				
1902-1903		1.3400					.9804				
1903-1904		.6744					.6971				
1904-1905		1.0426					1.4588				
1905-1906		1.0972					1.1855				
1906-1907		.7404					.7988				
1907-1908		.5453					.4093				
1908-1909		1.9861					1.9879				
1909-1910		1.2735					.9861				
1910-1911		.6751					.9021				
1911-1912		.4107					1.1130				
1912-1913		.5468					.9959				
1913-1914		1.0000					.9562				
1914-1915		.3287					.7570				
1915-1916		.1764					1.7378				
1916-1917			9680				.8268				
1917-1918			.5622				.4806				
1918-1919			.9553				1.0404				
1919-1920			.9778				.8037				
1920-1921			1.0390				1.0673				
1921-1922			.7806				.6370				
1922-1923			1.4161				1.2523				
1923-1924			1.3225				2.1637				
1924-1925			1.8084				1.3428				
1925-1926			2.1752				1.1471				
1926-1927			.9300				1.1249				
1927-1928			1.4662				1.5097				
1928-1929			1.1700				1.1092				
1929-1930			.7292				.8208				
1930-1931			.3896				.5431				
1931-1932			.1107				.7546				
1932-1933			.7605				.6600				
1933-1934			1.9668				3.2278				
1934-1935			.5787				.6600				
1935-1936			1.9485				1.0563				

## RAILROAD STOCK PRICES

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JANUARY 1857 TO JANUARY 1936

79	80	81	82	83	84	85	86	87	88	89	January Dates
											1857-1858
											1858-1859
											1859-1860
											1860-1861
											1861-1862
											1862-1863
											1863-1864
											1864-1865
											1865-1866
											1866-1867
											1867-1868
											1868-1869
											1869-1870
											1870-1871
											1871-1872
											1872-1873
											1873-1874
											1874-1875
											1875-1876
1.1556						1.4438	.9237				1876-1877
1.0179						.6687	.5074				1877-1878
.8586						8.2035	1.6159				1878-1879
1.0488						1.5038	6.7035				2.8801 1879-1880
1.1970						1.1345	1.0894				1.7033 1880-1881
.9650	1.1107					.9779	.8418				1.0619 1881-1882
.8038	.8385					.9299	.8776				.5713 1882-1883
.8469	.7599					.8852	.6081				.8376 1883-1884
1.0137	.9816					1.0209	.7953				.5258 1884-1885
.8654	1.1363					1.1965	1.8976				1.7037 1885-1886
.9756	.9733					1.0666	1.0332				1.5463 1886-1887
.9276	.9622					.9775	.5626				.9735 1887-1888
.3693	.5980					.5528	.7672				.9873 1888-1889
1.0935	1.0294					.6081	.7758				1.6222 1889-1890
1.0454	1.1738					.9513	.4297				.8763 1890-1891
.9051	.9551					1.4345	1.5164				.1.0488 1891-1892
1.5318	1.0313					1.706	.6428				.9401 1892-1893
1.3725	1.5999					1.2120	.9076				.5915 1893-1894
.8925	.8845					2.3383	.6667				
1.9516	1.7775					1.4645	1.7057	1.2951			
1.2747	1.4073					1.4581	1.1094	1.7660	1.1169		
1.0713	.9252					.7002	.7855	.5700	.6142		
.8418	.5252					1.0242	1.2715	1.4778	.7947		
1.1437	1.4856					1.0340	1.0720	1.1468	1.2117		
.9682	1.4070					.7503	.7686	1.1115	.8442		
.8668	.8721					.4438	.4786	.6903	.8066		
.4951	.5246					.4438	.4786	.6489	.6115		
1.6214	1.9852					1.7551	.6370	1.3954	1.7956		
.9884	1.1210					.2284	.6351	1.2012	1.9833		
.7065	.6474					.0090	.6507	.8719	.8148		
.8235	.7154					1.1492	.9344	1.0102	.8297		
1.0387	1.0354					.7157	1.6711	.9988	.9540		
.6443	.8090					.8035	.7467	.9209	.9908		
.4013	.3239					.4552	.4833	.9781	.8934		
.4912	2.1948					1.8690	1.2508	1.1110	1.2543		
2.7893	1.1687					.9432	1.7559	1.0053	.8600		
.6945	.2793					.5093	.4375	.1.0188	.8027		
1.1087	1.0922					.8859	1.4207	1.0892	1.0399		
1.0226	1.7789					1.5272	.7797	.9012	.8717		
.7641	.					1.1151	.9827	.8030	1.0708		
.8683	.					.5574	.7974	.6563	.7958		
.9739	.					1.1269	1.3412	1.3274	1.4976		
.6618	.					.9089	.9031	.9290	.1.1543		
3.1761	.					2.3137	1.5269	1.8932	1.9706		
1.1051	.					1.7104	1.0037	1.8886	1.6226		
1.0802	.					.7933	1.4064	1.5762	1.1290		
1.2150	.					1.1765	2.1111	1.0771	1.1464		
1.3406	.					1.0017	.9183	1.0191	1.0651		
1.3523	.					.6560	.5960	.8282	1.1390		
.3936	.					.5000	.5962	.6147	.8201		
.2377	.					.2713	.4071	.1712	.4514		
.3950	.					.5609	.9017	.5029	.8217		
1.3021	.					2.1428	1.8559	1.4810	1.6913		
.5800	.					.7840	.8466	.7961	.5212		
1.2240	.					.8707	1.0906	1.3310	1.8249		
								1.2455			1.5058 1935-1936

TABLE 14—RAILROAD COMMON STOCK PRICE RELATIVES

January Dates	90	91	92	93	94	95	96	97	98	99	100
1857-1858	.	.	.	.	.	.	.	.	.	.	.
1858-1859	.	.	.	.	.	.	.	.	.	.	.
1859-1860	.	.	.	.	.	.	.	.	.	.	.
1860-1861	.	.	.	.	.	.	.	.	.	.	.
1861-1862	.	.	.	.	.	.	.	.	.	.	.
1862-1863	.	.	.	.	.	.	.	.	.	.	.
1863-1864	.	.	.	.	.	.	.	.	.	.	.
1864-1865	.	.	.	.	.	.	.	.	.	.	.
1865-1866	.	.	.	.	.	.	.	.	.	.	.
1866-1867	.	.	.	.	.	.	.	.	.	.	.
1867-1868	.	.	.	.	.	.	.	.	.	.	.
1868-1869	.	.	.	.	.	.	.	.	.	.	.
1869-1870	.	.	.	.	.	.	.	.	.	.	.
1870-1871	.	.	.	.	.	.	.	.	.	.	.
1871-1872	.	.	.	.	.	.	.	.	.	.	.
1872-1873	.	.	.	.	.	.	.	.	.	.	.
1873-1874	.	.	.	.	.	.	.	.	.	.	.
1874-1875	.	.	.	.	.	.	.	.	.	.	.
1875-1876	.	.	.	.	.	.	.	.	.	.	.
1876-1877	.	.	8803	.	.	.	.	.	.	.	.
1877-1878	.	1.0691	.	.	.	.	.	.	.	.	.
1878-1879	.	9430	.	.	.	.	.	.	.	.	.
1879-1880	1.8048	1.4434	.	4.5941	.	.	.	.	.	.	.
1880-1881	1.2117	1.2975	.	.9871	.	2.0040	.	.	.	.	.
1881-1882	1.7685	9926	.	1.4385	.	.8100	.	.	.	.	.
1882-1883	7192	8666	.	.5437	.	7690	.	.	.	.	.
1883-1884	8466	7309	.	.5000	.	8413	.	9119	.	.	.
1884-1885	6863	6495	1.0242	.	.8110	9274	.	7326	.	.	.
1885-1886	1.3715	1.0829	1.5167	.	2.1242	1.7084	.	1.6014	.	.	.
1886-1887	1.7685	1.1282	1.2665	.	1.0780	1.1405	.	1.0000	.	.	.
1887-1888	.9189	.9680	.5373	.	.6678	.7323	.	.9057	.	.	.
1888-1889	1.0637	1.1174	2.6638	.	.7024	.9381	.	.8777	.	.	.
1889-1890	1.2360	1.0539	1.1773	.	1.9165	2.1483	1.4545	.	.	.	.
1890-1891	.9171	.6695	.4060	.7216	1.7595	.6122	.9761	.	.	.	.
1891-1892	1.0093	1.0624	1.4223	1.6372	1.4019	.9290	1.2382	.	.	.	.
1892-1893	.9888	8513	.7561	.8529	9169	.7773	.9672	.	.	.	.
1893-1894	.7955	.4641	.2232	.6399	.4902	.3278	.8125	.	.	.	.
1894-1895	.9571	.5380	.9403	.8355	.8875	.6120	.7674	.	.	.	.
1895-1896	.	.5280	1.1269	1.1426	1.5027	1.1439	.9796	.	.	.	.
1896-1897	.	1.5094	.	.6962	.9565	.6057	1.0233	.	.	.	.
1897-1898	.	.9569	.	1.4282	1.3690	1.1225	1.5754	.	.	.	.
1898-1899	.	2.1067	.	1.8437	1.2014	.8908	.9850	.	.	.	.
1899-1900	.	1.0134	.	.9675	1.0985	.6492	1.0822	1.5911	.	.	.
1900-1901	.	1.7877	.	1.2081	1.4325	.8667	.9704	.9294	.	.	.
1901-1902	.	1.2272	.	1.3375	.	1.6248	1.2425	1.2700	.	.	.
1902-1903	.	1.0049	.	1.0937	.	1.0639	1.3434	1.2252	1.6821	.	.
1903-1904	.	.7738	.	.7493	.	.5979	.7076	.8779	.	.	.
1904-1905	1.3462	1.4911	.	1.4025	.	1.6226	1.2048	1.1692	1.5244	.	.
1905-1906	1.3262	1.3044	.	1.0462	.	1.1434	1.3192	1.3068	1.3944	.	.
1906-1907	.7985	1.1405	.	1.3465	.	.7489	.7931	.1.1825	.8571	.	.
1907-1908	.	.5650	.6959	.	.8002	.	.8300	.6565	.8637	.	.
1908-1909	1.5293	1.4693	.	1.5940	.	2.3286	2.5545	1.1395	2.2652	.	.
1909-1910	1.2037	1.0785	.	1.1082	.	1.1992	1.2142	1.0882	.9251	.	.
1910-1911	.9125	.8969	.	.8891	.	.8720	1.2145	1.1293	.7086	.	.
1911-1912	1.1308	.9641	.	.9370	.	1.0254	.8862	1.1803	.7730	.	.
1912-1913	.9853	.9490	.	.9755	.	.9842	.9056	1.1251	.8977	.	.
1913-1914	.9259	.9984	.	.8758	.	.9135	.9467	.8765	.6012	.	.
1914-1915	.8512	.9315	.	.9074	.	.6369	.8019	.7593	1.0083	.	.
1915-1916	1.1021	1.1379	.	1.1874	.	1.3788	1.0186	1.0817	1.1000	.	.
1916-1917	1.0351	1.0700	.	.9586	.	1.4223	1.4061	.9178	.9782	.	.
1917-1918	.	.7723	.7840	.	.8542	.	.7428	.7329	.8890	.	.
1918-1919	1.0723	1.1179	.	1.2017	.	1.1822	.8528	1.1125	.	.	.
1919-1920	.9364	.9671	.	1.0278	.	.7982	.9255	.8224	.	.	.
1920-1921	.9335	.9726	.	.9645	.	.0710	.	.	.8952	.	.
1921-1922	1.0191	1.0673	.	1.0127	.	.7691	.	.	1.0464	.	.
1922-1923	1.3071	1.0740	.	1.1087	.	1.5314	.	.	1.1655	.	.
1923-1924	1.0055	.9449	.	.9832	.	1.5385	.	.	1.0384	.	.
1924-1925	1.3131	1.1604	.	1.1987	.	1.8315	.	.	1.0134	.	.
1925-1926	1.6661	.9771	.	.9703	.	1.4812	.	.	.9925	.	.
1926-1927	.8260	1.1015	.	.6624	.	1.0622	.	.	1.1218	.	.
1927-1928	.9788	1.1764	.	1.1210	.	.1758	.	.	1.2781	.	.
1928-1929	.9559	1.1522	.	1.0916	.	1.0514	.	.	1.1704	.	.
1929-1930	.9532	.9983	.	.9128	.	.8476	.	.	.8165	.	.
1930-1931	.6696	.8620	.	.8174	.	.4287	.	.	.8370	.	.
1931-1932	.2967	.4021	.	.3170	.	.1855	.	.	.3298	.	.
1932-1933	.6141	.9712	.	.5558	.	.5737	.	.	.9345	.	.
1933-1934	2.1951	1.6220	.	1.4157	.	5.0493	.	.	1.1696	.	.
1934-1935	.7307	.8841	.	.6910	.	.4800	.	.	.8591	.	.
1935-1936	.9392	1.0946	.	1.5756	.	1.0526	.	.	.9414	.	.

## RAILROAD STOCK PRICES

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JANUARY 1857 TO JANUARY 1936

TABLE 15

RAILROAD COMMON STOCK WEIGHTS,  
JANUARY 1857-JANUARY 1936

The numbers at the heads of columns are the numbers assigned to the various railroads in Chart 32. For example, the figures of Column 1 refer to the Baltimore and Ohio Railroad. The figures in the single column entitled '51 and 52' refer first to the Chicago, Milwaukee and St. Paul Railway (January 1874 to January 1928) and then (lower down) they refer to the Chicago, Milwaukee, St. Paul and Pacific Railroad (January 1928 to January 1936).

Each weight in Table 15 is the ratio of the market value of the total outstanding common stock of a specified railroad in the earlier January of the thirteen months designated in column 1 to the market value of the total outstanding common stock of all the railroads whose stocks in that particular thirteen months' period were used in constructing the railroad common stock price weighted index number. For example, the first figure in the table is .0587. This means that the market value of the total outstanding common stock of the Baltimore & Ohio Railroad in January 1857 was .0587, or a little less than one-seventeenth, of the market value of the total outstanding common stock of all the 27 railroads whose stock prices were used for constructing the railroad stock price index in the period January 1857 to January 1858 inclusive.

From this definition of the meaning of the figures in the table it follows that, for any particular thirteen months' period, the sum of the weights equals unity.

Though the January figures for the weighted index number of railroad stock prices given in Table 16 might be calculated perfectly from the price relatives of Table 14 and the weights of Table 15 they were not in fact so calculated. If from January to January each year, a chain weighted arithmetic average of relative prices index number were constructed by using the relative prices of Table 14 and the weights of Table 15, the movements of such an index number could be shown to be identical with the movements of a chain weighted aggregate of actual prices index number where the prices were dollars per share and the weights were the number of shares outstanding in the earlier January. This latter is how the railroad common stock price weighted index number was actually constructed.

The blank spaces in the table correspond to periods in which particular stocks were not used in constructing the stock price index numbers.

## APPENDIX

TABLE 15—RAILROAD COMMON STOCK WEIGHTS

January Dates	1	2	3	4	5	6	7	8	9	10	11
1857-1858	.0587	.	.0640	.0125	.0621	.	.0066	.	.0243	.0088	.0086
1858-1859	.0458	.	.0784	.0135	.0550	.	.0055	.	.0339	.0110	.0110
1859-1860	.0524	.	.0689	.0155	.0472	.	.0054	.	.0375	.0135	.0125
1860-1861	.0660	.	.0665	.0271	.0383	.	.0051	.0343	.0415	.0140	.0158
1861-1862	.0492	.	.0571	.0364	.0353	.	.0046	.0332	.0384	.0135	.0174
1862-1863	.0551	.	.0568	.0333	.0332	.	.0035	.0360	.0376	.0132	.0143
1863-1864	.0584	.	.0492	.0397	.0454	.	.0037	.	.0277	.0113	.0159
1864-1865	.0469	.0255	.0464	.0459	.0735	.	.0065	.	.0179	.0077	.0108
1865-1866	.0492	.0217	.0584	.0782	.0760	.	.0059	.	.0176	.0098	.0113
1866-1867	.0501	.0182	.0479	.0533	.0704	.	.0074	.0515	.0162	.0096	.0121
1867-1868	.0648	.0140	.0433	.0522	.0683	.	.0073	.0504	.0157	.0096	.0123
1868-1869	.0412	.0156	.0542	.0383	.0565	.	.0050	.0426	.0145	.0084	.0106
1869-1870	.0332	.0147	.0406	.0355	.0515	.	.0046	.0361	.0127	.0073	.0097
1870-1871	.0346	.0105	.0386	.0413	.0578	.	.0048	.0305	.0136	.0071	.0099
1871-1872	.0334	.0120	.0334	.0364	.0529	.	.0054	.0310	.0135	.0062	.0096
1872-1873	.0319	.0153	.0306	.0351	.0622	.	.0052	.0371	.0160	.0060	.0077
1873-1874	.0319	.0149	.0275	.0358	.0584	.	.0055	.0321	.0137	.0055	.0081
1874-1875	.0336	.0108	.0388	.0390	.0596	.	.0053	.0328	.0118	.0034	.0063
1875-1876	.0403	.0096	.0370	.0449	.0582	.	.0063	.0352	.0130	.0046	.0044
1876-1877	.0359	.0065	.0388	.0489	.0552	.	.0068	.0344	.0118	.0036	.0010
1877-1878	.0398	.0027	.0262	.0379	.0219	.	.0079	.0122	.0138	.0039	.0005
1878-1879	.0284	.0034	.0214	.0284	.0235	.	.0064	.0065	.0149	.0051	.0005
1879-1880	.0242	.0036	.0156	.0242	.0164	.	.	.0139	.0142	.0050	.0011
1880-1881	.0264	.0072	.0178	.0263	.0267	.	.	.0178	.0098	.0032	.0018
1881-1882	.0241	.0070	.0171	.0261	.0171	.	.	.0141	.0089	.	.0016
1882-1883	.0252	.0062	.0187	.0286	.0181	.	.	.0151	.0089	.	.0016
1883-1884	.0243	.0054	.0178	.0273	.0149	.	.	.0111	.0086	.	.0016
1884-1885	.0267	.0043	.0228	.0281	.0167	.	.	.0147	.0102	.	.0017
1885-1886	.0275	.0039	.0182	.0252	.0063	.	.	.0075	.0133	.	.0025
1886-1887	.0239	.0041	.0197	.0275	.0071	.	.	.0071	.0113	.	.0033
1887-1888	.0199	.0042	.0199	.0280	.0122	.	.	.0091	.0115	.	.0050
1888-1889	.0129	.0040	.0217	.0283	.0111	.	.	.0119	.0121	.	.
1889-1890	.0113	.0038	.0283	.0320	.0165	.	.	.0156	.0107	.	.
1890-1891	.0114	.0033	.0283	.0275	.0115	.	.	.0177	.0113	.	.
1891-1892	.0117	.0032	.0340	.0301	.0110	.	.	.0177	.0224	.	.
1892-1893	.0101	.0033	.0264	.0265	.0114	.	.	.0181	.0212	.	.
1893-1894	.0108	.	.0286	.0282	.0146	.	.	.0203	.0229	.	.
1894-1895	.0098	.	.0357	.0390	.0069	.	.	.0230	.0218	.	.
1895-1896	.0093	.	.0415	.0390	.0040	.	.	.0184	.0282	.	.
1896-1897	.0057	.	.0384	.0369	.0049	.	.	.0201	.0273	.	.
1897-1898	.0022	.	.0345	.0350	.	.0162	.	.0196	.0266	.	.
1898-1899	.0018	.	.0315	.0321	.	.0126	.	.0171	.0254	.	.
1899-1900	.0147	.	.0240	.0257	.	.0098	.	.0140	.0201	.	.
1900-1901	.0154	.	.0238	.0275	.	.0075	.	.0188	.0259	.	.
1901-1902	.0241	.	.0257	.0263	.	.0109	.	.0214	.0235	.	.
1902-1903	.0314	.	.0242	.0279	.	.0155	.	.0209	.0179	.	.
1903-1904	.0448	.	.0213	.0249	.	.0160	.	.0179	.0162	.	.
1904-1905	.0409	.	.0231	.0286	.	.0130	.	.0180	.0164	.	.
1905-1906	.0402	.	.0234	.0279	.	.0185	.	.0166	.0134	.	.
1906-1907	.0412	.	.0216	.0288	.	.0246	.	.0147	.0116	.	.
1907-1908	.0435	.	.0223	.0313	.	.0218	.	.0142	.0110	.	.
1908-1909	.0406	.	.0208	.0375	.	.0223	.	.0148	.0120	.	.
1909-1910	.0377	.	.0170	.0322	.	.0217	.	.0143	.0088	.	.
1910-1911	.0356	.	.0152	.0362	.	.0229	.	.0168	.0086	.	.
1911-1912	.0345	.	.0150	.0342	.	.0229	.	.	.0098	.	.
1912-1913	.0336	.	.0152	.0351	.	.0227	.	.	.0083	.	.
1913-1914	.0320	.	.0142	.0376	.	.0233	.	.	.0077	.	.
1914-1915	.0314	.	.0145	.0371	.	.0262	.	.	.0043	.	.
1915-1916	.0274	.	.0159	.0444	.	.0265	.	.	.0028	.	.
1916-1917	.0307	.	.0143	.0420	.	.0247	.	.	.0032	.	.
1917-1918	.0285	.	.0145	.0450	.	.0320	.	.	.0037	.	.
1918-1919	.0233	.	.0137	.0435	.	.0303	.	.	.0025	.	.
1919-1920	.0198	.	.0121	.0419	.	.0309	.	.	.0033	.	.
1920-1921	.0147	.	.0121	.0462	.	.0321	.	.	.0042	.	.
1921-1922	.0166	.	.0131	.0552	.	.0363	.	.	.0028	.	.
1922-1923	.0165	.	.0145	.0636	.	.0322	.	.	.0019	.	.
1923-1924	.0183	.	.0126	.0593	.	.0294	.	.	.0019	.	.
1924-1925	.0248	.	.0129	.0543	.	.0303	.	.	.0012	.	.
1925-1926	.0270	.	.0132	.0550	.	.0245	.	.	.0014	.	.
1926-1927	.0270	.	.0132	.0499	.	.0235	.	.	.0034	.	.
1927-1928	.0294	.	.0159	.0442	.	.0242	.	.	.0037	.	.
1928-1929	.0362	.	.0135	.0334	.	.0206	.	.	.0033	.	.
1929-1930	.0393	.	.0128	.0276	.	.0194	.	.	.0050	.	.
1930-1931	.0384	.	.0077	.0253	.	.0210	.	.	.0059	.	.
1931-1932	.0312	.	.0063	.0206	.	.0170	.	.	.0048	.	.
1932-1933	.0313	.	.0063	.0207	.	.0171	.	.	.0048	.	.
1933-1934	.0313	.	.0063	.0207	.	.0171	.	.	.0048	.	.
1934-1935	.0313	.	.0063	.0207	.	.0171	.	.	.0048	.	.
1935-1936	.0313	.	.0063	.0207	.	.0171	.	.	.0048	.	.

## RAILROAD STOCK PRICES

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JANUARY 1857 TO JANUARY 1936

12	13	14	15	16	17	18	19	20	21	22	January Dates
.0359			.0598			.0463			.1597	.0087	1857-1858
.0373			.0711			.0421			.1812	.0069	1858-1859
.0308			.0705			.0365			.1867	.0118	1859-1860
.0337			.0864			.0356			.1696	.0153	1860-1861
.0272			.1092			.0350			.1606	.0150	1861-1862
.0254			.0902			.0347			.1685	.0126	1862-1863
.0263			.0786	.0041		.0283	.0038		.1470	.0201	1863-1864
.0283			.0843	.0046			.0139		.1148	.0292	1864-1865
.0200			.0851	.0031			.0164		.0925	.0238	1865-1866
.0227			.0983	.0026			.0143		.0796	.0247	1866-1867
.0261			.0783	.0023			.0148		.0874	.0356	1867-1868
.0332			.0764	.0029			.0216		.0871	.0475	1868-1869
.0372			.0754	.0020			.0254		.0970	.0450	1869-1870
.0373			.0737	.0012			.0219				1870-1871
.0376			.0642	.0013			.0200				1871-1872
.0347			.0556				.0178				1872-1873
.0438			.0591				.0193				1873-1874
.0420			.0478				.0146				1874-1875
.0416			.0466				.0111				1875-1876
.0424			.0456				.0097				1876-1877
.0507			.0337				.0108				1877-1878
.0457		.0019	.0471				.0118				1878-1879
.0486		.0024	.0459				.0162	.0079			1879-1880
.0372		.0037	.0348		.0013		.0160	.0079			1880-1881
.0498		.0036	.0322		.0024		.0167	.0071			1881-1882
.0489		.0040	.0335		.0026		.0186	.0058			1882-1883
.0432		.0037	.0344		.0019		.0290	.0085			1883-1884
.0446		.0037	.0355		.0011		.0331	.0062			1884-1885
.0496		.0033	.0388		.0012		.0305	.0062			1885-1886
.0472		.0036	.0366		.0015		.0295	.0063			1886-1887
.0459			.0317		.0022		.0280	.0072			1887-1888
.0431			.0393		.0015		.0281	.0061			1888-1889
.0391			.0395		.0017		.0290	.0052			1889-1890
.0344			.0371		.0013		.0268	.0048			1890-1891
.0276			.0384		.0012		.0284	.0040			1891-1892
.0298			.0383		.0013		.0322	.0062			1892-1893
.0275			.0358		.0010		.0312	.0066			1893-1894
.0270			.0409		.0003		.0354	.0059			1894-1895
.0264			.0392		.0003		.0343	.0056			1895-1896
.0267			.0432				.0336	.0056			1896-1897
.0272			.0427				.0351	.0080			1897-1898
.0337			.0444				.0385	.0112			1898-1899
.0360			.0434				.0352	.0109			1899-1900
.0315			.0400				.0373	.0134			1900-1901
.0315			.0408				.0347	.0126			1901-1902
.0375			.0435				.0324	.0103			1902-1903
	.0158		.0498				.0306	.0106			1903-1904
	.0086		.0508				.0328	.0109			1904-1905
	.0100		.0466				.0343	.0109			1905-1906
	.0052		.0399				.0408	.0085			1906-1907
	.0060		.0378				.0421	.0074			1907-1908
	.0041		.0378				.0446	.0074			1908-1909
	.0051		.0357				.0524				1909-1910
	.0087		.0316				.0420				1910-1911
	.0061		.0312				.0400				1911-1912
	.0047		.0323				.0389				1912-1913
	.0042		.0276				.0359				1913-1914
	.0029		.0268				.0379				1914-1915
.0036			.0302				.0417				1915-1916
.0030			.0260				.0380				1916-1917
.0083			.0262				.0402				1917-1918
.0045			.0303				.0401				1918-1919
.0050			.0294				.0381				1919-1920
.0060			.0294				.0374				1920-1921
.0062			.0297				.0302				1921-1922
.0074			.0345				.0284				1922-1923
.0066			.0330				.0313				1923-1924
.0052			.0344				.0205				1924-1925
.0078			.0315				.0235				1925-1926
.0083			.0291				.0232				1926-1927
.0094			.0270				.0226				1927-1928
.0119			.0268				.0197				1928-1929
.0126			.0240				.0177				1929-1930
.0111			.0204				.0237				1930-1931
.0091			.0165				.0193				1931-1932
.0091			.0166				.0194				1932-1933
.0091			.0166				.0194				1933-1934
.0091			.0166				.0194				1934-1935
.0091			.0166				.0194				1935-1936

## APPENDIX

TABLE 15—RAILROAD COMMON STOCK WEIGHTS

## RAILROAD STOCK PRICES

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JANUARY 1857 TO JANUARY 1936

34	35	36	37	38	39	40	41	42	43	44	January Dates
	.0348				.0914			.0307			1857-1858
	.0415				1003			.0073			1858-1859
	.0422				1049			.0067			1859-1860
	.0416				.0963			.0050			1860-1861
	.0383				.0863			.0064			1861-1862
	.0473				.0882			.0105			1862-1863
	.0506				.0907	.0222	.0258				.0089 1863-1864
	.0374				.0987	.0244	.0335				.0102 1864-1865
	.0360				.0878	.0307	.0334				.0163 1865-1866
	.0238				.0756	.0330	.0297				.0139 1866-1867
	.0190				.0695	.0334	.0265				.0125 1867-1868
	.0516	.0146			.0725	.0284	.0246				.0099 1868-1869
	.0506	.0163			.0800	.0286	.0228				.0098 1869-1870
	.0508	.0185			.0780			.0277			.0091 1870-1871
	.0557	.0220			.0785			.0310			.0078 1871-1872
	.0492	.0225			.0827						.0074 1872-1873
	.0459	.0215			.0745						.0071 1873-1874
	.0438	.0163			.1117						.0062 1874-1875
	.0422	.0141			.1250						.0064 1875-1876
	.0510	.0109			.1195						.0067 1876-1877
	.0535	.0119			.1321						.0060 1877-1878
	.0493	.0117			.0946						.0041 1878-1879
	.0328	.0140			.0867						.0029 1879-1880
	.0287	.0120			.0833						.0045 1880-1881
	.0287	.0106			.0881						.0046 1881-1882
	.0286	.0099			.0912						.0056 1882-1883
	.0321	.0086			.0018						.0103 1883-1884
	.0377	.0053			.0122						.0122 1884-1885
	.0313	.0072			.0122						.0143 1885-1886
	.0315	.0075			.0091						.0143 1886-1887
	.0327	.0065			.0091						.0148 1887-1888
	.0347	.0076			.0091						.0149 1888-1889
	.0334		.0151		.0091						.0190 1889-1890
	.0338		.0149		.0091						.0166 .0081 1890-1891
	.0353		.0143		.0091						.0178 .0084 1891-1892
	.0372		.0115		.0091						.0163 .0072 1892-1893
	.0454		.0086		.0091						.0189 .0073 1893-1894
	.0481		.0098		.0091						.0214 .0090 1894-1895
	.0463		.0084		.0018						.0190 .0090 1895-1896
	.0453		.0068		.0078						.0175 .0089 1896-1897
	.0443		.0080		.0090						.0101 .0088 1897-1898
			.0089		.0013						.0077 .0093 1898-1899
			.0104		.0017						.0098 .0084 1899-1900
			.0104		.0020						.0085 .0085 1900-1901
			.0111		.0023						.0106 .0106 1901-1902
			.0108		.0030						.0095 .0095 1902-1903
			.0096		.0039						.0095 .0095 1903-1904
			.0089		.0087						.0083 .0083 1904-1905
			.0107		.0095						.0112 .0112 1905-1906
			.0101		.0087						.0086 .0086 1906-1907
			.0102		.0079						.0089 .0089 1907-1908
			.0081		.0060						.0100 .0100 1908-1909
			.0075		.0085						.0091 .0091 1909-1910
			.0075		.0109						.0110 .0110 1910-1911
			.0064		.0110						.0111 .0111 1911-1912
			.0057		.0096						.0113 .0113 1912-1913
			.0051		.0099						.0115 .0115 1913-1914
			.0041		.0088						.0116 .0116 1914-1915
			.0025		.0070						.0118 .0118 1915-1916
			.0046		.0088						.0116 .0116 1916-1917
					.0091						.0126 .0126 1917-1918
					.0097						.0124 .0124 1918-1919
					.0096						.0122 .0122 1919-1920
					.0105						.0120 .0120 1920-1921
					.0116						.0128 .0128 1921-1922
					.0110						.0126 .0126 1922-1923
					.0128						.0124 .0124 1923-1924
					.0136						.0120 .0120 1924-1925
					.0196						.0122 .0122 1925-1926
					.0274						.0120 .0120 1926-1927
					.0327						.0116 .0116 1927-1928
					.0342						.0105 .0105 1928-1929
					.0404						.0119 .0119 1929-1930
					.0287						.0144 .0144 1930-1931
					.0932						.0158 .0158 1931-1932
					.0936						.0169 .0169 1932-1933
					.0936						.0161 .0161 1933-1934
					.0936						.0161 .0161 1934-1935
					.0936						.0161 .0161 1935-1936

## APPENDIX

TABLE 15—RAILROAD COMMON STOCK WEIGHTS

January Dates	45	46	47	48	49	50	51 & 52	53	54	55	56
1857-1858			.0095	.0199				.0333			
1858-1859			.0112	.0108				.0261			
1859-1860			.0161	.0043				.0220			
1860-1861			.0151	.0008				.0177			
1861-1862			.0198	.0029				.0287			
1862-1863			.0217	.0048				.0246			
1863-1864			.0176	.0061				.0314			
1864-1865			.0441	.0060				.0282			
1865-1866			.0351	.0043				.0337			
1866-1867			.0395	.0037				.0387			
1867-1868			.0402	.0063				.0391	.0032		
1868-1869			.0407	.0068				.0431	.0025		
1869-1870			.0375	.0103				.0506	.0038		
1870-1871			.0404	.0175				.0439	.0097		
1871-1872			.0406	.0113				.0500	.0067		
1872-1873			.0443	.0127				.0423	.0083		
1873-1874			.0409	.0127				.0370	.0069		
1874-1875			.0473					.0115	.0328	.0046	
1875-1876			.0535					.0094	.0483	.0033	
1876-1877			.0540					.0095	.0504	.0030	
1877-1878			.0522					.0059	.0650	.0026	
1878-1879			.0483					.0128	.0629	.0023	
1879-1880			.0357					.0120	.0664	.0025	.0030
1880-1881			.0338					.0141	.0513	.0041	.0195
1881-1882			.0278					.0154	.0830	.0040	.0148
1882-1883			.0298					.0192	.0653		.0153
1883-1884			.0290					.0269	.0705		.0197
1884-1885	.0007		.0410					.0251	.0767		.0162
1885-1886	.0006		.0423					.0251	.1006		.0087
1886-1887	.0010		.0324					.0251	.0928		.0116
1887-1888	.0013		.0294					.0275	.0830		.0105
1888-1889	.0010		.0363					.0248	.0813		.0089
1889-1890	.0011		.0372					.0218	.0719		.0108
1890-1891	.0011		.0329					.0246	.0630		.0120
1891-1892			.0026	.0342				.0223	.0582		.0107
1892-1893			.0051	.0289				.0261	.0584		.0086
1893-1894			.0036	.0337				.0259	.0582		.0059
1894-1895			.0029	.0273				.0236	.0555		.0020
1895-1896			.0035	.0254				.0235	.0533		.0015
1896-1897			.0035	.0261				.0275	.0543		.0016
1897-1898			.0028	.0206				.0299	.0520		.0099
1898-1899			.0081	.0160				.0355	.0673		.0156
1899-1900			.0115	.0127				.0360	.0688		.0235
1900-1901			.0106	.0120				.0328	.0710		.0248
1901-1902			.0076	.0131					.0368		
1902-1903			.0084	.0117					.0378		
1903-1904			.0081	.0120					.0370		
1904-1905			.0065	.0122					.0341		
1905-1906			.0060	.0141					.0318		
1906-1907			.0050	.0156					.0256		.0750
1907-1908			.0052	.0144					.0304		
1908-1909			.0058	.0146					.0287		.0941
1909-1910			.0058	.0134					.0389		.0949
1910-1911			.0071	.0170					.0354		.0779
1911-1912			.0078	.0226					.0312		.0689
1912-1913			.0079	.0220					.0264		.0630
1913-1914			.0077	.0200					.0268		.0615
1914-1915			.0070	.0204					.0266		.0601
1915-1916			.0068	.0208					.0270		.0621
1916-1917			.0152	.0211					.0256		.0654
1917-1918				.0214					.0238		.0633
1918-1919				.0204					.0153		.0609
1919-1920				.0186					.0126		.0619
1920-1921				.0156					.0130		.0629
1921-1922				.0200					.0105		.0594
1922-1923				.0223					.0068		.0639
1923-1924				.0224					.0071		.0595
1924-1925				.0223					.0052		.0495
1925-1926				.0212					.0039		.0363
1926-1927				.0194					.0028		.0384
1927-1928				.0240					.0022		.0353
1928-1929				.0164					.0041		.0346
1929-1930				.0150					.0053		.0342
1930-1931				.0181					.0176		.0372
1931-1932				.0147					.0143		.0302
1932-1933				.0148					.0144		.0303
1933-1934				.0148					.0144		.0303
1934-1935				.0148					.0144		.0303
1935-1936				.0148					.0144		.0303

# RAILROAD STOCK PRICES

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JANUARY 1857 TO JANUARY 1936

57	58	59	60	61	62	63	64	65	66	67	January Dates
		.0207			.0179						1857-1858
		.0260			.0245						1858-1859
		.0270			.0272						1859-1860
					.0302						1860-1861
					.0265						1861-1862
					.0266						1862-1863
					.0209	.0058			.0060		1863-1864
					.0143	.0054				.0047	1864-1865
					.0149	.0056					1865-1866
					.0164	.0064					1866-1867
			.0203	.0138		.0123					1867-1868
		.0200	.0105		.0127						1868-1869
		.0213	.0098		.0160						1869-1870
		.0215	.0100		.0155						1870-1871
		.0202	.0089		.0190						1871-1872
		.0180	.0093		.0200						1872-1873
			.0340	.0117		.0176					1873-1874
			.0317	.0121		.0171					1874-1875
			.0338	.0117		.0168					1875-1876
			.0365	.0113		.0160					1876-1877
			.0471	.0138		.0204					1877-1878
			.0524	.0139		.0172					1878-1879
			.0465	.0127		.0158					1879-1880
			.0285	.0094	.0186	.0137					1880-1881
		.0115	.0238	.0082	.0177	.0146					1881-1882
		.0196	.0232	.0082	.0136	.0129					1882-1883
		.0235	.0219	.0114	.0120	.0139					1883-1884
		.0166	.0249	.0131	.0067	.0174					1884-1885
		.0184	.0304	.0176	.0074	.0202					1885-1886
		.0194	.0277	.0156	.0101	.0174					1886-1887
		.0182	.0263	.0159	.0086	.0160					1887-1888
		.0184	.0280	.0170	.0084	.0159	.0020				1888-1889
		.0174	.0331	.0176	.0083	.0167	.0022				1889-1890
		.0114	.0354	.0168	.0087	.0146	.0019				1890-1891
		.0128	.0415		.0080	.0155	.0015				1891-1892
		.0172	.0465		.0084	.0140	.0020				1892-1893
		.0190	.0671		.0077	.0164	.0019				1893-1894
		.0227	.0637		.0080	.0198	.0019				1894-1895
		.0233	.0678		.0086	.0253	.0017				1895-1896
		.0249	.0750		.0072	.0255	.0016				1896-1897
		.0261	.0728		.0075	.0269	.0015				1897-1898
		.0270	.0813		.0078	.0248	.0016				1898-1899
		.0873	.0674		.0077	.0196	.0014				1899-1900
		.0907	.0681		.0076	.0039	.0011				1900-1901
		.0996	.0596		.0095	.0039	.0015	.0006			1901-1902
		.0914	.0455		.0079	.0027	.0027	.0008			1902-1903
		.0898	.0613		.0069	.0025	.0021	.0011			1903-1904
		.0890	.0634		.0053	.0028	.0017	.0011			1904-1905
		.0954	.0503		.0078	.0025	.0019	.0011			1905-1906
		.1076	.0396		.0074	.0016	.0023	.0009			1906-1907
		.0638	.0376		.0064	.0021	.0012	.0008			1907-1908
		.0786	.0407		.0062	.0008	.0013	.0004			1908-1909
		.0680	.0360		.0061	.0029	.0017	.0011			1909-1910
		.0579	.0329		.0055	.0017	.0024	.0010			1910-1911
		.0561	.0569		.0051	.0012	.0019	.0005			1911-1912
		.0572	.0524		.0046	.0007	.0018	.0003			1912-1913
		.0548	.0468		.0038	.0007	.0017				1913-1914
		.0713	.0301		.0037	.0005	.0013				1914-1915
		.0733	.0212		.0034	.0005	.0013				1915-1916
		.0681	.0249		.0037	.0005	.0013				1916-1917
		.0659	.0165		.0037	.0008	.0012				1917-1918
		.0654	.0140		.0034	.0005	.0006				1918-1919
		.0641	.0132		.0032	.0004	.0011				1919-1920
		.0595	.0126		.0030	.0005	.0012				1920-1921
		.0586	.0102		.0033	.0005	.0021				1921-1922
		.0566	.0071		.0038	.0002	.0024				1922-1923
		.0494	.0083		.0031	.0001	.0031				1923-1924
		.0394	.0076		.0030	.0002	.0065				1924-1925
		.0388	.0108		.0032	.0004	.0086				1925-1926
		.0364	.0130		.0030	.0003	.0103				1926-1927
		.0369	.0124		.0027	.0002	.0101				1927-1928
		.0348	.0144		.0025	.0002	.0065				1928-1929
		.0344	.0172		.0021		.0058				1929-1930
		.0373	.0235		.0087		.0051				1930-1931
		.0303	.0191		.0071		.0041				1931-1932
		.0304	.0192		.0071		.0041				1932-1933
		.0304	.0192		.0071		.0041				1933-1934
		.0304	.0192		.0071		.0041				1934-1935
		.0304	.0192		.0071		.0041				1935-1936

## APPENDIX

TABLE 15—RAILROAD COMMON STOCK WEIGHTS

January Dates	68	69	70	71	72	73	74	75	76	77	78
1857-1858											
1858-1859											
1859-1860											
1860-1861											
1861-1862											
1862-1863											
1863-1864											
1864-1865											
1865-1866	.0042										
1866-1867	.0081										
1867-1868	.0071										
1868-1869	.0062										
1869-1870	.0100										
1870-1871	.0167										
1871-1872	.0142					.0324					
1872-1873	.0185					.0448					
1873-1874	.0173					.0763					
1874-1875	.0128					.0620					
1875-1876	.0043					.0366				.0060	
1876-1877	.0012					.0207				.0063	
1877-1878		.0020				.0158				.0052	
1878-1879		.0056				.0149				.0031	
1879-1880		.0068					.0350			.0061	
1880-1881		.0115					.0406			.0133	.0043
1881-1882		.0107					.0331				.0105
1882-1883		.0086					.0274				.0135
1883-1884		.0077					.0249				.0105
1884-1885		.0040					.0185			.0006	.0053
1885-1886		.0015					.0116			.0003	.0045
1886-1887		.0026					.0170			.0008	.0038
1887-1888		.0036					.0198			.0012	.0067
1888-1889		.0035					.0181			.0010	.0073
1889-1890		.0031					.0186			.0010	.0070
1890-1891		.0029					.0160			.0008	.0064
1891-1892		.0025					.0132			.0011	.0050
1892-1893		.0028					.0176			.0011	.0036
1893-1894		.0023					.0136			.0018	.0028
1894-1895		.0017					.0100			.0015	.0028
1895-1896		.0016					.0073			.0015	.0031
1896-1897		.0017					.0132			.0011	.0027
1897-1898		.0016					.0129			.0010	.0032
1898-1899		.0016					.0131				.0036
1899-1900		.0014					.0103				.0044
1900-1901		.0012					.0077				.0036
1901-1902		.0018					.0161				.0053
1902-1903		.0025					.0183				.0060
1903-1904		.0030					.0160				.0057
1904-1905		.0031					.0128				.0041
1905-1906		.0025					.0143				.0042
1906-1907		.0021					.0129				.0033
1907-1908		.0022					.0106				.0032
1908-1909		.0015					.0056				.0024
1909-1910		.0022					.0080				.0031
1910-1911		.0026					.0070				.0026
1911-1912		.0018					.0067				.0022
1912-1913		.0007					.0074				.0018
1913-1914		.0004					.0071				.0017
1914-1915		.0004					.0074				.0013
1915-1916		.0002					.0065				.0012
1916-1917					.0015		.0098				.0007
1917-1918					.0015		.0083				.0016
1918-1919					.0014		.0052				.0020
1919-1920					.0013		.0051				.0034
1920-1921					.0015		.0044				.0045
1921-1922					.0016		.0048				.0023
1922-1923					.0013		.0031				.0033
1923-1924					.0016		.0034				.0022
1924-1925					.0022		.0075				.0022
1925-1926					.0032		.0081				.0039
1926-1927					.0061		.0080				.0044
1927-1928					.0052		.0099				.0038
1928-1929					.0062		.0138				.0061
1929-1930					.0063		.0132				.0083
1930-1931					.0100		.0226				.0058
1931-1932					.0081		.0184				
1932-1933					.0082		.0185				
1933-1934					.0082		.0185				
1934-1935					.0082		.0185				
1935-1936					.0082		.0185				

## RAILROAD STOCK PRICES

A201

JANUARY 1857 TO JANUARY 1936

79	80	81	82	83	84	85	86	87	88	89	January Dates
											1857-1858
											1858-1859
											1859-1860
											1860-1861
											1861-1862
											1862-1863
											1863-1864
											1864-1865
											1865-1866
											1866-1867
											1867-1868
											1868-1869
											1869-1870
											1870-1871
											1871-1872
											1872-1873
											1873-1874
											1874-1875
											1875-1876
											1876-1877
											1877-1878
											1878-1879
											1879-1880
											1880-1881
											1881-1882
.0225											.0141 1882-1883
.0265											.0211 1883-1884
.0254											.0113 1883-1884
.0241											.0126 1884-1885
.0307											.0080 1885-1886
.0387	.0079										.0108 1886-1887
.0380	.0079										.0151 1887-1888
.0312	.0069										.0162 1888-1889
.0275	.0055										.0158 1889-1890
.0270	.0048			.0013							.0304 1890-1891
.0258	.0061				.0016						.0339 1891-1892
.0208	.0049					.0016					.0295 1892-1893
.0193	.0047					.0015					.0277 1893-1894
.0091	.0036					.0012					.0208 1894-1895
.0102	.0038					.0009					.0255 1895-1896
.0102	.0042					.0013					.0202 1896-1897
.0091	.0040					.0005					.0007 1897-1898
.0128	.0038					.0004					.0006 1898-1899
.0135	.0047					.0009					.0215 1899-1900
.0124	.0040					.0011					.0249 1900-1901
.0317	.0061					.0012					.0248 1901-1902
.0316	.0066					.0014					.0249 1902-1903
.0304	.0055					.0018					.0269 1903-1904
.0294	.0033					.0015					.0264 1904-1905
.0259	.0038					.0012					.0260 1905-1906
.0189	.0040			.0014		.0009					.0216 1906-1907
.0168	.0036					.0011					.0202 1907-1908
.0107	.0024					.0006					.0181 1908-1909
.0131	.0035					.0008					.0167 1909-1910
.0116	.0035					.0050					.0183 1910-1911
.0086	.0024					.0053					.0185 1911-1912
.0071	.0017					.0002					.0193 1912-1913
.0070	.0017					.0042					.0203 1913-1914
.0050	.0015					.0037					.0219 1914-1915
.0023	.0006					.0019					.0214 1915-1916
.0010	.0011					.0031					.0203 1916-1917
.0061	.0013					.0030					.0214 1917-1918
.0055	.0003					.0016	.0017	.0528	.0017	.0013	.0011
.0057	.0005					.0020		.0528		.0010	.0010
.0063						.0025		.0554		.0010	.0010
.0049						.0016		.0570		.0015	.0010
.0044						.0013		.0526		.0014	.0008
.0037						.0022		.0562		.0014	.0006
.0025						.0022		.0572		.0018	.0005
.0064						.0023		.0685		.0022	.0020
.0061						.0007		.0642		.0017	.0011
.0060						.0019		.0634		.0040	.0014
.0060						.0015		.0619		.0024	.0016
.0070						.0008		.0648		.0027	.0016
.0124						.0012		.0619		.0024	.0057
.0101						.0018		.0619		.0018	.0285 1925-1926
.0101						.0065		.0664		.0037	.0065
.0101						.0015		.0664		.0027	.0021
.0101						.0019		.0667		.0027	.0305 1926-1927
.0060						.0042		.0601		.0027	.0021
.0060						.0015		.0601		.0027	.0214 1927-1928
.0060						.0020		.0673		.0026	.0045
.0070						.0035		.0673		.0026	.0018
.0124						.0029		.0610		.0035	.0052
.0101						.0090		.0645		.0121	.0026
.0101						.0079		.0645		.0099	.0175 1930-1931
.0101						.0045		.0632		.0099	.0143 1932-1933
.0101						.0073		.0637		.0295	.0037
.0101						.0065		.0637		.0037	.0098
.0101						.0070		.0637		.0037	.0021
.0101						.0065		.0637		.0037	.0143 1933-1934
.0101						.0070		.0637		.0037	.0143 1934-1935
.0101						.0070		.0637		.0037	.0143 1935-1936

## APPENDIX

TABLE 15—RAILROAD COMMON STOCK WEIGHTS

January Dates	90	91	92	93	94	95	96	97	98	99	100
1857-1858											
1858-1859											
1859-1860											
1860-1861											
1861-1862											
1862-1863											
1863-1864											
1864-1865											
1865-1866											
1866-1867											
1867-1868											
1868-1869											
1869-1870											
1870-1871											
1871-1872											
1872-1873											
1873-1874											
1874-1875											
1875-1876											
1876-1877	.0413										
1877-1878	.0459										
1878-1879	.0536										
1879-1880	.0434					.0005					
1880-1881	.0067	.0542				.0015			.0014		
1881-1882	.0040	.0617				.0011			.0020		
1882-1883	.0049	.0624				.0016			.0016		
1883-1884	.0033	.0508				.0008			.0012	.0327	
1884-1885	.0031	.0411	.0017			.0004			.0011	.0330	
1885-1886	.0026	.0324	.0024			.0004			.0013	.0294	
1886-1887	.0028	.0277	.0029			.0007			.0017	.0372	
1887-1888	.0045	.0283	.0036			.0007			.0017	.0336	
1888-1889	.0043	.0286	.0020			.0005			.0016	.0318	
1889-1890	.0048	.0333	.0057			.0004			.0017	.0291	
1890-1891	.0053	.0315		.0108	.0294	.0006			.0032	.0380	
1891-1892	.0054	.0234		.0048	.0243	.0012			.0021	.0409	
1892-1893	.0063	.0206		.0057	.0338	.0014			.0017	.0420	
1893-1894	.0062	.0175		.0043	.0288	.0013			.0013	.0406	
1894-1895	.0063	.0103		.0012	.0235	.0008			.0005	.0420	
1895-1896	.0057								.0003	.0329	
1896-1897	.0029					.0223	.0011		.0004	.0310	
1897-1898	.0043					.0153	.0010		.0002	.0312	
1898-1899	.0106					.0202	.0013		.0002	.0454	
1899-1900	.0264					.0457	.0012		.0028	.0342	.0003
1900-1901	.0264					.0436	.0012		.0017	.0358	.0004
1901-1902	.0444					.0457		.0127	.0013	.0301	.0003
1902-1903	.0438					.0470		.0158	.0013	.0294	.0005
1903-1904	.0394					.0460		.0150	.0015	.0403	.0008
1904-1905	.0158	.0531				.0395		.0103	.0013	.0406	.0005
1905-1906	.0165	.0671				.0410		.0129	.0012	.0421	.0006
1906-1907	.0165	.0712				.0323		.0111	.0012	.0415	.0007
1907-1908	.0145	.0829				.0445		.0085	.0009	.0550	.0005
1908-1909	.0105	.0745				.0459		.0042	.0008	.0695	.0003
1909-1910	.0116	.0873				.0727		.0070	.0015	.0583	.0005
1910-1911	.0150	.0843				.0721		.0075	.0016	.0650	.0004
1911-1912	.0145	.0798				.0677		.0069	.0021	.0775	.0003
1912-1913	.0196	.0760				.0631		.0071	.0018	.0978	.0002
1913-1914	.0179	.0697				.0591		.0067	.0016	.1277	.0002
1914-1915	.0181	.0782				.0566		.0067	.0016	.1225	.0001
1915-1916	.0177	.0670				.0591		.0049	.0015	.1071	.0001
1916-1917	.0170	.0668				.0611		.0059	.0013	.1007	.0001
1917-1918	.0180	.0732				.0599		.0085	.0019	.0946	
1918-1919	.0181	.0743				.0674		.0082	.0018	.1093	
1919-1920	.0182	.0783				.0830		.0092	.0015	.1143	
1920-1921	.0185	.0823				.1003		.0079		.1021	
1921-1922	.0175	.0811				.0980		.0086		.0926	
1922-1923	.0184	.0894				.0872		.0068		.1001	
1923-1924	.0206	.0822				.0828		.0090		.0999	
1924-1925	.0213	.0798				.0905		.0142		.1066	
1925-1926	.0225	.0745				.0873		.0209		.0869	
1926-1927	.0324	.0630				.0737		.0268		.0746	
1927-1928	.0270	.0635				.0713		.0282		.0766	
1928-1929	.0217	.0613				.0656		.0272		.0908	
1929-1930	.0180	.0613				.0620		.0248		.0921	
1930-1931	.0122	.0333				.0538		.0195		.0498	
1931-1932	.0099	.0271				.0453		.0158		.1618	
1932-1933	.0099	.0272				.0461		.0159		.1638	
1933-1934	.0099	.0272				.0461		.0159		.1638	
1934-1935	.0099	.0272				.0461		.0159		.1638	
1935-1936	.0099	.0272				.0461		.0159		.1638	

## RAILROAD STOCK PRICES

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JANUARY 1857 TO JANUARY 1936

101	102	103	104	105	106	107	108	109	110	111	January Dates					
											1857-1858					
											1858-1859					
											1859-1860					
											1860-1861					
											1861-1862					
											1862-1863					
											1863-1864					
											1864-1865					
											1865-1866					
											1866-1867					
											1867-1868					
											1868-1869					
											1869-1870					
											1870-1871					
											1871-1872					
											1872-1873					
											1873-1874					
											1874-1875					
											1875-1876					
											1876-1877					
											1877-1878					
											1878-1879					
											1879-1880					
.0007		.0053									1880-1881					
.0007		.0043									1881-1882					
.0007		.0040	.0007	.0011							1882-1883					
		.0029	.0004	.0014							1883-1884					
.0008		.0019	.0003	.0009							1884-1885					
.0006		.0026	.0004	.0007							1885-1886					
.0005		.0023	.0006	.0011		.0006					1886-1887					
.0008		.0029	.0006	.0009			.0011				1887-1888					
.0007		.0035	.0004	.0004			.0010				1888-1889					
.0009		.0024	.0004	.0003			.0010				1889-1890					
.0006			.0005	.0003			.0016				1890-1891					
.0006			.0005	.0003	.0005		.0012				1891-1892					
.0006			.0006		.0004		.0011				1892-1893					
					.0008	.0006	.0006				1893-1894					
						.0006	.0005	.0004			1894-1895					
						.0007	.0004	.0004			1895-1896					
						.0010	.0006	.0002			1896-1897					
											1897-1898					
											1898-1899					
											1899-1900					
.0013		.0016		.0021	.0006	.0093	.0025				1900-1901					
.0014		.0037		.0022	.0011	.0147	.0021				1901-1902					
.0022		.0065		.0026	.0013	.0146	.0026				1902-1903					
.0037				.0023	.0013	.0170	.0028				1903-1904					
.0035				.0016	.0007	.0155	.0020				1904-1905					
.0041				.0011	.0008	.0159	.0032				1905-1906					
.0050					.0012	.0006	.0136	.0023			1906-1907					
.0042						.0008	.0005	.0137	.0018		1907-1908					
.0045							.0005	.0003	.0134	.0009		1908-1909				
.0053								.0008	.0006	.0131	.0009		1909-1910			
.0057									.0006	.0004	.0136	.0030		1910-1911		
.0060										.0004	.0184	.0022			1911-1912	
.0070		.0015			.0009			.0229	.0018						1912-1913	
.0071		.0010			.0007				.0234	.0015	.0014					1913-1914
.0072		.0003				.0005				.0245	.0013	.0015				1914-1915
.0071			.0002							.0295	.0013	.0013				1915-1916
.0068			.0003							.0313	.0014	.0015				1916-1917
.0067		.0034	.0028							.0369	.0014	.0014				1917-1918
.0063		.0017	.0018							.0368	.0010	.0009				1918-1919
.0062		.0016	.0017							.0356	.0010	.0008	.0002			1919-1920
		.0040	.0027							.0355	.0012	.0008	.0003			1920-1921
		.0025	.0035							.0371	.0012	.0007	.0003			1921-1922
		.0028	.0034							.0390	.0009	.0004	.0002			1922-1923
		.0045	.0031							.0389	.0006	.0006	.0004			1923-1924
		.0053	.0026							.0391	.0006	.0007	.0005			1924-1925
		.0069	.0060							.0394	.0010	.0018	.0006			1925-1926
		.0073	.0096							.0408	.0010	.0034	.0007			1926-1927
		.0094	.0092							.0392	.0008	.0024	.0008			1927-1928
		.0083	.0107							.0381	.0008	.0015	.0005			1928-1929
		.0090	.0097							.0349	.0012	.0009	.0007			1929-1930
		.0067	.0098							.0211	.0068	.0390	.0020			1930-1931
		.0055	.0080							.0171	.0055	.0317	.0016			1931-1932
		.0055	.0080							.0172	.0055	.0318				1932-1933
		.0055	.0080							.0172	.0055	.0318				1933-1934
		.0055	.0080							.0172	.0055	.0318				1934-1935
		.0055	.0080							.0172	.0055	.0318				1935-1936

## APPENDIX

TABLE 16

FOUR INDEX NUMBERS OF THE JANUARY PRICES OF  
AMERICAN RAILROAD COMMON STOCKS<sup>1</sup>

- Column 1. Unweighted geometric average index number (one share each stock).
- Column 2. Arithmetic average index number weighted according to the number of shares of each company outstanding at the beginning of each year.
- Column 3. Index based on arithmetic average price of one share of each stock.
- Column 4. Unweighted chain arithmetic average of relative prices.

Date	1	2	3	4
Jan 1857	100.00	100.00	100.00	100.00
" 1858	68.06	73.94	75.00	73.28
" 1859	70.09	75.07	75.08	78.23
" 1860	59.53	71.21	73.24	70.67
" 1861	76.49	80.54	83.23	99.38
" 1862	75.83	77.95	81.39	100.37
" 1863	132.42	125.35	129.07	183.57
" 1864	177.49	159.57	164.30	253.57
" 1865	167.96	155.18	160.14	243.67
" 1866	155.97	142.32	148.72	228.35
" 1867	165.17	148.49	159.35	243.05
" 1868	180.52	162.58	176.04	270.02
" 1869	200.81	180.16	194.73	304.79
" 1870	194.31	179.41	193.61	298.13
" 1871	202.56	187.09	199.44	312.68
" 1872	212.27	199.29	206.95	332.20
" 1873	215.40	208.53	207.67	340.33
" 1874	189.57	190.20	186.34	301.93
" 1875	173.84	185.72	180.27	283.73
" 1876	147.96	180.44	169.57	253.92
" 1877	109.76	142.74	136.82	200.82
" 1878	99.38	131.20	127.00	193.11
" 1879	128.29	146.80	148.88	286.29
" 1880	247.25	213.29	219.49	654.94
" 1881	303.27	265.69	278.67	816.02
" 1882	292.75	250.33	269.73	801.12
" 1883	286.02	246.70	271.09	799.10
" 1884	231.23	220.26	245.93	668.81
" 1885	174.27	179.64	205.91	525.90
" 1886	243.89	219.79	254.95	761.03
" 1887	283.93	236.15	281.23	910.12
" 1888	247.77	223.00	262.30	816.21
" 1889	238.01	212.96	255.11	804.64
" 1890	254.69	221.16	274.92	884.91

<sup>1</sup>These indexes have been so adjusted (by multiplication) that January 1857 is, in each case, 100. In constructing these indexes all adjustments were made for rights, stock dividends, etc. For further details concerning the construction of these indexes see Ch. V.

## RAILROAD STOCK PRICES

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TABLE 16—(Concluded)

FOUR INDEX NUMBERS OF THE JANUARY PRICES OF  
AMERICAN RAILROAD COMMON STOCKS

Date	1	2	3	4
Jan 1891	221.99	199.43	254.87	789.77
" 1892	272.84	229.12	288.10	993.12
" 1893	258.10	224.79	289.54	969.17
" 1894	170.09	175.82	227.32	676.03
" 1895	151.75	170.88	222.92	617.02
" 1896	147.58	172.57	225.64	618.02
" 1897	132.89	170.08	220.53	577.17
" 1898	153.41	196.61	251.44	700.16
" 1899	198.15	241.52	311.90	937.13
" 1900	199.62	246.47	323.80	960.51
" 1901	267.82	301.27	389.94	1,337.52
" 1902	364.69	367.30	485.54	1,866.38
" 1903	416.11	396.94	533.95	2,162.22
" 1904	305.92	319.75	428.12	1,616.59
" 1905	403.84	405.51	538.66	2,161.23
" 1906	467.11	470.50	629.23	2,534.54
" 1907	424.45	462.58	596.73	2,323.81
" 1908	271.52	347.36	435.46	1,530.03
" 1909	427.49	450.14	592.17	2,542.73
" 1910	438.86	483.46	647.84	2,710.19
" 1911	369.15	444.16	581.15	2,322.20
" 1912	335.59	439.21	570.13	2,146.84
" 1913	324.64	439.30	565.65	2,099.42
" 1914	262.61	392.93	493.29	1,739.00
" 1915	186.16	345.10	421.17	1,327.70
" 1916	209.67	389.40	479.07	1,585.99
" 1917	232.51	383.22	485.94	1,835.69
" 1918	150.85	293.92	354.79	1,233.10
" 1919	160.09	310.27	375.64	1,329.84
" 1920	159.15	285.53	353.04	1,363.95
" 1921	154.88	281.67	354.07	1,381.66
" 1922	132.27	275.02	348.64	1,227.16
" 1923	160.05	318.38	406.63	1,527.92
" 1924	157.25	304.05	393.77	1,548.46
" 1925	245.88	380.73	544.49	2,533.96
" 1926	308.91	427.24	666.61	3,291.55
" 1927	326.54	463.52	715.02	3,523.71
" 1928	395.45	540.95	848.00	4,349.81
" 1929	459.53	615.13	959.42	5,162.39
" 1930	398.10	585.20	886.98	4,575.94
" 1931	228.01	427.38	603.35	2,784.01
" 1932	65.55	150.85	197.36	912.33
" 1933	45.36	118.47	151.04	666.07
" 1934	86.78	196.42	254.63	1,419.91
" 1935	54.45	152.64	190.89	906.56
" 1936	65.78	195.00	240.73	1,150.27

TABLE 17

AN ARITHMETIC AVERAGE INDEX NUMBER OF THE PRICES OF AMERICAN  
RAILROAD COMMON STOCKS, WEIGHTED ACCORDING TO THE  
NUMBER OF SHARES OF EACH COMPANY OUTSTANDING  
AT THE BEGINNING OF EACH YEAR

MONTHLY, JANUARY 1857-JANUARY 1936

- Col. 1. Logarithms of Index (see Table 10—Column 6).
- Col. 2. Cyclical Curve (logarithms).
- Col. 3. Trend Curve (logarithms).
- Col. 4. Deviations of Cyclical Curve (logarithms) from Trend  
Curve (logarithms).

For details of the nature of the graduations given in columns 2 and  
3 of this table see Appendix D.

## RAILROAD STOCK PRICES

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TABLE 17

## AMERICAN RAILROAD STOCK PRICES

Date	1	2	3	4	Date	1	2	3	4
1857					1862				
J	1.327	1.3225	1.2781	+.0444	J	1.219	1.2126	1.2904	-.0778
F	1.319	1.3129	1.2746	+.0383	F	1.234	1.2223	1.2982	-.0759
M	1.318	1.3008	1.2711	+.0297	M	1.247	1.2335	1.3061	-.0726
A	1.310	1.2870	1.2678	+.0192	A	1.243	1.2462	1.3138	-.0676
M	1.303	1.2722	1.2642	+.0080	M	1.263	1.2604	1.3221	-.0617
J	1.276	1.2571	1.2609	-.0038	J	1.284	1.2760	1.3300	-.0540
J	1.270	1.2427	1.2575	-.0148	J	1.274	1.2926	1.3383	-.0457
A	1.248	1.2294	1.2542	-.0248	J	1.289	1.3102	1.3466	-.0364
S	1.180	1.2176	1.2510	-.0334	S	1.319	1.3285	1.3548	-.0263
O	1.108	1.2070	1.2478	-.0399	S	1.360	1.3471	1.3628	-.0157
ON	1.166	1.2007	1.2445	-.0438	N	1.363	1.3657	1.3712	-.0055
D	1.184	1.1961	1.2413	-.0452	D	1.372	1.3840	1.3794	+.0046
1858					1863				
J	1.196	1.1942	1.2382	-.0440	J	1.425	1.4017	1.3873	+.0144
F	1.235	1.1952	1.2349	-.0397	F	1.440	1.4182	1.3951	+.0231
M	1.242	1.1983	1.2317	-.0334	M	1.432	1.4335	1.4031	+.0304
A	1.219	1.2028	1.2286	-.0258	A	1.437	1.4476	1.4107	+.0369
M	1.226	1.2079	1.2257	-.0178	M	1.477	1.4603	1.4180	+.0423
J	1.207	1.2123	1.2223	-.0100	J	1.463	1.4721	1.4253	+.0468
J	1.209	1.2152	1.2192	-.0040	J	1.473	1.4831	1.4322	+.0309
A	1.204	1.2160	1.2161	-.0001	A	1.502	1.4937	1.4390	+.0347
S	1.198	1.2147	1.2133	+.0014	S	1.503	1.5040	1.4458	+.0582
O	1.211	1.2115	1.2101	+.0014	O	1.514	1.5144	1.4520	+.0624
ON	1.208	1.2070	1.2071	-.0001	N	1.516	1.5247	1.4584	+.0663
D	1.201	1.2019	1.2044	-.0025	D	1.512	1.5350	1.4642	+.0708
1859					1864				
J	1.202	1.1969	1.2016	-.0047	J	1.530	1.5448	1.4697	+.0751
F	1.197	1.1924	1.1989	-.0065	F	1.550	1.5538	1.4751	+.0787
M	1.195	1.1885	1.1962	-.0077	M	1.580	1.5614	1.4802	+.0812
A	1.184	1.1851	1.1940	-.0089	A	1.587	1.5672	1.4846	+.0826
M	1.170	1.1822	1.1919	-.0097	M	1.568	1.5706	1.4892	+.0814
J	1.173	1.1797	1.1897	-.0100	J	1.576	1.5712	1.4931	+.0781
J	1.176	1.1778	1.1880	-.0102	J	1.572	1.5686	1.4969	+.0717
A	1.179	1.1768	1.1865	-.0097	A	1.575	1.5628	1.5004	+.0624
S	1.196	1.1772	1.1854	-.0082	S	1.549	1.5544	1.5037	+.0507
O	1.188	1.1792	1.1844	-.0052	O	1.520	1.5438	1.5064	+.0374
ON	1.192	1.1832	1.1838	-.0006	N	1.543	1.5320	1.5092	+.0228
D	1.188	1.1890	1.1835	+.0055	D	1.539	1.5198	1.5113	+.0085
1860					1865				
J	1.179	1.1964	1.1835	+.0129	J	1.518	1.5084	1.5132	-.0048
F	1.182	1.2050	1.1839	+.0211	F	1.507	1.4983	1.5151	-.0168
M	1.200	1.2140	1.1846	+.0294	M	1.465	1.4900	1.5164	-.0264
A	1.222	1.2230	1.1857	+.0373	A	1.459	1.4837	1.5173	-.0336
M	1.230	1.2314	1.1873	+.0441	M	1.468	1.4793	1.5180	-.0387
J	1.236	1.2386	1.1891	+.0495	J	1.460	1.4765	1.5185	-.0420
J	1.249	1.2442	1.1914	+.0528	J	1.478	1.4751	1.5188	-.0437
A	1.274	1.2479	1.1941	+.0538	A	1.473	1.4742	1.5189	-.0442
S	1.285	1.2492	1.1972	+.0520	S	1.491	1.4753	1.5190	-.0437
O	1.270	1.2480	1.2006	+.0474	O	1.503	1.4767	1.5188	-.0421
ON	1.219	1.2444	1.2044	+.0400	N	1.507	1.4788	1.5185	-.0397
D	1.190	1.2384	1.2087	+.0297	D	1.500	1.4815	1.5182	-.0367
1861					1866				
J	1.233	1.2306	1.2132	+.0174	J	1.480	1.4848	1.5176	-.0328
F	1.231	1.2217	1.2181	+.0036	F	1.469	1.4883	1.5172	-.0289
M	1.241	1.2125	1.2232	-.0107	M	1.470	1.4918	1.5167	-.0249
A	1.207	1.2040	1.2288	-.0248	A	1.478	1.4950	1.5161	-.0211
M	1.172	1.1968	1.2348	-.0380	M	1.486	1.4979	1.5155	-.0176
J	1.176	1.1916	1.2409	-.0493	J	1.492	1.5003	1.5150	-.0147
J	1.194	1.1886	1.2474	-.0588	J	1.500	1.5024	1.5147	-.0123
A	1.185	1.1879	1.2541	-.0662	A	1.516	1.5041	1.5144	-.0103
S	1.184	1.1893	1.2609	-.0716	S	1.518	1.5055	1.5143	-.0088
O	1.200	1.1927	1.2679	-.0752	O	1.531	1.5064	1.5143	-.0079
ON	1.206	1.1977	1.2753	-.0776	N	1.524	1.5069	1.5145	-.0076
D	1.193	1.2044	1.2827	-.0783	D	1.516	1.5068	1.5148	-.0080

## APPENDIX

TABLE 17—Continued

## AMERICAN RAILROAD STOCK PRICES

Date	1	2	3	4	Date	1	2	3	4
1867					1872				
J	1.498	1.5061	1.5152	-.0091	J	1.626	1.6304	1.6273	+.0031
F	1.494	1.5049	1.5158	-.0109	F	1.629	1.6323	1.6276	+.0047
M	1.492	1.5034	1.5167	-.0133	M	1.642	1.6341	1.6278	+.0063
A	1.482	1.5021	1.5176	-.0155	A	1.655	1.6359	1.6279	+.0080
M	1.487	1.5014	1.5187	-.0173	M	1.654	1.6379	1.6279	+.0100
J	1.502	1.5018	1.5200	-.0182	J	1.649	1.6400	1.6279	+.0121
J	1.517	1.5035	1.5216	-.0181	J	1.645	1.6421	1.6279	+.0142
A	1.519	1.5068	1.5233	-.0165	A	1.639	1.6442	1.6280	+.0162
S	1.518	1.5114	1.5252	-.0138	S	1.634	1.6460	1.6280	+.0180
O	1.517	1.5171	1.5273	-.0102	O	1.633	1.6473	1.6279	+.0194
N	1.516	1.5234	1.5295	-.0061	N	1.630	1.6478	1.6278	+.0200
D	1.522	1.5298	1.5318	-.0020	D	1.642	1.6472	1.6277	+.0195
1868					1873				
J	1.538	1.5358	1.5341	+.0017	J	1.646	1.6457	1.6275	+.0182
F	1.548	1.5412	1.5367	+.0045	F	1.651	1.6431	1.6273	+.0158
M	1.546	1.5457	1.5393	+.0064	M	1.648	1.6395	1.6270	+.0125
A	1.543	1.5495	1.5418	+.0077	A	1.640	1.6352	1.6266	+.0086
M	1.558	1.5527	1.5448	+.0079	M	1.641	1.6302	1.6261	+.0041
J	1.565	1.5556	1.5475	+.0081	J	1.637	1.6248	1.6255	-.0007
J	1.565	1.5585	1.5504	+.0081	J	1.636	1.6192	1.6247	-.0055
A	1.560	1.5617	1.5532	+.0085	A	1.633	1.6134	1.6238	-.0104
S	1.564	1.5654	1.5562	+.0092	S	1.599	1.6077	1.6229	-.0152
O	1.571	1.5695	1.5591	+.0104	O	1.561	1.6022	1.6216	-.0194
N	1.558	1.5739	1.5621	+.0118	N	1.545	1.5971	1.6203	-.0232
D	1.567	1.5784	1.5650	+.0134	D	1.583	1.5929	1.6188	-.0259
1869					1874				
J	1.582	1.5828	1.5676	+.0152	J	1.606	1.5896	1.6171	-.0275
F	1.586	1.5868	1.5704	+.0164	F	1.618	1.5875	1.6151	-.0276
M	1.582	1.5901	1.5731	+.0170	M	1.610	1.5868	1.6131	-.0263
A	1.590	1.5928	1.5757	+.0171	A	1.598	1.5871	1.6109	-.0238
M	1.608	1.5946	1.5784	+.0162	M	1.587	1.5883	1.6085	-.0202
J	1.612	1.5957	1.5808	+.0149	J	1.582	1.5901	1.6059	-.0158
J	1.611	1.5962	1.5834	+.0128	J	1.583	1.5919	1.6032	-.0113
A	1.617	1.5962	1.5858	+.0104	A	1.586	1.5934	1.6003	-.0069
S	1.588	1.5059	1.5884	+.0075	S	1.592	1.5943	1.5970	-.0027
O	1.585	1.5053	1.5906	+.0047	O	1.591	1.5945	1.5937	+.0008
N	1.582	1.5048	1.5929	+.0019	N	1.592	1.5939	1.5902	+.0037
D	1.574	1.5943	1.5952	-.0009	D	1.592	1.5928	1.5865	+.0063
1870					1875				
J	1.581	1.5940	1.5977	-.0037	J	1.596	1.5913	1.5828	+.0085
F	1.594	1.5939	1.5997	-.0058	F	1.594	1.5895	1.5788	+.0107
M	1.592	1.5942	1.6018	-.0076	M	1.598	1.5877	1.5747	+.0130
A	1.598	1.5949	1.6040	-.0091	A	1.603	1.5860	1.5706	+.0154
M	1.615	1.5960	1.6061	-.0101	M	1.584	1.5846	1.5663	+.0183
J	1.618	1.5976	1.6081	-.0105	J	1.575	1.5833	1.5619	+.0214
J	1.605	1.5994	1.6099	-.0105	J	1.576	1.5823	1.5574	+.0249
A	1.597	1.6015	1.6117	-.0102	A	1.577	1.5815	1.5528	+.0287
S	1.601	1.6036	1.6134	-.0098	S	1.573	1.5809	1.5482	+.0327
O	1.603	1.6057	1.6150	-.0093	O	1.567	1.5803	1.5435	+.0368
N	1.603	1.6075	1.6166	-.0091	N	1.573	1.5796	1.5388	+.0408
D	1.598	1.6095	1.6180	-.0088	D	1.573	1.5787	1.5342	+.0445
1871					1876				
J	1.599	1.6105	1.6192	-.0087	J	1.583	1.5775	1.5296	+.0479
F	1.603	1.6117	1.6204	-.0087	F	1.590	1.5757	1.5250	+.0507
M	1.612	1.6127	1.6215	-.0088	M	1.591	1.5729	1.5204	+.0525
A	1.624	1.6138	1.6225	-.0087	A	1.574	1.5688	1.5158	+.0530
M	1.633	1.6151	1.6233	-.0082	M	1.555	1.5630	1.5113	+.0515
J	1.630	1.6165	1.6241	-.0076	J	1.551	1.5530	1.5074	+.0476
J	1.622	1.6183	1.6248	-.0065	J	1.547	1.5446	1.5032	+.0414
A	1.625	1.6202	1.6254	-.0052	A	1.527	1.5318	1.4992	+.0326
S	1.627	1.6223	1.6260	-.0037	S	1.501	1.5171	1.4953	+.0218
O	1.605	1.6244	1.6265	-.0021	O	1.497	1.5009	1.4918	+.0091
N	1.608	1.6265	1.6268	-.0003	N	1.487	1.4842	1.4885	-.0043
D	1.617	1.6285	1.6271	+.0014	D	1.485	1.4678	1.4853	-.0175

# RAILROAD STOCK PRICES

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TABLE 17—Continued

## AMERICAN RAILROAD STOCK PRICES

Date	1	2	3	4	Date	1	2	3	4
1877					1882				
J	1.481	1.4528	1.4823	-.0295	J	1.725	1.7262	1.7294	-.0032
F	1.453	1.4397	1.4797	-.0400	F	1.715	1.7228	1.7294	-.0066
M	1.432	1.4290	1.4774	-.0484	M	1.713	1.7206	1.7290	-.0084
A	1.399	1.4209	1.4754	-.0545	A	1.713	1.7196	1.7284	-.0088
M	1.398	1.4155	1.4737	-.0582	M	1.707	1.7194	1.7272	-.0078
J	1.373	1.4125	1.4723	-.0598	J	1.705	1.7200	1.7259	-.0059
J	1.387	1.4120	1.4714	-.0594	J	1.730	1.7211	1.7241	-.0030
A	1.414	1.4137	1.4709	-.0572	J	1.743	1.7224	1.7222	+.0002
S	1.442	1.4174	1.4707	-.0533	S	1.747	1.7238	1.7190	+.0039
O	1.455	1.4227	1.4709	-.0482	O	1.736	1.7249	1.7175	+.0074
N	1.447	1.4292	1.4716	-.0424	N	1.718	1.7254	1.7148	+.0106
D	1.445	1.4364	1.4726	-.0362	D	1.720	1.7251	1.7119	+.0132
1878					1883				
J	1.445	1.4435	1.4739	-.0304	J	1.719	1.7241	1.7087	+.0154
F	1.436	1.4500	1.4757	-.0257	F	1.708	1.7222	1.7056	+.0166
M	1.443	1.4556	1.4780	-.0224	M	1.714	1.7197	1.7022	+.0175
A	1.457	1.4599	1.4806	-.0207	A	1.724	1.7168	1.6990	+.0178
M	1.457	1.4632	1.4836	-.0244	M	1.715	1.7137	1.6955	+.0182
J	1.468	1.4657	1.4869	-.0212	J	1.719	1.7105	1.6922	+.0183
J	1.476	1.4677	1.4907	-.0230	J	1.711	1.7071	1.6888	+.0183
A	1.471	1.4698	1.4949	-.0251	A	1.691	1.7034	1.6854	+.0180
S	1.480	1.4722	1.4997	-.0275	S	1.697	1.6993	1.6820	+.0173
O	1.476	1.4751	1.5044	-.0293	O	1.685	1.6944	1.6789	+.0155
N	1.474	1.4788	1.5099	-.0311	N	1.691	1.6887	1.6757	+.0130
D	1.473	1.4835	1.5154	-.0319	D	1.682	1.6820	1.6727	+.0093
1879					1884				
J	1.493	1.4895	1.5215	-.0320	J	1.670	1.6744	1.6696	+.0048
F	1.510	1.4970	1.5277	-.0307	F	1.681	1.6661	1.6670	-.0009
M	1.501	1.5063	1.5343	-.0280	M	1.680	1.6573	1.6644	-.0071
A	1.514	1.5176	1.5410	-.0234	A	1.663	1.6482	1.6619	-.0137
M	1.536	1.5307	1.5481	-.0174	M	1.626	1.6391	1.6594	-.0203
J	1.542	1.5454	1.5554	-.0100	J	1.593	1.6299	1.6574	-.0275
J	1.550	1.5611	1.5628	-.0017	J	1.605	1.6209	1.6555	-.0346
A	1.556	1.5769	1.5704	+.0065	A	1.631	1.6123	1.6537	-.0414
S	1.571	1.5921	1.5781	+.0140	S	1.615	1.6043	1.6521	-.0478
O	1.615	1.6059	1.5863	+.0196	O	1.600	1.5972	1.6508	-.0336
N	1.636	1.6179	1.5942	+.0237	N	1.590	1.5914	1.6497	-.0583
D	1.638	1.6279	1.6021	+.0258	D	1.591	1.5873	1.6485	-.0612
1880					1885				
J	1.656	1.6360	1.6100	+.0260	J	1.581	1.5851	1.6479	-.0628
F	1.665	1.6425	1.6178	+.0247	F	1.593	1.5851	1.6474	-.0623
M	1.672	1.6478	1.6257	+.0221	M	1.594	1.5872	1.6470	-.0598
A	1.666	1.6525	1.6336	+.0189	A	1.594	1.5913	1.6467	-.0554
M	1.629	1.6571	1.6416	+.0155	M	1.587	1.5970	1.6466	-.0496
J	1.630	1.6621	1.6493	+.0128	J	1.584	1.6040	1.6467	-.0427
J	1.649	1.6679	1.6568	+.0111	J	1.602	1.6119	1.6469	-.0350
A	1.668	1.6750	1.6640	+.0110	A	1.624	1.6202	1.6473	-.0271
S	1.667	1.6835	1.6709	+.0126	S	1.619	1.6286	1.6478	-.0192
O	1.683	1.6934	1.6774	+.0160	O	1.642	1.6369	1.6484	-.0115
N	1.709	1.7045	1.6838	+.0207	N	1.668	1.6449	1.6491	-.0042
D	1.730	1.7164	1.6897	+.0267	D	1.667	1.6523	1.6499	+.0024
1881					1886				
J	1.751	1.7284	1.6955	+.0329	J	1.669	1.6589	1.6507	+.0082
F	1.746	1.7395	1.7006	+.0389	F	1.676	1.6647	1.6518	+.0129
M	1.752	1.7490	1.7054	+.0436	M	1.668	1.6697	1.6528	+.0169
A	1.750	1.7560	1.7097	+.0463	A	1.662	1.6739	1.6539	+.0200
M	1.767	1.7601	1.7139	+.0462	M	1.654	1.6775	1.6550	+.0225
J	1.771	1.7611	1.7173	+.0438	J	1.673	1.6809	1.6563	+.0246
J	1.754	1.7592	1.7203	+.0389	J	1.680	1.6843	1.6576	+.0267
A	1.746	1.7550	1.7230	+.0320	A	1.684	1.6880	1.6589	+.0291
S	1.749	1.7493	1.7252	+.0241	S	1.694	1.6920	1.6601	+.0319
O	1.742	1.7428	1.7269	+.0159	O	1.706	1.6963	1.6615	+.0348
N	1.745	1.7365	1.7281	+.0084	N	1.715	1.7006	1.6628	+.0378
D	1.733	1.7308	1.7288	+.0020	D	1.705	1.7047	1.6642	+.0405

## APPENDIX

TABLE 17—Continued

## AMERICAN RAILROAD STOCK PRICES

Date	1	2	3	4	Date	1	2	3	4
1887					1892				
J	1.700	1.7080	1.6657	+.0423	J	1.687	1.6813	1.6540	+.0273
F	1.696	1.7102	1.6670	+.0432	F	1.686	1.6848	1.6528	+.0320
M	1.706	1.7111	1.6684	+.0427	M	1.691	1.6875	1.6517	+.0358
A	1.718	1.7103	1.6696	+.0407	A	1.689	1.6894	1.6504	+.0390
M	1.725	1.7081	1.6708	+.0373	M	1.687	1.6906	1.6486	+.0420
J	1.714	1.7045	1.6720	+.0325	J	1.684	1.6912	1.6472	+.0440
J	1.702	1.6999	1.6730	+.0269	J	1.684	1.6911	1.6454	+.0457
A	1.691	1.6945	1.6739	+.0206	A	1.687	1.6900	1.6436	+.0464
S	1.685	1.6887	1.6746	+.0141	S	1.673	1.6876	1.6419	+.0457
O	1.668	1.6828	1.6754	+.0074	O	1.681	1.6838	1.6399	+.0449
N	1.674	1.6772	1.6759	+.0013	N	1.676	1.6783	1.6379	+.0404
D	1.673	1.6722	1.6762	-.0040	D	1.671	1.6713	1.6359	+.0354
1888					1893				
J	1.675	1.6679	1.6763	-.0084	J	1.679	1.6628	1.6339	+.0289
F	1.671	1.6645	1.6764	-.0119	F	1.669	1.6530	1.6316	+.0214
M	1.655	1.6621	1.6763	-.0142	M	1.654	1.6423	1.6295	+.0128
A	1.656	1.6605	1.6761	-.0156	A	1.657	1.6313	1.6274	+.0039
M	1.662	1.6595	1.6758	-.0163	M	1.625	1.6203	1.6249	-.0046
J	1.644	1.6590	1.6753	-.0163	J	1.604	1.6097	1.6226	-.0129
J	1.657	1.6586	1.6747	-.0161	J	1.563	1.6000	1.6203	-.0203
A	1.663	1.6583	1.6742	-.0159	A	1.554	1.5915	1.6170	-.0264
S	1.675	1.6578	1.6734	-.0156	S	1.578	1.5847	1.6151	-.0304
O	1.670	1.6573	1.6727	-.0154	O	1.585	1.5796	1.6128	-.0332
N	1.657	1.6567	1.6719	-.0152	N	1.594	1.5765	1.6103	-.0338
D	1.649	1.6561	1.6711	-.0150	D	1.581	1.5751	1.6077	-.0326
1889					1894				
J	1.655	1.6555	1.6702	-.0147	J	1.572	1.5752	1.6051	-.0299
F	1.659	1.6550	1.6695	-.0145	F	1.577	1.5761	1.6026	-.0265
M	1.647	1.6546	1.6687	-.0141	M	1.590	1.5773	1.6001	-.0228
A	1.644	1.6544	1.6678	-.0134	A	1.594	1.5780	1.5976	-.0196
M	1.655	1.6545	1.6670	-.0125	M	1.576	1.5778	1.5949	-.0171
J	1.660	1.6551	1.6664	-.0113	J	1.568	1.5764	1.5923	-.0159
J	1.649	1.6565	1.6658	-.0093	J	1.560	1.5740	1.5898	-.0158
A	1.659	1.6586	1.6652	-.0066	A	1.576	1.5712	1.5873	-.0161
S	1.674	1.6616	1.6646	-.0030	S	1.586	1.5684	1.5849	-.0165
O	1.670	1.6653	1.6642	+.0011	O	1.572	1.5663	1.5824	-.0161
N	1.669	1.6692	1.6638	+.0054	N	1.571	1.5654	1.5801	-.0147
D	1.667	1.6730	1.6636	+.0094	D	1.565	1.5660	1.5779	-.0119
1890					1895				
J	1.671	1.6761	1.6632	+.0129	J	1.559	1.5681	1.5756	-.0075
F	1.667	1.6781	1.6630	+.0151	F	1.553	1.5714	1.5736	-.0022
M	1.664	1.6787	1.6629	+.0158	M	1.550	1.5757	1.5716	+.0041
A	1.673	1.6778	1.6627	+.0151	A	1.567	1.5805	1.5697	+.0108
M	1.690	1.6752	1.6626	+.0126	M	1.590	1.5854	1.5679	+.0475
J	1.687	1.6712	1.6625	+.0087	J	1.600	1.5900	1.5663	+.0237
J	1.683	1.6659	1.6625	+.0034	J	1.607	1.5940	1.5649	+.0291
A	1.672	1.6597	1.6624	-.0027	A	1.613	1.5968	1.5638	+.0330
S	1.663	1.6528	1.6624	-.0096	S	1.617	1.5983	1.5627	+.0356
O	1.643	1.6456	1.6623	-.0167	O	1.611	1.5981	1.5618	+.0363
N	1.614	1.6387	1.6622	-.0235	N	1.597	1.5961	1.5614	+.0347
D	1.607	1.6325	1.6620	-.0295	D	1.570	1.5923	1.5612	+.0311
1891					1896				
J	1.627	1.6275	1.6618	-.0343	J	1.564	1.5872	1.5611	+.0261
F	1.631	1.6243	1.6616	-.0373	F	1.581	1.5810	1.5613	+.0197
M	1.621	1.6233	1.6613	-.0380	M	1.572	1.5744	1.5618	+.0126
A	1.637	1.6245	1.6609	-.0364	A	1.576	1.5679	1.5626	+.0053
M	1.636	1.6281	1.6604	-.0323	M	1.574	1.5618	1.5634	-.0016
J	1.626	1.6336	1.6600	-.0264	J	1.568	1.5564	1.5646	-.0082
J	1.621	1.6405	1.6595	-.0189	J	1.543	1.5520	1.5659	-.0139
A	1.639	1.6485	1.6587	-.0102	A	1.519	1.5484	1.5674	-.0190
S	1.676	1.6566	1.6579	-.0013	S	1.538	1.5458	1.5690	-.0232
O	1.676	1.6642	1.6571	+.0071	O	1.547	1.5442	1.5708	-.0266
N	1.667	1.6711	1.6562	+.0149	N	1.570	1.5438	1.5728	-.0290
D	1.682	1.6768	1.6552	+.0216	D	1.558	1.5449	1.5749	-.0300

**RAILROAD STOCK PRICES**

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**TABLE 17—Continued**

**AMERICAN RAILROAD STOCK PRICES**

Date	1	2	3	4	Date	1	2	3	4
1897					1902				
J	1.557	1.5473	1.5771	-.0298	J	1.892	1.8941	1.8536	+.0405
F	1.552	1.5512	1.5795	-.0283	F	1.895	1.8987	1.8560	+.0427
M	1.554	1.5563	1.5819	-.0256	M	1.896	1.9041	1.8583	+.0458
A	1.540	1.5624	1.5844	-.0220	A	1.912	1.9101	1.8604	+.0497
M	1.542	1.5690	1.5870	-.0180	M	1.914	1.9163	1.8622	+.0541
J	1.562	1.5759	1.5898	-.0139	J	1.915	1.9221	1.8643	+.0578
J	1.578	1.5826	1.5926	-.0100	J	1.931	1.9271	1.8661	+.0610
A	1.606	1.5889	1.5956	-.0067	J	1.944	1.9304	1.8678	+.0626
S	1.625	1.5946	1.5985	-.0039	S	1.945	1.9316	1.8697	+.0619
O	1.614	1.5904	1.6017	-.0023	O	1.930	1.9308	1.8714	+.0594
N	1.599	1.6035	1.6050	-.0015	N	1.913	1.9272	1.8731	+.0541
D	1.610	1.6067	1.6084	-.0017	D	1.905	1.9210	1.8749	+.0461
1898					1903				
J	1.620	1.6091	1.6117	-.0026	J	1.925	1.9125	1.8768	+.0357
F	1.618	1.6111	1.6153	-.0042	F	1.918	1.9022	1.8785	+.0237
M	1.598	1.6130	1.6160	-.0060	M	1.898	1.8907	1.8804	+.0103
A	1.589	1.6153	1.6229	-.0076	A	1.878	1.8785	1.8824	-.0039
M	1.614	1.6186	1.6270	-.0084	M	1.871	1.8663	1.8844	-.0181
J	1.630	1.6233	1.6314	-.0081	J	1.847	1.8544	1.8864	-.0320
J	1.630	1.6297	1.6358	-.0061	J	1.835	1.8433	1.8884	-.0451
A	1.648	1.6379	1.6405	-.0026	A	1.822	1.8333	1.8904	-.0571
S	1.650	1.6478	1.6452	+.0026	S	1.816	1.8247	1.8925	-.0678
O	1.641	1.6589	1.6502	+.0087	O	1.807	1.8176	1.8945	-.0769
N	1.651	1.6705	1.6555	+.0150	N	1.809	1.8123	1.8963	-.0842
D	1.674	1.6820	1.6609	+.0211	D	1.825	1.8091	1.8986	-.0895
1899					1904				
J	1.710	1.6928	1.6664	+.0264	J	1.832	1.8082	1.9007	-.0925
F	1.726	1.7026	1.6721	+.0305	F	1.818	1.8098	1.9027	-.0929
M	1.725	1.7110	1.6781	+.0329	M	1.818	1.8139	1.9046	-.0907
A	1.731	1.7180	1.6842	+.0338	A	1.829	1.8205	1.9063	-.0860
M	1.715	1.7236	1.6904	+.0332	M	1.818	1.8292	1.9083	-.0791
J	1.709	1.7278	1.6969	+.0309	J	1.820	1.8397	1.9101	-.0704
J	1.725	1.7309	1.7034	+.0275	J	1.839	1.8515	1.9117	-.0602
J	1.735	1.7326	1.7100	+.0226	A	1.854	1.8642	1.9134	-.0492
S	1.730	1.7332	1.7166	+.0166	S	1.873	1.8774	1.9148	-.0374
O	1.728	1.7327	1.7232	+.0095	O	1.897	1.8907	1.9163	-.0256
N	1.737	1.7311	1.7300	+.0011	N	1.915	1.9038	1.9177	-.0139
D	1.714	1.7286	1.7368	-.0082	D	1.922	1.9166	1.9191	-.0025
1900					1905				
J	1.719	1.7257	1.7436	-.0179	J	1.935	1.9287	1.9204	+.0083
F	1.728	1.7226	1.7502	-.0276	F	1.956	1.9398	1.9217	+.0181
M	1.739	1.7200	1.7568	-.0368	M	1.969	1.9498	1.9230	+.0268
A	1.747	1.7183	1.7633	-.0450	A	1.962	1.9584	1.9243	+.0341
M	1.729	1.7182	1.7695	-.0513	M	1.940	1.9654	1.9253	+.0401
J	1.718	1.7200	1.7754	-.0554	J	1.948	1.9708	1.9265	+.0443
J	1.716	1.7242	1.7814	-.0572	J	1.962	1.9746	1.9276	+.0470
J	1.720	1.7309	1.7872	-.0563	A	1.980	1.9772	1.9287	+.0485
J	1.712	1.7402	1.7930	-.0528	S	1.984	1.9787	1.9300	+.0487
J	1.727	1.7517	1.7984	-.0467	O	1.988	1.9798	1.9311	+.0487
S	1.755	1.7653	1.8036	-.0383	N	1.983	1.9808	1.9324	+.0484
D	1.786	1.7803	1.8086	-.0283	D	1.987	1.9821	1.9336	+.0485
1901					1906				
J	1.806	1.7962	1.8131	-.0169	J	1.999	1.9840	1.9350	+.0490
F	1.820	1.8122	1.8177	-.0055	F	1.997	1.9865	1.9362	+.0503
M	1.834	1.8276	1.8218	+.0058	M	1.989	1.9894	1.9375	+.0519
A	1.871	1.8416	1.8258	+.0158	A	1.983	1.9924	1.9387	+.0537
M	1.854	1.8538	1.8297	+.0241	M	1.972	1.9954	1.9400	+.0554
J	1.894	1.8639	1.8332	+.0307	J	1.980	1.9978	1.9412	+.0566
J	1.858	1.8717	1.8366	+.0351	J	1.972	1.9995	1.9423	+.0572
J	1.869	1.8774	1.8398	+.0376	A	2.004	2.0002	1.9434	+.0568
J	1.872	1.8815	1.8430	+.0385	S	2.017	1.9997	1.9448	+.0549
J	1.874	1.8846	1.8458	+.0388	O	2.012	1.9978	1.9456	+.0522
N	1.891	1.8874	1.8486	+.0388	N	2.011	1.9943	1.9467	+.0476
D	1.885	1.8904	1.8512	+.0392	D	2.007	1.9889	1.9477	+.0412

## APPENDIX

TABLE 17—Continued

## AMERICAN RAILROAD STOCK PRICES

Date	1	2	3	4	Date	1	2	3	4
1907					1912				
J	1.992	1.9812	1.9486	+.0326	J	1.969	1.9700	1.9755	-.0055
F	1.975	1.9712	1.9494	+.0218	F	1.965	1.9718	1.9732	-.0014
M	1.930	1.9590	1.9500	+.0000	M	1.974	1.9744	1.9707	+.0037
A	1.932	1.9448	1.9506	-.0058	A	1.984	1.9773	1.9684	+.0089
M	1.918	1.9294	1.9511	-.0217	M	1.981	1.9804	1.9653	+.0151
J	1.907	1.9137	1.9515	-.0378	J	1.979	1.9830	1.9628	+.0202
J	1.923	1.8986	1.9518	-.0532	J	1.979	1.9847	1.9599	+.0248
A	1.897	1.8852	1.9520	-.0668	A	1.990	1.9852	1.9573	+.0279
S	1.898	1.8743	1.9521	-.0778	S	1.990	1.9843	1.9542	+.0301
O	1.858	1.8663	1.9521	-.0858	O	1.987	1.9818	1.9516	+.0302
N	1.832	1.8615	1.9521	-.0906	N	1.984	1.9774	1.9489	+.0285
D	1.851	1.8599	1.9521	-.0922	D	1.972	1.9724	1.9463	+.0261
1908					1913				
J	1.868	1.8613	1.9521	-.0908	J	1.970	1.9660	1.9436	+.0224
F	1.851	1.8653	1.9521	-.0868	F	1.958	1.9590	1.9413	+.0177
M	1.863	1.8716	1.9521	-.0805	M	1.949	1.9518	1.9390	+.0128
A	1.883	1.8799	1.9522	-.0723	A	1.948	1.9448	1.9367	+.0081
M	1.907	1.8897	1.9522	-.0625	M	1.936	1.9383	1.9345	+.0038
J	1.908	1.9003	1.9526	-.0523	J	1.915	1.9327	1.9325	+.0002
J	1.920	1.9123	1.9528	-.0405	J	1.921	1.9280	1.9305	-.0025
A	1.934	1.9242	1.9532	-.0290	A	1.928	1.9244	1.9286	-.0042
S	1.931	1.9358	1.9533	-.0175	S	1.929	1.9216	1.9269	-.0053
O	1.937	1.9470	1.9540	-.0070	O	1.919	1.9195	1.9253	-.0058
N	1.963	1.9577	1.9546	+.0031	N	1.909	1.9178	1.9237	-.0059
D	1.974	1.9669	1.9554	+.0115	D	1.908	1.9160	1.9221	-.0061
1909					1914				
J	1.980	1.9757	1.9562	+.0195	J	1.921	1.9138	1.9206	-.0068
F	1.971	1.9834	1.9573	+.0261	F	1.924	1.9109	1.9191	-.0082
M	1.978	1.9909	1.9584	+.0325	M	1.912	1.9073	1.9177	-.0104
A	1.994	1.9978	1.9596	+.0382	A	1.902	1.9030	1.9162	-.0132
M	2.004	2.0041	1.9608	+.0433	M	1.905	1.8979	1.9148	-.0169
J	2.009	2.0097	1.9621	+.0476	J	1.902	1.8924	1.9134	-.0210
J	2.017	2.0147	1.9635	+.0512	J	1.879	1.8865	1.9120	-.0255
A	2.025	2.0179	1.9650	+.0529	A	1.875*	1.8805	1.9106	-.0301
S	2.022	2.0201	1.9667	+.0534	S	1.871*	1.8749	1.9091	-.0342
O	2.021	2.0198	1.9684	+.0514	O	1.867*	1.8607	1.9078	-.0381
N	2.013	2.0180	1.9701	+.0479	N	1.862*	1.8653	1.9064	-.0411
D	2.019	2.0149	1.9717	+.0432	D	1.858	1.8626	1.9048	-.0422
1910					1915				
J	2.011	2.0095	1.9733	+.0362	J	1.865	1.8612	1.9031	-.0419
F	1.997	2.0030	1.9751	+.0279	F	1.857	1.8615	1.9018	-.0403
M	2.007	1.9965	1.9767	+.0198	M	1.865	1.8635	1.9003	-.0368
A	1.999	1.9896	1.9782	+.0114	A	1.887	1.8671	1.8988	-.0317
M	1.993	1.9830	1.9797	+.0033	M	1.876	1.8717	1.8972	-.0255
J	1.971	1.9773	1.9811	-.0038	J	1.872	1.8771	1.8959	-.0188
J	1.949	1.9728	1.9824	-.0096	J	1.862	1.8828	1.8945	-.0117
A	1.958	1.9696	1.9837	-.0141	A	1.875	1.8884	1.8931	-.0047
S	1.960	1.9679	1.9849	-.0170	S	1.886	1.8936	1.8916	+.0020
O	1.978	1.9676	1.9858	-.0182	O	1.909	1.8984	1.8904	+.0080
N	1.974	1.9683	1.9867	-.0184	N	1.928	1.9027	1.8891	+.0136
D	1.963	1.9699	1.9874	-.0175	D	1.925	1.9065	1.8878	+.0187
1911					1916				
J	1.974	1.9718	1.9879	-.0161	J	1.917	1.9101	1.8865	+.0236
F	1.980	1.9737	1.9881	-.0144	F	1.907	1.9132	1.8854	+.0278
M	1.975	1.9752	1.9881	-.0129	M	1.905	1.9157	1.8842	+.0315
A	1.975	1.9762	1.9878	-.0116	A	1.902	1.9177	1.8829	+.0348
M	1.982	1.9764	1.9875	-.0111	M	1.914	1.9191	1.8816	+.0375
J	1.992	1.9758	1.9867	-.0109	J	1.920	1.9198	1.8804	+.0394
J	1.992	1.9746	1.9854	-.0108	J	1.916	1.9199	1.8791	+.0408
A	1.972	1.9731	1.9839	-.0108	A	1.913	1.9195	1.8778	+.0417
S	1.949	1.9714	1.9822	-.0108	S	1.919	1.9188	1.8765	+.0423
O	1.956	1.9700	1.9807	-.0107	O	1.930	1.9177	1.8752	+.0425
N	1.972	1.9691	1.9793	-.0102	N	1.927	1.9160	1.8737	+.0423
D	1.970	1.9691	1.9775	-.0084	D	1.919	1.9135	1.8724	+.0411

\*Interpolated.—Stock Exchange closed.

# RAILROAD STOCK PRICES

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TABLE 17—Continued

## AMERICAN RAILROAD STOCK PRICES

Date	1	2	3	4	Date	1	2	3	4
<b>1917</b>					<b>1922</b>				
J	1.910	1.9098	1.8708	+.0390	J	1.766	1.7799	1.7884	-.0085
F	1.887	1.9045	1.8694	+.0351	F	1.781	1.7906	1.7894	+.0012
M	1.892	1.8975	1.8678	+.0297	M	1.779	1.8014	1.7903	+.0111
A	1.887	1.8888	1.8661	+.0227	A	1.818	1.8120	1.7915	+.0205
M	1.869	1.8785	1.8641	+.0144	M	1.827	1.8219	1.7927	+.0292
J	1.875	1.8670	1.8624	+.0046	J	1.822	1.8308	1.7940	+.0368
J	1.869	1.8549	1.8604	-.0055	J	1.839	1.8383	1.7953	+.0432
A	1.863	1.8428	1.8584	-.0156	A	1.859	1.8446	1.7970	+.0476
S	1.844	1.8312	1.8560	-.0248	S	1.865	1.8489	1.7985	+.0504
O	1.825	1.8207	1.8538	-.0331	O	1.865	1.8512	1.8002	+.0510
N	1.791	1.8117	1.8515	-.0398	N	1.840	1.8514	1.8020	+.0494
D	1.776	1.8044	1.8489	-.0445	D	1.830	1.8495	1.8040	+.0455
<b>1918</b>					<b>1923</b>				
J	1.795	1.7901	1.8465	-.0474	J	1.830	1.8458	1.8061	+.0397
F	1.800	1.7959	1.8439	-.0480	F	1.843	1.8406	1.8084	+.0322
M	1.797	1.7946	1.8411	-.0465	M	1.845	1.8346	1.8105	+.0241
A	1.788	1.7952	1.8384	-.0432	A	1.839	1.8281	1.8129	+.0152
M	1.802	1.7975	1.8353	-.0380	M	1.823	1.8217	1.8152	+.0065
J	1.804	1.8012	1.8325	-.0313	J	1.819	1.8158	1.8178	-.0020
J	1.806	1.8060	1.8295	-.0235	J	1.801	1.8106	1.8204	-.0098
A	1.816	1.8115	1.8266	-.0151	A	1.799	1.8063	1.8232	-.0169
S	1.819	1.8171	1.8238	-.0067	S	1.801	1.8029	1.8259	-.0230
O	1.836	1.8227	1.8209	+.0018	O	1.797	1.8008	1.8288	-.0280
N	1.847	1.8277	1.8182	+.0095	N	1.804	1.7999	1.8317	-.0318
D	1.829	1.8319	1.8154	+.0165	D	1.803	1.8004	1.8349	-.0345
<b>1919</b>					<b>1924</b>				
J	1.818	1.8351	1.8122	+.0229	J	1.810	1.8026	1.8381	-.0355
F	1.819	1.8371	1.8099	+.0272	F	1.813	1.8064	1.8414	-.0350
M	1.823	1.8378	1.8072	+.0306	M	1.810	1.8119	1.8448	-.0329
A	1.825	1.8371	1.8045	+.0326	A	1.816	1.8190	1.8483	-.0293
M	1.848	1.8351	1.8018	+.0333	M	1.817	1.8272	1.8518	-.0246
J	1.849	1.8317	1.7996	+.0321	J	1.829	1.8361	1.8555	-.0194
J	1.847	1.8268	1.7974	+.0294	J	1.849	1.8453	1.8592	-.0139
A	1.818	1.8206	1.7954	+.0252	A	1.861	1.8543	1.8629	-.0086
S	1.810	1.8135	1.7935	+.0200	S	1.858	1.8627	1.8667	-.0040
O	1.815	1.8058	1.7917	+.0141	O	1.853	1.8702	1.8706	-.0004
N	1.801	1.7980	1.7903	+.0377	N	1.882	1.8770	1.8746	+.0024
D	1.781	1.7907	1.7889	+.0018	D	1.904	1.8829	1.8786	+.0043
<b>1920</b>					<b>1925</b>				
J	1.782	1.7844	1.7877	-.0033	J	1.907	1.8883	1.8827	+.0056
F	1.764	1.7795	1.7866	-.0071	F	1.908	1.8932	1.8869	+.0063
M	1.790	1.7763	1.7857	-.0094	M	1.896	1.8978	1.8911	+.0067
A	1.774	1.7747	1.7849	-.0102	A	1.883	1.9020	1.8954	+.0066
M	1.758	1.7745	1.7843	-.0098	M	1.895	1.9060	1.8997	+.0063
J	1.754	1.7754	1.7839	-.0085	J	1.897	1.9098	1.9041	+.0057
J	1.760	1.7769	1.7835	-.0066	J	1.901	1.9136	1.9086	+.0050
A	1.775	1.7783	1.7830	-.0047	A	1.916	1.9173	1.9133	+.0040
S	1.800	1.7792	1.7827	-.0035	S	1.920	1.9212	1.9180	+.0032
O	1.819	1.7794	1.7826	-.0032	O	1.926	1.9253	1.9228	+.0025
N	1.806	1.7785	1.7825	-.0040	N	1.938	1.9296	1.9277	+.0019
D	1.764	1.7765	1.7826	-.0061	D	1.957	1.9341	1.9328	+.0013
<b>1921</b>					<b>1926</b>				
J	1.776	1.7733	1.7826	-.0093	J	1.957	1.9386	1.9380	+.0006
F	1.771	1.7692	1.7827	-.0135	F	1.950	1.9429	1.9434	-.0005
M	1.750	1.7644	1.7830	-.0186	M	1.931	1.9470	1.9488	-.0018
A	1.742	1.7593	1.7832	-.0239	A	1.934	1.9507	1.9543	-.0036
M	1.759	1.7546	1.7836	-.0290	M	1.938	1.9541	1.9601	-.0060
J	1.732	1.7506	1.7839	-.0333	J	1.956	1.9576	1.9661	-.0085
J	1.750	1.7482	1.7842	-.0360	J	1.964	1.9614	1.9719	-.0105
A	1.758	1.7479	1.7848	-.0369	A	1.976	1.9658	1.9778	-.0120
S	1.762	1.7499	1.7854	-.0355	S	1.989	1.9711	1.9843	-.0132
O	1.755	1.7545	1.7861	-.0316	O	1.976	1.9775	1.9907	-.0132
N	1.767	1.7613	1.7868	-.0255	N	1.979	1.9848	1.9972	-.0124
D	1.768	1.7699	1.7874	-.0175	D	1.987	1.9929	2.0037	-.0108

## APPENDIX

TABLE 17—Concluded

## AMERICAN RAILROAD STOCK PRICES

Date	1	2	3	4	Date	1	2	3	4
1927					1932				
J	1.993	2.0013	2.0100	-.0087	J	1.505	1.4818		
F	2.011	2.0090	2.0168	-.0069	F	1.503	1.4330		
M	2.016	2.0182	2.0234	-.0052	M	1.469	1.3909		
A	2.026	2.0261	2.0300	-.0039	A	1.328	1.3566		
M	2.035	2.0335	2.0365	-.0030	M	1.192	1.3304		
J	2.042	2.0403	2.0433	-.0030	J	1.129	1.3125		
J	2.050	2.0463	2.0499	-.0036	J	1.201	1.3032		
A	2.055	2.0516	2.0565	-.0049	A	1.409	1.3028		
S	2.062	2.0560	2.0629	-.0069	S	1.455	1.3113		
O	2.061	2.0595	2.0694	-.0099	O	1.418	1.3278		
N	2.058	2.0621	2.0753	-.0137	N	1.387	1.3512		
D	2.067	2.0639	2.0817	-.0178	D	1.367	1.3793		
1928					1933				
J	2.060	2.0650	2.0876	-.0226	J	1.400	1.4098		
F	2.049	2.0657	2.0931	-.0274	F	1.377	1.4407		
M	2.063	2.0662	2.0983	-.0321	M	1.376	1.4701		
A	2.081	2.0667	2.1031	-.0364	A	1.406	1.4972		
M	2.088	2.0574	2.1078	-.0404	M	1.540	1.5220		
J	2.066	2.0586	2.1115	-.0429	J	1.606	1.5447		
J	2.060	2.0703	2.1149	-.0446	J	1.662	1.5657		
A	2.067	2.0730	2.1176	-.0446	A	1.659	1.5850		
S	2.078	2.0767	2.1199	-.0432	S	1.633	1.6024		
O	2.073	2.0817	2.1211	-.0394	O	1.550	1.6168		
N	2.095	2.0878	2.1215	-.0337	N	1.549	1.6275		
D	2.097	2.0950	2.1209	-.0259	D	1.572	1.6335		
1929					1934				
J	2.116	2.1028	2.1201	-.0173	J	1.620	1.6342		
F	2.110	2.1108	2.1177	-.0069	F	1.663	1.6301		
M	2.109	2.1185	2.1145	+.0040	M	1.647	1.6219		
A	2.103	2.1252	2.1105	+.0147	A	1.652	1.6107		
M	2.109	2.1309	2.1056	+.0253	M	1.605			
J	2.126	2.1352			J	1.606			
J	2.166	2.1380			J	1.555			
A	2.184	2.1393			A	1.516			
S	2.189	2.1392			S	1.506			
O	2.133	2.1374			O	1.518			
N	2.087	2.1339			N	1.512			
D	2.097	2.1285			D	1.525			
1930					1935				
J	2.094	2.1212			J	1.510			
F	2.116	2.1121			F	1.485			
M	2.118	2.1016			M	1.427			
A	2.110	2.0900			A	1.440			
M	2.088	2.0777			M	1.463			
J	2.061	2.0653			J	1.479			
J	2.061	2.0528			J	1.501			
A	2.049	2.0404			A	1.525			
S	2.041	2.0277			S	1.533			
O	2.008	2.0144			O	1.505			
N	1.970	2.0001			N	1.552			
D	1.931	1.9848			D	1.584			
1931					1936				
J	1.958	1.9681			J	1.617			
F	1.983	1.9499							
M	1.954	1.9298							
A	1.903	1.9067							
M	1.849	1.8795							
J	1.831	1.8466							
J	1.840	1.8074							
A	1.787	1.7613							
S	1.712	1.7091							
O	1.655	1.6525							
N	1.614	1.5939							
D	1.502	1.5362							

TABLE 18

PRICE OF GOLD IN GREENBACKS JANUARY 1862-DECEMBER 1878<sup>a</sup>

MONTHLY AVERAGES

Date		Date		Date		Date		Date	
1862		1865		1868		1872		1875	
J	102.5	J	140.1	N	134.4	M	110.1	A	113.5
F	103.5	J	142.1	D	135.2	A	111.1	S	115.8
M	101.8	A	143.5	1869	J	M	113.7	O	116.4
A	101.5	S	143.9		135.6	J	113.9	N	114.7
M	103.3	O	145.5		134.4	J	114.3	D	113.9
J	106.5	N	147.0		M	131.3	A	114.4	1876
J	115.5	D	146.2		A	132.9	S	113.5	J
A	114.5	1866			M	139.2	O	113.2	F
S	118.5	J	140.1		J	138.1	N	112.9	M
O	128.5	F	138.4		J	136.1	D	112.2	A
N	131.1	M	130.5		A	134.2	1873	M	112.6
D	132.3	A	127.3		S	136.8	J	112.7	J
1863		M	131.8		O	130.2	F	114.1	J
J	145.1	J	148.7		N	126.2	M	115.5	A
F	160.5	J	151.6		D	121.5	A	117.8	S
M	154.5	A	148.7	1870		M	117.7	O	109.7
A	151.5	S	145.5		J	121.3	J	116.5	N
M	148.9	O	148.3		F	119.5	J	115.7	D
J	144.5	N	143.8		M	112.6	A	115.4	1877
J	130.6	D	136.7		A	113.1	S	112.7	J
A	125.8	1867			M	114.7	O	108.9	F
S	134.2	J	134.6		J	112.9	N	108.6	M
O	147.7	F	137.4		J	116.8	D	110.0	A
N	148.0	M	135.0		A	117.9	1874	M	106.9
D	151.1	A	135.6		S	114.8	J	111.4	J
1864		M	137.0		O	112.8	F	112.3	J
J	155.5	J	137.5		N	111.4	M	112.1	A
F	158.6	J	139.4		D	110.7	A	113.4	S
M	162.9	A	140.8	1871		M	112.4	O	102.8
A	172.7	S	143.4		J	110.7	J	111.3	N
M	176.3	O	143.5		F	111.5	J	110.0	D
J	210.7	N	139.6		M	111.0	A	109.7	1878
J	258.1	D	134.8		A	110.6	S	109.7	J
A	254.1	1868			M	111.5	O	110.0	F
S	222.5	J	138.5		J	112.4	N	110.9	M
O	207.2	F	141.4		J	112.4	D	111.7	A
N	233.5	M	139.5		A	112.4	1875	M	100.7
D	227.5	A	138.7		S	114.5	J	112.5	J
1865		M	139.6		O	113.2	F	114.5	J
J	216.2	J	140.1		N	111.2	M	115.5	A
F	205.5	J	142.7		D	109.3	A	114.8	S
M	173.8	A	145.5	1872	J	109.1	M	115.8	O
A	148.5	S	143.6		F	110.3	J	117.0	N
M	135.6	O	137.1				J	114.8	D

<sup>a</sup>W. C. Mitchell—Gold, Prices and Wages under the Greenback Standard—pp. 5-13.

TABLE 19

AN UNADJUSTED ARITHMETIC AVERAGE INDEX NUMBER OF THE YIELDS  
IN *Gold<sup>1</sup>* OF AMERICAN RAILROAD BONDS, MONTHLY,  
JANUARY 1857-JANUARY 1879

- Col. 1. Index
- Col. 2. Logarithms of Index
- Col. 3. Cyclical Curve (logarithms)

For details of the nature of the graduation given in Column 3 of this table, see Appendix D.

<sup>1</sup>For the meaning of gold yield see Appendix C. The nature of this index of yields in gold is such that beginning with January 1879 it is identical with the index given in Table 10, column 4.

# THE GREENBACK PERIOD

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TABLE 19  
AMERICAN RAILROAD BOND YIELDS  
UNADJUSTED ARITHMETIC INDEX—GOLD

Date	Data	Logarithms of data	Cyclical curve (logarithms)	Date	Data	Logarithms of data	Cyclical curve (logarithms)	Date	Data	Logarithms of data	Cyclical curve (logarithms)	
1857	J	8.173	.9124	.9164	J	6.193	.7910	.7788	J	9.589	.9818	1.0005
F	8.102	.9086	.9179	F	5.996	.7779	.7743	F	9.840	.9930	.9996	
M	8.107	.9089	.9211	M	5.881	.7695	.7719	M	9.693	.9865	.9990	
A	8.124	.9098	.9257	A	5.725	.7578	.7724	A	9.823	.9922	.9986	
M	8.195	.9136	.9313	M	5.594	.7477	.7760	M	9.962	.9984	.9987	
J	8.436	.9261	.9373	J	5.701	.7560	.7831	J	10.036	1.0016	.9995	
J	8.393	.9239	.9431	J	6.491	.8123	.7935	J	10.063	1.0027	1.0009	
A	8.502	.9295	.9478	A	6.277	.7978	.8062	A	10.181	1.0078	1.0029	
S	9.563	.9806	.9509	S	6.388	.8054	.8205	S	10.424	1.0180	1.0052	
O	10.295	1.0126	.9520	O	6.625	.8404	.8353	O	10.547	1.0231	1.0078	
N	9.519	.9786	.9507	N	6.986	.8442	.8494	N	10.343	1.0147	1.0102	
D	9.043	.9563	.9468	D	7.123	.8527	.8617	D	10.001	1.0000	1.0123	
1858	J	8.715	.9403	.9403	J	7.564	.8788	.8717	J	10.186	1.0080	1.0138
F	8.171	.9123	.9314	F	8.402	.9244	.8789	F	10.358	1.0153	1.0148	
M	7.838	.8942	.9205	M	8.121	.9096	.8832	M	10.196	1.0084	1.0153	
A	7.773	.8906	.9082	A	8.189	.9132	.8850	A	10.201	1.0086	1.0154	
M	7.660	.8842	.8954	M	8.042	.9054	.8848	M	10.245	1.0105	1.0153	
J	7.570	.8791	.8828	J	7.765	.8901	.8835	J	10.284	1.0122	1.0150	
J	7.505	.8754	.8713	J	6.918	.8400	.8821	J	10.506	1.0214	1.0148	
A	7.471	.8734	.8616	A	6.585	.8186	.8818	A	10.781	1.0327	1.0148	
S	7.346	.8661	.8538	S	7.188	.8566	.8839	S	10.741	1.0310	1.0151	
O	7.113	.8521	.8482	O	8.081	.9075	.8895	O	10.314	1.0134	1.0159	
N	6.992	.8446	.8445	N	8.232	.9155	.8996	N	10.200	1.0086	1.0171	
D	6.940	.8414	.8424	D	8.567	.9328	.9149	D	10.344	1.0147	1.0188	
1859	J	6.890	.8382	.8413	J	8.973	.9529	.9352	J	10.424	1.0180	1.0208
F	6.875	.8373	.8410	F	9.148	.9613	.9599	F	10.358	1.0153	1.0230	
M	6.854	.8359	.8412	M	9.263	.9668	.9880	M	10.164	1.0071	1.0249	
A	6.802	.8326	.8417	A	9.677	.9857	1.0176	A	10.352	1.0150	1.0263	
M	6.943	.8416	.8425	M	9.044	.9976	1.0468	M	10.814	1.0340	1.0268	
J	7.139	.8536	.8434	J	11.927	1.0765	1.0735	J	10.740	1.0310	1.0260	
J	7.112	.8520	.8440	J	14.043	1.1475	1.0958	J	10.674	1.0283	1.0236	
A	7.032	.8471	.8440	A	13.915	1.1435	1.1124	A	10.514	1.0218	1.0194	
S	6.846	.8354	.8431	S	12.925	1.1114	1.1224	S	10.832	1.0347	1.0136	
O	6.877	.8374	.8410	O	12.533	1.0981	1.1257	O	10.401	1.0171	1.0062	
N	6.897	.8387	.8376	N	14.067	1.1482	1.1226	N	10.092	1.0040	.9975	
D	6.843	.8353	.8329	D	14.011	1.1465	1.1141	D	9.718	.9876	.9880	
1860	J	6.803	.8327	.8271	J	13.680	1.1361	1.1014	J	9.621	.9832	.9782
F	6.712	.8269	.8207	F	13.308	1.1241	1.0856	F	9.219	.9647	.9683	
M	6.631	.8216	.8142	M	11.712	1.0686	1.0681	M	8.467	.9277	.9590	
A	6.506	.8133	.8080	A	10.020	1.0009	1.0500	A	8.554	.9322	.9505	
M	6.327	.8012	.8025	M	9.048	.9566	1.0325	M	8.641	.9366	.9432	
J	6.158	.7894	.7980	J	9.670	.9854	1.0167	J	8.421	.9254	.9372	
J	6.067	.7830	.7945	J	9.702	.9869	1.0034	J	8.769	.9430	.9327	
A	6.012	.7790	.7922	A	9.868	.9942	.9935	A	8.954	.9520	.9294	
S	6.009	.7788	.7910	S	9.972	.9988	.9871	S	8.728	.9409	.9274	
O	6.043	.7813	.7911	O	10.204	1.0088	.9844	O	8.561	.9325	.9264	
N	6.387	.8053	.7923	N	10.479	1.0203	.9850	N	8.480	.9284	.9261	
D	6.729	.8280	.7946	D	10.503	1.0213	.9882	D	8.397	.9241	.9262	
1861	J	6.386	.8052	.7977	J	10.110	1.0048	.9929	J	8.344	.9214	.9263
F	6.286	.7984	.8013	F	10.021	1.0009	.9981	F	8.371	.9228	.9262	
M	6.123	.7870	.8048	M	9.480	.9768	1.0028	M	8.316	.9199	.9259	
A	6.233	.7947	.8078	A	9.143	.9611	1.0064	A	8.265	.9172	.9252	
M	6.614	.8205	.8098	M	9.385	.9724	1.0083	M	8.308	.9195	.9242	
J	6.537	.8154	.8104	J	10.722	1.0303	1.0088	J	8.390	.9238	.9230	
J	6.291	.7987	.8094	J	10.812	1.0339	1.0082	J	8.385	.9235	.9217	
A	6.288	.7985	.8067	A	10.594	1.0251	1.0068	A	8.350	.9217	.9205	
S	6.384	.8051	.8025	S	10.323	1.0138	1.0051	S	8.541	.9315	.9195	
O	6.432	.8084	.7970	O	10.536	1.0227	1.0037	O	8.571	.9330	.9186	
N	6.351	.8028	.7909	N	10.154	1.0066	1.0024	N	8.437	.9262	.9178	
D	6.312	.8002	.7846	D	9.717	.9875	1.0013	D	8.177	.9126	.9172	

## APPENDIX

TABLE 19—(Concluded)  
 AMERICAN RAILROAD BOND YIELDS  
 UNADJUSTED ARITHMETIC INDEX—GOLD

Date	Data	Loga- rithms of data	Cyclical curve (loga- rithms)	Date	Data	Loga- rithms of data	Cyclical curve (loga- rithms)	Date	Data	Loga- rithms of data	Cyclical curve (loga- rithms)
1872				1875				1878			
J	7.932	.8994	.9165	J	8.226	.9152	.9174	J	6.765	.8303	.8307
F	8.011	.9037	.9160	F	8.363	.9224	.9183	F	6.745	.8290	.8278
M	8.095	.9082	.9158	M	8.433	.9260	.9192	M	6.669	.8241	.8250
A	8.181	.9128	.9159	A	8.291	.9186	.9199	A	6.607	.8200	.8224
M	8.428	.9237	.9165	M	8.342	.9213	.9203	M	6.576	.8180	.8198
J	8.419	.9253	.9178	J	8.495	.9292	.9201	J	6.507	.8134	.8173
J	8.362	.9223	.9198	J	8.242	.9160	.9193	J	6.471	.8110	.8145
A	8.459	.9273	.9225	A	8.116	.9093	.9179	A	6.514	.8139	.8116
S	8.464	.9276	.9255	S	8.265	.9172	.9159	S	6.494	.8125	.8083
O	8.499	.9294	.9288	O	8.379	.9232	.9134	O	6.468	.8108	.8048
N	8.523	.9306	.9320	N	8.182	.9129	.9106	N	6.394	.8058	.8010
D	8.500	.9294	.9350	D	8.031	.9048	.9075	D	6.311	.8001	.7972
1873				1876				1879			
J	8.471	.9279	.9374	J	7.887	.8969	.9043	J	6.188	.7916	.7932
F	8.577	.9333	.9394	F	7.857	.8953	.9009	F			.7893
M	8.723	.9407	.9408	M	7.892	.8972	.8975	M			.7856
A	8.973	.9529	.9417	A	7.825	.8935	.8940	A			.7820
M	8.957	.9522	.9422	M	7.832	.8939	.8905	M			.7789
J	8.830	.9460	.9423	J	7.790	.8915	.8870	J			.7761
J	8.704	.9397	.9420	J	7.658	.8841	.8836	J			.7738
A	8.692	.9391	.9414	A	7.568	.8790	.8803	A			.7719
S	8.591	.9340	.9403	S	7.563	.8787	.8770	S			.7705
O	8.636	.9363	.9388	O	7.541	.8774	.8739	O			.7693
N	8.680	.9385	.9368	N	7.483	.8741	.8709	N			.7683
D	8.600	.9345	.9344	D	7.374	.8677	.8679	D			.7671
1874				1877				1880			
J	8.450	.9273	.9318	J	7.185	.8564	.8651	J			.7658
F	8.429	.9258	.9290	F	7.116	.8522	.8623	F			.7640
M	8.427	.9257	.9263	M	7.177	.8559	.8595	M			.7618
A	8.534	.9312	.9238	A	7.316	.8643	.8569	A			.7590
M	8.516	.9302	.9215	M	7.330	.8651	.8542	M			.7557
J	8.363	.9224	.9196	J	7.111	.8519	.8516	J			.7519
J	8.263	.9171	.9181	J	7.047	.8480	.8488	J			.7478
A	8.214	.9146	.9170	A	7.048	.8481	.8460	A			
S	8.189	.9132	.9163	S	6.911	.8395	.8431	S			
O	8.151	.9112	.9160	O	6.896	.8386	.8400	O			
N	8.145	.9109	.9161	N	6.875	.8373	.8369	N			
D	8.220	.9149	.9166	D	6.835	.8347	.8337	D			

(see paper index)

(see paper index)

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TABLE 20

AN INDEX NUMBER OF THE GOLD PRICES OF AMERICAN RAILROAD  
COMMON STOCKS, JANUARY 1862-DECEMBER 1878

This index number was constructed by multiplying the monthly paper index figures (see Table 10) by the monthly average prices of greenbacks in gold (compare Table 18).

- Col. 1. Index
- Col. 2. Logarithms of Index
- Col. 3. Cyclical Curve (logarithms)

For details of the nature of the graduation given in Column 3 of this table, see Appendix D.

## APPENDIX

TABLE 20

## AMERICAN RAILROAD STOCK PRICES—GOLD

Date	Data	Loga- rithms of data	Cyclical curve (loga- rithms)	Date	Data	Loga- rithms of data	Cyclical curve (loga- rithms)	Date	Data	Loga- rithms of data	Cyclical curve (loga- rithms)
1860				1865				1870			
J				J	15.25	1.183	1.2042	J	31.37	1.497	1.5076
F				F	15.66	1.195	1.2186	F	32.89	1.517	1.5149
M				M	16.77	1.225	1.2364	M	34.68	1.540	1.5221
A				A	19.35	1.287	1.2561	A	35.06	1.545	1.5288
M				M	21.66	1.336	1.2761	M	35.94	1.556	1.5350
J				J	20.58	1.313	1.2952	J	36.80	1.566	1.5405
J				J	21.17	1.326	1.3121	J	34.47	1.537	1.5454
A				A	20.72	1.316	1.3268	A	33.53	1.525	1.5495
S				S	21.51	1.333	1.3369	S	34.74	1.541	1.5529
O				O	21.87	1.340	1.3436	O	35.53	1.551	1.5556
N				N	21.84	1.330	1.3471	N	35.97	1.556	1.5578
D				D	21.65	1.335	1.3483	D	35.77	1.554	1.5595
1861				1866				1871			
J				J	21.56	1.334	1.3471	J	35.86	1.555	1.5609
F				F	21.29	1.328	1.3461	F	35.98	1.556	1.5622
M				M	22.63	1.355	1.3453	M	36.91	1.567	1.5634
A				A	23.60	1.373	1.3449	A	38.01	1.580	1.5650
M				M	23.26	1.367	1.3455	M	38.57	1.586	1.5667
J				J	20.87	1.320	1.3468	J	37.99	1.580	1.5686
J				J	20.85	1.319	1.3488	J	37.30	1.572	1.5707
A				A	22.04	1.343	1.3510	A	37.54	1.574	1.5729
S				S	22.64	1.355	1.3531	S	37.00	1.568	1.5751
O				O	22.88	1.359	1.3550	O	35.54	1.551	1.5772
N				N	23.25	1.366	1.3565	N	36.48	1.562	1.5792
D				D	23.99	1.380	1.3577	D	37.86	1.578	1.5811
1862				1867				1872			
J	16.14	1.208	1.2130	J	23.41	1.369	1.3585	J	38.78	1.589	1.5829
F	16.54	1.219	1.2197	F	22.73	1.357	1.3592	F	38.59	1.586	1.5846
M	17.33	1.239	1.2257	M	22.98	1.361	1.3598	M	39.83	1.600	1.5863
A	17.25	1.237	1.2306	A	22.35	1.349	1.3605	A	40.68	1.609	1.5878
M	17.73	1.249	1.2340	M	22.40	1.350	1.3615	M	39.63	1.598	1.5892
J	18.06	1.257	1.2360	J	23.07	1.363	1.3628	J	39.12	1.592	1.5905
J	16.28	1.212	1.2368	J	23.57	1.372	1.3646	J	38.67	1.587	1.5913
A	16.97	1.230	1.2370	A	23.45	1.370	1.3671	A	38.08	1.581	1.5918
S	17.58	1.245	1.2374	S	22.99	1.362	1.3703	S	37.91	1.579	1.5916
O	17.81	1.251	1.2385	O	22.94	1.361	1.3741	O	37.92	1.579	1.5908
N	17.61	1.246	1.2412	N	23.49	1.371	1.3783	N	37.81	1.578	1.5893
D	17.80	1.250	1.2459	D	24.70	1.393	1.3829	D	39.04	1.592	1.5872
1863				1868				1873			
J	18.33	1.263	1.2529	J	24.91	1.396	1.3876	J	30.25	1.594	1.5846
F	17.15	1.234	1.2621	F	24.96	1.397	1.3921	F	30.24	1.594	1.5815
M	17.49	1.243	1.2735	M	25.18	1.401	1.3964	M	38.47	1.585	1.5780
A	18.06	1.257	1.2869	A	25.17	1.401	1.4005	A	37.07	1.569	1.5742
M	20.13	1.304	1.3017	M	25.86	1.413	1.4046	M	37.17	1.570	1.5702
J	20.07	1.303	1.3172	J	26.21	1.418	1.4086	J	37.20	1.571	1.5659
J	22.74	1.357	1.3326	J	25.74	1.411	1.4129	J	37.33	1.572	1.5616
A	25.27	1.403	1.3466	A	24.97	1.397	1.4176	A	37.26	1.571	1.5573
S	23.71	1.375	1.3581	S	25.52	1.407	1.4226	S	35.25	1.547	1.5532
O	22.13	1.345	1.3657	O	27.13	1.433	1.4279	O	33.43	1.524	1.5494
N	22.16	1.346	1.3684	N	26.90	1.430	1.4334	N	32.34	1.510	1.5464
D	21.51	1.333	1.3652	D	27.29	1.436	1.4388	D	34.80	1.542	1.5441
1864				1869				1874			
J	21.77	1.338	1.3561	J	28.18	1.440	1.4440	J	36.20	1.559	1.5428
F	22.39	1.350	1.3414	F	28.66	1.457	1.4488	F	36.95	1.568	1.5424
M	23.33	1.368	1.3219	M	29.13	1.464	1.4532	M	36.33	1.560	1.5430
A	22.40	1.350	1.2992	A	29.25	1.466	1.4574	A	34.94	1.543	1.5441
M	20.97	1.322	1.2750	M	29.14	1.464	1.4614	M	34.35	1.536	1.5456
J	17.90	1.283	1.2512	J	29.66	1.472	1.4654	J	34.41	1.537	1.5472
J	14.45	1.160	1.2295	J	30.04	1.478	1.4698	J	34.84	1.542	1.5484
A	14.82	1.171	1.2115	A	30.87	1.490	1.4747	A	35.13	1.546	1.5489
S	13.90	1.201	1.1985	S	28.33	1.452	1.4802	S	35.65	1.552	1.5487
O	16.01	1.204	1.1911	O	29.52	1.470	1.4863	O	35.45	1.550	1.5475
N	14.93	1.174	1.1897	N	30.22	1.480	1.4931	N	35.22	1.547	1.5454
D	15.22	1.182	1.1943	D	30.88	1.490	1.5002	D	35.03	1.544	1.5425

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TABLE 20—(Concluded)

AMERICAN RAILROAD STOCK PRICES—GOLD

Date	Data	Loga- rithms of data	Cyclical curve (loga- rithms)	Date	Data	Loga- rithms of data	Cyclical curve (loga- rithms)	Date	Data	Loga- rithms of data	Cyclical curve (loga- rithms)
1875				1877				1879			
J	35.04	1.545	1.5390	J	28.47	1.454	1.4218	J			1.4879
F	34.28	1.535	1.5351	F	26.91	1.430	1.4111	F			1.4959
M	34.33	1.536	1.5311	M	25.81	1.412	1.4028	M			1.5058
A	34.89	1.543	1.5274	A	23.62	1.373	1.3969	A			1.5176
M	33.08	1.520	1.5241	M	23.37	1.369	1.3934	M			1.5311
J	32.13	1.507	1.5215	J	22.39	1.350	1.3922	J			1.5460
J	32.83	1.516	1.5197	J	23.15	1.365	1.3931	J			1.5616
A	33.30	1.522	1.5187	A	24.72	1.393	1.3961	A			1.5773
S	32.33	1.510	1.5183	S	26.81	1.428	1.4010	S			1.5923
O	31.70	1.501	1.5184	O	27.71	1.443	1.4074	O			1.6059
N	32.60	1.513	1.5188	N	27.21	1.435	1.4153	N			1.6178
D	32.82	1.516	1.5192	D	27.09	1.433	1.4239	D			1.6278
1876				1878				1880			
J	33.92	1.530	1.5193	J	27.26	1.436	1.4326	J			1.6359
F	34.28	1.535	1.5190	F	26.73	1.427	1.4408	F			1.6424
M	34.14	1.533	1.5179	M	27.42	1.438	1.4481	M			
A	33.17	1.521	1.5156	A	28.44	1.454	1.4540	A			
M	31.91	1.504	1.5117	M	28.42	1.454	1.4586	M			
J	31.65	1.500	1.5060	J	29.15	1.465	1.4620	J			
J	31.49	1.498	1.4980	J	29.76	1.474	1.4647	J			
A	30.25	1.481	1.4879	A	29.41	1.469	1.4670	A			
S	28.82	1.460	1.4758	S	30.08	1.478	1.4695	S			
O	28.63	1.457	1.4623	O	29.76	1.474	1.4725	O			
N	28.17	1.450	1.4482	N	29.74	1.473	1.4765	N			
D	28.29	1.452	1.4344	D	29.66	1.472	1.4814	D			

(see paper index) (see paper index)  
(see paper index) (see paper index)

TABLE 21

CALL MONEY RATES AT THE NEW YORK STOCK  
EXCHANGE

MONTHLY AVERAGES, JANUARY 1857 - JANUARY 1936

- Col. 1. Logarithms of Data Adjusted for Seasonal Fluctuations.
- Col. 2. Cyclical Curve (logarithms).
- Col. 3. Trend Curve (logarithms).
- Col. 4. Deviations of Cyclical Curve (logarithms) from Trend Curve (logarithms).
- Col. 5. Changing Seasonal Fluctuations (logarithms).

For details of the nature of the graduations given in Columns 2 and 3 and of the seasonal given in Column 5 of this table, see Appendix D

## SHORT TERM INTEREST RATES

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TABLE 21

## CALL MONEY RATES

Date	1	2	3	4	5	Date	1	2	3	4	5
1857						1862					
J	.874	.8813	.8353	+.0460	+.029	J	.775	.7523	.7596	-.0073	+.038
F	.927	.9040	.8300	+.0740	+.015	F	.776	.7427	.7616	-.0189	+.002
M	.969	.9279	.8249	+.1030	-.003	M	.734	.7320	.7636	-.0316	+.006
A	.936	.9501	.8199	+.1302	-.039	A	.759	.7212	.7655	-.0443	-.019
M	.906	.9682	.8150	+.1532	-.038	M	.689	.7109	.7672	-.0563	-.026
J	.876	.9798	.8099	+.1699	-.056	J	.653	.7022	.7686	-.0664	-.040
J	.860	.9828	.8051	+.1777	-.031	J	.756	.6963	.7700	-.0737	-.024
A	.985	.9763	.8004	+.1759	-.007	A	.639	.6935	.7711	-.0776	-.037
S	1.122	.9604	.7958	+.1646	+.054	S	.640	.6942	.7720	-.0778	-.007
O	1.225	.9351	.7913	+.1438	+.030	O	.642	.6989	.7728	-.0739	+.021
N	.880	.9012	.7869	+.1143	+.023	N	.757	.7072	.7736	-.0664	+.042
D	.823	.8603	.7828	+.0775	+.022	D	.735	.7187	.7743	-.0556	+.043
1858						1863					
J	.783	.8136	.7788	+.0348	+.030	J	.745	.7325	.7748	-.0423	+.040
F	.676	.7629	.7749	-.0120	+.012	F	.801	.7477	.7753	-.0276	+.002
M	.650	.7113	.7712	-.0599	-.003	M	.775	.7625	.7758	-.0133	+.010
A	.663	.6616	.7677	-.1061	-.040	A	.721	.7756	.7763	-.0007	-.005
M	.573	.6170	.7643	-.1473	-.029	M	.757	.7865	.7768	+.0097	-.033
J	.606	.5808	.7611	-.1803	-.050	J	.827	.7943	.7772	+.0171	-.042
J	.572	.5558	.7581	-.2023	-.028	J	.811	.7991	.7776	+.0215	-.026
J	.555	.5434	.7552	-.2118	-.013	J	.826	.8018	.7781	+.0237	-.048
A	.575	.5433	.7524	-.2091	+.040	S	.830	.8032	.7786	+.0246	-.010
S	.525	.547	.7499	-.1952	+.025	O	.791	.8040	.7790	+.0250	+.022
O	.582	.5752	.7473	-.1721	+.025	N	.800	.8051	.7794	+.0257	+.045
D	.577	.6015	.7449	-.1434	+.025	D	.794	.8071	.7798	+.0273	+.051
1859						1864					
J	.603	.6308	.7427	-.1119	+.031	J	.802	.8099	.7801	+.0298	+.043
F	.689	.6605	.7406	-.0801	+.010	F	.792	.8135	.7802	+.0333	-.007
M	.659	.6884	.7387	-.0503	-.002	M	.736	.8176	.7803	+.0373	+.015
A	.693	.7132	.7367	-.0235	-.040	A	.824	.8216	.7804	+.0412	+.009
M	.792	.7344	.7349	-.0005	-.023	M	.788	.8250	.7803	+.0447	-.040
J	.820	.7512	.7332	+.0180	-.045	J	.872	.8274	.7800	+.0474	-.046
J	.772	.7632	.7316	-.0316	-.025	J	.866	.8285	.7796	+.0489	-.033
A	.820	.7706	.7301	-.0405	-.015	A	.903	.8279	.7792	+.0487	-.064
S	.749	.7735	.7286	-.0449	+.026	S	.855	.8256	.7784	+.0472	-.010
O	.758	.7723	.7275	-.0448	+.022	O	.807	.8217	.7776	+.0441	+.026
N	.691	.7682	.7264	-.0418	+.029	N	.793	.8163	.7767	+.0396	+.046
D	.737	.7626	.7253	+.0373	+.027	D	.758	.8096	.7757	+.0339	+.062
1860						1865					
J	.791	.7569	.7242	+.0327	+.034	J	.800	.8023	.7746	+.0277	+.045
F	.761	.7523	.7237	+.0286	+.008	F	.795	.7952	.7735	+.0217	-.010
M	.740	.7499	.7232	+.0267	-.000	M	.824	.7888	.7724	+.0164	+.021
A	.756	.7501	.7228	+.0273	-.036	A	.723	.7840	.7714	+.0126	+.025
M	.746	.7527	.7226	+.0301	-.021	M	.781	.7810	.7703	+.0107	-.049
J	.719	.7571	.7228	+.0343	-.042	J	.743	.7800	.7695	+.0105	-.053
J	.742	.7627	.7232	+.0395	-.022	J	.783	.7805	.7686	+.0119	-.043
A	.771	.7683	.7237	+.0446	-.020	A	.854	.7816	.7679	+.0137	-.083
S	.800	.7729	.7246	+.0483	+.013	S	.783	.7823	.7673	+.0150	-.005
O	.809	.7761	.7258	+.0503	+.020	O	.810	.7814	.7669	+.0145	+.035
N	.819	.7776	.7272	+.0504	+.034	N	.787	.7781	.7667	+.0114	+.046
D	.828	.7772	.7287	+.0485	+.032	D	.756	.7717	.7666	+.0051	+.077
1861						1866					
J	.724	.7753	.7304	+.0449	+.036	J	.692	.7629	.7669	-.0040	+.048
F	.735	.7728	.7325	+.0403	+.005	F	.797	.7520	.7674	-.0154	-.015
M	.757	.7700	.7347	+.0353	+.003	M	.717	.7403	.7681	-.0278	+.028
A	.740	.7676	.7371	+.0305	-.030	A	.690	.7289	.7690	-.0401	+.041
M	.817	.7662	.7394	+.0268	-.021	M	.788	.7192	.7701	-.0509	-.056
J	.781	.7661	.7420	+.0241	-.041	J	.751	.7117	.7715	-.0598	-.063
J	.762	.7666	.7446	+.0220	-.022	J	.748	.7071	.7729	-.0658	-.060
A	.681	.7676	.7472	+.0204	-.028	A	.719	.7056	.7746	-.0690	-.103
S	.759	.7682	.7498	+.0184	+.001	S	.620	.7065	.7767	-.0702	+.002
O	.793	.7675	.7524	+.0151	+.020	O	.594	.7099	.7786	-.0687	+.044
N	.775	.7647	.7548	+.0099	+.038	N	.734	.7150	.7807	-.0657	+.044
D	.777	.7597	.7574	+.0023	+.036	D	.708	.7214	.7832	-.0618	+.097

## APPENDIX

TABLE 21—Continued

## CALL MONEY RATES

Date	1	2	3	4	5	Date	1	2	3	4	5
1867						1872					
J	.805	.7287	.7860	-.0573	+.051	J	.868	.8347	.8312	+.0035	+.075
F	.784	.7376	.7884	-.0508	-.020	F	.861	.8472	.8301	+.0171	-.020
M	.749	.7478	.7909	-.0431	+.033	M	.874	.8545	.8286	+.0259	+.052
A	.734	.7589	.7936	-.0347	+.058	A	1.025	.8588	.8269	+.0319	+.111
M	.745	.7708	.7964	-.0256	-.064	M	.874	.8599	.8247	+.0352	-.082
J	.868	.7823	.7989	-.0166	-.076	J	.796	.8591	.8227	+.0364	-.143
J	.730	.7919	.8014	-.0095	-.077	J	.726	.8581	.8203	+.0378	-.164
A	.748	.7983	.8039	-.0056	-.120	A	.756	.8590	.8176	+.0414	-.175
S	.741	.8014	.8067	-.0053	+.010	S	1.002	.8631	.8146	+.0485	+.012
O	.979	.8004	.8089	-.0085	+.053	O	.720	.8724	.8115	+.0609	+.088
N	.819	.7958	.8113	-.0155	+.040	N	.838	.8888	.8080	+.0808	+.050
D	.697	.7898	.8135	-.0237	+.116	D	1.108	.9120	.8043	+.1077	+.194
1868						1873					
J	.698	.7834	.8157	-.0323	+.054	J	.775	.9407	.8004	+.1403	+.082
F	.695	.7770	.8175	-.0405	-.024	F	1.028	.9729	.7959	+.1770	-.015
M	.933	.7727	.8194	-.0467	+.038	M	1.068	1.0047	.7912	+.2135	+.055
A	.988	.7718	.8209	-.0491	+.074	A	1.328	1.0304	.7861	+.2443	+.112
M	.811	.7736	.8223	-.0487	-.071	M	.866	1.0474	.7805	+.2669	-.081
J	.632	.7794	.8234	-.0440	-.088	J	.818	1.0526	.7747	+.2779	-.152
J	.710	.7906	.8244	-.0338	-.092	J	.760	1.0435	.7683	+.2752	-.180
A	.711	.8071	.8252	-.0181	-.137	A	.839	1.0210	.7611	+.2599	-.173
S	.671	.8293	.8257	+.0036	+.017	S	1.788	.9875	.7534	+.2341	-.001
O	.896	.8582	.8260	+.0322	+.060	O	1.080	.9447	.7453	+.1994	+.093
N	1.195	.8924	.8262	+.0662	+.036	N	.912	.8949	.7370	+.1579	+.061
D	.921	.9292	.8260	+.1032	+.136	D	.701	.8406	.7284	+.1122	+.196
1869						1874					
J	1.022	.9664	.8256	+.1408	+.058	J	.651	.7829	.7194	+.0635	+.089
F	.855	1.0003	.8252	+.1751	-.026	F	.626	.7232	.7099	+.0133	-.010
M	.913	1.0266	.8246	+.2020	+.042	M	.543	.6637	.7004	-.0367	+.059
A	.900	1.0422	.8238	+.2184	+.088	A	.508	.6064	.6907	-.0843	+.110
M	.905	1.0463	.8230	+.2233	-.076	M	.576	.5540	.6805	-.1265	-.080
J	1.475	1.0379	.8219	+.2160	-.101	J	.558	.5088	.6705	-.1617	-.160
J	1.100	1.0172	.8211	+.1961	-.109	J	.628	.4741	.6604	-.1863	-.189
A	.957	.9870	.8203	+.1667	-.152	A	.566	.4499	.6502	-.2003	-.168
S	1.270	.9501	.8195	+.1306	+.021	S	.449	.4356	.6395	-.2039	-.018
O	.683	.9084	.8188	+.0896	+.068	O	.370	.4296	.6294	-.1998	+.098
N	.762	.8655	.8183	+.0472	+.034	N	.405	.4298	.6193	-.1895	+.072
D	.744	.8248	.8178	+.0070	+.157	D	.385	.4328	.6091	-.1763	+.195
1870	.					1875					
J	.729	.7881	.8175	-.0294	+.063	J	.344	.4371	.5988	-.1617	+.095
F	.766	.7579	.8176	-.0597	-.026	F	.405	.4419	.5892	-.1473	-.007
M	.667	.7361	.8177	-.0816	+.045	M	.333	.4472	.5794	-.1322	+.064
A	.652	.7231	.8181	-.0950	+.099	A	.441	.4544	.5699	-.1153	+.103
M	.738	.7182	.8187	-.1005	-.079	M	.517	.4647	.5608	-.0961	-.078
J	.737	.7197	.8197	-.1000	-.114	J	.535	.4788	.5522	-.0734	-.164
J	.830	.7251	.8207	-.0956	-.126	J	.595	.4944	.5437	-.0493	-.197
A	.837	.7310	.8218	-.0908	-.165	A	.497	.5106	.5357	-.0251	-.157
S	.719	.7339	.8229	-.0890	+.021	S	.404	.5249	.5280	-.0031	-.033
O	.645	.7315	.8241	-.0926	+.075	O	.421	.5351	.5211	+.0140	+.099
N	.706	.7230	.8256	-.1026	+.034	N	.521	.5396	.5146	+.0250	+.081
D	.883	.7088	.8269	-.1181	+.176	D	.525	.5400	.5086	+.0314	+.188
1871						1876					
J	.743	.6913	.8282	-.1369	+.069	J	.667	.5365	.5032	+.0333	+.099
F	.640	.6742	.8206	-.1554	-.024	F	.564	.5305	.4984	+.0321	-.004
M	.575	.6608	.8307	-.1599	+.048	M	.503	.5233	.4942	+.0291	+.071
A	.658	.6539	.8317	-.1778	+.108	A	.472	.5159	.4909	+.0250	+.095
M	.631	.6551	.8324	-.1773	-.081	M	.582	.5084	.4888	+.0196	-.077
J	.606	.6656	.8331	-.1675	-.129	J	.575	.5004	.4866	+.0138	-.167
J	.657	.6844	.8335	-.1491	-.143	J	.516	.4915	.4857	+.0058	-.202
A	.619	.7091	.8336	-.1245	-.172	A	.373	.4816	.4856	-.0040	-.143
S	.628	.7375	.8337	-.0962	+.019	S	.330	.4707	.4861	-.0154	-.042
O	1.010	.7670	.8334	-.0664	+.082	O	.377	.4600	.4873	-.0273	+.100
N	.764	.7937	.8328	-.0391	+.039	N	.496	.4512	.4891	-.0379	+.089
D	.822	.8165	.8322	-.0157	+.189	D	.522	.4459	.4916	-.0457	+.177

**SHORT TERM INTEREST RATES**

**A225**

**TABLE 21—Continued**

**CALL MONEY RATES**

Date	1	2	3	4	5	Date	1	2	3	4	5
<b>1877</b>						<b>1882</b>					
J	.633	.4461	.4945	-.0484	+.097	J	.705	.6229	.6644	-.0415	+.030
F	.522	.4529	.4979	-.0450	-.002	F	.677	.6212	.6572	-.0360	-.024
M	.390	.4666	.5019	-.0353	+.078	M	.587	.6245	.6491	-.0246	+.080
A	.481	.4866	.5068	-.0202	+.086	A	.574	.6314	.6402	-.0088	+.035
M	.465	.5116	.5121	-.0005	-.076	M	.536	.6409	.6308	+.0101	-.059
J	.408	.5400	.5178	+.0222	-.165	J	.656	.6521	.6204	+.0317	-.105
J	.448	.5697	.5237	+.0460	-.205	J	.641	.6654	.6098	+.0556	-.164
A	.660	.5988	.5296	-.0693	-.129	A	.649	.6806	.5986	+.0821	-.052
S	.678	.6258	.5355	-.0903	-.044	S	.861	.6969	.5871	+.1028	-.001
O	.685	.6490	.5418	+.1072	+.100	O	.672	.7121	.5747	+.1374	+.068
N	.635	.6668	.5482	+.1186	+.096	N	.804	.7236	.5623	+.1613	+.088
D	.613	.6776	.5544	+.1232	+.165	D	.551	.7280	.5498	+.1782	+.115
<b>1878</b>						<b>1883</b>					
J	.900	.6803	.5607	+.1196	+.080	J	.634	.7210	.5372	+.1833	+.019
F	.681	.7049	.5781	+.1071	-.004	F	.649	.7007	.5248	+.1759	-.033
M	.604	.6583	.5728	+.0855	+.084	M	.948	.6670	.5121	+.1549	+.068
A	.713	.6336	.5787	+.0549	+.078	A	.758	.6211	.4996	+.1215	+.024
M	.617	.6012	.5842	+.0170	-.073	M	.606	.5672	.4871	+.0801	-.056
J	.568	.5644	.5897	-.0253	-.160	J	.389	.5110	.4748	+.0362	-.088
J	.446	.5267	.5949	-.0682	-.203	J	.481	.4579	.4632	-.0053	-.153
A	.371	.4926	.5998	-.1072	-.113	A	.439	.4125	.4527	-.0402	-.041
S	.408	.4664	.6044	-.1380	-.044	S	.371	.3798	.4429	-.0631	+.016
O	.602	.4520	.6090	-.1570	+.097	O	.366	.3612	.4333	-.0721	+.065
N	.481	.4511	.6136	-.1625	+.100	N	.217	.3559	.4246	-.0687	+.084
D	.490	.4643	.6181	-.1538	+.151	D	.215	.3610	.4167	-.0557	+.113
<b>1879</b>						<b>1884</b>					
J	.407	.4902	.6227	-.1325	+.077	J	.274	.3741	.4092	-.0351	+.005
F	.492	.5261	.6273	-.1012	-.006	F	.318	.3902	.4027	-.0125	-.044
M	.566	.5692	.6317	-.0625	+.087	M	.191	.4044	.3968	+.0076	+.052
A	.575	.6158	.6363	-.0205	+.068	A	.307	.4141	.3916	+.0225	+.015
M	.651	.6625	.6408	+.0217	-.070	M	.1231	.4162	.3869	+.0293	-.055
J	.670	.7066	.6454	+.0612	-.150	J	.608	.4085	.3831	+.0254	-.071
J	.667	.7451	.6498	+.0953	-.197	J	.419	.3901	.3797	+.0104	-.140
A	.990	.7752	.6544	+.1208	-.095	A	.276	.3616	.3767	-.0151	-.033
S	.779	.7951	.6588	+.1363	-.039	S	.212	.3235	.3746	-.0511	+.031
O	.999	.8026	.6631	+.1395	+.092	O	.227	.2790	.3732	-.0942	+.063
N	.839	.7973	.6673	+.1300	+.102	N	.077	.2326	.3721	-.1395	+.081
D	.622	.7802	.6714	+.1088	+.141	D	.063	.1884	.3713	-.1829	+.113
<b>1880</b>						<b>1885</b>					
J	.639	.7533	.6753	+.0780	+.060	J	.077	.1507	.3709	-.2202	-.001
F	.677	.7200	.6791	+.0409	-.011	F	.212	.1235	.3711	-.2476	-.054
M	.774	.6848	.6826	+.0022	+.088	M	.083	.1098	.3717	-.2619	+.034
A	.759	.6526	.6859	-.0333	+.057	A	.125	.1090	.3729	-.2639	+.005
M	.675	.6268	.6887	-.0619	-.066	M	.212	.1199	.3746	-.2547	-.054
J	.614	.6101	.6915	-.0814	-.137	J	.134	.1403	.3767	-.2364	-.058
J	.584	.6037	.6938	-.0901	-.186	J	.260	.1669	.3792	-.2123	-.130
A	.476	.6069	.6959	-.0890	-.078	A	.204	.1961	.3817	-.1856	-.028
S	.462	.6178	.6978	-.0800	-.031	S	.145	.2263	.3844	-.1581	+.045
O	.375	.6345	.6991	-.0646	+.084	O	.265	.2569	.3876	-.1307	+.063
N	.683	.6552	.7002	-.0450	+.099	N	.350	.2874	.3912	-.1038	+.080
D	.919	.6773	.7010	-.0237	+.130	D	.323	.3190	.3951	-.0761	+.116
<b>1881</b>						<b>1886</b>					
J	.637	.6994	.7012	-.0018	+.045	J	.333	.3528	.3998	-.0470	-.005
F	1,220	.7198	.7012	+.0186	-.018	F	.380	.3885	.4043	-.0158	-.066
M	.789	.7360	.7006	+.0354	+.085	M	.407	.4254	.4094	+.0160	+.016
A	.600	.7460	.6995	+.0465	+.047	A	.379	.4633	.4149	+.0484	+.002
M	.592	.7484	.6979	+.0505	-.063	M	.513	.5013	.4209	+.0804	-.054
J	.619	.7425	.6956	+.0469	-.121	J	.576	.5380	.4269	+.1111	-.051
J	.712	.7283	.6931	+.0352	-.175	J	.471	.5731	.4334	+.1397	-.119
A	.731	.7084	.6901	+.0183	-.064	A	.750	.5071	.4403	+.1658	-.025
S	.739	.6856	.6863	-.0007	-.019	S	.713	.6391	.4473	+.1918	+.058
O	.661	.6632	.6820	-.0188	+.075	O	.639	.6687	.4547	+.2140	+.065
N	.622	.6439	.6771	-.0332	+.094	N	.671	.6956	.4620	+.2336	+.080
D	.657	.6303	.6713	-.0410	+.121	D	.821	.7192	.4697	+.2495	+.119

## APPENDIX

TABLE 21—Continued

## CALL MONEY RATES

Date	1	2	3	4	5	Date	1	2	3	4	5
1887						1892					
J	.628	.7381	.4777	+.2604	-.006	J	.376	.3693	.5487	-.1794	+.004
F	.628	.7524	.4856	+.2668	-.077	F	.385	.3476	.5391	-.1915	-.084
M	.701	.7616	.4937	+.2679	+.002	M	.297	.3319	.5287	-.1968	+.004
A	.794	.7654	.5017	+.2637	-.007	A	.305	.3245	.5178	-.1933	-.004
M	.765	.7634	.5097	+.2537	-.055	M	.244	.3271	.5067	-.1796	-.068
J	.907	.7559	.5177	+.2382	-.050	J	.233	.3413	.4947	-.1534	-.087
J	.788	.7419	.5257	+.2162	-.111	J	.368	.3693	.4831	-.1138	-.094
A	.736	.7205	.5336	+.1869	-.024	A	.525	.4661	.4715	-.0603	-.038
S	.642	.6913	.5411	+.1502	+.068	S	.665	.5309	.4485	+.0064	+.001
O	.554	.6545	.5488	+.1057	+.068	O	.630	.6013	.4367	+.1646	+.082
N	.581	.6104	.5559	+.0545	+.082	D	.736	.6707	.4251	+.2436	+.097
D	.578	.5612	.5627	-.0015	+.121						
1888						1893					
J	.572	.5101	.5689	-.0588	-.005	J	.596	.7309	.4136	+.3173	+.006
F	.517	.4601	.5747	-.1146	-.086	F	.556	.7753	.4027	+.3726	-.079
M	.445	.4145	.5803	-.1658	-.006	M	.897	.7988	.3924	+.4064	+.017
A	.430	.3763	.5855	-.2092	-.010	A	.683	.7977	.3826	+.4151	+.005
M	.312	.3474	.5901	-.2427	-.057	M	.624	.7724	.3731	+.3993	-.068
J	.228	.3279	.5942	-.2663	-.052	J	1.048	.7259	.3642	+.3617	-.100
J	.263	.3177	.5975	-.2798	-.105	J	.985	.6618	.3559	+.3059	-.096
A	.214	.3166	.6003	-.2837	-.024	A	.789	.5849	.3479	+.2370	-.049
S	.373	.3233	.6028	-.2795	+.076	S	.481	.5004	.3404	+.1600	+.093
O	.343	.3371	.6044	-.2673	+.072	O	.290	.4117	.3336	+.0781	+.087
N	.323	.3582	.6056	-.2474	+.085	N	.152	.3217	.3272	-.0055	+.078
D	.497	.3861	.6064	-.2203	+.119	D	-.031	.2341	.3216	-.0875	+.095
1889						1894					
J	.523	.4194	.6067	-.1873	-.004	J	-.001	.1528	.3164	-.1636	+.010
F	.453	.4572	.6067	-.1495	-.089	F	.075	.0812	.3119	-.2307	-.075
M	.495	.4976	.6063	-.1087	-.009	M	.012	.0233	.3077	-.2844	+.025
A	.601	.5374	.6056	-.0682	-.012	A	.037	-.0165	.3038	-.3203	+.016
M	.467	.5745	.6042	-.0297	-.060	M	.106	-.0367	.3003	-.3370	-.065
J	.535	.6079	.6033	+.0046	-.058	J	.113	-.0383	.2974	-.3357	-.113
J	.650	.6365	.6021	+.0344	-.100	J	.099	-.0238	.2946	-.3184	-.099
A	.614	.6606	.6011	+.0595	-.025	A	.061	-.0018	.2920	-.2902	-.061
S	.600	.5821	.6002	+.0819	+.082	S	-.092	.0315	.2898	-.2583	+.092
O	.842	.7024	.5996	+.1028	+.077	O	-.088	.0600	.2877	-.2277	+.088
N	.765	.7215	.5991	+.1224	+.088	N	-.063	.0842	.2858	-.2016	+.076
D	.787	.7402	.5989	+.1413	+.116	D	.061	.1025	.2843	-.1818	+.097
1890						1895					
J	.888	.7580	.5990	+.1590	-.002	J	.116	.1165	.2828	-.1663	+.014
F	.718	.7727	.5994	+.1733	-.090	F	.249	.1294	.2812	-.1518	-.073
M	.638	.7826	.5999	+.1827	-.010	M	.322	.1442	.2798	-.1356	+.030
A	.645	.7873	.6006	+.1867	-.012	A	.325	.1623	.2787	-.1164	+.027
M	.752	.7855	.6016	+.1839	-.064	M	.181	.1847	.2778	-.0931	-.060
J	.743	.7771	.6026	+.1745	-.066	J	.188	.2103	.2768	-.0665	-.124
J	.759	.7637	.6036	+.1601	-.096	J	.249	.2370	.2761	-.0391	-.103
A	1.094	.7463	.6047	+.1416	-.028	A	.087	.2639	.2756	-.0117	-.074
S	.743	.7257	.6056	+.1201	+.086	S	.103	.2915	.2754	+.0161	+.090
O	.618	.7033	.6063	+.0970	+.081	O	.248	.3205	.2756	+.0449	+.088
N	.756	.6804	.6067	+.0737	+.089	N	.217	.3527	.2759	+.0768	+.077
D	.590	.6563	.6067	+.0498	+.109	D	.556	.3901	.2766	+.1135	+.103
1891						1896					
J	.590	.6327	.6063	+.0264	+.001	J	.671	.4330	.2776	+.1554	+.019
F	.546	.6101	.6055	+.0046	-.087	F	.671	.4793	.2791	+.2002	-.075
M	.466	.5887	.6039	-.0152	-.007	M	.511	.5257	.2811	+.2446	+.033
A	.529	.5684	.6017	-.0333	-.010	A	.443	.5673	.2836	+.2837	+.037
M	.707	.5498	.5991	-.0493	-.066	M	.457	.5982	.2870	+.3112	-.054
J	.587	.5320	.5956	-.0636	-.075	J	.421	.6144	.2903	+.3241	-.133
J	.437	.5137	.5914	-.0777	-.095	J	.423	.6145	.2945	+.3200	-.107
A	.359	.4938	.5864	-.0926	-.031	A	.760	.5979	.2992	+.2987	-.089
S	.564	.4718	.5803	-.1085	+.089	S	.649	.5666	.3042	+.2624	+.087
O	.544	.4473	.5733	-.1260	+.084	O	.961	.5248	.3098	+.2150	+.086
N	.554	.4210	.5659	-.1449	+.087	N	.716	.4762	.3156	+.1606	+.080
D	.367	.3943	.5578	-.1635	+.101	D	.172	.4238	.3214	+.1024	+.118

**SHORT TERM INTEREST RATES**

A227

TABLE 21—Continued

**CALL MONEY RATES**

Date	1	2	3	4	5	Date	1	2	3	4	5
1897						1902					
J	.227	.3712	.3280	+ .0432	+ .023	J	.602	.5914	.5721	+ .0193	+ .058
F	.292	.3213	.3341	-.0128	-.080	F	.495	.5667	.5667	.0336	-.118
M	.176	.2758	.3409	-.0651	+.034	M	.577	.6154	.5609	.0545	+.019
A	.131	.2377	.3479	-.1102	+.045	A	.576	.6351	.5550	.0801	+.032
M	.198	.2095	.3550	-.1455	-.049	M	.792	.6583	.5490	.1093	-.047
J	.219	.1928	.3614	-.1686	-.140	J	.602	.6824	.5429	.1395	-.149
J	.189	.1885	.3680	-.1794	-.113	J	.683	.7043	.5365	.1778	-.136
A	.202	.1969	.3744	-.1775	-.105	A	.760	.7208	.5305	.1903	.183
S	.263	.2155	.3808	-.1653	+.083	S	.991	.7300	.5243	.2057	+.042
O	.313	.2404	.3862	-.1458	+.085	O	.811	.7298	.5185	.2113	+.072
N	.170	.2673	.3916	-.1243	+.088	N	.536	.7204	.5127	.2077	.152
D	.331	.2920	.3967	-.1047	+.134	D	.564	.7032	.5071	.1961	+.269
1898						1903					
J	.368	.3108	.4014	-.0906	+.030	J	.694	.6795	.5020	.1775	+.066
F	.340	.3218	.4054	-.0836	-.090	F	.576	.6521	.4970	.1551	-.117
M	.302	.3254	.4094	-.0840	+.034	M	.765	.6238	.4925	.1313	+.013
A	.422	.3230	.4129	-.0899	+.051	A	.601	.5959	.4886	.1073	+.021
M	.334	.3170	.4160	-.0990	-.044	M	.442	.5688	.4850	.0838	-.055
J	.242	.3106	.4189	-.1083	-.145	J	.630	.5431	.4819	.0612	-.146
J	.215	.3062	.4216	-.1154	-.118	J	.536	.5179	.4793	.0386	-.138
A	.355	.3057	.4241	-.1184	-.125	A	.495	.4918	.4772	.0146	-.187
S	.501	.3112	.4269	-.1157	+.076	S	.336	.4639	.4756	.0117	+.029
O	.268	.3242	.4294	-.1052	+.084	O	.362	.4334	.4743	.0409	+.068
N	.223	.3455	.4322	-.0867	+.099	N	.552	.3999	.4737	.0738	+.163
D	.221	.3756	.4352	-.0896	+.161	D	.451	.3637	.4739	-.1102	+.289
1899						1904					
J	.398	.4144	.4384	-.0240	+.037	J	.296	.3263	.4748	-.1485	+.073
F	.494	.4611	.4422	+.0189	-.101	F	.368	.2896	.4760	-.1864	-.110
M	.582	.5137	.4459	-.0678	+.031	M	.234	.2553	.4777	.2224	+.009
A	.656	.5689	.4500	-.1189	+.054	A	.131	.2261	.4796	.2535	+.009
M	.589	.6229	.4543	-.1686	-.042	M	.256	.2042	.4822	.2780	-.066
J	.567	.6709	.4595	-.2114	-.147	J	.194	.1901	.4853	.2952	-.141
J	.773	.7085	.4648	-.2437	-.123	J	.151	.1849	.4886	.3037	-.138
A	.659	.7323	.4704	-.2619	-.144	A	.142	.1887	.4924	.3037	-.188
S	.736	.7401	.4765	-.2636	+.069	S	.167	.2003	.4965	.2962	+.018
O	.793	.7309	.4830	-.2479	+.082	O	.243	.2189	.5009	.2820	+.065
N	.770	.7063	.4898	-.2165	+.111	N	.279	.2440	.5057	.2617	+.168
D	.859	.6687	.4971	-.1716	+.188	D	.194	.2745	.5105	.2360	+.302
1900						1905					
J	.573	.6207	.5048	+.1159	+.045	J	.272	.3095	.5153	-.2058	+.080
F	.464	.5664	.5121	-.0543	-.112	F	.440	.3486	.5203	-.1717	-.100
M	.568	.5101	.5200	-.0099	+.028	M	.501	.3912	.5253	.1341	+.004
A	.435	.4561	.5279	-.0718	+.051	A	.513	.4360	.5304	-.0944	-.001
M	.342	.4082	.5359	-.1277	-.041	M	.460	.4818	.5356	-.0538	-.076
J	.376	.3706	.5436	-.1730	-.148	J	.534	.5276	.5407	-.0131	-.136
J	.313	.3462	.5509	-.2047	-.128	J	.501	.5713	.5456	+.0257	-.137
A	.275	.3368	.5580	-.2212	-.161	A	.497	.6115	.5502	.0613	-.185
S	.146	.3431	.5649	-.2218	+.061	S	.544	.6477	.5549	.0928	+.007
O	.473	.3644	.5709	-.2065	+.080	O	.660	.6795	.5593	.1202	+.065
N	.580	.3974	.5766	-.1792	+.124	N	.715	.7064	.5635	.1429	+.171
D	.494	.4384	.5817	-.1433	+.216	D	.911	.7300	.5676	.1624	+.306
1901						1906					
J	.435	.4830	.5859	-.1029	+.052	J	.852	.7512	.5715	+.1797	+.085
F	.418	.5258	.5891	-.0633	-.117	F	.753	.7697	.5751	.1946	-.087
M	.346	.5623	.5917	-.0294	+.023	M	.690	.7850	.5785	.2065	-.002
A	.590	.5904	.5935	-.0031	+.043	A	.992	.7962	.5816	.2146	-.014
M	.881	.6088	.5944	+.0144	-.043	M	.703	.8015	.5844	.2171	-.085
J	.783	.6174	.5941	+.0233	-.149	J	.642	.7987	.5869	.2118	-.130
J	.766	.6181	.5930	+.0251	-.133	J	.605	.7877	.5892	.1985	-.132
A	.561	.6134	.5912	+.0222	-.174	A	.827	.7691	.5910	.1781	-.180
S	.585	.6055	.5888	+.0167	+.052	S	.971	.7449	.5927	.1522	+.001
O	.473	.5972	.5853	+.0119	+.077	O	.647	.7192	.5938	.1254	+.065
N	.482	.5911	.5816	+.0095	+.140	N	.703	.6967	.5948	.1019	+.172
D	.552	.5866	.5771	+.0115	+.244	D	.842	.6804	.5954	.0850	+.304

## APPENDIX

TABLE 21—Continued

## CALL MONEY RATES

Date	1	2	3	4	5	Date	1	2	3	4	\$
1907						1912					
J	.703	.6724	.5954	+.0770	+.086	J	.362	.3967	.4766	-.0799	+.022
F	.715	.6742	.5952	+.0790	-.074	F	.418	.4143	.4799	-.0656	-.060
M	.815	.6842	.5942	+.0900	-.010	M	.429	.4378	.4828	-.0450	-.045
A	.395	.6988	.5926	+.1062	-.024	A	.521	.4658	.4853	-.0195	-.040
M	.453	.7153	.5904	+.1249	-.089	M	.500	.4963	.4871	+.0092	-.061
J	.619	.7308	.5874	+.1434	-.123	J	.509	.5270	.4884	+.0386	-.070
J	.784	.7416	.5838	+.1578	-.126	J	.524	.5552	.4890	+.0662	-.065
A	.655	.7452	.5798	+.1654	-.169	A	.533	.5788	.4890	+.0898	-.080
S	.605	.7407	.5755	+.1652	-.003	S	.654	.5961	.4882	+.1079	+.012
O	1.256	.7257	.5699	+.1558	+.060	O	.654	.6064	.4873	+.1191	+.073
N	.917	.6986	.5639	+.1347	+.171	N	.685	.6101	.4856	+.1245	+.120
D	.868	.6591	.5572	+.1019	+.296	D	.626	.6076	.4837	+.1239	+.187
1908						1913					
J	.596	.6072	.5495	+.0577	+.081	J	.476	.6000	.4810	+.1190	+.003
F	.324	.5429	.5416	+.0013	-.066	F	.579	.5882	.4787	+.1095	-.059
M	.286	.4694	.5329	-.0635	-.019	M	.669	.5727	.4757	+.0970	-.047
A	.269	.3919	.5239	-.1320	-.033	A	.576	.5529	.4724	+.0805	-.041
M	.311	.3153	.5145	-.1992	-.091	M	.490	.5292	.4688	+.0604	-.051
J	.296	.2458	.5051	-.2593	-.114	J	.415	.5017	.4654	+.0363	-.057
J	.201	.1895	.4951	-.3056	-.115	J	.395	.4711	.4618	+.0093	-.049
A	.178	.1509	.4853	-.3344	-.153	A	.415	.4401	.4583	-.0182	-.063
S	.134	.1310	.4758	-.3448	-.004	S	.442	.4118	.4547	-.0429	+.019
O	.089	.1298	.4659	-.3361	+.069	O	.487	.3892	.4511	-.0619	+.071
N	.079	.1449	.4565	-.3116	+.164	N	.467	.3753	.4475	-.0722	+.107
D	.185	.1719	.4476	-.2757	+.277	D	.504	.3720	.4439	-.0719	+.157
1909						1914					
J	.185	.2065	.4395	-.2330	+.073	J	.425	.3793	.4402	-.0609	-.015
F	.414	.2453	.4317	-.1864	-.062	F	.304	.3953	.4367	-.0414	-.054
M	.294	.2850	.4242	-.1392	-.027	M	.327	.4175	.4331	-.0156	-.048
A	.325	.3236	.4176	-.0940	-.037	A	.301	.4430	.4295	+.0135	-.041
M	.352	.3609	.4114	-.0505	-.087	M	.292	.4686	.4258	+.0428	-.042
J	.376	.3964	.4059	-.0095	-.104	J	.310	.4918	.4224	+.0694	-.043
J	.419	.4296	.4014	+.0282	-.105	J	.470	.5115	.4189	+.0926	-.032
A	.470	.4602	.3977	+.0625	-.134	A	.847	.5264	.4157	+.1107	-.051
A	.434	.4876	.3946	+.0930	-.004	S	.757	.5354	.4123	+.1231	+.021
S	.561	.5105	.3922	+.1183	+.073	O	.714	.5377	.4092	+.1285	+.064
O	.512	.5278	.3904	+.1374	+.155	N	.640	.5317	.4061	+.1256	+.093
N	.443	.5387	.3894	+.1493	+.259	D	.396	.5157	.4031	+.1126	+.133
1910						1915					
J	.617	.5428	.3889	+.1539	+.057	J	.354	.4804	.4002	+.0892	-.026
F	.503	.5397	.3890	+.1507	-.059	F	.342	.4532	.3977	+.0555	-.048
M	.494	.5301	.3896	+.1405	-.035	M	.332	.4091	.3954	+.0137	-.046
A	.555	.5148	.3906	+.1242	-.039	A	.360	.3610	.3934	-.0324	-.040
M	.639	.4951	.3921	+.1030	-.079	M	.324	.3139	.3915	-.0776	-.036
J	.535	.4731	.3941	+.0790	-.093	J	.292	.2727	.3903	-.1176	-.030
J	.475	.4512	.3964	+.0548	-.093	J	.283	.2416	.3892	-.1476	-.016
A	.306	.4308	.3991	+.0317	-.161	A	.286	.2230	.3886	-.1656	-.040
S	.301	.4140	.4021	+.0119	-.000	S	.231	.2178	.3884	-.1706	+.022
O	.421	.4018	.4056	-.0038	+.075	O	.206	.2244	.3887	-.1643	+.054
N	.363	.3944	.4094	-.0150	+.146	N	.196	.2403	.3896	-.1493	+.078
D	.292	.3912	.4134	-.0222	+.237	D	.175	.2624	.3912	-.1288	+.111
1911						1916					
J	.462	.3916	.4179	-.0263	+.040	J	.310	.2877	.3936	-.1059	-.036
F	.419	.3939	.4225	-.0286	-.061	F	.312	.3132	.3965	-.0833	-.038
M	.399	.3967	.4275	-.0308	-.041	M	.321	.3376	.4001	-.0625	-.042
A	.402	.3988	.4325	-.0337	-.040	A	.360	.3600	.4042	-.0442	-.038
M	.433	.3992	.4379	-.0387	-.069	M	.388	.3796	.4088	-.0292	-.030
J	.462	.3973	.4431	-.0458	-.082	J	.492	.3963	.4144	-.0181	-.019
J	.452	.3934	.4483	-.0549	-.079	J	.500	.4102	.4203	-.0101	-.004
A	.461	.3883	.4535	-.0652	-.097	A	.402	.4212	.4270	-.0058	-.035
S	.353	.3834	.4588	-.0754	+.005	S	.422	.4293	.4348	-.0055	+.022
O	.292	.3801	.4637	-.0836	+.075	O	.376	.4351	.4427	-.0076	+.044
N	.302	.3803	.4685	-.0882	+.153	N	.418	.4395	.4514	-.0119	+.065
D	.393	.3856	.4727	-.0871	+.212	D	.558	.4434	.4606	-.0172	+.089

## SHORT TERM INTEREST RATES

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TABLE 21—Continued

## CALL MONEY RATES

Date	1	2	3	4	5	Date	1	2	3	4	5
1917						1922					
J	.350	.4477	.4709	-.0232	-.038	J	.673	.6561	.7355	-.0794	-.015
F	.409	.4539	.4816	-.0277	-.027	F	.661	.6402	.7273	-.0871	+.029
M	.393	.4626	.4925	-.0299	-.035	M	.627	.6273	.7192	-.0919	-.001
A	.428	.4742	.5038	-.0296	-.035	A	.617	.6178	.7109	-.0931	-.018
M	.513	.4892	.5152	-.0260	-.026	M	.598	.6118	.7028	-.0910	-.006
J	.686	.5076	.5277	-.0201	-.014	J	.597	.6093	.6948	-.0855	-.029
J	.525	.5285	.5402	-.0117	.000	J	.602	.6103	.6868	-.0765	-.015
A	.506	.5517	.5529	-.0012	-.030	A	.593	.6145	.6789	-.0644	-.018
S	.636	.5762	.5650	+.0112	+.020	S	.636	.6214	.6711	-.0497	+.001
O	.567	.6009	.5784	+.0225	+.035	O	.662	.6305	.6637	-.0332	+.013
N	.567	.6249	.5917	+.0332	+.053	N	.680	.6411	.6563	-.0152	+.009
D	.636	.6474	.6048	+.0426	+.077	D	.626	.6526	.6493	+.0033	+.042
1918						1923					
J	.651	.6678	.6176	+.0502	-.038	J	.646	.6641	.6423	+.0218	-.011
F	.714	.6856	.6312	+.0544	-.016	F	.650	.6753	.6359	+.0394	+.033
M	.744	.7006	.6444	+.0562	-.028	M	.710	.6860	.6295	+.0565	+.001
A	.659	.7129	.6578	+.0551	-.034	A	.702	.6958	.6236	+.0722	-.014
M	.724	.7224	.6704	+.0520	-.022	M	.675	.7045	.6177	+.0868	-.003
J	.709	.7291	.6838	+.0453	-.010	J	.729	.7116	.6124	+.0992	-.030
J	.749	.7333	.6964	+.0369	+.002	J	.726	.7162	.6072	+.1090	-.022
A	.704	.7350	.7086	+.0264	-.025	A	.714	.7171	.6026	+.1145	-.018
S	.763	.7343	.7199	+.0144	+.015	S	.691	.7128	.5981	+.1147	+.002
O	.750	.7318	.7309	+.0009	+.028	O	.666	.7019	.5941	+.1078	+.012
N	.724	.7284	.7420	-.0136	+.043	N	.677	.6835	.5903	+.0932	+.005
D	.668	.7249	.7525	-.0276	+.064	D	.646	.6576	.5869	+.0707	+.041
1919						1924					
J	.714	.7230	.7624	-.0394	-.035	J	.651	.6251	.5835	+.0416	-.009
F	.708	.7239	.7712	-.0473	-.004	F	.604	.5876	.5806	+.0070	+.032
M	.707	.7288	.7799	-.0511	-.019	M	.604	.5477	.5780	-.0303	+.002
A	.764	.7387	.7877	-.0490	-.032	A	.634	.5082	.5756	-.0674	-.009
M	.741	.7534	.7950	-.0416	-.021	M	.525	.4719	.5736	-.1017	-.001
J	.830	.7727	.8012	-.0285	-.008	J	.380	.4410	.5718	-.1308	-.028
J	.815	.7956	.8068	-.0112	+.001	J	.350	.4175	.5704	-.1529	-.028
A	.731	.8204	.8120	+.0084	-.021	A	.319	.4027	.5690	-.1663	-.018
S	.752	.8453	.8167	+.0286	+.010	S	.313	.3972	.5678	-.1706	+.003
O	.879	.8689	.8203	+.0486	+.021	O	.355	.4013	.5670	-.1655	+.010
N	1.011	.8893	.8236	+.0657	+.033	N	.381	.4151	.5666	-.1515	+.003
D	.894	.9055	.8264	+.0791	+.053	D	.501	.4374	.5662	-.1288	+.042
1920						1925					
J	.942	.9167	.8285	+.0882	-.029	J	.529	.4667	.5660	-.0993	-.008
F	.993	.9227	.8304	+.0923	+.007	F	.531	.5010	.5663	-.0653	+.025
M	.919	.9237	.8315	+.0922	-.011	M	.597	.5375	.5669	-.0294	+.002
A	.892	.9205	.8319	+.0886	-.029	A	.592	.5731	.5678	+.0053	-.005
M	.870	.9140	.8319	+.0821	-.016	M	.581	.6049	.5688	+.0361	+.001
J	.889	.9051	.8311	+.0740	-.014	J	.620	.6309	.5703	+.0606	-.021
J	.919	.8951	.8301	+.0650	-.000	J	.638	.6496	.5723	+.0773	-.026
A	.879	.8855	.8289	+.0561	-.020	A	.640	.6610	.5746	+.0864	-.018
S	.846	.8755	.8275	+.0480	+.005	S	.662	.6660	.5773	+.0887	+.003
O	.872	.8668	.8249	+.0419	+.017	O	.682	.6663	.5804	+.0859	+.006
N	.873	.8589	.8220	+.0369	+.025	N	.674	.6639	.5840	+.0799	+.002
D	.800	.8516	.8186	+.0330	+.045	D	.684	.6604	.5381	+.0723	+.042
1921						1926					
J	.848	.8444	.8149	+.0295	-.021	J	.645	.6570	.5926	+.0644	-.009
F	.843	.8366	.8106	+.0260	+.018	F	.671	.6543	.5976	+.0567	+.015
M	.839	.8276	.8057	+.0219	-.005	M	.657	.6524	.6029	+.0495	+.001
A	.836	.8170	.8001	+.0169	-.026	A	.611	.6512	.6088	+.0424	-.002
M	.842	.8044	.7943	+.0101	-.010	M	.580	.6505	.6150	+.0355	+.001
J	.798	.7898	.7878	+.0020	-.020	J	.631	.6502	.6219	+.0283	-.013
J	.754	.7732	.7811	-.0079	-.006	J	.647	.6502	.6288	+.0214	-.017
A	.765	.7548	.7741	-.0193	-.019	A	.674	.6508	.6360	+.0148	-.019
S	.710	.7350	.7669	-.0319	+.001	S	.699	.6517	.6435	+.0082	+.002
O	.708	.7146	.7591	-.0445	+.015	O	.673	.6526	.6515	+.0011	+.004
N	.687	.6941	.7513	-.0572	+.015	N	.657	.6531	.6594	-.0063	+.002
D	.669	.6743	.7433	-.0690	+.042	D	.672	.6522	.6676	-.0154	+.041

## APPENDIX

**TABLE 21—Concluded**

## CALL MONEY RATES

Date	1	2	3	4	5	Date	1	2	3	4	5
1927						1932					
J	.645	.6491	.6754	-.0263	-.010	J	.433	.3914			-.010
F	.602	.6434	.6838	-.0404	+.003	F	.408	.4036			-.010
M	.616	.6352	.6914	-.0562	.000	M	.398	.4039			.000
A	.622	.6247	.6990	-.0743	-.001	A	.398	.3929			.000
M	.629	.6131	.7063	-.0932	.000	M	.398	.3720			.000
J	.639	.6020	.7131	-.1111	-.003	J	.398	.3432			.000
J	.617	.5930	.7195	-.1265	-.010	A	.318	.3099			.000
A	.586	.5873	.7264	-.1391	-.020	A	.321	.2746			-.020
S	.579	.5862	.7310	-.1448	+.001	S	.301	.2392			.000
O	.589	.5905	.7357	-.1452	+.002	O	.130	.2045			.000
N	.555	.5999	.7396	-.1397	+.001	N	.000	.1719			.000
D	.600	.6143	.7428	-.1285	+.041	D	-.040	.1414			+.040
1928						1933					
J	.637	.6330	.7456	-.1126	-.010	J	.010	.1126			-.010
F	.647	.6550	.7474	-.0924	-.006	F	.010	.0864			-.010
M	.650	.6791	.7486	-.0695	.000	M	.521	.0631			.000
A	.706	.7048	.7489	-.0441	.000	A	.137	.0422			.000
M	.756	.7311	.7484	-.0173	.000	M	.000	.0242			.000
J	.801	.7573	.7470	+.0103	.000	J	.000	.0089			.000
J	.785	.7832	.7451	+.0381	-.003	J	.000	-.0047			.000
A	.857	.8085	.7427	+.0658	-.020	A	.011	.0174			-.020
S	.861	.8328	.7397	+.0931	.000	S	-.125	-.0291			.000
O	.844	.8555	.7357	+.1198	.000	O	-.125	-.0400			.000
N	.824	.8766	.7312	+.1454	.000	N	-.125	-.0494			.000
D	.895	.8953	.7264	+.1689	+.040	D	-.067	-.0555			+.040
1929						1934					
J	.858	.9110	.7210	+.1900	-.010	J	.010	-.0560			-.010
F	.859	.9231	.7148	+.2083	-.010	F	.010	-.0497			-.010
M	.959	.9312	.7083	+.2229	.000	M	.000	-.0359			.000
A	.949	.9344	.7012	+.2332	.000	A	.000	-.0152			.000
M	.950	.9321	.6940	+.2381	.000	M	.000				.000
J	.886	.9239			.000	J	.000				.000
J	.965	.9091			.000	J	.000				.000
A	.935	.8870			-.020	A	.020				-.020
S	.929	.8580			.000	S	.000				.000
O	.808	.8222			.000	O	.000				.000
N	.736	.7801			.000	N	.000				.000
D	.644	.7332			+.040	D	-.040				+.040
1930						1935					
J	.677	.6833			-.010	J	.010				-.010
F	.645	.6321			-.010	F	.010				-.010
M	.567	.5813			.000	M	.000				.000
A	.602	.5326			.000	A	-.194				.000
M	.494	.4868			.000	M	-.602				.000
J	.418	.4439			.000	J	-.602				.000
J	.342	.4037			.000	J	-.602				.000
A	.364	.3659			-.020	A	-.582				-.020
S	.340	.3299			.000	S	-.602				.000
O	.301	.2956			.000	O	-.538				.000
N	.301	.2637			.000	N	-.125				.000
D	.308	.2351			+.040	D	-.165				+.040
1931						1936					
J	.206	.2108			-.010	J	-.115				-.010
F	.186	.1921			-.010						.000
M	.190	.1803			.000						.000
A	.182	.1760			.000						.000
M	.161	.1795			.000						.000
J	.176	.1916			.000						.000
J	.176	.2116			.000						.000
A	.196	.2383			-.020						.000
S	.176	.2703			.000						.000
O	.322	.3053			.000						.000
N	.398	.3393			.000						.000
D	.391	.3690			+.040						+.040

TABLE 22

90-DAY TIME MONEY RATES IN NEW YORK CITY  
MONTHLY AVERAGES, JANUARY 1890-JANUARY 1936

- Col. 1. Logarithms of Data Adjusted for Seasonal Fluctuations.
- Col. 2. Cyclical Curve (logarithms).
- Col. 3. Trend Curve (logarithms).
- Col. 4. Deviations of Cyclical Curve (logarithms) from Trend Curve (logarithms).
- Col. 5. Changing Seasonal Fluctuations (logarithms).

For details of the nature of the graduations given in Columns 2 and 3 and of the seasonal given in Column 5, see Appendix D.

## APPENDIX

TABLE 22  
TIME MONEY RATES

Date	1	2	3	4	5	Date	1	2	3	4	5
1890						1895					
J	.699	.6989	.6888	+.0101	-.018	J	.423	.4014	.5005	-.0991	-.016
F	.742	.7105	.6889	+.0216	-.048	F	.526	.4086	.4993	-.0907	-.022
M	.717	.7212	.6890	+.0322	-.013	M	.504	.4149	.4981	-.0832	+.025
A	.683	.7305	.6893	+.0412	-.030	A	.520	.4209	.4969	-.0760	+.013
M	.757	.7378	.6895	+.0483	-.041	M	.416	.4274	.4958	-.0684	-.036
J	.741	.7427	.6899	+.0528	-.042	J	.356	.4344	.4949	-.0605	-.055
J	.716	.7451	.6904	+.0547	-.030	J	.432	.4417	.4940	-.0523	-.054
A	.756	.7456	.6907	+.0549	+.022	A	.374	.4501	.4932	-.0431	+.024
S	.737	.7446	.6911	+.0535	+.059	S	.356	.4610	.4926	-.0316	+.074
O	.730	.7428	.6914	+.0514	+.048	O	.401	.4758	.4918	-.0160	+.054
N	.794	.7410	.6916	+.0494	+.051	N	.404	.4960	.4913	+.0047	-.006
D	.803	.7394	.6916	+.0478	+.042	D	.618	.5226	.4910	+.0316	-.003
1891						1896					
J	.740	.7383	.6913	+.0470	-.022	J	.792	.5553	.4908	+.0645	-.014
F	.697	.7376	.6911	+.0465	-.046	F	.744	.5917	.4907	+.1010	-.024
M	.685	.7365	.6904	+.0461	-.008	M	.561	.6287	.4908	+.1379	+.028
A	.645	.7344	.6895	+.0449	-.022	A	.551	.6623	.4909	+.1714	+.017
M	.791	.7302	.6878	+.0424	-.044	M	.527	.6879	.4911	+.1968	-.033
J	.696	.7230	.6862	+.0368	-.043	J	.555	.7030	.4918	+.2112	-.061
J	.687	.7120	.6839	+.0281	-.029	J	.650	.7063	.4926	+.2137	-.059
A	.720	.6969	.6815	+.0154	+.025	A	.855	.6975	.4937	+.2038	+.020
S	.699	.6776	.6787	-.0011	+.063	S	.823	.6780	.4948	+.1832	+.074
O	.682	.6550	.6754	-.0204	+.050	O	.872	.6503	.4964	+.1539	+.054
N	.670	.6300	.6719	-.0419	+.029	N	.678	.6166	.4981	+.1185	+.004
D	.615	.6038	.6681	-.0643	+.028	D	.492	.5785	.5002	+.0783	-.001
1892						1897					
J	.542	.5779	.6635	-.0856	-.022	J	.429	.5384	.5024	+.0360	-.011
F	.533	.5538	.6592	-.1054	-.039	F	.428	.4985	.5048	-.0063	-.030
M	.549	.5331	.6543	-.1212	+.001	M	.424	.4610	.5075	-.0465	+.028
A	.471	.5171	.6490	-.1319	-.012	A	.381	.4289	.5103	-.0814	+.017
M	.461	.5079	.6431	-.1352	-.043	M	.429	.4052	.5132	-.1080	-.031
J	.475	.5069	.6375	-.1306	-.044	J	.413	.3922	.5164	-.1242	-.067
J	.507	.5155	.6316	-.1161	-.030	J	.361	.3910	.5194	-.1284	-.060
A	.443	.5345	.6257	-.0912	+.027	A	.416	.4019	.5223	-.1204	+.014
S	.586	.5638	.6197	-.0559	+.067	S	.432	.4227	.5249	-.1022	+.073
O	.689	.6016	.6135	-.0119	+.051	O	.449	.4496	.5278	-.0782	+.055
N	.721	.6452	.6075	+.0377	+.010	N	.460	.4787	.5302	-.0515	+.017
D	.726	.6912	.6015	+.0897	+.014	D	.527	.5060	.5326	-.0266	+.004
1893						1898					
J	.709	.7348	.5957	+.1391	-.021	J	.468	.5279	.5348	-.0069	-.009
F	.646	.7716	.5899	+.1817	-.031	F	.467	.5423	.5367	+.0056	-.037
M	.766	.7983	.5841	+.2144	+.011	M	.637	.5493	.5385	+.0108	+.026
A	.773	.8129	.5785	+.2344	-.002	A	.750	.5491	.5401	+.0090	+.014
M	.810	.8136	.5728	+.2408	-.042	M	.601	.5431	.5414	+.0017	-.030
J	.831	.8012	.5675	+.2337	-.047	J	.518	.5330	.5427	-.0097	-.074
J	.977	.7769	.5621	+.2148	-.035	J	.467	.5200	.5438	-.0238	-.059
A	.841	.7422	.5569	+.1853	+.028	A	.463	.5054	.5446	-.0392	+.007
S	.690	.6991	.5517	+.1474	+.070	S	.497	.4911	.5452	-.0541	+.070
O	.636	.6495	.5469	+.1026	+.052	O	.375	.4789	.5459	-.0670	+.055
N	.533	.5952	.5422	+.0530	-.002	N	.428	.4707	.5468	-.0761	+.034
D	.413	.5384	.5378	+.0006	+.005	D	.452	.4688	.5477	-.0789	+.015
1894						1899					
J	.437	.4824	.5333	-.0509	-.020	J	.468	.4749	.5489	-.0740	-.007
F	.433	.4301	.5293	-.0992	-.025	F	.523	.4894	.5499	-.0605	-.042
M	.379	.3849	.5255	-.1406	+.019	M	.580	.5118	.5514	-.0396	+.022
A	.392	.3502	.5218	-.1716	+.006	A	.583	.5404	.5531	-.0127	+.006
M	.340	.3280	.5185	-.1905	-.039	M	.535	.5723	.5552	+.0171	-.031
J	.325	.3183	.5153	-.1968	-.051	J	.558	.6041	.5575	+.0466	-.081
J	.346	.3207	.5125	-.1918	-.045	J	.612	.6325	.5602	+.0723	-.053
A	.362	.3317	.5100	-.1783	+.027	A	.633	.6550	.5630	+.0920	.000
S	.305	.3475	.5077	-.1602	+.072	S	.679	.6700	.5662	+.1038	+.066
O	.248	.3644	.5054	-.1410	+.053	O	.672	.6773	.5699	+.1074	+.056
N	.386	.3799	.5036	-.1237	-.008	N	.727	.6776	.5738	+.1038	+.048
D	.378	.3923	.5019	-.1096	-.001	D	.758	.6721	.5779	+.0942	+.029

**SHORT TERM INTEREST RATES**

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**TABLE 22—Continued**

**TIME MONEY RATES**

Date	1	2	3	4	5	Date	1	2	3	4	5
1900						1905	.463	.4823	.6236	-.1413	+.004
J	.686	.6621	.5823	+.0798	-.005	F	.517	.4960	.6263	-.1303	-.026
F	.672	.6490	.5870	+.0620	-.044	M	.525	.5108	.6288	-.1180	-.014
M	.643	.6340	.5918	+.0422	+.016	A	.567	.5265	.6313	-.1048	-.040
A	.549	.6179	.5970	+.0209	-.005	M	.564	.5430	.6335	-.0905	-.062
M	.510	.6018	.6024	-.0006	-.033	J	.582	.5605	.6360	-.0755	-.095
J	.572	.5870	.6080	-.0210	-.086	J	.567	.5788	.6384	-.0596	-.077
J	.572	.5745	.6135	-.0390	-.046	A	.545	.5977	.6407	-.0430	-.029
A	.565	.5656	.6187	-.0531	-.007	S	.593	.6170	.6429	-.0259	+.038
S	.538	.5612	.6237	-.0625	+.061	O	.612	.6366	.6451	-.0085	+.078
O	.637	.5616	.6288	-.0672	+.057	N	.650	.6560	.6471	+.0089	+.107
N	.576	.5664	.6337	-.0673	+.060	D	.636	.6752	.6490	+.0262	+.122
D	.630	.5751	.6383	-.0632	+.049						
1901						1906	.699	.6940	.6507	+.0433	+.007
J	.587	.5861	.6424	-.0563	-.004	J	.746	.7120	.6526	+.0594	-.026
F	.555	.5978	.6465	-.0487	-.043	M	.737	.7287	.6541	+.0746	-.019
M	.505	.6086	.6301	-.0415	+.011	A	.796	.7434	.6555	+.0879	-.041
A	.632	.6179	.6332	-.0353	-.015	M	.761	.7551	.6567	+.0984	-.066
M	.677	.6246	.6355	-.0369	-.038	J	.736	.7630	.6580	+.1050	-.095
J	.642	.6290	.6577	-.0287	-.091	J	.735	.7662	.6592	+.1070	-.082
J	.681	.6314	.6595	-.0281	-.045	A	.760	.7650	.6601	+.1049	-.028
A	.655	.6326	.6607	-.0281	-.044	S	.822	.7600	.6610	+.0990	+.035
S	.649	.6331	.6615	-.0284	+.055	O	.703	.7526	.6618	+.0908	+.084
O	.609	.6342	.6622	-.0280	+.058	N	.747	.7452	.6625	+.0827	+.110
N	.598	.6364	.6622	-.0258	+.073	D	.772	.7400	.6630	+.0770	+.125
D	.640	.6402	.6617	-.0215	+.069						
1902						1907					
J	.659	.6463	.6608	-.0145	-.003	J	.754	.7386	.6633	+.0753	+.008
F	.641	.6550	.6597	-.0047	-.039	F	.748	.7421	.6635	+.0786	-.028
M	.599	.6659	.6584	+.0075	+.003	M	.818	.7508	.6634	+.0874	-.024
A	.653	.6787	.6569	+.0218	-.025	A	.687	.7632	.6632	+.1000	-.042
M	.722	.6928	.6550	+.0378	-.045	M	.668	.7777	.6626	+.1151	-.069
J	.732	.7072	.6530	+.0542	-.024	J	.740	.7917	.6617	+.1300	-.093
J	.711	.7206	.6508	+.0658	-.048	J	.791	.8029	.6604	+.1425	-.083
A	.695	.7322	.6485	+.0837	-.021	A	.833	.8089	.6588	+.1501	-.026
S	.843	.7411	.6458	+.0953	+.051	S	.722	.8081	.6569	+.1512	+.035
O	.811	.7465	.6432	+.1033	+.061	O	.815	.7993	.6543	+.1450	+.091
N	.725	.7486	.6405	+.1081	+.084	N	.1020	.7819	.6516	+.1303	+.110
D	.745	.7478	.6376	+.1102	+.088	D	.876	.7558	.6484	+.1074	+.124
1903						1908					
J	.696	.7443	.6345	+.1098	.000	J	.721	.7220	.6446	+.0774	+.008
F	.697	.7390	.6316	+.1074	-.035	F	.656	.6813	.6407	+.0406	-.031
M	.755	.7328	.6287	+.1041	-.034	M	.583	.6354	.6361	-.0007	-.030
A	.728	.7260	.6258	+.1002	-.033	A	.427	.5869	.6311	-.0442	-.042
M	.643	.7183	.6230	+.0953	-.050	M	.535	.5387	.6257	-.0870	-.071
J	.726	.7099	.6203	+.0896	-.035	J	.454	.4936	.6201	-.1265	-.089
J	.716	.7000	.6179	+.0821	-.055	J	.439	.4544	.6142	-.1598	-.079
A	.676	.6880	.6156	+.0724	-.025	A	.430	.4235	.6081	-.1846	-.022
S	.674	.6733	.6138	+.0595	+.046	S	.375	.4021	.6020	-.1999	+.035
O	.634	.6554	.6118	+.0436	+.065	O	.395	.3906	.5958	-.2052	+.096
N	.671	.6342	.6106	+.0236	+.033	N	.411	.3883	.5897	-.2014	+.109
D	.616	.6100	.6096	+.0004	+.103	D	.387	.3936	.5834	-.1898	+.118
1904						1909					
J	.603	.5836	.6090	-.0254	+.002	J	.420	.4046	.5770	-.1724	+.005
F	.596	.5563	.6087	-.0524	-.029	F	.479	.4194	.5708	-.1514	-.035
M	.510	.5294	.6088	-.0794	-.039	M	.458	.4359	.5650	-.1291	-.035
A	.468	.5045	.6091	-.1046	-.038	A	.435	.4535	.5595	-.1060	-.042
M	.473	.4832	.6095	-.1263	-.056	M	.486	.4711	.5546	-.0835	-.071
J	.460	.4664	.6105	-.1441	-.036	J	.491	.4888	.5496	-.0608	-.084
J	.453	.4549	.6117	-.1568	-.066	J	.447	.5066	.5452	-.0386	-.070
A	.399	.4489	.6131	-.1642	-.028	A	.534	.5248	.5415	-.0167	-.017
S	.470	.4482	.6149	-.1667	+.042	S	.537	.5433	.5379	+.0054	+.036
O	.473	.4520	.6167	-.1647	+.071	O	.579	.5620	.5349	+.0271	+.098
N	.474	.4596	.6189	-.1593	+.100	N	.582	.5803	.5323	+.0480	+.105
D	.440	.4700	.6212	-.1512	+.115	D	.557	.5974	.5301	+.0673	+.110

## APPENDIX

TABLE 22—Continued

## TIME MONEY RATES

Date	1	2	3	4	5	Date	1	2	3	4	5
1910						1915					
J	.634	.6123	.5283	+.0840	.000	J	.536	.5967	.5455	+.0512	-.032
F	.605	.6240	.5272	+.0968	-.038	F	.485	.5715	.5437	+.0278	-.026
M	.630	.6317	.5263	+.1054	-.039	M	.490	.5404	.5419	-.0015	-.035
A	.653	.6349	.5258	+.1091	-.041	A	.488	.5064	.5405	-.0341	-.024
M	.665	.6331	.5256	+.1075	-.071	M	.491	.4732	.5392	-.0660	-.038
J	.608	.6269	.5261	+.1008	-.077	J	.445	.4442	.5380	-.0938	-.014
J	.653	.6171	.5269	+.0902	-.055	J	.450	.4225	.5371	-.1146	-.006
A	.588	.6044	.5280	+.0764	-.011	A	.434	.4096	.5365	-.1269	+.015
S	.588	.5900	.5292	+.0608	+.037	S	.396	.4057	.5362	-.1305	+.043
O	.581	.5750	.5313	+.0437	+.098	O	.392	.4094	.5363	-.1269	+.047
N	.555	.5602	.5334	+.0268	+.098	N	.402	.4187	.5365	-.1178	+.033
D	.494	.5460	.5359	+.0101	+.098	D	.404	.4311	.5370	-.1059	+.008
1911						1916					
J	.540	.5331	.5389	-.0058	-.011	J	.470	.4444	.5380	-.0936	-.031
F	.536	.5216	.5419	-.0203	-.039	F	.457	.4572	.5393	-.0821	-.016
M	.499	.5115	.5455	-.0340	-.043	M	.478	.4691	.5412	-.0721	-.028
A	.479	.5031	.5494	-.0463	-.040	A	.475	.4801	.5435	-.0634	-.016
M	.513	.4964	.5534	-.0570	-.069	M	.484	.4904	.5462	-.0558	-.025
J	.516	.4914	.5577	-.0663	-.067	J	.547	.5007	.5494	-.0487	-.003
J	.502	.4883	.5619	-.0736	-.043	J	.600	.5112	.5530	-.0418	-.001
A	.507	.4872	.5661	-.0789	-.002	A	.493	.5217	.5571	-.0354	+.016
S	.505	.4881	.5705	-.0824	+.039	S	.494	.5322	.5620	-.0298	+.027
O	.463	.4911	.5749	-.0838	+.096	O	.498	.5425	.5671	-.0246	+.028
N	.470	.4963	.5790	-.0827	+.089	N	.513	.5527	.5728	-.0201	+.021
D	.532	.5039	.5830	-.0791	+.083	D	.626	.5631	.5791	-.0160	+.002
1912						1917					
J	.491	.5136	.5868	-.0732	-.021	J	.525	.5741	.5857	-.0116	-.029
F	.499	.5257	.5905	-.0648	-.038	F	.616	.5862	.5927	-.0065	-.007
M	.581	.5399	.5938	-.0539	-.044	M	.595	.5997	.6003	-.0006	-.021
A	.582	.5560	.5966	-.0406	-.038	A	.608	.6148	.6082	+.0066	-.009
M	.569	.5735	.5989	-.0254	-.065	M	.659	.6315	.6162	+.0153	-.014
J	.549	.5920	.6007	-.0087	-.055	J	.687	.6495	.6249	+.0246	+.004
J	.587	.6106	.6022	+.0084	-.033	J	.634	.6681	.6338	+.0343	+.001
A	.608	.6295	.6034	+.0261	+.005	A	.637	.6868	.6426	+.0442	+.015
S	.699	.6464	.6043	+.0421	+.041	S	.724	.7048	.6516	+.0532	+.016
O	.666	.6616	.6044	+.0572	+.094	O	.732	.7215	.6610	+.0605	+.014
N	.692	.6750	.6042	+.0708	+.077	N	.722	.7364	.6702	+.0662	+.014
D	.706	.6862	.6036	+.0826	+.063	D	.749	.7493	.6799	+.0694	-.004
1913						1918					
J	.642	.6942	.6027	+.0915	-.028	J	.778	.7597	.6895	+.0702	-.026
F	.692	.7002	.6012	+.0990	-.036	F	.766	.7676	.6990	+.0686	-.002
M	.773	.7026	.5998	+.1028	-.043	M	.791	.7731	.7083	+.0648	-.013
A	.664	.7005	.5979	+.1026	-.035	A	.783	.7763	.7178	+.0385	-.005
M	.653	.6932	.5958	+.0974	-.058	M	.782	.7772	.7271	+.0501	-.004
J	.656	.6805	.5934	+.0871	-.040	J	.754	.7761	.7361	+.0400	+.008
J	.680	.6627	.5909	+.0718	-.023	J	.756	.7736	.7449	+.0287	+.001
A	.644	.6414	.5884	+.0530	+.009	A	.761	.7699	.7534	+.0165	+.011
S	.623	.6187	.5858	+.0329	+.042	S	.771	.7653	.7615	+.0038	+.007
O	.612	.5971	.5832	+.0139	+.090	O	.772	.7603	.7696	-.0093	+.006
N	.632	.5790	.5805	-.0015	+.062	N	.770	.7553	.7767	-.0214	+.008
D	.663	.5672	.5777	-.0105	+.039	D	.762	.7504	.7836	-.0332	-.008
1914						1919					
J	.597	.5611	.5746	-.0135	-.032	J	.735	.7462	.7902	-.0440	-.021
F	.514	.5611	.5718	-.0107	-.033	F	.723	.7431	.7959	-.0528	+.002
M	.516	.5663	.5691	-.0028	-.039	M	.747	.7416	.8015	-.0599	-.007
A	.478	.5753	.5664	+.0889	-.029	A	.764	.7421	.8067	-.0646	-.001
M	.435	.5858	.5638	+.0220	-.048	M	.738	.7453	.8112	-.0659	+.002
J	.433	.5977	.5613	+.0364	-.028	J	.753	.7514	.8150	-.0636	+.009
J	.577	.6091	.5588	+.0503	-.014	J	.778	.7607	.8186	-.0579	.000
A	.871	.6188	.5564	+.0624	+.012	A	.767	.7731	.8218	-.0487	+.007
S	.797	.6256	.5539	+.0717	+.042	S	.770	.7883	.8239	-.0356	-.001
O	.734	.6282	.5516	+.0766	+.079	O	.789	.8057	.8260	-.0203	+.002
N	.671	.6251	.5494	+.0757	+.047	D	.809	.8245	.8277	-.0032	+.004
D	.568	.6148	.5473	+.0675	+.020	D	.828	.8438	.8288	+.0150	-.008

## SHORT TERM INTEREST RATES

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TABLE 22—Continued

## TIME MONEY RATES

Date	1	2	3	4	5	Date	1	2	3	4	5
1920						1925					
J	.881	.8626	.8293	+.0333	-.017	J	.549	.5198	.6018	-.0820	+.010
F	.904	.8799	.8298	+.0501	+.006	F	.552	.5380	.6014	-.0634	+.010
M	.911	.8946	.8297	+.0649	.000	M	.590	.5591	.6012	-.0421	+.020
A	.906	.9063	.8293	+.0770	+.004	A	.594	.5813	.6013	-.0200	+.009
M	.911	.9142	.8285	+.0857	+.005	M	.576	.6026	.6016	+.0010	+.001
J	.902	.9183	.8273	+.0910	+.006	J	.609	.6215	.6022	+.0193	-.024
J	.921	.9184	.8259	+.0925	-.003	J	.621	.6369	.6031	+.0338	-.027
A	.940	.9150	.8243	+.0907	+.001	A	.652	.6481	.6045	+.0436	-.014
S	.919	.9084	.8224	+.0860	-.004	S	.644	.6555	.6061	+.0494	+.000
O	.901	.8993	.8202	+.0791	-.001	O	.677	.6597	.6083	+.0514	+.006
N	.889	.8882	.8177	+.0705	+.001	N	.690	.6616	.6106	+.0510	+.001
D	.870	.8758	.8148	+.0610	-.005	D	.685	.6623	.6134	+.0489	+.013
1921						1926					
J	.831	.8627	.8112	+.0515	-.011	J	.672	.6623	.6165	+.0458	+.007
F	.8494	.8079	.8045	+.007		F	.659	.6621	.6202	+.0419	+.008
M	.826	.8362	.8040	+.0322	+.006	M	.662	.6617	.6242	+.0375	+.014
A	.823	.8233	.7997	+.0235	+.008	A	.619	.6611	.6287	+.0324	+.006
M	.815	.8103	.7950	+.0153	+.006	M	.609	.6603	.6336	+.0267	
J	.825	.7971	.7903	+.0068	-.000	J	.638	.6593	.6389	+.0204	-.022
J	.796	.7834	.7853	+.0019	-.009	J	.661	.6586	.6446	+.0140	-.022
A	.784	.7688	.7801	-.0113	-.007	A	.675	.6582	.6505	+.0077	-.007
S	.753	.7530	.7746	-.0216	-.006	S	.687	.6585	.6566	+.0019	+.004
O	.733	.7361	.7689	-.0328	-.002	O	.688	.6592	.6632	-.0040	+.010
N	.717	.7184	.7633	-.0449	-.001	N	.669	.6602	.6698	-.0096	+.001
D	.707	.7005	.7573	-.0570	+.002	D	.662	.6607	.6766	-.0158	+.007
1922						1927					
J	.681	.6833	.7513	-.0680	-.004	J	.656	.6603	.6833	-.0230	+.002
F	.679	.6676	.7453	-.0777	+.009	F	.640	.6581	.6903	-.0322	+.005
M	.661	.6545	.7392	-.0847	+.015	M	.638	.6542	.6970	-.0429	+.007
A	.633	.6445	.7330	-.0885	+.011	A	.637	.6484	.7033	-.0550	+.004
M	.613	.6381	.7266	-.0885	+.007	M	.640	.6413	.7097	-.0685	
J	.622	.6353	.7203	-.0850	-.007	J	.662	.6338	.7157	-.0821	-.019
J	.630	.6360	.7141	-.0781	-.021	J	.664	.6269	.7216	-.0948	-.017
A	.625	.6397	.7080	-.0683	-.014	A	.614	.6218	.7270	-.1053	-.003
S	.656	.6459	.7018	-.0559	-.006	S	.610	.6192	.7320	-.1127	+.010
O	.681	.6540	.6957	-.0417	-.001	O	.624	.6200	.7364	-.1163	+.013
N	.699	.6633	.6898	-.0265	-.001	N	.618	.6245	.7407	-.1160	.000
D	.682	.6734	.6839	-.0105	+.009	D	.619	.6327	.7445	-.1115	+.003
1923						1928					
J	.666	.6838	.6781	+.0057	+.003	J	.642	.6445	.7476	-.1027	-.004
F	.681	.6939	.6723	+.0216	+.010	F	.655	.6595	.7503	-.0903	+.003
M	.702	.7035	.6668	+.0367	+.021	M	.660	.6773	.7524	-.0746	+.004
A	.714	.7124	.6614	+.0510	+.012	A	.685	.6972	.7542	-.0564	+.003
M	.700	.7202	.6565	+.0637	+.005	M	.714	.7189	.7555	-.0361	-.001
J	.707	.7265	.6518	+.0747	-.016	J	.775	.7418	.7561	-.0139	-.015
J	.738	.7307	.6472	+.0835	-.029	J	.786	.7654	.7563	+.0095	-.013
A	.737	.7320	.6426	+.0894	-.018	A	.804	.7896	.7558	+.0341	-.002
S	.743	.7296	.6381	+.0915	-.005	S	.834	.8140	.7548	+.0593	+.015
O	.723	.7228	.6341	+.0887	-.000	O	.835	.8380	.7530	+.0850	+.016
N	.703	.7110	.6304	+.0806	-.001	N	.838	.8610	.7507	+.1103	.000
D	.683	.6942	.6269	+.0673	+.016	D	.872	.8824	.7481	+.1341	+.001
1924						1929					
J	.674	.6727	.6236	+.0491	+.007	J	.893	.9011	.7447	+.1562	+.009
F	.667	.6478	.6206	+.0272	+.010	F	.886	.9163	.7407	+.1754	+.000
M	.648	.6206	.6177	+.0029	+.023	M	.899	.9271	.7359	+.1910	+.002
A	.624	.5929	.6153	-.0224	+.012	A	.939	.9326	.7303	+.2021	+.002
M	.596	.5665	.6129	-.0464	+.003	M	.944	.9323	.7245	+.2076	-.001
J	.542	.5427	.6108	-.0681	-.022	J	.921	.9257			-.013
A	.485	.5229	.6090	-.0861	-.030	J	.906	.9126			-.012
S	.452	.5079	.6073	-.0994	-.017	A	.949	.8930			-.001
O	.474	.4985	.6057	-.1072	-.003	S	.933	.8668			+.018
N	.456	.4949	.6044	-.1095	+.003	O	.874	.8347			+.018
D	.494	.4975	.6033	-.1058	-.000	N	.741	.7970			-.001
	.533	.5060	.6025	-.0965	+.017	D	.684	.7548			-.001

## APPENDIX

TABLE 22—Concluded

## TIME MONEY RATES

Date	1	2	3	4	5	Date	1	2	3	4	5
1930						1934	.047	-.0519			-.010
J	.682	.7097			-.010	J	.047	-.0519			-.010
F	.668	.6637			-.001	F	-.040	-.0588			-.001
M	.614	.6184			+.001	M	-.057	-.0583			+.001
A	.613	.5757			+.002	A	-.057	-.0497			+.001
M	.550	.5365			-.001	M	-.055				-.001
J	.473	.5005			-.011	J	-.045				-.011
J	.455	.4672			-.011	J	-.045				-.011
A	.419	.4352			-.001	A	-.055				-.001
S	.394	.4032			+.019	S	-.075				+.019
O	.370	.3704			+.019	O	-.075				+.019
N	.339	.3376			-.001	N	-.055				-.001
D	.351	.3060			-.001	D	-.055				-.001
1931						1935					
J	.332	.2781			-.010	I	-.046				-.010
F	.275	.2566			-.001	F	-.055				-.001
M	.325	.2440			+.001	M	-.057				+.001
A	.325	.2420			+.001	A	-.253				+.001
M	.221	.2510			-.001	M	-.601				-.001
J	.160	.2708			-.011	J	-.591				-.011
J	.163	.2997			-.011	J	-.591				-.011
A	.177	.3349			-.001	A	-.601				-.001
S	.209	.3729			+.019	S	-.621				+.019
O	.485	.4100			+.019	O	-.488				+.019
N	.549	.4407			-.001	N	.001				-.001
D	.532	.4606			-.001	D	.001				-.001
1932						1936					
J	.561	.4655			-.010	J	.010				-.010
F	.560	.4523			-.001						
M	.495	.4198			+.001						
A	.429	.3696			+.001						
M	.202	.3055			-.001						
J	.187	.2325			-.011						
J	.169	.1575			-.011						
A	.141	.0869			-.001						
S	.031	.0259			+.019						
O	-.032	-.0225			+.019						
N	-.300	-.0560			-.001						
D	-.300	-.0750			-.001						
1933											
J	-.291	-.0817			-.010						
F	-.179	-.0782			-.001						
M	.467	-.0672			+.001						
A	.026	-.0520			+.001						
M	.018	-.0356			-.001						
J	-.021	-.0203			-.011						
J	.075	-.0090			-.011						
A	.034	-.0038			-.001						
S	-.213	-.0051			+.019						
O	-.180	-.0128			+.019						
N	-.080	-.0253			-.001						
D	.038	-.0398			-.001						

TABLE 23

COMMERCIAL PAPER RATES IN NEW YORK CITY<sup>1</sup>  
MONTHLY AVERAGES, JANUARY 1857-JANUARY 1936

- Col. 1. Logarithms of Data Adjusted for Seasonal Fluctuations.
- Col. 2. Cyclical Curve (logarithms).
- Col. 3. Trend Curve (logarithms).
- Col. 4. Deviations of Cyclical Curve (logarithms)  
from Trend Curve (logarithms).
- Col. 5. Changing Seasonal Fluctuations (logarithms).

For details of the nature of the graduations given in Columns 2 and 3, and of the seasonal given in Column 5 of this table, see Appendix D.

<sup>1</sup> January 1857-December 1923 'Choice 60-90 day two name paper'.  
January 1924-January 1932 '4-6 months prime double and single name paper'.

## APPENDIX

TABLE 23

## COMMERCIAL PAPER RATES

Date	1	2	3	4	5	Date	1	2	3	4	5
1857						1862					
J	.933	.9297	.8917	+.0380	+.013	J	.777	.7788	.7833	-.0045	+.022
F	.929	.9529	.8868	+.0661	+.017	F	.752	.7696	.7840	-.0144	+.019
M	.979	.9787	.8819	+.0968	-.012	M	.803	.7589	.7844	-.0255	-.004
A	.979	1.0040	.8771	+.1269	-.025	A	.790	.7469	.7848	-.0379	-.005
M	.932	1.0262	.8724	+.1538	-.019	M	.711	.7342	.7850	-.0508	-.012
J	.927	1.0427	.8677	+.1750	-.030	J	.583	.7218	.7855	-.0637	-.030
J	.960	1.0511	.8631	+.1880	-.031	J	.770	.7108	.7857	-.0749	-.030
A	.997	1.0501	.8589	+.1912	+.003	A	.666	.7019	.7859	-.0840	-.013
S	1.239	1.0392	.8547	+.1845	+.016	S	.700	.6956	.7860	-.0904	-.001
O	1.365	1.0180	.8505	+.1675	+.015	O	.647	.6922	.7863	-.0941	+.006
N	1.040	.9868	.8467	+.1401	+.021	N	.658	.6918	.7868	-.0950	+.014
D	.876	.9467	.8429	+.1038	+.027	D	.707	.6942	.7870	-.0928	+.034
1858						1863					
J	.861	.8980	.8396	+.0584	+.014	J	.701	.6994	.7873	-.0879	+.023
F	.742	.8444	.8362	+.0082	+.018	F	.739	.7067	.7880	-.0813	+.017
M	.752	.7883	.8329	-.0446	-.012	M	.724	.7184	.7887	-.0703	.000
A	.737	.7335	.8300	-.0965	-.022	A	.724	.7253	.7895	-.0642	.000
M	.576	.6833	.8274	-.1441	-.015	M	.732	.7354	.7901	-.0547	-.016
J	.661	.6430	.8248	-.1818	-.026	J	.766	.7444	.7914	-.0470	-.034
J	.599	.6137	.8224	-.2087	-.030	J	.779	.7526	.7925	-.0399	-.031
A	.607	.5979	.8200	-.2221	-.000	A	.740	.7598	.7940	-.0342	-.016
S	.635	.5957	.8180	-.2223	+.012	S	.751	.7664	.7954	-.0290	-.003
O	.632	.6060	.8160	-.2100	+.011	O	.748	.7729	.7973	-.0244	+.008
N	.658	.6260	.8140	-.1880	+.014	N	.800	.7799	.7992	-.0193	+.020
D	.636	.6527	.8123	-.1596	+.029	D	.798	.7880	.8011	-.0131	+.035
1859						1864					
J	.648	.6825	.8106	-.1281	+.016	J	.839	.7975	.8031	-.0056	+.024
F	.721	.7133	.8090	-.0957	+.020	F	.800	.8087	.8053	+.0034	+.013
M	.724	.7425	.8074	-.0649	-.010	M	.745	.8211	.8076	+.0135	+.003
A	.741	.7690	.8059	-.0369	-.019	A	.821	.8346	.8099	+.0247	+.005
M	.823	.7920	.8045	-.0125	-.012	M	.861	.8484	.8123	+.0361	-.022
J	.864	.8106	.8030	+.0076	-.025	J	.872	.8621	.8146	+.0475	-.039
J	.850	.8240	.8016	+.0224	-.029	J	.847	.8750	.8170	+.0580	-.034
A	.850	.8317	.8001	+.0316	-.003	A	.905	.8867	.8194	+.0673	-.019
S	.808	.8337	.7986	+.0351	+.008	S	.958	.8967	.8219	+.0748	-.004
O	.821	.8301	.7972	+.0329	+.009	O	.953	.9046	.8239	+.0807	+.011
N	.782	.8225	.7957	+.0268	+.010	N	.889	.9102	.8262	+.0840	+.030
D	.800	.8128	.7941	+.0187	+.030	D	.855	.9134	.8285	+.0849	+.038
1860						1865					
J	.884	.8032	.7925	+.0107	+.019	J	.879	.9139	.8307	+.0832	+.024
F	.831	.7959	.7909	+.0050	+.020	F	.920	.9124	.8327	+.0797	+.009
M	.780	.7925	.7895	+.0030	-.009	M	.948	.9092	.8343	+.0747	+.006
A	.763	.7940	.7881	+.0059	-.015	A	.921	.9049	.8363	+.0686	+.008
M	.773	.8003	.7868	+.0135	-.010	M	.884	.9002	.8381	+.0621	-.027
J	.766	.8106	.7854	+.0252	-.026	J	.871	.8954	.8397	+.0557	-.045
J	.760	.8238	.7842	+.0396	-.028	J	.899	.8908	.8412	+.0496	-.036
A	.791	.8384	.7832	+.0552	-.006	A	.909	.8862	.8426	+.0436	-.023
S	.841	.8526	.7822	+.0704	+.004	S	.855	.8812	.8440	+.0372	-.004
O	.826	.8654	.7813	+.0841	+.007	O	.866	.8752	.8452	+.0300	+.015
N	1.037	.8757	.7807	+.0950	+.009	N	.863	.8677	.8464	+.0213	+.040
D	1.080	.8827	.7801	+.1026	+.031	D	.851	.8586	.8476	+.0110	+.041
1861						1866					
J	.882	.8857	.7797	+.1060	+.021	J	.843	.8479	.8487	-.0008	+.024
F	.842	.8848	.7794	+.1054	+.021	F	.858	.8361	.8497	-.0136	+.004
M	.791	.8796	.7792	+.1004	-.006	M	.856	.8237	.8507	-.0270	+.009
A	.803	.8707	.7792	+.0915	-.011	A	.814	.8119	.8517	-.0398	+.012
M	.918	.8593	.7795	+.0798	-.010	M	.815	.8013	.8527	-.0514	-.033
J	.840	.8464	.7797	+.0667	-.027	J	.797	.7925	.8538	-.0613	-.052
J	.769	.8332	.7800	+.0532	-.029	J	.809	.7863	.8548	-.0685	-.039
A	.822	.8210	.7804	+.0406	-.009	A	.795	.7830	.8557	-.0727	-.025
S	.798	.8105	.7810	+.0295	+.001	S	.723	.7826	.8568	-.0742	-.003
O	.827	.8016	.7817	+.0199	+.006	O	.717	.7854	.8578	-.0724	+.019
N	.789	.7939	.7824	+.0115	+.010	N	.776	.7913	.8589	-.0676	+.049
D	.813	.7867	.7830	+.0037	+.032	D	.793	.7997	.8600	-.0603	+.045

## SHORT TERM INTEREST RATES

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TABLE 23—Continued

## COMMERCIAL PAPER RATES

Date	1	2	3	4	5	Date	1	2	3	4	5
1867						1872					
J	.846	.8103	.8611	-.0508	+.023	J	.899	.8880	.9080	-.0200	+.020
F	.851	.8224	.8622	-.0398	-.002	F	.900	.8982	.9080	-.0098	-.021
M	.847	.8351	.8632	-.0281	+.010	M	.930	.9077	.9079	-.0002	+.007
A	.842	.8473	.8642	-.0169	+.014	A	.923	.9163	.9076	+.0087	+.016
M	.863	.8581	.8652	-.0071	-.039	M	.916	.9236	.9071	+.0165	-.059
J	.925	.8668	.8662	+.0006	-.057	J	.854	.9295	.9067	+.0228	-.076
J	.858	.8725	.8672	+.0053	-.042	J	.879	.9340	.9059	+.0281	-.069
A	.841	.8752	.8682	+.0070	-.028	A	.916	.9375	.9050	+.0325	-.037
S	.853	.8751	.8692	+.0059	-.001	S	.978	.9407	.9041	+.0366	+.022
O	.899	.8724	.8700	+.0024	+.025	O	.972	.9447	.9029	+.0418	+.061
N	.875	.8680	.8709	-.0029	+.057	N	.993	.9503	.9016	+.0487	+.072
D	.851	.8627	.8718	-.0091	+.049	D	.964	.9578	.9001	+.0577	+.071
1868						1873					
I	.827	.8572	.8729	-.0157	+.022	J	.948	.9671	.9887	+.0684	+.020
B	.821	.8519	.8738	-.0219	-.008	F	.995	.9776	.8968	+.0808	-.023
M	.874	.8475	.8747	-.0272	+.011	M	1.000	.9880	.8949	+.0931	+.005
A	.887	.8443	.8756	-.0313	+.016	A	1.043	.9966	.8929	+.1037	+.014
M	.866	.8424	.8765	-.0341	-.045	M	.970	1.0022	.8905	+.1117	-.060
J	.819	.8421	.8774	-.0353	-.062	J	.911	1.0041	.8879	+.1162	-.077
J	.859	.8439	.8783	-.0344	-.046	J	.883	1.0016	.8851	+.1165	-.074
A	.851	.8480	.8791	-.0311	-.030	A	.886	.9948	.8821	+.1127	-.037
S	.827	.8548	.8800	-.0252	+.002	S	1.128	.9844	.8788	+.1056	+.027
O	.840	.8649	.8807	-.0158	+.032	O	1.152	.9707	.8752	+.0955	+.065
N	.937	.8784	.8815	-.0031	+.063	N	1.091	.9541	.8715	+.0826	+.070
D	.862	.8950	.8823	+.0127	+.054	D	.920	.9349	.8674	+.0675	+.072
1869						1874					
I	.899	.9143	.8831	+.0312	+.021	J	.852	.9131	.8632	+.0499	+.020
F	.898	.9351	.8840	+.0511	-.012	F	.801	.8888	.8568	+.0300	+.023
M	.962	.9561	.8846	+.0715	+.011	M	.784	.8656	.8541	+.0085	+.004
A	.978	.9756	.8853	+.0903	+.017	A	.783	.8353	.8492	-.0137	+.013
M	.943	.9920	.8859	+.1061	-.050	M	.812	.8090	.8439	-.0349	-.059
J	1.052	1.0039	.8864	+.1175	-.067	J	.823	.7843	.8387	-.0542	-.078
J	1.062	1.0100	.8870	+.1230	-.051	J	.828	.7637	.8331	-.0694	-.079
A	1.012	1.0099	.8876	+.1223	-.032	A	.772	.7473	.8276	-.0803	-.036
S	1.053	1.0037	.8881	+.1156	+.006	S	.765	.7355	.8216	-.0861	+.031
O	.977	.9917	.8887	+.1030	+.039	O	.697	.7277	.8159	-.0882	+.067
N	1.009	.9750	.8892	+.0858	+.068	N	.682	.7231	.8100	-.0869	+.068
D	.947	.9551	.8898	+.0653	+.060	D	.707	.7206	.8038	-.0832	+.071
1870						1875					
J	.934	.9339	.8903	+.0436	+.020	J	.699	.7192	.7973	-.0781	+.021
F	.884	.9127	.8909	+.0218	-.016	F	.738	.7186	.7909	-.0723	-.023
M	.865	.8932	.8915	+.0017	+.010	M	.767	.7188	.7845	-.0657	+.004
A	.840	.8764	.8921	-.0157	+.017	A	.724	.7202	.7782	-.0580	+.012
M	.859	.8628	.8928	-.0300	-.054	M	.717	.7232	.7724	-.0492	-.058
J	.808	.8524	.8935	-.0411	-.071	J	.735	.7278	.7661	-.0383	-.077
J	.863	.8446	.8943	-.0497	-.058	J	.716	.7337	.7602	-.0265	-.082
A	.890	.8387	.8952	-.0565	-.034	A	.728	.7399	.7543	-.0144	-.034
S	.848	.8335	.8962	-.0627	+.012	S	.737	.7455	.7483	-.0028	+.033
O	.814	.8284	.8972	-.0688	+.048	O	.731	.7493	.7426	+.0067	+.069
N	.789	.8230	.8982	-.0752	+.071	N	.741	.7509	.7370	+.0139	+.065
D	.877	.8173	.8992	-.0819	+.065	D	.751	.7499	.7317	+.0182	+.069
1871						1876					
J	.839	.8118	.9002	-.0884	+.020	J	.789	.7467	.7266	+.0201	+.021
F	.840	.8074	.9012	-.0938	-.019	F	.749	.7417	.7217	+.0200	-.022
M	.788	.8050	.9021	-.0971	+.008	M	.727	.7351	.7170	+.0181	+.005
A	.815	.8051	.9030	-.0979	+.016	A	.730	.7271	.7128	+.0143	+.010
M	.798	.8079	.9039	-.0960	-.058	M	.759	.7179	.7087	+.0092	-.056
J	.778	.8136	.9047	-.0911	-.074	J	.753	.7077	.7051	+.0026	-.076
J	.754	.8216	.9054	-.0838	-.064	J	.667	.6967	.7018	-.0051	-.086
A	.778	.8314	.9060	-.0746	-.036	A	.587	.6856	.6987	-.0131	-.031
S	.806	.8425	.9068	-.0643	+.017	S	.642	.6753	.6959	-.0206	+.035
O	.946	.8541	.9071	-.0530	+.055	O	.685	.6668	.6935	-.0267	+.069
N	.897	.8657	.9075	-.0418	+.072	N	.674	.6610	.6916	-.0306	+.062
D	.929	.8771	.9078	-.0307	+.069	D	.704	.6588	.6899	-.0311	+.065

## APPENDIX

TABLE 23—Continued

## COMMERCIAL PAPER RATES

Date	1	2	3	4	5	Date	1	2	3	4	5
1877						1882					
J	.725	.6604	.6884	-.0280	+.019	J	.733	.7331	.7390	-.0059	+.007
F	.674	.6656	.6874	-.0218	-.021	F	.758	.7393	.7399	-.0006	-.020
M	.641	.6738	.6866	-.0128	+.006	M	.747	.7445	.7407	+.0038	+.004
A	.632	.6842	.6860	-.0018	+.009	A	.709	.7482	.7410	+.0072	-.005
M	.655	.6957	.6855	+.0102	-.053	M	.730	.7505	.7411	+.0094	-.044
J	.682	.7073	.6853	+.0220	-.073	J	.768	.7516	.7410	+.0106	-.059
A	.704	.7183	.6852	+.0331	-.087	J	.732	.7521	.7405	+.0116	-.067
S	.779	.7278	.6854	+.0424	-.028	A	.756	.7528	.7398	+.0130	-.004
O	.769	.7353	.6857	+.0496	+.036	S	.790	.7543	.7390	+.0153	+.039
N	.791	.7404	.6859	+.0545	+.069	O	.769	.7569	.7377	+.0192	+.056
D	.732	.7425	.6863	+.0562	+.060	N	.764	.7607	.7363	+.0244	+.049
	.689	.7410	.6867	+.0543	+.061	D	.723	.7648	.7346	+.0302	+.044
1878						1883					
J	.750	.7359	.6873	+.0486	+.017	J	.734	.7683	.7327	+.0356	+.006
F	.745	.7272	.6877	+.0395	-.020	F	.735	.7703	.7307	+.0396	-.022
M	.701	.7152	.6882	+.0270	+.008	M	.803	.7699	.7285	+.0414	+.002
A	.722	.7008	.6886	+.0122	+.008	A	.773	.7668	.7263	+.0405	-.009
M	.707	.6854	.6889	-.0035	-.051	M	.772	.7610	.7238	+.0372	-.044
J	.652	.6702	.6892	-.0150	-.071	J	.796	.7533	.7215	+.0318	-.056
A	.641	.6566	.6896	-.0330	-.085	J	.738	.7447	.7190	+.0257	-.059
S	.604	.6460	.6899	-.0439	-.023	A	.749	.7360	.7163	+.0197	-.000
O	.628	.6391	.6900	-.0509	+.037	S	.738	.7283	.7138	+.0145	+.040
N	.669	.6360	.6904	-.0544	+.067	O	.725	.7224	.7113	+.0111	+.053
D	.651	.6369	.6907	-.0538	+.058	N	.708	.7185	.7089	+.0096	+.047
	.648	.6413	.6910	-.0497	+.056	D	.697	.7167	.7066	+.0101	+.044
1879						1884					
J	.622	.6483	.6912	-.0429	+.014	J	.685	.7168	.7042	+.0126	+.004
F	.600	.6572	.6918	-.0346	-.019	F	.701	.7185	.7020	+.0163	-.024
M	.697	.6674	.6923	-.0249	+.007	M	.666	.7212	.6998	+.0214	-.001
A	.732	.6782	.6929	-.0147	+.004	A	.686	.7245	.6978	+.0267	-.012
M	.696	.6890	.6934	-.0044	-.049	M	.747	.7277	.6958	+.0319	-.043
J	.696	.6997	.6943	+.0054	-.068	J	.813	.7301	.6938	+.0363	-.053
J	.673	.7096	.6952	+.0144	-.082	J	.827	.7309	.6921	+.0388	-.052
A	.763	.7184	.6961	+.0223	-.018	A	.736	.7292	.6904	+.0388	+.004
S	.724	.7259	.6971	+.0288	+.038	S	.700	.7243	.6888	+.0355	+.040
O	.710	.7316	.6982	+.0334	+.064	O	.689	.7157	.6871	+.0286	+.051
N	.741	.7353	.6994	+.0359	+.056	N	.670	.7034	.6856	+.0178	+.045
D	.723	.7370	.7006	+.0364	+.052	D	.656	.6879	.6842	+.0037	+.044
1880						1885					
J	.720	.7369	.7019	+.0350	+.011	J	.669	.6702	.6829	-.0127	+.002
F	.744	.7355	.7031	+.0324	-.019	F	.680	.6515	.6816	-.0301	-.027
M	.733	.7330	.7045	+.0285	+.007	M	.653	.6333	.6804	-.0471	-.003
A	.739	.7300	.7059	+.0241	+.001	A	.615	.6169	.6794	-.0625	-.016
M	.762	.7268	.7073	+.0195	-.047	M	.609	.6029	.6784	-.0735	-.043
J	.723	.7235	.7088	+.0147	-.065	J	.601	.5920	.6774	-.0854	-.051
J	.725	.7200	.7103	+.0097	-.078	J	.589	.5841	.6765	-.0924	-.045
A	.714	.7162	.7118	+.0044	-.012	A	.560	.5792	.6758	-.0966	+.006
S	.682	.7119	.7133	-.0014	+.038	S	.533	.5771	.6753	-.0382	+.042
O	.648	.7071	.7149	-.0078	+.061	O	.553	.5778	.6747	-.0969	+.049
N	.683	.7022	.7165	-.0143	+.053	N	.604	.5812	.6742	-.0930	+.043
D	.729	.6978	.7180	-.0202	+.049	D	.610	.5874	.6740	-.0866	+.043
1881						1886					
J	.711	.6943	.7198	-.0255	+.009	J	.633	.5963	.6739	-.0776	+.001
F	.750	.6921	.7213	-.0292	-.019	F	.621	.6077	.6738	-.0661	-.030
M	.738	.6916	.7231	-.0315	+.006	M	.593	.6206	.6739	-.0533	-.005
A	.717	.6923	.7248	-.0323	-.002	A	.647	.6345	.6741	-.0396	-.019
M	.655	.6946	.7268	-.0322	-.046	M	.651	.6484	.6744	-.0260	-.042
J	.606	.6973	.7284	-.0309	-.062	J	.633	.6618	.6748	-.0130	-.048
J	.675	.7009	.7300	-.0291	-.073	J	.635	.6743	.6755	-.0012	-.039
A	.703	.7048	.7318	-.0270	-.008	A	.706	.6861	.6761	+.0100	+.009
S	.716	.7092	.7337	-.0245	+.039	S	.721	.6973	.6768	+.0205	+.044
O	.738	.7143	.7351	-.0208	+.058	O	.734	.7083	.6777	+.0306	+.048
N	.748	.7201	.7365	-.0164	+.051	N	.732	.7192	.6787	+.0405	+.040
D	.750	.7265	.7378	-.0113	+.046	D	.734	.7299	.6798	+.0501	+.043

## SHORT TERM INTEREST RATES

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TABLE 23—Continued

## COMMERCIAL PAPER RATES

Date	1	2	3	4	5	Date	1	2	3	4	5
1887						1892					
J	.740	.7400	.6808	+.0592	.000	J	.623	.6231	.7062	-.0831	-.004
F	.714	.7492	.6822	+.0670	-.032	F	.604	.6020	.7038	-.1018	-.037
M	.735	.7571	.6835	+.0736	-.007	M	.600	.5836	.7009	-.1173	.000
A	.752	.7634	.6849	+.0785	-.021	A	.559	.5688	.6980	-.1292	-.019
M	.759	.7680	.6863	+.0817	-.042	M	.538	.5591	.6942	-.1351	-.038
J	.756	.7711	.6881	+.0830	-.046	J	.514	.5559	.6913	-.1354	-.044
J	.826	.7726	.6897	+.0829	-.034	J	.560	.5609	.6878	-.1269	-.020
A	.792	.7725	.6916	+.0809	+.011	A	.580	.5752	.6841	-.1089	+.018
S	.795	.7708	.6934	+.0774	+.046	S	.616	.5996	.6800	-.0804	+.057
O	.758	.7672	.6954	+.0718	+.048	O	.667	.6331	.6765	-.0434	+.046
N	.722	.7614	.6974	+.0640	+.038	N	.693	.6744	.6729	+.0015	+.018
D	.737	.7535	.6995	+.0540	+.041	D	.726	.7203	.6693	+.0510	+.044
1888						1893					
J	.749	.7438	.7016	+.0422	-.001	J	.712	.7669	.6655	+.1014	-.004
F	.720	.7326	.7036	+.0290	-.034	F	.732	.8100	.6621	+.1479	-.036
M	.725	.7206	.7056	+.0150	-.007	M	.829	.8458	.6587	+.1871	+.004
A	.755	.7085	.7076	+.0009	-.023	A	.775	.8710	.6552	+.2158	-.015
M	.725	.6970	.7096	-.0126	-.042	M	.861	.8839	.6519	+.2320	-.036
J	.673	.6862	.7113	-.0251	-.045	J	.974	.8839	.6487	+.2352	-.046
J	.640	.6764	.7127	-.0363	-.029	J	1.056	.8712	.6456	+.2256	-.019
A	.626	.6676	.7141	-.0465	+.013	A	1.007	.8471	.6426	+.2045	+.019
S	.675	.6599	.7153	-.0554	+.048	S	.860	.8131	.6396	+.1735	+.058
O	.658	.6533	.7161	-.0628	+.047	O	.726	.7711	.6367	+.1344	+.046
N	.643	.6481	.7167	-.0686	+.034	N	.526	.7229	.6339	+.0890	+.015
D	.638	.6446	.7172	-.0726	+.038	D	.555	.6709	.6314	+.0395	+.008
1889						1894					
J	.669	.6432	.7174	-.0742	-.002	J	.547	.6184	.6289	-.0105	-.005
F	.663	.6442	.7173	-.0731	-.035	F	.554	.5683	.6265	-.0382	-.035
M	.660	.6477	.7171	-.0694	-.007	M	.474	.5241	.6244	-.1003	+.007
A	.655	.6535	.7166	-.0631	-.023	A	.503	.4888	.6224	-.1336	-.012
M	.627	.6611	.7159	-.0548	-.042	M	.501	.4643	.6205	-.1562	-.034
J	.633	.6701	.7152	-.0451	-.044	J	.511	.4507	.6188	-.1681	-.047
J	.670	.6798	.7145	-.0347	-.026	J	.495	.4471	.6174	-.1703	-.018
A	.699	.6896	.7136	-.0240	+.015	A	.469	.4509	.6160	-.1651	+.018
S	.672	.6992	.7129	-.0137	+.051	S	.458	.4589	.6149	-.1560	+.058
O	.731	.7079	.7121	-.0042	+.047	O	.395	.4682	.6138	-.1456	+.046
N	.747	.7162	.7114	+.0048	+.031	N	.433	.4768	.6129	-.1361	+.013
D	.750	.7236	.7109	+.0127	+.035	D	.456	.4837	.6122	-.1285	+.003
1890						1895					
J	.730	.7301	.7107	+.0194	-.002	J	.496	.4893	.6115	-.1222	-.005
F	.739	.7353	.7104	+.0249	-.037	F	.594	.4949	.6109	-.1160	-.035
M	.747	.7394	.7103	+.0291	-.007	M	.582	.5018	.6103	-.1085	+.010
A	.731	.7419	.7105	+.0314	-.023	A	.608	.5107	.6097	-.0990	-.009
M	.745	.7433	.7110	+.0323	-.041	M	.473	.5219	.6091	-.0872	-.031
J	.743	.7440	.7116	+.0324	-.044	J	.467	.5354	.6087	-.0733	-.049
J	.726	.7445	.7123	+.0322	-.023	J	.486	.5506	.6081	-.0575	-.018
A	.731	.7455	.7129	+.0326	+.016	A	.522	.5673	.6074	-.0401	+.018
S	.707	.7472	.7136	+.0336	+.053	S	.547	.5861	.6065	-.0204	+.058
O	.725	.7500	.7144	+.0356	+.046	O	.633	.6075	.6056	+.0019	+.046
N	.802	.7539	.7152	+.0387	+.027	N	.604	.6316	.6047	+.0269	+.012
D	.836	.7585	.7159	+.0426	+.029	D	.675	.6587	.6037	+.0550	+.002
1891						1896					
J	.769	.7632	.7166	+.0466	-.003	J	.784	.6878	.6028	+.0850	-.006
F	.736	.7672	.7171	+.0501	-.037	F	.799	.7167	.6016	+.1151	-.035
M	.724	.7696	.7173	+.0523	-.004	M	.707	.7428	.6006	+.1422	+.011
A	.727	.7693	.7175	+.0518	-.021	A	.729	.7635	.5996	+.1639	-.007
M	.771	.7658	.7175	+.0483	-.040	M	.685	.7761	.5987	+.1774	-.029
J	.784	.7585	.7172	+.0413	-.044	J	.679	.7793	.5978	+.1815	-.051
J	.769	.7471	.7166	+.0305	-.021	J	.722	.7733	.5971	+.1762	-.019
A	.743	.7318	.7157	+.0161	+.017	A	.876	.7591	.5965	+.1626	+.017
S	.706	.7312	.7143	-.0011	+.056	S	.862	.7384	.5959	+.1425	+.057
O	.701	.6919	.7128	-.0209	+.046	O	.876	.7135	.5957	+.1178	+.046
N	.681	.6691	.7109	-.0418	+.023	N	.715	.6862	.5956	+.0906	+.013
D	.662	.6458	.7087	-.0629	+.022	D	.569	.6575	.5956	+.0619	+.003

## APPENDIX

TABLE 23—Continued

## COMMERCIAL PAPER RATES

Date	1	2	3	4	5	Date	1	2	3	4	5
1897						1902					
J	.526	.6284	.5957	+.0327	-.006	J	.657	.6526	.6742	-.0216	-.004
F	.513	.5999	.5960	+.0039	-.036	F	.637	.6573	.6752	-.0179	-.035
M	.510	.5732	.5965	-.0233	+.012	M	.632	.6625	.6760	-.0135	+.005
A	.554	.5498	.5972	-.0474	-.006	A	.666	.6682	.6767	-.0085	-.015
M	.575	.5318	.5982	-.0664	-.027	M	.687	.6747	.6771	-.0024	-.031
J	.548	.5207	.5990	-.0783	-.054	J	.704	.6817	.6775	+.0042	-.057
J	.551	.5176	.5998	-.0822	-.020	J	.692	.6891	.6776	+.0115	-.027
A	.555	.5225	.6006	-.0781	+.016	A	.683	.6967	.6775	+.0192	+.002
S	.557	.5342	.6018	-.0676	+.056	S	.709	.7042	.6773	+.0269	+.040
O	.576	.5502	.6022	-.0520	+.046	O	.728	.7114	.6771	+.0343	+.046
N	.514	.5677	.6028	-.0351	+.015	N	.724	.7181	.6767	+.0414	+.036
D	.529	.5841	.6034	-.0193	+.005	D	.735	.7243	.6763	+.0480	+.044
1898						1903					
J	.518	.5969	.6039	-.0070	-.006	J	.712	.7300	.6756	+.0544	-.003
F	.531	.6047	.6039	+.0008	-.037	F	.719	.7353	.6752	+.0601	-.034
M	.655	.6075	.6037	+.0038	+.012	M	.747	.7401	.6745	+.0656	+.002
A	.766	.6055	.6035	+.0020	-.006	A	.736	.7444	.6737	+.0707	-.018
M	.692	.5996	.6031	-.0035	-.025	M	.711	.7477	.6731	+.0746	-.034
J	.566	.5906	.6024	-.0118	-.055	J	.762	.7498	.6726	+.0772	-.056
J	.584	.5793	.6016	-.0223	-.021	J	.764	.7501	.6720	+.0781	-.028
A	.548	.5660	.6007	-.0347	+.013	A	.774	.7483	.6716	+.0767	.000
S	.561	.5518	.5995	-.0477	+.053	S	.743	.7438	.6713	+.0725	+.038
O	.487	.5377	.5985	-.0608	+.046	O	.720	.7364	.6712	+.0652	+.046
N	.502	.5253	.5974	-.0721	+.018	N	.736	.7262	.6713	+.0549	+.040
D	.469	.5164	.5963	-.0799	+.012	D	.720	.7131	.6714	+.0417	+.048
1899						1904					
J	.468	.5130	.5953	-.0823	-.006	J	.690	.6978	.6719	+.0259	-.002
F	.521	.5163	.5946	-.0783	-.037	F	.710	.6811	.6724	+.0087	-.031
M	.576	.5268	.5940	-.0672	+.011	M	.670	.6636	.6732	-.0096	.000
A	.574	.5439	.5936	-.0497	-.007	A	.629	.6464	.6741	-.0277	-.020
M	.581	.5662	.5932	-.0270	-.025	M	.629	.6304	.6754	-.0450	-.036
J	.577	.5911	.5935	-.0024	-.057	J	.612	.6163	.6765	-.0602	-.054
J	.585	.6161	.5939	+.0222	-.022	J	.577	.6046	.6780	-.0734	-.029
A	.627	.6389	.5945	+.0444	+.011	A	.590	.5957	.6797	-.0840	-.001
S	.644	.6575	.5955	+.0620	+.050	S	.598	.5897	.6815	-.0918	+.036
O	.669	.6709	.5966	+.0743	+.046	O	.597	.5864	.6833	-.0969	+.046
N	.712	.6792	.5984	+.0808	+.022	N	.574	.5857	.6852	-.0995	+.042
D	.750	.6826	.6005	+.0821	+.019	D	.581	.5872	.6871	-.0999	+.050
1900						1905					
J	.699	.6818	.6030	+.0788	-.006	J	.600	.5906	.6891	-.0985	-.001
F	.680	.6776	.6057	+.0719	-.037	F	.612	.5954	.6911	-.0957	-.029
M	.679	.6708	.6086	+.0622	+.009	M	.596	.6017	.6930	-.0913	-.002
A	.636	.6620	.6117	+.0503	-.008	A	.621	.6090	.6949	-.0859	-.022
M	.594	.6519	.6152	+.0367	-.026	M	.639	.6174	.6969	-.0795	-.039
J	.623	.6413	.6186	+.0227	-.057	J	.627	.6267	.6987	-.0720	-.053
J	.629	.6310	.6222	+.0088	-.024	J	.644	.6370	.7004	-.0634	-.029
A	.614	.6218	.6260	-.0042	+.008	A	.625	.6483	.7020	-.0537	-.002
S	.591	.6145	.6302	-.0157	+.046	S	.639	.6604	.7036	-.0432	+.035
O	.657	.6098	.6341	-.0243	+.046	O	.649	.6732	.7050	-.0318	+.046
N	.616	.6078	.6379	-.0301	+.027	N	.703	.6865	.7063	-.0198	+.044
D	.648	.6083	.6417	-.0334	+.029	D	.713	.6997	.7077	-.0080	+.051
1901						1906					
J	.610	.6108	.6454	-.0346	-.005	J	.703	.7127	.7085	+.0042	.000
F	.603	.6146	.6489	-.0343	-.036	F	.729	.7249	.7097	+.0152	-.027
M	.567	.6188	.6522	-.0334	+.007	M	.727	.7361	.7104	+.0257	-.004
A	.610	.6230	.6554	-.0324	-.011	A	.759	.7459	.7111	+.0348	-.023
M	.628	.6268	.6584	-.0316	-.029	M	.766	.7542	.7115	+.0427	-.040
J	.652	.6300	.6611	-.0311	-.057	J	.771	.7608	.7123	+.0485	-.051
J	.659	.6329	.6636	-.0307	-.026	J	.766	.7657	.7128	+.0529	-.029
A	.649	.6357	.6660	-.0303	+.005	A	.776	.7690	.7130	+.0560	-.001
S	.652	.6384	.6681	-.0297	+.042	S	.783	.7708	.7131	+.0577	+.034
O	.621	.6415	.6698	-.0283	+.046	O	.753	.7717	.7136	+.0581	+.046
N	.642	.6449	.6715	-.0266	+.032	N	.751	.7722	.7137	+.0585	+.045
D	.657	.6485	.6729	-.0244	+.037	D	.745	.7729	.7138	+.0591	+.051

## SHORT TERM INTEREST RATES

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TABLE 23—Continued

## COMMERCIAL PAPER RATES

Date	1	2	3	4	5	Date	1	2	3	4	5
1907						1912					
J	.790	.7746	.7139	+.0607	-.001	J	.697	.6112	.6740	-.0628	-.016
F	.800	.7779	.7140	+.0639	-.026	F	.599	.6193	.6768	-.0575	-.025
M	.797	.7828	.7140	+.0688	-.006	M	.637	.6281	.6794	-.0513	-.015
A	.798	.7833	.7133	+.0754	-.024	A	.640	.6375	.6816	-.0441	-.023
M	.778	.7068	.7136	+.0832	-.040	M	.648	.6475	.6840	-.0365	-.026
J	.785	.8042	.7130	+.0912	-.049	J	.626	.6582	.6855	-.0273	-.024
J	.788	.8102	.7126	+.0776	-.028	J	.664	.6696	.6868	-.0172	-.009
A	.795	.8139	.7120	+.1019	+.004	A	.682	.6817	.6879	-.0062	+.017
S	.800	.8138	.7111	+.1027	+.033	S	.717	.6945	.6887	+.0058	+.028
O	.805	.8092	.7100	+.0992	+.046	O	.739	.7076	.6889	+.0188	+.034
N	.816	.7998	.7086	+.0912	+.044	N	.734	.7213	.6887	+.0326	+.023
D	.844	.7855	.7070	+.0785	+.050	D	.749	.7346	.6881	+.0465	+.029
1908						1913					
J	.813	.7666	.7052	+.0614	-.002	J	.701	.7471	.6871	+.0600	-.019
F	.729	.7441	.7032	+.0409	-.025	F	.714	.7581	.6857	+.0724	-.024
M	.762	.7188	.7008	+.0180	-.008	M	.775	.7664	.6839	+.0825	-.015
A	.674	.6917	.6982	-.0065	-.025	A	.763	.7711	.6820	+.0891	-.021
M	.634	.6640	.6951	-.0311	-.039	M	.749	.7714	.6798	+.0916	-.021
J	.608	.6371	.6819	-.0548	-.047	J	.786	.7667	.6773	+.0894	-.017
J	.600	.6119	.6886	-.0767	-.026	J	.786	.7571	.6746	+.0825	-.005
A	.552	.5895	.6850	-.0955	+.004	A	.760	.7435	.6717	+.0718	+.018
S	.561	.5711	.6812	-.1101	+.033	S	.738	.7273	.6684	+.0589	+.026
O	.563	.5570	.6775	-.1205	+.046	O	.723	.7100	.6652	+.0448	+.030
N	.563	.5477	.6737	-.1260	+.042	N	.728	.6935	.6618	+.0317	+.017
D	.538	.5431	.6697	-.1266	+.047	D	.732	.6795	.6582	+.0213	+.023
1909						1914					
J	.575	.5427	.6654	-.1227	-.004	J	.677	.6689	.6548	+.0141	-.021
F	.573	.5457	.6617	-.1160	-.025	F	.607	.6622	.6509	+.0113	-.022
M	.554	.5514	.6579	-.1065	-.010	M	.599	.6594	.6475	+.0119	-.015
A	.570	.5588	.6543	-.0955	-.026	A	.591	.6599	.6440	+.0159	-.018
M	.574	.5675	.6503	-.0828	-.037	M	.605	.6631	.6405	+.0226	-.016
J	.555	.5770	.6472	-.0702	-.043	J	.596	.6679	.6371	+.0308	-.009
J	.551	.5873	.6441	-.0568	-.022	J	.648	.6734	.6337	+.0397	-.001
A	.599	.5989	.6412	-.0423	+.007	A	.783	.6784	.6302	+.0482	+.019
S	.589	.6117	.6382	-.0265	+.032	S	.805	.6817	.6267	+.0550	+.021
O	.657	.6261	.6359	-.0098	+.045	O	.786	.6822	.6235	+.0587	+.023
N	.664	.6419	.6339	+.0080	+.039	N	.729	.6786	.6203	+.0583	+.011
D	.665	.6586	.6321	+.0265	+.043	D	.621	.6698	.6171	+.0527	+.018
1910						1915					
J	.685	.6752	.6306	+.0446	-.008	J	.607	.6556	.6140	+.0416	-.022
F	.673	.6906	.6294	+.0612	-.026	F	.593	.6362	.6110	+.0252	-.019
M	.665	.7038	.6286	+.0752	-.012	M	.543	.6126	.6083	+.0043	-.014
A	.702	.7135	.6282	+.0853	-.025	A	.577	.5868	.6057	-.0189	-.014
M	.711	.7191	.6280	+.0911	-.034	M	.582	.5611	.6031	-.0420	-.011
J	.730	.7202	.6283	+.0919	-.038	J	.565	.5377	.6008	-.0631	-.003
J	.749	.7173	.6287	+.0886	-.018	J	.510	.5187	.5986	-.0799	+.002
A	.724	.7105	.6205	+.0810	+.011	A	.531	.5050	.5967	-.0917	+.018
S	.711	.7006	.6303	+.0703	+.032	S	.498	.4969	.5949	-.0980	+.018
O	.703	.6885	.6317	+.0568	+.042	O	.490	.4935	.5935	-.1000	+.018
N	.706	.6750	.6335	+.0415	+.034	N	.470	.4939	.5921	-.0982	+.006
D	.629	.6605	.6353	+.0252	+.039	D	.478	.4965	.5911	-.0946	+.012
1911						1916					
J	.612	.6460	.6372	+.0088	-.011	J	.516	.5001	.5904	-.0903	-.022
F	.635	.6321	.6306	-.0075	-.026	F	.510	.5038	.5898	-.0860	-.016
M	.605	.6193	.6421	-.0228	-.014	M	.505	.5078	.5897	-.0819	-.011
A	.506	.6081	.6448	-.0367	-.024	A	.504	.5120	.5900	-.0780	-.010
M	.589	.5992	.6480	-.0488	-.030	M	.500	.5168	.5909	-.0741	-.006
J	.598	.5927	.6510	-.0583	-.032	J	.557	.5227	.5918	-.0691	+.002
J	.590	.5889	.6542	-.0653	-.013	J	.596	.5299	.5933	-.0634	+.003
A	.608	.5878	.6577	-.0699	+.014	A	.557	.5383	.5953	-.0570	+.014
S	.626	.5891	.6611	-.0720	+.030	S	.516	.5478	.5973	-.0495	+.013
O	.600	.5924	.6646	-.0722	+.039	O	.517	.5582	.6002	-.0420	+.012
N	.566	.5974	.6678	-.0704	+.029	N	.541	.5692	.6034	-.0342	+.002
D	.631	.6038	.6710	-.0672	+.034	D	.584	.5807	.6068	-.0261	+.008

## APPENDIX

TABLE 23—Continued

## COMMERCIAL PAPER RATES

Date	1	2	3	4	5	Date	1	2	3	4	5
1917						1922					
J	.556	.5930	.6105	-.0175	-.016	J	.694	.6866	.7483	-.0617	-.003
F	.624	.6061	.6151	-.0090	-.012	F	.690	.6688	.7432	-.0744	-.002
M	.623	.6202	.6197	+.0005	-.008	M	.682	.6534	.7383	-.0849	-.002
A	.638	.6351	.6246	+.0105	-.007	A	.661	.6409	.7329	-.0920	-.002
M	.688	.6508	.6305	+.0203	-.004	M	.632	.6317	.7273	-.0956	-.001
J	.698	.6668	.6364	+.0304	+.002	J	.605	.6259	.7220	-.0961	.000
J	.668	.6820	.6425	+.0401	+.002	J	.596	.6234	.7167	-.0933	.000
A	.670	.6978	.6491	+.0487	+.011	A	.587	.6241	.7111	-.0870	+.002
S	.704	.7118	.6562	+.0556	+.010	S	.620	.6277	.7056	-.0779	+.002
O	.722	.7244	.6632	+.0612	+.009	O	.640	.6339	.7002	-.0663	+.002
N	.735	.7355	.6705	+.0650	+.002	N	.664	.6422	.6947	-.0525	.000
D	.734	.7451	.6780	+.0671	+.006	D	.664	.6520	.6893	-.0373	+.001
1918						1923					
J	.758	.7533	.6859	+.0674	-.012	J	.667	.6627	.6840	-.0213	-.002
F	.763	.7602	.6935	+.0667	-.009	F	.672	.6737	.6787	-.0050	-.002
M	.775	.7658	.7015	+.0643	-.006	M	.703	.6842	.6734	+.0108	-.001
A	.777	.7701	.7093	+.0608	-.005	A	.701	.6940	.6683	+.0257	-.001
M	.772	.7730	.7170	+.0560	-.003	M	.710	.7025	.6631	+.0394	-.001
J	.768	.7743	.7248	+.0495	+.001	J	.691	.7094	.6581	+.0513	.000
J	.768	.7741	.7322	+.0419	+.002	J	.695	.7144	.6533	+.0611	.000
A	.766	.7722	.7395	+.0327	+.008	A	.701	.7170	.6486	+.0684	+.001
S	.771	.7690	.7468	+.0222	+.007	S	.708	.7168	.6440	+.0728	+.001
O	.772	.7645	.7536	+.0109	+.007	O	.708	.7135	.6397	+.0738	+.001
N	.775	.7591	.7601	-.0010	+.001	N	.707	.7067	.6355	+.0712	.000
D	.760	.7530	.7665	-.0135	+.005	D	.687	.6961	.6314	+.0647	+.001
1919						1924					
J	.729	.7464	.7723	-.0259	-.009	J	.689	.6820	.6275	+.0545	-.001
F	.720	.7398	.7779	-.0381	-.006	F	.680	.6647	.6242	+.0405	-.001
M	.735	.7336	.7828	-.0492	-.004	M	.666	.6451	.6208	+.0243	-.001
A	.735	.7283	.7874	-.0591	-.004	A	.666	.6242	.6176	+.0066	-.001
M	.733	.7245	.7918	-.0573	-.002	M	.622	.6031	.6145	-.0114	.000
J	.742	.7228	.7954	-.0726	+.001	J	.599	.5830	.6118	-.0288	.000
J	.734	.7236	.7988	-.0752	+.001	J	.547	.5650	.6093	-.0443	.000
A	.726	.7272	.8017	-.0745	+.006	A	.511	.5499	.6069	-.0570	+.001
S	.726	.7339	.8042	-.0703	+.005	S	.493	.5386	.6050	-.0664	+.001
O	.726	.7434	.8063	-.0629	+.005	O	.493	.5320	.6032	-.0712	+.001
N	.739	.7556	.8078	-.0522	+.001	N	.508	.5294	.6016	-.0722	.000
D	.766	.7699	.8091	-.0392	+.003	D	.550	.5313	.6004	-.0691	+.001
1920						1925					
J	.784	.7859	.8101	-.0242	-.006	J	.560	.5374	.5993	-.0619	-.001
F	.811	.8030	.8107	-.0077	-.005	F	.560	.5475	.5983	-.0508	-.001
M	.827	.8207	.8111	+.0096	-.003	M	.594	.5595	.5975	-.0380	.000
A	.837	.8384	.8111	+.0273	-.003	A	.596	.5758	.5970	-.0212	.000
M	.857	.8554	.8105	+.0449	-.002	M	.589	.5901	.5967	-.0066	.000
J	.887	.8711	.8100	+.0611	+.001	J	.589	.6032	.5965	+.0067	.000
J	.893	.8849	.8091	+.0758	+.001	J	.592	.6138	.5966	+.0172	.000
A	.899	.8960	.8077	+.0883	+.004	A	.599	.6216	.5968	+.0248	+.001
S	.897	.9039	.8062	+.0977	+.004	S	.620	.6245	.5971	+.0274	+.001
O	.900	.9082	.8045	+.1037	+.003	O	.641	.6268	.5978	+.0290	.000
N	.898	.9066	.8024	+.1062	+.001	N	.641	.6273	.5986	+.0287	.000
D	.895	.9051	.8001	+.1050	+.002	D	.641	.6268	.5996	+.0272	.000
1921						1926					
J	.898	.8981	.7974	+.1007	-.005	J	.638	.6260	.6007	+.0253	.000
F	.892	.8880	.7947	+.0933	-.003	F	.618	.6252	.6023	+.0229	.000
M	.884	.8753	.7916	+.0837	-.002	M	.631	.6247	.6041	+.0206	.000
A	.881	.8607	.7883	+.0724	-.002	A	.622	.6245	.6061	+.0184	.000
M	.842	.8444	.7843	+.0601	-.001	M	.605	.6244	.6081	+.0163	.000
J	.797	.8083	.7766	+.0317	+.001	J	.596	.6243	.6135	+.0108	.000
J	.772	.7888	.7722	+.0166	+.003	A	.625	.6244	.6164	+.0080	.000
A	.766	.7685	.7676	+.0009	+.003	S	.643	.6246	.6195	+.0051	.000
S	.747	.7477	.7628	-.0151	+.003	O	.656	.6250	.6229	+.0021	.000
O	.713	.7267	.7581	-.0314	+.000	N	.647	.6253	.6264	-.0011	.000
D	.707	.7061	.7532	-.0471	+.002	D	.643	.6254	.6302	-.0048	.000

## SHORT TERM INTEREST RATES

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TABLE 23—Concluded

## COMMERCIAL PAPER RATES

Date	1	2	3	4	5	Date	1	2	3	4	5
1927						1932					
J	.622	.6247	.6341	-.0094	.000	J	.602	.5319			.000
F	.592	.6229	.6377	-.0148	.000	F	.589	.5373			.000
M	.602	.6197	.6416	-.0219	.000	M	.547	.5309			.000
A	.612	.6151	.6456	-.0305	.000	A	.529	.5130			.000
M	.616	.6095	.6497	-.0402	.000	M	.477	.4852			.000
J	.616	.6034	.6534	-.0500	.000	J	.444	.4500			.000
J	.609	.5976	.6572	-.0596	.000	J	.408	.4112			.000
A	.591	.5930	.6604	-.0674	.000	A	.338	.3726			.000
S	.592	.5904	.6637	-.0733	.000	S	.326	.3371			.000
O	.602	.5904	.6664	-.0760	.000	O	.288	.3066			.000
N	.594	.5932	.6692	-.0760	.000	N	.241	.2826			.000
D	.599	.5990	.6706	-.0716	.000	D	.179	.2651			.000
1928						1933					
J	.580	.6076	.6739	-.0663	.000	J	.140	.2532			.000
F	.601	.6185	.6757	-.0572	.000	F	.140	.2458			.000
M	.622	.6311	.6773	-.0462	.000	M	.444	.2413			.000
A	.634	.6451	.6784	-.0333	.000	A	.408	.2370			.000
M	.658	.6597	.6791	-.0194	.000	M	.318	.2340			.000
J	.674	.6745	.6796	-.0051	.000	J	.228	.2280			.000
J	.707	.6891	.6798	+.0093	.000	J	.176	.2181			.000
A	.734	.7031	.6795	+.0236	.000	A	.176	.2033			.000
S	.747	.7162	.6790	+.0372	.000	S	.097	.1832			.000
O	.741	.7284	.6783	+.0501	.000	O	.097	.1578			.000
N	.731	.7394	.6770	+.0624	.000	N	.097	.1281			.000
D	.736	.7493	.6754	+.0739	.000	D	.149	.0956			.000
1929						1934					
J	.740	.7581	.6738	+.0843	.000	J	.097	.0623			.000
F	.745	.7658	.6716	+.0942	.000	F	.086	.0300			.000
M	.755	.7723	.6692	+.1031	.000	M	.000	-.0002			.000
A	.769	.7774	.6666	+.1108	.000	A	.000	-.0273			.000
M	.778	.7808	.6638	+.1170	.000	M	-.046				.000
J	.778	.7819				J	-.125				.000
J	.778	.7800				J	-.125				.000
A	.784	.7745				A	-.125				.000
S	.787	.7648				S	-.125				.000
O	.787	.7506				O	-.125				.000
N	.733	.7318				N	-.125				.000
D	.699	.7090				D	-.125				.000
1930						1935					
J	.690	.6832			.000	J	-.125				.000
F	.665	.6557			.000	F	-.125				.000
M	.613	.6278			.000	M	-.125				.000
A	.589	.6009			.000	A	-.125				.000
M	.566	.5756			.000	M	-.125				.000
J	.537	.5520			.000	J	-.125				.000
J	.498	.5297			.000	J	-.125				.000
A	.477	.5077			.000	A	-.125				.000
S	.477	.4853			.000	S	-.125				.000
O	.477	.4620			.000	O	-.125				.000
N	.473	.4379			.000	N	-.125				.000
D	.475	.4141			.000	D	-.125				.000
1931						1936					
J	.450	.3918			.000	J	-.125				.000
F	.398	.3731			.000						
M	.403	.3600			.000						
A	.380	.3538			.000						
M	.326	.3554			.000						
J	.326	.3652			.000						
J	.290	.3826			.000						
A	.274	.4063			.000						
S	.274	.4343			.000						
O	.525	.4642			.000						
N	.602	.4926			.000						
D	.602	.5161			.000						

## TABLE 24

## COMMERCIAL PAPER RATES IN BOSTON MONTHLY 1831-1860

(From Joseph G. Martin's "Seventy-three Years' History of the Boston Stock Market" pages 37 and 38. Martin's table is preceded by the statement that "the following rates are for first-class, three to six months, bankable paper. Loans 'on call' range from 1 to 3 per cent lower." Martin's table goes to 1871. In his later volume "One Hundred Years' History of the Boston Stock Market" it is continued through 1897.)

- 1831.—Jan., 5½ per cent, and gradually rose to 7, the rate for last four months of year.
- 1832.—Opened at 7 per cent; declined to 6 in March; rose to 7 in May; thence for the year, 6 per cent.
- 1833.—Opened at 6 per cent; declined to 5½; rose to 6½ and to 8, July, Aug., and Sept.; to 10, Oct.; 12, Nov., and 15, Dec.
- 1834.—In Jan., 15 to 24 per cent; then high and variable, and fell in Dec. from 10 to 8 per cent. Called a "panic year."
- 1835.—Rates low, and down to 5 per cent; but closed in Dec. at 8 to 10. Called the "golden year" for business.
- 1836.—Opened at 10 per cent; up to 12 in March; 15, April; 18, May; up to 24, Aug. and Sept.; 36, Oct., and 24 to 30, Nov. and Dec.
- 1837.—Opened at 16 per cent; advanced to 20, and receded to 13; up to 18 in Feb.; 27, March; 30, April; 32, May; then fell rapidly to 6 in June; advanced to 7½; fell to 6 in Nov., and rose to 10 in Dec. Banks suspended May 10; resumed May, 1838.
- 1838.—Jan., 11 per cent; Feb., 12; March and April, 12 to 18; fell in May from 10 to 7; thence, 6 to 7 till Dec., and closed at 7 to 9 per cent.
- 1839.—Opened at 6 to 9, and stationary till July, when it advanced to 11 and 12; in Aug. to 15; Sept. to 21; Oct. to 30; Nov. to 36, and then rapidly fell to 9 per cent at the close of year.
- 1840.—Jan., 9 per cent; Feb. and March, 9 to 12, and fell in April to 7; May, 7; June, 6 to 8; July, fell to 5, and ranged at 6 to 7 for remainder of the year.
- 1841.—At 6 to 7 per cent till May; then 6 till Sept., and 6½ to 7, up to 9, in Nov., and 9 to 12 in Dec.
- 1842.—At 9 to 12 till April; then 8 to Aug.; Sept., 7; declined to 6 in Oct. and Nov., and thence 6 to 9 per cent to close of year.
- 1843.—Opened at 6 per cent; then 5 to 6 till May; declined in May to 4½, and 3 in June; "exceptional loans" made as low as 2½; thence 3½ to 4 per cent.
- 1844.—Opened at 4 per cent; rose to 5 in March, and remained for the year with little change from 5 per cent.
- 1845.—Opened at 5 per cent, and ranged from 5 to 6 till Aug., and rose to 8 in Nov. and Dec.

1846.—Opened at 8 per cent; rose to 9 in Feb.; declined to 7 in March; thence ranged from 8 and 9 to 12, up to Aug. In Aug., 8 to 9; declined to 6 in Sept.; thence 6, 7, and 8 per cent.

1847.—Opened at 8 per cent; advanced to 12 in Jan. and Feb.; 8 to 10 in March; fell to 6 in June; advanced to 9 and 12 in Oct.; 15 in Nov., and 18 in Dec.

1848.—Jan., 18 per cent; Feb., 18 to 12; March and April, 12 to 15; May and June, 15 to 18; July and Aug., 12 to 15; Oct., 18; Nov., 18 to 15; Dec., 15 to 12.

1849.—Jan., 12 per cent; Feb., 9 to 12; March and April, 12 to 15; May, 9 to 11; declined to 7 in June; July, 8; Aug., 7½ to 8½; Sept., 9; Oct., 9 to 10, reaching 10½ in Dec.

1850.—Jan., 9 to 10½ per cent; Feb. and March, receded to 8 and 9; April, May, and June, 7 to 8½; fell to 6½ in July; rose to 9 in Sept.; thence, 7 to 8 per cent.

1851.—Opened at 6 to 7½ per cent; advanced to 7 and 8½ in Feb. and March; April, 8; fell to 6½ in May, and rose to 11 in July and Aug.; 15 in Sept.; and 16, Oct.; thence 9 to 12 per cent.

1852.—Opened at 9 per cent; fell to 7¼ in Feb.; March, April and May, 6, and 5½ the Summer months. In Sept., 6 to 7; thence, 6 per cent.

1853.—Opened at 6 per cent; advanced to 8, and gradually to 12 in March; fell to 8 in May; then at 9 to 10 in June and July; rose to 12 in Sept.; 15, Oct.; 18, Nov., and fell to 9, Dec.

1854.—Opened at 9 per cent; fell to 7 in Feb.; rose to 10 in March, and 12, April and May; fell to 9 in June; July, 9 to 10; Aug., 12; and 10 to 12, up to 18, in Dec.

1855.—Opened at 15 per cent; fell to 10, and in March to 7; rose to 10 in April; fell to 6½, May; up to 8, and fluctuated from 6 to 8, till Oct.; in Oct., 9, and thence 10 to 15 per cent.

1856.—Opened at 10 to 12 per cent; Feb., 9 to 10; March, 7 to 9; thence till Nov. at 9 to 10, and in Dec., 10 to 11 per cent.

1857.—Opened at 9 to 10 per cent; Feb., 8½ to 9; March, 9 to 10, and fell to 7 and 8 in April and May; June, July, Aug., 9 to 10, and rose in Sept. from 12 to 36; Oct., 24 to 36; Nov., 15 to 24; Dec., 9 to 15. Banks suspended Oct. 13, and resumed Dec. 12.

1858.—Jan., 7½ to 9 per cent; fell to 5½ in Feb., to 5 in March, and 4½ in April; thence, 4½ to 4 in Sept. In Aug., "call loans" reported at 2½ in New York, and leading bankers said to be purchasing their own paper at two per cent. Prominent sixty days' acceptances passed at 3 per cent. Oct. and Nov., 4; Dec., 5 per cent.

1859.—Jan., 5 to 6 per cent; Feb., March, and April, 5½ to 7; May, 6½ to 8; June to Nov., 7 to 8; Dec., 7 to 8½ per cent.

1860.—Jan. and Feb., 7½ to 9½ per cent; March, 6 to 8; April and May, 6 to 7; June, 5 to 7; July, 5 to 6½; Aug., 6 to 9; Sept., 6½ to 9; Oct., 6½ to 7½; Nov., 7 to 15; Dec., 12 to 18 per cent; the money market being disturbed by the Government as a constant borrower, and the threatening aspect of political matters South.

## APPENDIX

TABLE 25

## COMMERCIAL PAPER RATES IN BOSTON MONTHLY 1831-1860

(From Erastus B. Bigelow's *The Tariff Question* Appendix Table No. 112. Bigelow describes these rates as "street rates on first class paper in Boston . . . at the beginning, middle, and end of the month." Both figures and comments are Bigelow's.)

1831		1834		1838			
J	5½	S	O	M	A	12	18
F	5½	N	D	M	S	18	12
M	5½			M	O	9	7
A	5½			J	N	7	6
M	5½			J	S	6	6
J	5½			A	O	6	7
J	6	J		S	N	6	7
A	6½	F		O	D	6	7
S	7	M		N		8	7
O	7	A		D		7	7
N	7	M					
D	7	J					
1832		1835		1839			
J	7	J	J	J	F	6	9
F	6½	S	A	M	M	6	9
M	6	O	N	A	A	6	9
A	6½	N	D	M	M	6	9
M	7	D		J	J	11	12
J	6			A	S	12	15
J	6	J		10	O	15	21
A	6	F		10	N	21	30
S	6	M		12	D	33	36
O	6	A		15		15	9
N	6	M		18			
D	6	J		15			
1833		1836		1840			
J	6	J	J	J	F	9	9
F	5½	S	A	M	M	9	12
M	5½	O	N	A	A	12	7
A	6	N	D	M	M	6	8
M	6	D		J	J	8	5
J	6½			A	S	5	7½
J	8	J	16	13	S	6	7
A	8	F	15	18	O	6	7
S	8	M	18	20	N	6	7
O	10	A	27	26	D	6	7
N	12	M	27	27			
D	12	J	18	9			
1834		1837		1841			
J	15	J	16	7½	J	6	7
F	18	A	20	13	J	6	7
M	24	S	21	18	F	6	7
A	24	O	20	27	M	6	6
M	24	N	26	30	A	6	6
J	27	D	27	32	M	6	6
J	32		9	6	J	6	7
Business unsettled		1838		1841			
J	variable	J	7½	7½	J	6	7
J		F	6	6½	J	6	7
A			6	9	F	6	7
			10	10	M	6	6
			11	11	A	6	6
			12	12	S	6	7
					O	6	7½

Rates comparatively low

## SHORT TERM INTEREST RATES

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TABLE 25—(Continued)

1841			1845			1849		
N	6	9	N	6	5½	8	N	8
D	9	12	D			8	D	9½
J	9	12	J			8	J	9
F	9	12	F			9	F	9
M	9	12	M			7	M	8
A	8		A			12	A	9
M	8		M			12	M	8½
J	8		J			12	J	7½
J	8		J	8		9	J	7
A	7½		A	8		9	A	8
S	7		S	9		6	S	9
O	6½	6	O	6		8	O	8
N	6	6½	N	6		7	N	8
D	6	9	D	6		7	D	8
1842			1846			1850		
J	9	12	J			8	J	9
F	9	12	F			9	F	9
M	9	12	M			7	M	9
A	8		A			12	A	8½
M	8		M			12	M	7½
J	8		J			12	J	8
J	8		J	8		9	J	7
A	7½		A	8		9	A	8
S	7		S	9		6	S	9
O	6½	6	O	6		8	O	8
N	6	6½	N	6		7	N	8
D	6	9	D	6		7	D	8
1843			1847			1851		
J		6	J			8	J	6
F		5	F			8	F	7
M		6	M			10	M	7
A		5	A			9	A	8
M	5	4½	M			8	M	7½
J	4½	3½	J			7	J	7
J	4	4	J			6	J	9
A	3½	4	A			7	A	11
S	3½	4	S			9	S	11
O	3½	4	O			12	O	12
N	3½	4	N			15	N	15
D	3½	4	D			18	D	16
1844			1848			1852		
J		4	J			18	J	9
F		4	F			12	F	8½
M		4	M			15	M	7
A		5	A			15	A	6
M		5	M			15	M	6
J		5	J			15	J	6
J		5	J			18	J	5½
A		5	A			15	A	6
S	5	5½	S			12	S	5½
O	5	5½	O			15	O	6
N	5	5½	N			18	N	6
D	5	5	D			15	D	6
1845			1849			1853		
J	5	6	J			12	J	6
F	5½	6	F			9	F	7
M	5½	6	M			12	M	9
A	5½	6	A			15	A	10
M	5½	6	M			12	M	12
J	5½	6	J			9	J	10½
J	5½	6	J			7	J	10
A	5¾	6	A			8	A	9
S	6		S			7½	S	9
O	6	5½	O			9	O	10
						10		12
						12		15

## APPENDIX

TABLE 25—(Concluded)

1853				1856				1858			
N	15	18	12	M	10	A	4	A	4	4	4
D	12	10	9	A	9	S	4	S	4	4	4
1854				M	7	O	4½	O	4½	4½	4½
J	9	8	7	J	7	N	4½	N	4½	5	5
F	7	9	8	J	7	D	5	D	5	5	5
M	9	10	9	S	8						
A	10	12	10	O	9						
M	10	12	12	N	9						
J	9	11	10	D	10						
J	10	9	10								
A	10	9	10								
S	10	12	12								
O	12	10	12								
N	10	12	12								
D	12	18	10								
1855				1857				1859			
J	15	10	10	J	9	J	5	J	5	5	5
F				J	9	F	5½	J	5½	5½	5½
M	7	9	9	S	12	M	6	A	5½	5½	5½
A	8	10	8	O	36	M	6	M	5½	5½	5½
M	6½	8	8	N	24	J	7	J	7	7	7
J	7	6	6	D	15	F	7	A	7	7	7
J	6	7	7			M	7	S	7	7	7
A	7	8	8			A	7	O	7	7	7
S	7	8	8			M	7	N	7	7	7
O	7½	9	9			J	8	D	8	8	8
N	10	12	12			F	8		9	9	9
D	12	15	15			M	8		8	8	8
1856				1858				1860			
J	10	12	10	J	9	J	7½	J	7½	7½	7½
F	10	9	9	J	8	F	7½	J	7½	7½	7½
						M	5	A	5	5	5
						J	5	S	5	5	5
						F	5	O	5	5	5
						M	6	N	6	6	6
						J	6	D	6	6	6
						F	6		6	6	6
						M	6		6	6	6
						J	6		6	6	6
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						F	6		6	6	6
						M	6		6	6	6
						J	6		6	6	6
						F	6		6	6	6
						M	6		6	6	6
						J	6		6	6	6
						F	6		6	6	6
						M	6		6	6	6
						J	6		6	6	6
						F	6		6	6	6
						M	6		6	6	

## SHORT TERM INTEREST RATES

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TABLE 26

AVERAGE MONTHLY<sup>1</sup> RATE ON 90-DAY PRIME BANKERS' ACCEPTANCES

	1918 <sup>2</sup>	1921	1924	1927	1930	1933
J	4.00	5.94	4.09	3.69	3.96	.33
F	4.12	5.97	4.07	3.69	3.77	.47
M	4.25	5.98	4.04	3.63	3.07	2.49
A	4.25	5.67	3.95	3.63	2.91	.81
M	4.25	5.69	3.29	3.63	2.48	.50
J	4.25	5.59	2.45	3.63	2.09	.38
J	4.25	5.25	2.01	3.50	1.88	.48
A	4.25	5.00	2.10	3.13	1.88	.45
S	4.25	4.94	2.33	3.13	1.88	.25
O	4.31	4.49	2.21	3.25	1.88	.25
N	4.31	4.27	2.37	3.25	1.88	.39
D	4.31	4.16	2.89	3.25	1.88	.62
	1919	1922	1925	1928	1931	1934
J	4.25	3.95	3.00	3.36	1.58	.50
F	4.25	4.00	3.08	3.51	1.39	.50
M	4.25	3.73	3.25	3.52	1.50	.31
A	4.25	3.32	3.14	3.81	1.43	.20
M	4.25	3.18	3.17	3.94	1.01	.19
J	4.25	3.07	3.25	4.05	.88	.19
J	4.26	3.00	3.25	4.32	.88	.19
A	4.28	3.00	3.27	4.62	.88	.19
S	4.25	3.12	3.50	4.50	.98	.19
O	4.25	3.72	3.50	4.50	2.47	.17
N	4.52	4.00	3.50	4.50	2.99	.13
D	4.95	4.00	3.50	4.50	3.00	.13
	1920	1923	1926	1929	1932	1935
J	5.37	3.98	3.67	4.84	2.85	.13
F	5.50	3.99	3.63	5.15	2.78	.13
M	6.00	4.00	3.63	5.34	2.51	.13
A	6.00	4.14	3.42	5.46	1.39	.13
M	6.13	4.13	3.20	5.48	.92	.13
J	6.25	4.13	3.32	5.49	.86	.13
J	6.25	4.13	3.38	5.16	.75	.13
A	6.25	4.13	3.57	5.13	.75	.13
S	6.25	4.13	3.88	5.13	.75	.13
O	6.25	4.13	3.88	5.01	.59	.13
N	6.23	4.13	3.79	4.23	.50	.13
D	6.25	4.13	3.83	3.90	.39	.13

<sup>1</sup>These rates are monthly averages of daily quotations for the month.<sup>2</sup>Rates for 1918 are "Prevailing Rates" calculated at the Federal Reserve Bank of New York. Monthly averages of daily quotations are not available before January 1919.

## APPENDIX

TABLE 27

## BANK CLEARINGS, PIG IRON PRODUCTION AND WHOLESALE PRICES

## PART I

Bank Clearings in New York City, October 1853-December 1874  
 (daily averages—thousands of dollars)

## PART II

- Col. 1 Bank Clearings in New York City, January 1875-January 1919;  
 Bank Debits in New York City, January 1919-January 1937  
 (daily averages—thousands of dollars)
- Col. 2 Deflated<sup>1</sup> Bank Clearings Outside New York City, January 1875-January 1919; Deflated Bank Debits for 140 Outside Cities, January 1919-January 1937 (daily averages—thousands of dollars)
- Col. 3 Bank Clearings Outside New York City,<sup>2</sup> January 1875-January 1919; Bank Debits for 140 Outside Cities, January 1919-January 1937 (daily averages—thousands of dollars)
- Col. 4 Pig Iron Production in the United States,<sup>3</sup> January 1877-January 1937 (daily averages—thousands of gross tons)
- Col. 5 Carl Snyder's Index of General Price Level, January 1875-January 1937
- Col. 6 United States Bureau of Labor Statistics Index Number of Wholesale Prices of Commodities, January 1890-January 1937.

<sup>1</sup>Deflated by Carl Snyder's index of general price level.

<sup>2</sup>Estimated by chaining monthly totals, making the percentage movement from each December to the immediately succeeding January be the same as the percentage movement of the totals of the largest number of cities whose clearings were available for the December and the January.

<sup>3</sup>These figures do not include charcoal pig iron. Monthly figures for 1877-September 1901 were estimated from weekly capacity of furnaces in blast.

## BANK CLEARINGS, PIG IRON AND PRICES A253

TABLE 27  
PART I  
BANK CLEARINGS IN NEW YORK CITY

1853		1857		1861	
J		J	21,854	J	16,962
F		F	23,769	F	17,009
M		M	24,221	M	17,104
A		A	25,509	A	17,467
M		M	24,856	M	14,239
J		J	23,996	J	12,273
J		J	23,506	J	12,837
A		A	21,573	A	11,861
S	11,381	S	16,062	S	12,864
O	15,688	O	9,954	O	16,646
N	15,530	N	10,716	N	16,615
D		D	10,878	D	15,823
1854		1858		1862	
J	15,008	J	11,057	J	14,546
F	16,008	F	12,731	F	15,601
M	17,095	M	14,851	M	15,861
A	17,064	A	14,707	A	17,197
M	18,742	M	15,206	M	22,539
J	17,579	J	14,502	J	22,052
J	15,137	J	13,917	J	23,088
A	14,789	A	13,455	A	20,257
S	15,139	S	14,452	S	23,537
O	15,451	O	16,896	O	34,888
N	14,904	N	17,850	N	20,215
D	13,773	D	17,015	D	20,793
1855		1859		1863	
J	13,781	J	16,548	J	39,869
F	13,681	F	17,682	F	42,832
M	17,623	M	18,872	M	42,155
A	14,711	A	20,382	A	39,581
M	15,744	M	20,170	M	49,291
J	15,507	J	17,171	J	40,785
J	14,150	J	15,596	J	40,645
A	14,750	A	15,968	A	44,491
S	15,425	S	17,926	S	52,850
O	17,971	O	18,619	O	62,167
N	18,457	N	19,226	N	58,950
D	17,838	D	18,826	D	57,202
1856		1860		1864	
J	17,556	J	18,952	J	57,107
F	18,764	F	18,936	F	72,006
M	17,981	M	21,149	M	88,817
A	20,114	A	20,963	A	88,158
M	21,452	M	21,809	M	60,569
J	18,923	J	19,222	J	63,401
J	19,244	J	18,910	J	57,347
A	17,667	A	19,909	A	57,291
S	20,520	S	20,541	S	69,425
O	22,643	O	24,221	O	68,531
N	23,167	N	22,163	N	80,632
D	22,822	D	15,304	D	78,189

## APPENDIX

TABLE 27—(Continued)

## PART I

## BANK CLEARINGS IN NEW YORK CITY

1865		1869		1873	
J	83,596	J	90,562	J	102,428
F	77,356	F	92,818	F	113,816
M	78,351	M	106,585	M	106,062
A	54,010	A	112,583	A	109,517
M	70,397	M	116,750	M	89,665
J	67,842	J	115,208	J	76,648
J	68,809	J	97,592	J	76,901
A	66,225	A	81,659	A	66,704
S	61,827	S	111,103	S	78,598
O	82,425	O	83,277	O	50,139
N	75,193	N	83,504	N	49,927
D	63,932	D	77,455	D	63,357
1866		1870		1874	
J	76,722	J	76,236	J	73,673
F	71,126	F	72,649	F	65,797
M	82,195	M	76,204	M	68,211
A	79,092	A	73,624	A	73,658
M	87,979	M	88,642	M	64,952
J	87,981	J	76,820	J	66,368
J	74,395	J	82,921	J	61,424
A	81,571	A	60,438	A	50,268
S	81,060	S	61,718	S	64,075
O	111,500	O	69,871	O	73,286
N	115,803	N	71,004	N	69,343
D	81,344	D	79,787	D	72,844
1867		1871			
J	78,541	J	73,603		
F	67,325	F	69,115		
M	68,338	M	90,485		
A	70,713	A	100,267		
M	71,544	M	94,817		
J	64,479	J	93,915		
J	71,823	J	63,393		
A	62,936	A	67,489		
S	74,780	S	89,585		
O	79,783	O	96,795		
N	73,078	N	78,987		
D	64,927	D	88,429		
1868		1872			
J	82,613	J	97,114		
F	82,665	F	84,854		
M	87,106	M	100,196		
A	83,275	A	118,178		
M	73,314	M	109,595		
J	81,547	J	83,210		
J	73,268	J	72,241		
A	75,138	A	86,032		
S	77,647	S	93,664		
O	109,223	O	125,061		
N	106,118	N	113,184		
D	89,817	D	108,528		

## BANK CLEARINGS, PIG IRON AND PRICES A255

TABLE 27—(Continued)

## PART II

Date	1 Clear. N. Y.	2 Def. Cl. outs. N. Y.	3 Clear. outs. N. Y.	4 Pig Iron	5. Snyder's Prices	6 B. of L. Prices
1875						
J	74,771	33,118	30,800		93	
F	69,180	31,447	29,246		93	
M	73,398	35,643	33,148		93	
A	75,580	32,452	30,180		93	
M	70,667	31,736	29,197		92	
J	71,148	36,340	33,433		92	
J	63,997	30,553	27,803		91	
A	50,041	31,793	28,932		91	
S	59,765	29,520	26,863		91	
O	62,576	33,043	29,739		90	
N	63,700	39,970	35,573		89	
D	64,903	33,113	29,471		89	
1876						
J	65,211	35,727	31,797		89	
F	65,210	32,433	28,541		88	
M	62,152	36,067	31,739		88	
A	55,490	30,394	26,747		88	
M	57,309	32,369	28,161		87	
J	55,075	34,583	30,087		87	
J	48,948	30,041	25,835		86	
A	50,461	32,292	27,771		86	
S	57,329	30,267	26,030		86	
O	65,040	33,709	28,990		86	
N	59,195	36,992	31,813		86	
D	62,908	34,576	29,735		86	
1877						
J	68,563	34,241	29,790	4.71	87	
F	69,556	32,691	28,114	4.78	86	
M	63,897	33,586	28,548	4.83	85	
A	68,174	31,282	26,590	4.85	85	
M	63,720	35,373	29,713	4.80	84	
J	61,244	29,889	25,107	4.72	84	
J	60,332	29,831	25,058	4.70	84	
A	61,868	30,215	25,381	4.74	84	
S	61,571	31,301	25,980	4.84	83	
O	73,369	35,029	29,074	5.00	83	
N	64,647	37,622	30,850	5.20	82	
D	65,800	34,107	27,968	5.43	82	
1878						
J	64,971	39,237	32,174	5.70	82	
F	53,924	30,962	25,079	5.90	81	
M	59,963	29,175	23,632	5.98	81	
A	67,364	30,272	24,520	5.90	81	
M	60,646	32,790	26,232	5.76	80	
J	57,211	29,796	23,837	5.63	80	
J	59,666	33,359	26,687	5.45	80	
A	56,542	28,121	22,497	5.32	80	
S	55,074	31,966	25,573	5.25	80	
O	71,310	38,730	30,984	5.32	80	
N	67,841	33,725	26,980	5.40	80	
D	61,307	32,625	25,774	5.47	79	

## APPENDIX

TABLE 27—(Continued)

## PART II

Date	1 Clear. N. Y.	2 Def. Cl. outs. N. Y.	3 Clear. outs. N. Y.	4 Pig Iron	5 Snyder's Prices	6 B. of L. Prices
1879						
J	.70,985	37,208	29,394	5.51	79	.....
F	68,296	34,001	26,861	5.54	79	.....
M	60,836	31,658	25,010	5.58	79	.....
A	63,341	37,772	29,840	5.63	79	.....
M	78,898	34,724	27,432	5.74	79	.....
J	63,088	35,392	27,960	5.98	79	.....
J	65,608	38,325	30,277	6.40	79	.....
A	74,290	31,715	25,055	6.84	79	.....
S	76,938	35,541	28,433	7.31	80	.....
O	114,187	50,435	40,348	7.83	80	.....
N	117,142	46,444	37,620	8.33	81	.....
D	101,586	45,099	36,981	8.83	82	.....
1880						
J	104,572	47,898	39,755	9.25	83	.....
F	100,868	43,294	35,934	9.59	83	.....
M	111,972	44,270	37,187	9.75	84	.....
A	112,520	44,925	37,737	9.74	84	.....
M	107,501	41,788	34,684	9.50	83	.....
J	97,808	41,241	34,230	9.07	83	.....
J	83,984	41,228	34,219	8.60	83	.....
A	77,412	39,239	32,568	8.45	83	.....
S	89,841	40,735	34,217	8.60	84	.....
O	104,520	45,350	38,094	8.89	84	.....
N	135,766	51,354	43,137	9.15	84	.....
D	139,434	53,111	44,613	9.42	84	.....
1881						
J	152,117	51,359	43,655	9.71	85	.....
F	155,456	49,214	41,832	9.93	85	.....
M	135,559	47,154	40,081	10.03	85	.....
A	123,535	49,208	41,827	9.97	85	.....
M	157,457	52,516	44,639	9.80	85	.....
J	140,538	58,156	49,433	9.64	85	.....
J	125,335	47,002	39,952	9.49	85	.....
A	114,704	52,779	45,390	9.44	85	.....
S	113,833	53,860	46,320	9.54	86	.....
O	138,106	58,821	51,174	9.69	87	.....
N	129,956	56,920	49,520	9.95	87	.....
D	137,633	56,940	48,968	10.36	86	.....
1882						
J	139,159	53,852	46,813	10.98	86	.....
F	126,737	49,543	42,607	11.34	86	.....
M	143,956	49,033	42,168	11.25	86	.....
A	130,254	50,663	43,570	11.03	86	.....
M	103,850	50,386	43,332	10.80	85	.....
J	111,563	51,453	44,250	10.57	86	.....
J	114,336	51,001	43,861	10.30	86	.....
A	120,181	48,357	41,587	10.24	86	.....
S	134,573	52,872	45,470	10.48	86	.....
O	141,442	56,144	48,284	11.15	86	.....
N	151,038	58,267	49,527	11.56	85	.....
D	125,641	54,744	46,532	11.83	85	.....

BANK CLEARINGS, PIG IRON AND PRICES A257

TABLE 27—(Continued)

PART II

Date	1 Clear. N. Y.	2 Def. Cl outs. N. Y.	3 Clear. outs. N. Y.	4 Pig Iron	5 Snyder's Prices	6 B. of L. Prices
1883						
J	106,738	56,626	48,132	12.00	85	.....
F	107,058	52,008	44,207	12.02	85	.....
M	99,838	51,799	44,029	11.88	85	.....
A	102,846	50,768	43,153	11.49	85	.....
M	103,388	53,818	45,745	11.18	85	.....
J	100,401	55,964	47,010	11.08	84	.....
J	88,881	52,281	43,916	11.04	84	.....
A	96,168	50,517	41,929	10.98	83	.....
S	101,400	51,590	42,820	10.92	83	.....
O	123,604	59,316	49,232	10.77	83	.....
N	96,329	56,880	47,210	10.62	83	.....
D	104,202	57,188	46,894	10.38	82	.....
1884						
J	109,125	57,041	46,774	9.94	82	.....
F	102,336	51,720	42,410	9.67	82	.....
M	92,747	50,860	41,197	9.82	81	.....
A	96,744	55,675	45,097	10.22	81	.....
M	107,394	56,030	45,384	10.45	81	.....
J	79,890	49,163	39,330	10.59	80	.....
J	70,320	48,258	38,606	10.74	80	.....
A	66,122	44,210	35,368	10.23	80	.....
S	68,549	47,159	37,727	9.85	80	.....
O	76,479	53,246	42,597	9.90	80	.....
N	69,864	49,801	39,343	10.09	79	.....
D	76,739	54,324	42,916	9.44	79	.....
1885						
J	70,496	53,765	42,474	9.05	79	.....
F	67,864	46,392	36,650	9.80	79	.....
M	64,928	46,570	36,790	10.10	79	.....
A	62,266	50,895	40,207	9.90	79	.....
M	64,446	48,371	37,729	9.71	78	.....
J	64,077	52,667	41,080	9.60	78	.....
J	76,648	53,127	41,439	9.84	78	.....
A	65,842	45,827	35,745	9.90	78	.....
S	70,048	50,747	39,583	9.80	78	.....
O	102,895	60,363	47,687	10.23	79	.....
N	110,632	61,570	48,640	11.20	79	.....
D	104,464	62,319	49,232	12.10	79	.....
1886						
J	92,759	58,358	46,103	12.19	79	.....
F	98,054	56,171	44,375	11.96	79	.....
M	93,712	58,310	46,065	12.81	79	.....
A	80,699	56,532	44,660	14.23	79	.....
M	77,753	55,399	43,765	15.03	79	.....
J	91,139	60,772	48,010	15.30	79	.....
J	79,872	60,820	48,048	15.13	79	.....
A	79,167	55,027	43,471	14.78	79	.....
S	86,860	59,751	47,203	14.88	79	.....
O	104,784	66,432	52,481	15.39	79	.....
N	106,065	69,384	54,813	15.63	79	.....
D	116,741	70,473	55,674	15.84	79	.....

## APPENDIX

TABLE 27—(Continued)  
PART II

Date	1 Clear. N. Y.	2 Def. Cl. outs. N. Y.	3 Clear. outs. N. Y.	4 Pig Iron	5 Snyder's Prices	6 B. of L. Prices
1887						
J	95,571	65,426	51,032	16.26	78	.....
F	88,331	62,738	48,936	16.54	78	.....
M	91,495	68,673	54,252	16.71	79	.....
A	101,096	70,228	55,480	17.03	79	.....
M	90,024	69,306	54,752	14.65	79	.....
J	98,848	75,744	59,080	12.13	78	.....
J	83,717	66,468	51,845	12.97	78	.....
A	80,449	62,754	48,948	15.42	78	.....
S	89,429	67,017	52,273	17.57	78	.....
O	96,095	72,486	56,539	18.35	78	.....
N	97,727	75,785	59,870	18.47	79	.....
D	88,399	70,984	56,077	17.97	79	.....
1888						
J	81,328	68,334	53,984	16.26	79	.....
F	76,333	65,216	51,521	14.59	79	.....
M	76,967	63,148	49,887	14.48	79	.....
A	85,745	67,186	53,077	15.17	79	.....
M	87,960	70,000	55,300	15.61	79	.....
J	78,544	63,199	54,667	15.23	79	.....
J	75,622	66,982	52,916	15.19	79	.....
A	77,828	64,451	51,561	16.00	80	.....
S	89,813	66,571	53,257	16.70	80	.....
O	103,043	82,181	65,745	17.58	80	.....
N	90,541	76,075	60,860	18.73	80	.....
D	96,023	75,875	60,700	19.65	80	.....
1889						
J	99,023	77,270	61,816	19.55	80	.....
F	96,258	72,116	57,693	19.18	80	.....
M	93,218	71,056	53,845	19.23	80	.....
A	91,667	72,484	57,987	18.77	80	.....
M	99,364	75,456	60,365	17.94	80	.....
J	102,379	74,654	59,723	17.67	80	.....
J	93,699	76,504	61,203	18.03	80	.....
A	88,660	68,678	54,942	18.18	80	.....
S	89,996	70,521	56,417	18.75	80	.....
O	116,702	85,908	68,726	20.18	80	.....
N	106,806	83,534	66,827	21.43	80	.....
D	102,062	81,243	64,994	22.16	80	.....
1890						
J	105,625	85,823	68,658	22.67	80	54.7
F	100,767	78,139	62,511	23.23	80	54.8
M	91,062	78,649	62,919	23.77	80	55.0
A	97,453	85,250	68,200	24.02	80	55.1
M	122,211	91,460	73,168	24.24	80	55.6
J	105,288	83,621	69,297	23.92	80	55.4
J	91,392	86,399	69,119	22.94	80	55.7
A	95,488	79,476	63,581	22.65	80	57.8
S	103,067	85,066	68,053	23.49	80	58.4
O	115,050	97,113	77,690	23.85	80	58.1
N	111,699	93,275	73,687	24.07	79	57.1
D	92,499	83,913	68,661	23.07	79	56.6

## BANK CLEARINGS, PIG IRON AND PRICES A259

TABLE 27—(Continued)

## PART II

Date	1 Clear. N. Y.	2 Def. Cl. outs. N. Y.	3 Clear. outs. N. Y.	4 Pig Iron	5 Snyder's Prices	6 B. of L. Prices
1891						
J	95,387	87,039	68,761	19.95	79	56.1
F	82,305	79,986	63,189	17.37	79	56.6
M	78,907	77,419	61,161	15.09	79	57.8
A	96,530	85,616	67,637	13.92	79	58.2
M	93,766	82,405	65,100	16.24	79	57.5
J	84,850	83,086	64,807	20.53	78	55.8
J	79,939	83,954	65,484	23.04	78	55.5
A	77,532	77,945	60,797	23.55	78	55.4
S	110,750	89,769	70,020	24.56	78	54.8
O	105,874	95,830	75,706	25.93	79	54.6
N	98,276	92,958	72,507	26.49	78	54.3
D	105,130	92,809	73,319	26.28	79	53.8
1892						
J	114,471	91,078	71,952	25.81	79	52.7
F	111,637	91,096	71,966	25.86	79	52.4
M	105,182	87,958	69,487	25.55	79	51.6
A	102,517	89,848	70,980	24.47	79	50.5
M	96,134	88,584	69,981	23.42	79	50.8
J	93,568	94,971	75,027	22.93	79	50.7
J	83,173	89,020	70,326	22.07	79	51.9
A	81,749	86,268	68,152	20.99	79	52.4
S	92,616	90,794	71,727	21.20	79	52.5
O	99,306	101,249	79,987	22.62	79	53.0
N	106,041	103,667	81,897	23.84	79	54.0
D	116,202	104,324	82,416	23.95	79	55.0
1893						
J	114,886	102,532	81,000	23.54	79	56.6
F	109,532	95,710	75,611	23.76	79	57.2
M	104,861	94,301	73,555	24.33	78	56.2
A	93,545	96,368	75,167	24.70	78	55.6
M	98,564	97,973	75,439	24.45	77	55.0
J	87,530	87,658	67,497	22.57	77	53.2
J	77,207	78,514	59,671	17.95	76	51.9
A	63,162	62,542	47,532	13.01	76	50.3
S	61,373	68,825	52,307	10.65	76	52.0
O	71,915	80,568	61,232	10.49	76	52.9
N	75,228	84,991	64,593	12.45	76	51.2
D	71,466	84,099	63,074	13.99	75	50.4
1894						
J	69,857	85,088	63,816	14.16	75	49.6
F	61,573	73,891	55,418	15.10	75	48.6
M	66,090	76,847	57,635	17.20	75	47.5
A	67,278	79,343	59,507	17.21	75	47.3
M	67,521	82,250	60,865	12.44	74	47.0
J	63,286	80,388	59,487	10.61	74	47.2
J	59,465	76,386	56,526	14.43	74	47.5
A	60,374	77,323	57,219	19.11	74	48.3
S	62,168	78,328	57,963	21.56	74	49.6
O	73,597	91,639	67,813	22.36	74	48.2
N	74,716	91,104	67,417	23.50	74	47.9
D	75,365	90,288	66,813	23.70	74	47.5

## APPENDIX

TABLE 27—(Continued)

## PART II

Date	1 Clear. N. Y.	2 Def. Cl. outs. N. Y.	3 Clear. outs. N. Y.	4 Pig Iron	5 Snyder's Prices	6 B. of L. Prices
1895						
J	77,248	91,809	67,939	23.09	74	47.2
F	66,587	78,118	57,807	22.14	74	46.9
M	72,282	82,009	60,687	21.62	74	47.2
A	79,116	88,923	65,803	21.45	74	49.6
M	91,415	91,325	68,494	21.35	75	50.1
J	82,695	89,284	66,963	22.44	75	50.4
J	81,538	91,815	68,861	24.31	75	50.0
A	74,736	82,172	61,629	26.47	75	49.5
S	79,100	84,013	63,010	28.35	75	49.0
O	94,633	103,901	77,926	30.12	75	49.4
N	86,440	100,036	75,027	31.21	75	49.0
D	93,868	99,011	73,268	30.37	74	48.3
1896						
J	82,659	93,418	69,129	28.81	74	48.0
F	81,828	84,278	62,366	27.33	74	47.5
M	74,718	82,750	61,235	26.43	74	46.9
A	79,782	89,239	66,037	26.30	74	46.7
M	75,487	85,972	63,619	25.76	74	46.0
J	80,479	88,405	65,420	24.89	74	45.5
J	80,013	86,990	63,503	22.96	73	45.1
A	63,586	72,992	53,284	19.33	73	45.1
S	68,768	78,178	57,070	16.13	73	45.3
O	84,317	90,166	66,723	15.85	74	46.6
N	89,562	90,347	66,857	18.14	74	48.1
D	85,675	93,409	69,123	20.73	74	47.6
1897						
J	83,527	86,696	64,155	22.36	74	46.7
F	73,040	82,384	60,964	23.24	74	46.3
M	77,004	82,785	61,261	24.07	74	46.3
A	74,992	87,068	64,430	24.30	74	45.8
M	74,682	84,093	62,229	24.12	74	45.5
J	85,718	89,149	65,970	23.71	74	45.0
J	91,417	89,638	66,332	23.40	74	45.3
A	94,738	86,308	63,868	24.78	74	47.1
S	115,078	97,747	73,310	27.18	75	48.5
O	107,614	102,431	76,823	29.22	75	48.1
N	104,048	106,193	78,583	30.80	74	47.9
D	115,754	106,211	79,658	31.59	75	48.1
1898						
J	119,042	103,824	77,868	31.65	75	48.0
F	125,580	100,795	75,596	31.96	75	48.6
M	110,258	99,480	74,610	32.16	75	48.8
A	95,631	98,572	72,943	32.00	74	48.9
M	101,465	98,008	73,506	31.39	75	51.8
J	108,862	103,257	77,443	30.53	75	48.3
J	96,033	91,264	68,448	29.65	75	48.0
A	113,283	93,101	69,826	29.55	75	48.0
S	113,799	96,303	72,227	30.37	75	47.8
O	114,137	107,208	80,406	31.58	75	47.7
N	132,454	114,070	86,693	32.90	76	48.0
D	150,076	119,414	90,755	33.61	76	48.3

## BANK CLEARINGS, PIG IRON AND PRICES A261

TABLE 27—(Continued)

## PART II

Date	1 Clear. N. Y.	2 Def. Cl. outs. N. Y.	3 Clear. outs. N. Y.	4 Pig Iron	5 Snyder's Prices	6 B. of L. Prices
1899						
J	183,572	121,496	93,552	33.59	77	48.9
F	162,523	116,730	89,882	32.47	77	49.7
M	190,390	122,513	94,335	32.96	77	49.8
A	185,897	119,688	93,357	34.40	78	50.6
M	178,215	120,050	93,639	34.92	78	50.7
J	159,340	120,594	94,063	35.78	78	51.3
J	142,592	113,884	89,968	36.71	79	51.9
A	140,592	108,734	85,900	37.16	79	53.0
S	146,665	116,756	92,237	38.11	79	54.6
O	169,566	128,279	102,623	39.64	80	55.4
N	165,098	127,184	101,747	40.96	80	55.8
D	172,525	125,960	100,768	41.42	80	56.7
1900						
J	150,470	122,067	98,874	41.52	81	57.0
F	140,948	112,814	91,379	41.51	81	57.3
M	155,983	114,353	92,626	40.96	81	57.3
A	157,208	116,744	94,563	41.05	81	57.2
M	144,427	116,130	94,065	41.48	81	56.1
J	129,140	118,300	95,823	40.45	81	55.5
J	114,571	110,832	89,774	36.55	81	55.8
A	102,719	104,694	83,755	32.82	80	55.7
S	105,217	105,909	84,727	31.32	80	56.1
O	147,620	124,799	101,087	30.22	81	55.3
N	190,135	127,796	104,793	30.76	82	55.4
D	191,843	126,928	104,081	33.38	82	55.1
1901						
J	238,745	134,323	110,145	37.43	82	55.2
F	200,843	122,752	100,657	40.42	82	54.7
M	222,157	126,262	103,535	41.14	82	54.5
A	287,896	141,248	115,823	41.75	82	54.4
M	300,820	140,152	116,326	43.00	83	54.1
J	228,693	134,205	111,390	43.65	83	54.1
J	196,191	131,434	109,090	44.10	83	54.5
A	159,017	122,363	101,561	43.42	83	55.4
S	168,238	120,792	100,257	43.67	83	56.1
O	191,952	143,339	118,971	44.59	83	56.1
N	212,271	142,250	119,490	45.40	84	56.6
D	203,735	138,054	115,965	40.85	84	57.7
1902						
J	223,531	147,773	124,129	46.38	84	56.8
F	191,034	132,029	110,904	44.92	84	56.7
M	177,643	133,740	112,342	46.61	84	56.5
A	245,088	146,289	122,883	49.18	84	57.4
M	219,539	140,182	119,155	49.77	85	58.3
J	165,572	131,141	111,470	48.23	85	58.8
J	212,698	140,046	119,039	46.51	85	59.1
A	187,643	122,418	104,055	47.36	85	58.0
S	226,819	135,655	115,307	47.29	85	58.7
O	241,834	149,378	128,465	47.77	86	63.2
N	217,976	141,864	122,003	47.76	86	60.7
D	198,905	143,901	123,755	49.59	86	61.5

## APPENDIX

TABLE 27—(Continued)  
PART II

Date	1 Clear. N. Y.	2 Def. Cl. outs. N. Y.	3 Clear. outs. N. Y.	4 Pig Iron	5 Snyder's Prices	6 B. of L. Prices
1903						
J	231,810	150,210	129,181	47.51	86	62.6
F	187,186	135,944	118,271	49.67	87	62.0
M	193,684	136,129	118,432	51.31	87	60.3
A	198,146	144,663	124,410	53.61	86	60.0
M	179,839	136,384	117,290	55.28	86	59.0
J	191,550	146,183	125,717	55.77	86	59.0
J	192,832	143,623	123,516	49.88	86	58.6
A	150,472	125,337	107,790	50.68	86	58.8
S	143,049	134,520	115,687	51.79	86	59.5
O	168,816	151,763	130,516	45.99	86	58.7
N	153,597	141,659	121,827	34.65	86	58.3
D	177,343	146,163	125,700	27.31	86	58.2
1904						
J	183,598	144,513	124,281	29.80	86	59.7
F	152,752	135,477	116,510	41.67	86	60.7
M	154,967	138,117	118,781	46.82	86	60.5
A	159,688	140,337	120,690	52.04	86	59.3
M	156,221	130,187	111,961	49.58	86	58.5
J	152,350	139,073	119,603	43.19	86	58.4
J	167,560	133,751	115,026	36.16	86	58.5
A	150,181	129,317	111,213	37.83	86	59.2
S	178,490	139,108	119,633	45.26	86	59.8
O	241,189	153,875	133,871	46.94	87	59.9
N	277,922	164,241	142,890	49.55	87	60.7
D	274,224	162,255	142,784	52.13	88	61.1
1905						
J	249,507	154,443	135,910	57.48	88	60.6
F	254,226	146,826	129,207	57.05	88	61.0
M	281,658	157,195	138,332	62.46	88	60.3
A	289,360	157,295	138,420	64.07	88	60.4
M	254,324	156,778	137,965	63.35	88	59.3
J	224,510	158,276	139,283	59.78	88	59.3
J	220,614	149,518	133,071	56.19	89	59.4
A	225,186	145,592	129,577	59.47	89	60.1
S	228,649	152,730	137,457	63.32	90	59.6
O	258,903	168,792	151,913	66.23	90	59.9
N	284,755	174,770	157,293	67.12	90	60.1
D	312,565	174,857	157,371	65.99	90	61.0
1906						
J	362,522	185,831	169,106	66.74	91	61.1
F	297,301	167,673	152,582	68.00	91	60.8
M	270,234	168,852	153,655	69.86	91	60.6
A	284,775	164,238	149,457	69.11	91	61.1
M	283,646	162,088	147,500	67.70	91	61.3
J	260,540	167,069	152,033	65.89	91	61.3
J	234,082	160,174	145,758	64.95	91	59.7
A	284,942	155,491	143,052	62.15	92	61.2
S	277,128	156,533	144,010	65.70	92	61.7
O	301,421	187,801	172,777	70.87	92	62.8
N	286,933	186,151	173,120	72.92	93	63.6
D	297,675	178,566	167,852	72.11	94	64.3

## BANK CLEARINGS, PIG IRON AND PRICES A263

TABLE 27—(Continued)

## PART II

Date	1 Clear. N. Y.	2 Def. Cl. outs. N. Y.	3 Clear. outs. N. Y.	4 Pig Iron	5 Snyder's Prices	6 B. of L. Prices
1907						
J	310,893	189,914	178,519	71.15	94	64.0
F	261,839	174,377	163,914	73.04	94	64.9
M	308,460	178,648	167,929	71.82	94	64.3
A	255,584	180,926	170,070	73.89	94	64.5
M	236,608	177,814	167,145	74.05	94	65.6
J	212,306	173,539	163,127	74.49	94	66.1
J	235,864	177,410	166,765	72.76	94	66.1
A	222,274	163,665	153,845	72.59	94	66.1
S	201,008	164,574	154,700	72.78	94	66.5
O	264,387	198,758	184,845	75.39	93	66.9
N	183,358	154,688	142,313	60.94	92	64.6
D	172,579	145,908	134,235	39.82	92	63.2
1908						
J	217,751	165,060	151,855	33.72	92	62.3
F	168,829	147,740	135,921	37.16	92	61.4
M	177,453	154,757	140,829	39.62	91	61.8
A	182,919	188,232	145,573	38.32	92	62.2
M	215,156	149,902	137,910	37.60	92	62.2
J	188,462	155,942	141,907	36.40	91	62.6
J	213,486	161,148	146,645	39.29	91	63.1
A	200,811	144,004	132,484	43.87	92	63.0
S	226,083	160,141	147,330	47.30	92	63.3
O	233,364	175,375	161,345	50.56	92	63.5
N	273,034	177,040	162,877	52.60	92	64.1
D	298,912	181,117	168,439	56.16	93	64.8
1909						
J	286,590	181,769	169,045	57.99	93	64.6
F	245,961	170,269	158,350	60.98	93	64.9
M	241,510	180,673	168,026	59.10	93	65.2
A	287,158	184,534	171,617	57.96	93	66.2
M	261,169	170,868	160,616	60.75	94	67.3
J	303,723	181,359	170,477	64.36	94	67.8
J	268,379	179,183	168,432	67.85	94	67.9
A	280,208	167,879	157,806	72.55	94	68.2
S	282,612	180,161	171,153	79.51	95	68.9
O	324,269	200,371	190,352	83.86	95	70.2
N	302,121	201,479	193,420	84.92	96	70.9
D	319,572	203,105	194,981	85.02	96	71.6
1910						
J	362,874	200,649	192,623	84.15	96	71.4
F	291,112	186,801	179,329	85.62	96	71.3
M	291,812	201,330	195,290	84.45	97	72.9
A	278,059	197,512	191,587	82.79	97	73.2
M	251,834	180,013	174,613	77.10	97	72.0
J	278,811	189,677	183,987	75.52	97	71.0
J	254,151	184,005	176,645	69.31	96	71.0
A	208,460	170,079	164,977	67.96	97	70.8
S	207,701	178,835	173,470	68.54	97	69.9
O	254,971	198,460	192,506	67.52	97	67.9
N	260,477	201,446	195,403	63.66	97	66.4
D	258,865	201,082	193,039	57.85	96	66.6

## APPENDIX

TABLE 27—(Continued)  
PART II

Date	1 Clear. N. Y.	2 Def. Cl. outs. N. Y.	3 Clear. outs. N. Y.	4 Pig Iron	5 Snyder's Prices	6 B. of L. Prices
1911						
J	275,202	201,371	193,316	56.75	96	66.1
F	260,541	184,068	178,546	64.09	97	64.4
M	245,858	195,518	189,652	70.04	97	64.7
A	232,328	189,604	182,020	68.80	96	63.3
M	256,730	187,950	180,432	61.08	96	63.0
J	273,884	193,972	188,153	59.59	97	63.0
J	242,446	185,594	180,026	57.84	97	63.9
A	238,199	176,405	171,113	62.15	97	65.5
S	239,499	187,209	181,593	66.57	97	66.1
O	242,265	200,389	196,381	67.81	98	66.2
N	269,129	206,020	201,900	66.65	98	65.9
D	261,671	202,232	198,187	65.91	98	65.3
1912						
J	285,019	207,667	205,590	66.38	99	66.0
F	252,161	197,917	195,938	72.44	99	66.7
M	271,514	200,104	198,103	77.59	99	67.5
A	294,339	208,267	208,267	79.18	100	69.7
M	283,219	198,184	198,184	81.05	100	70.0
J	265,369	192,327	192,327	81.36	100	69.0
J	255,519	197,861	197,861	77.77	100	68.9
A	241,493	187,923	187,923	81.05	100	69.7
S	247,762	191,530	191,530	82.13	100	70.5
O	327,065	227,853	230,132	86.77	101	70.8
N	293,994	219,953	222,153	87.70	101	70.2
D	284,152	215,190	215,190	89.77	100	70.1
1913						
J	301,249	225,468	225,468	90.17	100	70.3
F	278,379	210,704	210,704	92.37	100	69.8
M	254,395	204,497	204,497	89.15	100	69.9
A	268,511	210,640	210,640	91.76	100	69.7
M	256,855	201,335	201,335	91.04	100	68.9
J	258,451	203,283	201,250	87.62	99	69.0
J	236,933	203,052	203,052	82.60	100	69.5
A	218,136	184,074	184,074	82.12	100	69.7
S	248,531	200,433	202,437	83.53	101	70.6
O	280,434	227,493	229,768	82.14	101	70.4
N	252,896	213,150	213,150	74.44	100	70.1
D	258,065	219,129	219,129	63.99	100	69.1
1914						
J	302,327	222,894	222,894	60.81	100	68.6
F	258,485	203,461	203,461	67.45	100	68.3
M	253,203	209,106	209,106	75.74	100	68.0
A	284,884	214,357	214,357	75.67	100	67.6
M	233,501	193,587	193,587	67.51	100	67.4
J	261,473	205,953	205,953	63.93	100	67.4
J	263,887	206,132	206,132	63.15	100	67.3
A	147,781	172,999	174,729	64.36	101	69.6
S	154,271	180,399	182,203	62.75	101	70.2
O	180,950	200,039	200,039	57.36	100	68.0
N	179,981	193,629	191,693	50.61	99	67.5
D	210,635	199,645	199,645	48.90	100	67.3

## BANK CLEARINGS, PIG IRON AND PRICES A265

TABLE 27—(Continued)

## PART II

Date	1 Clear. N. Y.	2 Def. Cl. outs. N. Y.	3 Clear. outs. N. Y.	4 Pig Iron	5 Snyder's Prices	6 B. of L. Prices
1915						
J	235,086	202,003	202,003	51.66	100	68.1
F	231,494	196,018	196,018	59.81	100	68.6
M	244,036	204,858	204,858	66.58	100	68.2
A	293,722	206,858	208,927	70.55	101	68.7
M	278,553	193,414	195,348	73.02	101	69.0
J	267,516	203,366	205,400	79.36	101	68.3
J	280,498	199,267	203,252	82.69	102	69.3
A	275,401	181,497	186,942	89.67	103	68.6
S	320,812	198,846	206,800	95.09	104	68.3
O	410,957	225,849	241,658	100.82	107	70.2
N	394,314	237,897	254,550	101.24	107	71.7
D	397,779	240,887	260,158	103.33	108	74.0
1916						
J	397,639	229,516	252,468	102.75	110	77.0
F	382,991	223,653	248,255	106.46	111	78.5
M	404,770	234,419	264,894	107.67	113	80.4
A	387,420	227,120	258,917	107.59	114	81.7
M	405,191	231,307	263,690	108.42	114	82.5
J	418,451	235,235	270,520	107.05	115	82.9
J	368,992	224,477	258,148	104.02	115	83.4
A	379,591	222,272	260,058	103.35	117	85.1
S	478,531	236,522	283,827	106.75	120	86.9
O	506,813	263,312	323,681	113.19	122	91.1
N	555,112	269,323	339,347	110.39	126	97.4
D	546,310	263,589	334,758	102.54	127	99.2
1917						
J	487,979	265,313	339,600	101.64	128	102.1
F	456,931	243,066	315,986	94.47	130	104.5
M	459,004	258,502	341,223	104.88	132	107.7
A	488,408	254,272	345,810	111.17	136	114.1
M	502,691	249,429	346,706	110.24	139	120.7
J	569,969	249,998	354,997	109.00	142	122.0
J	489,849	240,071	338,500	107.82	141	123.0
A	473,526	236,899	336,397	104.77	142	124.8
S	462,797	238,495	338,663	104.47	142	123.5
O	507,206	285,284	405,103	106.55	142	122.2
N	494,473	293,438	413,747	106.86	141	122.8
D	471,405	269,366	385,194	93.00	143	122.9
1918						
J	474,809	265,329	382,074	77.80	144	125.0
F	437,834	244,838	357,464	82.83	146	122.7
M	446,460	269,030	395,474	103.65	147	126.4
A	469,783	277,497	413,470	109.61	149	128.3
M	501,926	271,820	410,448	111.18	151	128.1
J	495,255	271,839	415,913	110.79	153	129.0
J	496,813	275,975	427,761	110.35	155	132.0
A	482,530	269,853	426,368	109.34	158	134.3
S	455,462	265,175	424,280	113.94	160	137.5
O	545,652	302,069	489,352	112.48	162	136.3
N	520,194	283,165	458,727	111.80	162	136.3
D	537,389	278,694	457,058	110.76	164	136.3

## APPENDIX

TABLE 27—(Continued)

## PART II

Date	1 Clear. N. Y.	2 Def. Cl. outs. N. Y.	3 Clear. outs. N. Y.	4 Pig Iron	5 Snyder's Prices	6 B. of L. Prices
1919						
J	576,150	288,294	469,919			
	"Debits to individual acc'ts"					
J	584,484	332,674	542,258	106.53	163	134.4
F	517,571	303,261	488,250	105.01	161	129.8
M	538,645	308,085	499,097	99.69	162	131.3
A	577,433	312,256	512,100	82.61	164	133.0
M	655,806	322,523	538,613	68.00	167	135.3
J	719,000	345,902	588,033	70.50	170	135.6
J	723,452	345,365	600,935	78.34	174	141.1
A	654,065	323,827	569,935	88.50	176	144.3
S	681,533	342,538	602,867	82.93	176	141.1
O	781,484	366,944	653,161	60.12	178	141.6
N	778,367	353,315	639,500	79.75	181	144.5
D	801,935	380,522	700,161	84.94	184	150.5
1920						
J	762,452	372,872	701,000	97.26	188	157.7
F	622,552	323,554	611,517	102.72	189	157.1
M	718,871	355,276	682,129	108.90	192	158.6
A	710,667	345,646	677,467	91.33	196	165.5
M	631,645	320,561	634,710	96.31	198	167.2
J	660,200	344,070	684,700	101.45	199	166.5
J	614,935	338,954	671,129	98.94	198	165.8
A	560,355	312,721	609,806	101.53	195	161.4
S	586,667	338,103	659,300	104.31	195	155.2
O	649,581	350,991	673,903	106.21	192	144.2
N	672,367	348,039	650,833	97.83	187	133.4
D	722,839	368,101	662,581	87.22	180	120.7
1921						
J	646,226	327,975	580,516	77.95	177	114.0
F	540,357	303,135	521,393	69.19	172	104.9
M	559,774	314,042	533,871	51.47	170	102.4
A	544,967	317,086	529,533	39.77	167	98.9
M	553,903	301,770	494,903	39.39	164	96.2
J	591,833	326,173	528,400	35.49	162	93.4
J	527,097	305,948	489,516	27.89	160	93.4
A	489,871	300,625	481,000	30.78	160	93.5
S	536,733	325,430	517,433	32.85	159	93.4
O	568,065	339,075	539,129	40.22	159	94.1
N	583,067	334,360	531,633	47.18	159	94.2
D	663,710	356,186	562,774	53.20	158	92.9
1922						
J	615,000	328,350	512,226	53.06	156	91.4
F	590,821	323,548	501,500	58.21	155	92.9
M	657,968	344,121	533,387	65.68	155	92.8
A	690,567	334,851	522,367	69.07	156	93.2
M	698,516	333,238	526,516	74.41	158	96.1
J	735,433	362,299	572,433	78.70	158	96.3
J	635,903	331,569	527,194	77.59	159	99.4
A	589,903	319,536	511,258	58.59	160	98.6
S	640,500	344,854	551,767	67.79	160	99.3
O	720,065	369,124	594,290	85.09	161	99.6
N	634,233	352,531	571,100	94.99	162	100.5
D	672,613	387,611	631,806	99.58	163	100.7

BANK CLEARINGS, PIG IRON AND PRICES A267

TABLE 27—(Continued)

PART II

Date	1 Debits N. Y.	2 Def. Deb. outs. N. Y.	3 Debits outs. N. Y.	4 Pig Iron	5 Snyder's Prices	6 B. of L. Prices
1923						
J	712,484	389,194	634,387	104.18	163	102.0
F	679,250	368,162	603,786	106.94	164	103.3
M	727,129	384,047	633,677	113.67	165	104.5
A	682,633	380,121	627,200	118.32	165	103.9
M	667,871	376,370	624,774	124.76	166	101.9
J	701,367	392,209	651,067	122.55	166	100.3
J	591,000	355,504	586,581	118.66	165	98.4
A	522,226	338,358	558,290	111.27	165	97.8
S	559,967	348,707	575,367	104.18	165	99.7
O	617,806	383,968	637,387	101.59	166	99.4
N	666,100	371,908	617,367	96.48	166	98.4
D	712,290	395,783	657,000	94.23	166	98.1
1924						
J	713,355	374,425	625,290	97.38	167	99.6
F	685,724	361,594	603,862	106.03	167	99.7
M	695,032	372,969	619,129	111.81	166	98.5
A	688,467	381,111	628,833	107.78	165	97.3
M	690,516	364,399	601,258	84.36	165	95.9
J	730,867	372,032	610,133	67.54	164	94.9
J	692,548	364,848	602,000	57.58	165	95.6
A	674,710	345,433	573,419	60.88	166	97.0
S	691,133	368,444	607,933	68.44	165	97.1
O	726,000	408,837	674,581	79.91	165	98.2
N	768,233	378,434	628,200	83.66	166	99.1
D	881,516	419,163	704,194	95.54	168	101.5
1925						
J	892,968	425,673	719,387	108.72	169	102.9
F	818,714	392,921	664,036	114.79	169	104.0
M	851,032	405,421	685,161	114.98	169	104.2
A	798,167	408,988	687,100	108.63	168	101.9
M	844,484	392,032	658,613	94.54	168	101.6
J	897,667	425,529	723,400	89.12	170	103.0
J	821,226	409,488	696,129	85.94	170	104.3
A	750,484	374,816	640,935	87.24	171	103.9
S	812,300	407,310	696,500	90.87	171	103.4
O	932,774	450,844	775,452	97.53	172	103.6
N	900,300	411,503	711,900	100.77	173	104.5
D	977,839	449,095	776,935	104.85	173	103.4
1926						
J	985,097	440,183	761,516	106.97	173	103.2
F	886,179	417,401	717,929	104.41	172	102.0
M	1,064,710	442,520	756,710	111.03	171	100.6
A	976,667	439,318	751,233	115.00	171	100.3
M	857,129	404,622	691,903	112.30	171	100.5
J	939,867	418,109	714,967	107.84	171	100.4
J	892,226	439,540	751,613	103.98	171	99.5
A	846,226	391,964	670,258	103.24	171	99.1
S	853,933	413,488	711,200	104.54	172	99.7
O	927,581	448,595	767,097	107.55	171	99.4
N	859,667	418,469	719,767	107.89	172	98.4
D	1,050,871	462,045	790,097	99.71	171	97.9

## APPENDIX

TABLE 27—(Continued)  
PART II

Date	1 Debits N. Y.	2 Def. Deb. outs. N. Y.	3 Debits outs. N. Y.	4 Pig Iron	5 Snyder's Prices	6 B. of L. Prices
1927						
J	1,008,323	445,085	756,645	100.12	170	96.5
F	979,964	436,576	742,179	105.02	170	95.8
M	1,112,645	455,901	775,032	112.37	170	94.7
A	1,066,900	465,010	785,867	114.07	169	94.1
M	1,008,710	434,023	737,839	109.39	170	94.2
J	1,100,267	464,171	793,733	102.99	171	94.1
J	991,935	435,142	739,742	95.20	170	94.3
A	1,021,065	415,922	711,226	95.07	171	95.2
S	1,112,300	450,501	779,367	92.50	173	96.3
O	1,099,710	468,227	810,032	89.81	173	96.6
N	1,109,400	458,632	793,433	88.28	173	96.3
D	1,256,065	491,342	854,935	86.96	174	96.4
1928						
J	1,222,065	466,176	806,484	92.57	173	96.4
F	1,128,966	433,625	750,172	100.00	173	95.8
M	1,444,710	479,180	833,774	103.22	174	95.5
A	1,392,600	480,476	840,833	106.18	175	96.6
M	1,460,323	480,153	849,871	105.93	177	97.5
J	1,515,167	511,913	900,967	102.73	176	96.7
J	1,131,774	437,995	770,871	99.09	176	97.4
A	1,132,323	428,904	754,871	101.18	176	97.6
S	1,290,833	457,865	815,000	102.08	178	98.6
O	1,457,710	504,921	893,710	108.83	177	96.7
N	1,515,633	484,644	862,667	110.08	178	95.8
D	1,700,871	537,496	956,742	108.71	178	95.8
1929						
J	1,765,129	506,866	907,290	111.04	179	95.9
F	1,653,179	489,126	875,536	114.51	179	95.4
M	1,787,903	504,140	907,452	119.82	180	96.1
A	1,599,300	499,125	893,433	122.09	179	95.5
M	1,614,290	477,924	855,484	125.75	179	94.7
J	1,442,100	492,141	880,933	123.91	179	95.2
J	1,587,581	506,933	917,548	122.10	181	96.5
A	1,581,742	502,286	914,161	121.15	182	96.3
S	1,678,067	497,523	910,467	116.59	183	96.1
O	2,042,742	574,960	1,040,677	115.75	181	95.1
N	1,786,800	546,341	950,633	106.05	174	93.5
D	1,285,484	499,295	868,774	91.51	174	93.3
1930						
J	1,120,387	476,882	829,774	91.21	174	92.5
F	1,111,321	444,550	769,071	101.39	173	91.4
M	1,314,194	466,418	806,903	104.72	173	90.2
A	1,287,700	466,418	811,567	106.06	174	90.0
M	1,207,194	457,914	787,613	104.28	172	88.8
J	1,256,333	486,134	821,567	97.80	169	86.8
J	954,839	447,576	747,452	85.15	167	84.4
A	808,129	407,423	676,323	81.42	166	84.3
S	912,767	424,211	708,433	75.89	167	84.4
O	992,935	469,028	764,516	69.83	163	83.0
N	749,667	407,868	656,667	62.24	161	81.3
D	935,516	471,764	745,387	53.73	158	79.6

BANK CLEARINGS, PIG IRON AND PRICES A269

TABLE 27—(Continued)

PART II

Date	1 Debits N. Y.	2 Def. Deb. outs. N. Y.	3 Debit outs. N. Y.	4 Pig Iron	5 Snyder's Prices	6 B. of L. Prices
1931						
J	792,161	445,798	699,903	55.30	157	78.2
F	748,143	388,626	610,143	60.95	157	76.8
M	889,968	399,034	626,484	65.56	157	76.0
A	894,033	421,935	654,000	67.32	155	74.8
M	808,774	397,597	608,323	64.33	153	73.2
J	863,100	431,245	646,867	54.62	150	72.1
J	677,645	399,307	594,968	47.20	149	72.0
A	564,548	357,783	533,097	41.31	149	72.1
S	669,100	377,029	554,233	38.96	147	71.2
O	667,032	406,003	584,645	37.85	144	70.3
N	482,133	338,078	486,833	36.78	144	70.2
D	620,419	394,286	552,000	31.63	140	68.6
1932						
J	570,194	371,505	512,677	31.38	138	67.3
F	495,897	326,318	443,793	33.25	136	66.3
M	521,290	323,264	442,871	31.20	137	66.0
A	518,600	357,338	478,833	28.43	134	65.5
M	416,548	305,425	403,161	25.28	132	64.4
J	473,400	333,359	430,033	20.94	129	63.9
J	410,581	312,853	403,581	18.46	129	64.5
A	434,129	287,317	379,258	17.12	132	65.2
S	472,100	297,172	392,267	19.75	132	65.3
O	417,548	304,211	398,516	20.80	131	64.4
N	327,167	280,385	364,500	21.04	130	63.9
D	450,548	323,084	413,548	17.62	128	62.6
1933						
J	400,419	306,146	388,806	18.35	127	61.0
F	429,857	299,568	371,464	19.80	124	59.8
M	...	...	...	17.48	123	60.2
A	400,400	285,377	353,867	20.79	124	60.4
M	450,871	292,329	371,258	28.62	127	62.7
J	558,100	337,709	432,267	42.17	128	65.0
J	559,806	339,149	447,677	57.82	132	68.9
A	421,806	302,420	399,194	59.14	132	69.5
S	411,333	306,141	407,167	50.74	133	70.8
O	428,387	315,959	420,226	43.75	133	71.2
N	406,800	298,923	397,567	36.17	133	71.1
D	419,774	324,731	428,645	38.13	132	70.8
1934						
J	452,355	320,107	425,742	39.20	133	72.2
F	472,536	309,454	420,857	45.13	136	73.6
M	503,484	333,895	454,097	52.24	136	73.7
A	565,133	343,163	470,133	57.56	137	73.3
M	472,677	338,638	460,548	65.90	136	73.7
J	512,933	358,978	491,800	64.34	137	74.6
J	446,516	325,152	448,710	39.51	138	74.8
A	396,290	313,721	432,935	34.01	138	76.4
S	374,067	309,041	429,567	29.94	139	77.6
O	396,323	335,670	466,581	30.68	139	76.5
N	378,100	319,262	446,967	31.90	140	76.5
D	490,774	361,774	506,484	33.15	140	76.9

\*Not available, complete data not having been reported on account of bank holidays.

## APPENDIX

TABLE 27—(Concluded)  
PART II

Date	1 Debits N. Y.	2 Def. Deb. outs. N. Y.	3 Debits outs. N. Y.	4 Pig Iron	5 Snyder's Prices	6 B. of L. Prices
1935						
J	483,806	344,635	485,935	47.66	141	78.8
F	448,179	331,514	470,750	57.45	142	79.5
M	512,742	362,594	511,258	57.10	141	79.4
A	530,167	369,625	524,867	55.45	142	80.1
M	469,387	353,147	505,000	55.71	143	80.2
J	522,233	368,380	530,467	51.75	144	79.8
J	539,903	370,568	537,323	49.04	145	79.4
A	475,225	345,647	504,645	56.82	146	80.5
S	467,133	343,016	504,233	59.22	147	80.7
O	507,516	369,703	547,161	63.82	148	80.5
N	518,067	375,884	560,067	68.86	149	80.6
D	570,452	407,361	606,968	67.95	149	80.9
1936						
J	578,226	339,914	509,871	65.35	150	80.6
F	545,034	360,036	543,655	62.89	151	80.6
M	633,194	381,671	576,323	65.82	151	79.6
A	576,167	388,822	583,233	80.12	150	79.7
M	523,452	365,549	548,323	85.43	150	78.6
J	620,767	414,035	629,333	86.21	152	79.2
J	522,548	389,966	600,548	83.69	154	80.5
A	463,290	353,722	551,806	87.48	156	81.6
S	521,867	375,769	586,200	91.01	156	81.6
O	553,903	416,501	649,742	96.51	156	81.5
N	579,800	389,768	615,833	98.25	158	82.4
D	730,903	471,455	749,613	100.48	159	84.2
1937						
J	616,000	408,395	657,516	103.60	161	85.9

TABLE 28

DAILY AVERAGE BANK CLEARINGS IN NEW YORK CITY, MONTHLY,  
JANUARY 1857 - JANUARY 1919, INCLUSIVE; DAILY AVERAGE  
BANK DEBITS IN NEW YORK CITY, MONTHLY,  
JANUARY 1919 - JANUARY 1936

- Col. 1. Logarithms of Data (in thousands of dollars) Adjusted for Seasonal Fluctuations.
- Col. 2. Cyclical Curve (logarithms).
- Col. 3. Trend Curve (logarithms).
- Col. 4. Deviations of Cyclical Curve (logarithms) from Trend Curve (logarithms).
- Col. 5. Changing Seasonal Fluctuations (logarithms).

For details of the nature of the graduations given in Columns 2 and 3 and of the seasonal given in Column 5 of this table, see Appendix D.

## APPENDIX

TABLE 28

## BANK CLEARINGS IN NEW YORK CITY

Date	1	.2	3	4	5	Date	1	2	3	4	5
1857						1862					
J	4.357	4.3866	4.2521	+.1345	-.017	J	4.164	4.1848	4.3479	-.1631	-.001
F	4.376	4.3884	4.2519	+.1365	.000	F	4.184	4.2070	4.3600	-.1530	+.009
M	4.357	4.3818	4.2516	+.1302	+.027	M	4.170	4.2325	4.3724	-.1399	+.030
A	4.380	4.3665	4.2513	+.1152	+.027	A	4.221	4.2607	4.3848	-.1241	+.014
M	4.363	4.3432	4.2509	+.0923	+.032	M	4.335	4.2913	4.3973	-.1060	+.018
J	4.384	4.3133	4.2506	+.0627	-.004	J	4.364	4.3240	4.4109	-.0869	-.021
J	4.387	4.2790	4.2502	+.0288	-.016	J	4.382	4.3580	4.4245	-.0665	-.038
A	4.371	4.2426	4.2499	-.0073	-.037	A	4.358	4.3925	4.4386	-.0461	-.051
S	4.220	4.2062	4.2497	-.0435	-.014	S	4.424	4.4270	4.4525	-.0255	-.017
O	3.999	4.1719	4.2493	-.0774	-.001	O	4.498	4.4605	4.4673	-.0068	+.045
N	4.022	4.1417	4.2488	-.1071	+.008	N	4.434	4.4921	4.4821	+.0100	+.032
D	4.043	4.1172	4.2482	-.1310	-.006	D	4.493	4.5214	4.4973	+.0241	-.019
1858						1863					
J	4.059	4.0999	4.2477	-.1478	-.015	J	4.600	4.5483	4.5128	+.0355	+.001
F	4.101	4.0909	4.2467	-.1558	+.004	F	4.624	4.5729	4.5289	+.0440	+.008
M	4.143	4.0907	4.2457	-.1550	+.029	M	4.595	4.5960	4.5449	+.0511	+.030
A	4.142	4.0987	4.2446	-.1459	+.026	A	4.586	4.6183	4.5610	+.0573	+.011
M	4.151	4.1140	4.2438	-.1298	+.031	M	4.676	4.6403	4.5764	+.0639	+.017
J	4.170	4.1344	4.2420	-.1076	-.009	J	4.630	4.6624	4.5935	+.0689	-.019
J	4.169	4.1574	4.2405	-.0831	-.025	J	4.648	4.6848	4.6095	+.0753	-.039
A	4.169	4.1803	4.2389	-.0586	-.040	A	4.706	4.7071	4.6245	+.0826	-.053
S	4.175	4.2010	4.2372	-.0362	-.015	S	4.739	4.7285	4.6406	+.0879	-.016
O	4.219	4.2181	4.2352	-.0171	+.009	O	4.746	4.7486	4.6561	+.0925	+.048
N	4.238	4.2307	4.2330	-.0023	+.014	N	4.738	4.7670	4.6719	+.0951	+.032
D	4.240	4.2393	4.2306	+.0087	-.009	D	4.776	4.7836	4.6875	+.0961	-.019
1859						1864					
J	4.231	4.2448	4.2281	+.0167	-.012	J	4.754	4.7982	4.7022	+.0960	+.003
F	4.241	4.2481	4.2256	+.0225	+.007	F	4.832	4.8112	4.7168	+.0944	+.005
M	4.247	4.2502	4.2229	+.0273	+.029	M	4.919	4.8227	4.7309	+.0918	+.030
A	4.285	4.2519	4.2204	+.0315	+.024	A	4.935	4.8323	4.7445	+.0878	+.010
M	4.276	4.2534	4.2179	+.0355	+.029	M	4.766	4.8403	4.7579	+.0824	+.016
J	4.249	4.2547	4.2155	+.0392	-.014	J	4.818	4.8463	4.7703	+.0760	-.016
J	4.223	4.2559	4.2132	+.0427	-.030	J	4.798	4.8501	4.7828	+.0673	-.039
A	4.247	4.2572	4.2111	+.0461	-.044	A	4.812	4.8521	4.7941	+.0580	-.054
S	4.269	4.2589	4.2092	+.0497	-.016	S	4.858	4.8527	4.8050	+.0477	-.016
O	4.250	4.2616	4.2076	+.0540	+.020	O	4.787	4.8523	4.8151	+.0372	+.049
N	4.264	4.2660	4.2063	+.0597	+.020	N	4.875	4.8516	4.8248	+.0268	+.032
D	4.287	4.2721	4.2053	+.0668	-.012	D	4.913	4.8509	4.8338	+.0171	-.020
1860						1865					
J	4.287	4.2799	4.2046	+.0753	-.009	J	4.917	4.8505	4.8418	+.0087	+.005
F	4.269	4.2892	4.2043	+.0849	+.008	F	4.887	4.8502	4.8495	+.0007	+.002
M	4.295	4.2992	4.2046	+.0946	+.030	M	4.864	4.8497	4.8562	-.0065	+.030
A	4.300	4.3086	4.2054	+.1032	+.021	A	4.723	4.8484	4.8627	-.0143	+.009
M	4.314	4.3164	4.2069	+.1095	+.025	M	4.832	4.8464	4.8682	-.0218	+.016
J	4.302	4.3215	4.2087	+.1128	-.018	J	4.845	4.8435	4.8734	-.0299	-.013
J	4.311	4.3228	4.2111	+.1117	-.034	J	4.877	4.8404	4.8779	-.0375	-.039
A	4.346	4.3196	4.2141	+.1055	-.047	A	4.877	4.8379	4.8819	-.0440	-.056
S	4.330	4.3118	4.2179	+.0939	-.017	S	4.806	4.8370	4.8854	-.0484	-.015
N	4.352	4.2997	4.2218	+.0779	+.032	O	4.868	4.8389	4.8887	-.0498	+.048
D	4.320	4.2838	4.2267	+.0571	+.026	N	4.845	4.8443	4.8914	-.0471	+.031
	4.200	4.2651	4.2321	+.0330	-.015	D	4.825	4.8534	4.8938	-.0404	-.019
1861						1866					
J	4.234	4.2446	4.2382	+.0064	-.005	J	4.879	4.8650*	4.8960	-.0301	+.006
F	4.222	4.2233	4.2448	-.0215	+.009	F	4.854	4.8807	4.8980	-.0173	-.002
M	4.203	4.2023	4.2520	-.0497	+.030	M	4.885	4.8964	4.8997	-.0033	+.030
A	4.223	4.1829	4.2595	-.0766	+.017	A	4.887	4.9118	4.9012	+.0106	+.011
M	4.131	4.1660	4.2674	-.1014	+.022	M	4.926	4.9252	4.9024	+.0228	+.018
J	4.110	4.1522	4.2760	-.1238	-.021	J	4.953	4.9356	4.9037	+.0319	-.009
J	4.144	4.1426	4.2850	-.1424	-.036	J	4.910	4.9423	4.9048	+.0375	-.038
A	4.123	4.1376	4.2945	-.1569	-.049	A	4.970	4.9449	4.9058	+.0391	-.058
S	4.126	4.1375	4.3044	-.1669	-.017	S	4.921	4.9432	4.9066	+.0366	-.013
O	4.180	4.1423	4.3146	-.1723	+.041	O	5.001	4.9375	4.9074	+.0301	+.046
N	4.192	4.1521	4.3251	-.1730	+.029	N	5.037	4.9284	4.9081	+.0203	+.027
D	4.216	4.1664	4.3365	-.1701	-.017	D	4.919	4.9163	4.9088	+.0075	-.019

## BANK CLEARINGS

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TABLE 28—Continued

## BANK CLEARINGS IN NEW YORK CITY

Date	1	2	3	4	5	Date	1	2	3	4	5
1867						1872					
J	4.889	4.9025	4.9095	-.0070	+.006	J	4.971	4.9493	4.9360	+.0133	+.016
F	4.833	4.8879	4.9101	-.0222	-.005	F	4.933	4.9528	4.9349	+.0179	-.004
M	4.805	4.8737	4.9108	-.0371	+.030	M	4.975	4.9584	4.9336	+.0248	+.026
A	4.835	4.8612	4.9114	-.0502	+.015	A	5.030	4.9662	4.9322	+.0340	+.043
M	4.835	4.8514	4.9119	-.0605	+.020	M	5.011	4.9756	4.9307	+.0449	+.029
J	4.814	4.8450	4.9126	-.0676	-.005	J	4.921	4.9862	4.9291	+.0571	-.001
J	4.893	4.8423	4.9131	-.0708	-.037	J	4.900	4.9976	4.9274	+.0702	-.041
A	4.860	4.8431	4.9138	-.0707	-.061	A	5.008	5.0083	4.9256	+.0827	-.073
S	4.886	4.8472	4.9142	-.0670	-.012	S	4.983	5.0174	4.9239	+.0935	-.011
O	4.861	4.8537	4.9148	-.0611	+.041	O	5.078	5.0242	4.9219	+.1023	+.019
N	4.842	4.8614	4.9152	-.0538	+.022	N	5.061	5.0276	4.9198	+.1078	-.007
D	4.829	4.8697	4.9158	-.0461	-.017	D	5.033	5.0263	4.9176	+.1087	+.003
1868						1873					
J	4.919	4.8776	4.9163	-.0387	+.007	J	4.991	5.0202	4.9153	+.1049	+.019
F	4.924	4.8847	4.9168	-.0321	-.007	F	5.057	5.0089	4.9127	+.0962	-.001
M	4.911	4.8910	4.9172	-.0262	+.029	M	5.001	4.9921	4.9100	+.0821	+.025
A	4.900	4.8968	4.9176	-.0208	+.021	A	4.995	4.9707	4.9072	+.0635	+.044
M	4.842	4.9026	4.9180	-.0154	+.023	M	4.926	4.9461	4.9044	+.0417	+.027
J	4.912	4.9092	4.9184	-.0092	-.001	J	4.889	4.9193	4.9013	+.0180	-.004
J	4.902	4.9174	4.9188	-.0014	-.037	J	4.929	4.8920	4.8981	-.0061	-.043
A	4.939	4.9276	4.9192	+.0084	-.063	A	4.898	4.8661	4.8948	-.0287	-.074
S	4.900	4.9398	4.9195	+.0203	-.010	S	4.908	4.8426	4.8913	-.0487	-.013
O	5.004	4.9540	4.9198	+.0342	+.034	O	4.682	4.8227	4.8878	-.0651	+.018
N	5.012	4.9692	4.9202	+.0490	+.014	N	4.706	4.8070	4.8840	-.0770	+.008
D	4.968	4.9843	4.9205	+.0638	-.015	D	4.795	4.7961	4.8802	-.0841	+.007
1869						1874					
J	4.949	4.9081	4.9209	+.0772	+.008	J	4.843	4.7895	4.8761	-.0866	+.024
F	4.976	5.0093	4.9213	+.0880	-.008	F	4.814	4.7872	4.8720	-.0848	+.004
M	4.999	5.0161	4.9218	+.0943	+.029	M	4.811	4.7888	4.8678	-.0790	+.023
A	5.024	5.0186	4.9222	+.0964	+.027	M	4.824	4.7931	4.8636	-.0705	+.043
M	5.041	5.0165	4.9228	+.0937	+.026	M	4.788	4.7996	4.8595	-.0599	+.025
M	5.060	5.0099	4.9233	+.0866	+.001	J	4.830	4.8075	4.8531	-.0476	-.008
J	5.027	4.9994	4.9240	+.0724	-.038	J	4.832	4.8156	4.8508	-.0352	-.044
A	4.978	4.9866	4.9248	+.0618	-.066	A	4.773	4.8230	4.8465	-.0235	-.074
S	5.053	4.9716	4.9237	+.0459	-.006	S	4.824	4.8293	4.8422	-.0129	-.017
O	4.893	4.9535	4.9266	+.0290	+.028	O	4.840	4.8340	4.8379	-.0039	+.019
N	4.913	4.9388	4.9276	+.0112	+.007	N	4.808	4.8370	4.8337	+.0033	-.006
D	4.900	4.9218	4.9287	-.0069	-.011	D	4.851	4.8387	4.8295	+.0092	+.011
1870						1875					
J	4.872	4.9053	4.9298	-.0245	+.010	J	4.845	4.8394	4.8253	+.0141	+.029
F	4.869	4.8896	4.9309	-.0413	-.008	F	4.832	4.8393	4.8210	+.0183	+.008
M	4.854	4.8757	4.9321	-.0564	+.028	M	4.844	4.8385	4.8169	+.0216	+.022
A	4.832	4.8647	4.9333	-.0686	+.035	M	4.839	4.8372	4.8129	+.0243	+.039
M	4.920	4.8567	4.9345	-.0778	+.028	M	4.828	4.8348	4.8087	+.0261	+.021
J	4.883	4.8528	4.9358	-.0830	+.002	J	4.863	4.8310	4.8050	+.0260	-.011
J	4.958	4.8524	4.9369	-.0845	-.039	J	4.851	4.8257	4.8013	+.0244	-.045
A	4.850	4.8549	4.9379	-.0830	-.069	A	4.771	4.8188	4.7978	+.0210	-.072
S	4.799	4.8596	4.9387	-.0791	-.009	S	4.796	4.8102	4.7942	+.0160	-.020
O	4.821	4.8658	4.9396	-.0738	+.023	O	4.775	4.8006	4.7912	+.0094	+.021
N	4.850	4.8719	4.9403	-.0684	+.001	N	4.804	4.7907	4.7881	+.0026	.002
D	4.908	4.8782	4.9409	-.0627	-.006	D	4.798	4.7811	4.7853	-.0042	+.014
1871						1876					
J	4.855	4.8844	4.9414	-.0570	+.012	J	4.782	4.7726	4.7826	-.0100	+.032
F	4.847	4.8908	4.9418	-.0510	-.007	F	4.804	4.7658	4.7802	-.0144	+.010
M	4.930	4.8977	4.9419	-.0442	+.027	M	4.774	4.7608	4.7782	-.0174	+.019
A	4.961	4.9050	4.9419	-.0369	+.040	A	4.710	4.7577	4.7765	-.0188	+.034
M	4.948	4.9129	4.9417	-.0288	+.029	M	4.741	4.7565	4.7730	-.0185	+.017
J	4.972	4.9211	4.9416	-.0205	+.001	J	4.756	4.7568	4.7737	-.0169	-.015
J	4.846	4.9285	4.9412	-.0127	-.040	J	4.736	4.7585	4.7728	-.0143	-.046
A	4.900	4.9349	4.9406	-.0057	-.071	A	4.772	4.7616	4.7721	-.0105	-.069
S	4.962	4.9398	4.9398	.0000	-.010	S	4.781	4.7659	4.7717	-.0058	-.023
O	4.966	4.9431	4.9392	+.0039	+.020	O	4.787	4.7715	4.7716	-.0001	+.026
N	4.902	4.9451	4.9383	+.0068	-.004	N	4.765	4.7783	4.7718	+.0065	+.007
D	4.949	4.9469	4.9373	+.0096	-.002	D	4.782	4.7861	4.7722	+.0139	+.017

## APPENDIX

TABLE 28—Continued  
BANK CLEARINGS IN NEW YORK CITY

Date	1	2	3	4	5	Date	1	2	3	4	5
1877						1882					
J	4.803	4.7944	4.7729	+.0215	+.033	J	5.118	5.0981	5.0923	+.0058	+.026
F	4.830	4.8026	4.7738	+.0288	+.012	F	5.095	5.0980	5.0915	+.0065	+.008
M	4.789	4.8097	4.7750	+.0347	+.016	M	5.161	5.1002	5.0898	+.0104	-.003
A	4.807	4.8153	4.7764	+.0389	+.027	A	5.119	5.1033	5.0877	+.0156	-.004
M	4.791	4.8186	4.7781	+.0405	+.013	M	5.016	5.1058	5.0849	+.0209	.000
J	4.806	4.8195	4.7800	+.0395	-.019	J	5.071	5.1068	5.0817	+.0251	-.023
J	4.828	4.8181	4.7822	+.0359	-.047	J	5.102	5.1056	5.0781	+.0275	-.044
A	4.857	4.8149	4.7847	+.0302	-.066	A	5.132	5.1018	5.0741	+.0277	-.052
S	4.815	4.8104	4.7872	+.0232	-.026	S	5.156	5.0956	5.0695	+.0261	-.027
O	4.835	4.8052	4.7903	+.0149	+.031	O	5.100	5.0875	5.0646	+.0229	+.051
N	4.797	4.8000	4.7934	+.0066	+.014	N	5.138	5.0780	5.0595	+.0185	+.041
D	4.798	4.7951	4.7968	-.0017	+.020	D	5.063	5.0674	5.0341	+.0133	+.034
1878						1883					
J	4.779	4.7910	4.8002	-.0092	+.034	J	5.005	5.0564	5.0486	+.0078	+.023
F	4.720	4.7877	4.8041	-.0164	+.012	F	5.025	5.0454	5.0428	+.0026	+.005
M	4.766	4.7856	4.8084	-.0228	+.012	M	5.005	5.0349	5.0370	-.0021	-.006
A	4.807	4.7844	4.8131	-.0287	+.021	A	5.019	5.0255	5.0300	-.0054	-.007
M	4.773	4.7840	4.8180	-.0340	+.010	M	5.015	5.0179	5.0248	-.0069	-.001
J	4.779	4.7844	4.8233	-.0389	-.022	J	5.023	5.0125	5.0187	-.0062	-.021
J	4.823	4.7853	4.8291	-.0438	-.047	J	4.992	5.0094	5.0127	-.0033	-.043
A	4.815	4.7863	4.8350	-.0487	-.063	A	5.034	5.0085	5.0067	+.0018	-.051
S	4.770	4.7877	4.8412	-.0535	-.029	S	5.030	5.0091	5.0006	+.0085	-.024
O	4.817	4.7896	4.8480	-.0584	+.036	O	5.039	5.0102	4.9947	+.0155	+.053
N	4.810	4.7921	4.8549	-.0628	+.022	N	4.942	5.0104	4.9888	+.0216	+.042
D	4.765	4.7957	4.8621	-.0664	+.023	D	4.983	5.0085	4.9831	+.0254	+.035
1879						1884					
J	4.817	4.8013	4.8696	-.0683	+.034	J	5.019	5.0037	4.9777	+.0260	+.019
F	4.822	4.8094	4.8773	-.0679	+.012	F	5.007	4.9953	4.9724	+.0231	+.003
M	4.776	4.8206	4.8853	-.0647	+.008	M	4.976	4.9837	4.9674	+.0163	-.009
A	4.821	4.8355	4.8934	-.0579	+.014	A	4.994	4.9687	4.9623	+.0064	-.008
M	4.890	4.8538	4.9018	-.0480	+.007	M	5.032	4.9512	4.9574	-.0062	-.001
J	4.824	4.8750	4.9101	-.0351	-.024	J	4.921	4.9316	4.9528	-.0212	-.019
J	4.863	4.8981	4.9186	-.0205	-.046	J	4.889	4.9108	4.9486	-.0378	-.042
A	4.930	4.9218	4.9274	-.0356	-.059	A	4.871	4.8895	4.9443	-.0548	-.051
S	4.916	4.9442	4.9361	+.0381	-.030	S	4.857	4.8685	4.9406	-.0721	-.021
O	5.018	4.9639	4.9447	+.0192	+.040	O	4.830	4.8490	4.9369	-.0879	+.054
N	5.040	4.9800	4.9533	+.0267	+.029	N	4.803	4.8325	4.9335	-.1010	+.041
D	4.982	4.9918	4.9619	+.0299	+.025	D	4.849	4.8200	4.9305	-.1105	+.036
1880						1885					
J	4.987	4.9993	4.9705	+.0288	+.032	J	4.831	4.8127	4.9276	-.1149	+.017
F	4.993	5.0032	4.9790	+.0242	+.011	F	4.830	4.8113	4.9251	-.1138	+.001
M	5.045	5.0048	4.9873	+.0175	+.004	M	4.823	4.8161	4.9229	-.1068	-.011
A	5.045	5.0052	4.9957	+.0095	+.006	A	4.803	4.8264	4.9209	-.0945	-.009
M	5.027	5.0061	5.0035	+.0026	+.004	M	4.809	4.8408	4.9191	-.0783	.000
J	5.015	5.0089	5.0116	-.0027	-.025	J	4.823	4.8581	4.9177	-.0596	-.016
J	4.970	5.0143	5.0192	-.0049	-.046	J	4.927	4.8768	4.9164	-.0396	-.042
A	4.945	5.0229	5.0267	-.0038	-.056	A	4.870	4.8891	4.9154	-.0203	-.051
S	4.983	5.0347	5.0339	+.0008	-.030	S	4.863	4.9120	4.9148	-.0028	-.018
O	4.974	5.0492	5.0408	+.0084	+.045	O	4.958	4.9268	4.9142	+.0126	+.054
N	5.098	5.0657	5.0475	+.0182	+.035	N	5.004	4.9390	4.9140	+.0250	+.040
D	5.115	5.0831	5.0540	+.0291	+.029	D	4.983	4.9485	4.9140	+.0345	+.036
1881						1886					
J	5.153	5.1004	5.0599	+.0405	+.029	J	4.950	4.9554	4.9144	+.0410	+.017
F	5.182	5.1163	5.0657	+.0506	+.010	F	4.992	4.9598	4.9149	+.0449	-.001
M	5.131	5.1206	5.0708	+.0588	+.001	M	4.985	4.9619	4.9157	+.0462	-.013
A	5.092	5.1393	5.0752	+.0641	+.000	A	4.916	4.9623	4.9165	+.0458	-.009
M	5.195	5.1446	5.0795	+.0651	+.002	M	4.891	4.9615	4.9173	+.0442	.000
J	5.172	5.1452	5.0830	+.0622	-.024	J	4.973	4.9603	4.9183	+.0420	-.013
J	5.143	5.1415	5.0861	+.0554	-.045	J	4.943	4.9592	4.9197	+.0395	-.041
A	5.113	5.1344	5.0887	+.0457	-.053	A	4.951	4.9594	4.9213	+.0381	-.052
S	5.085	5.1252	5.0906	+.0346	-.029	S	4.954	4.9612	4.9230	+.0382	-.015
O	5.092	5.1155	5.0920	+.0235	+.048	O	4.966	4.9645	4.9247	+.0398	+.054
N	5.075	5.1070	5.0926	+.0144	+.039	N	4.987	4.9692	4.9266	+.0426	+.039
D	5.108	5.1011	5.0927	+.0084	+.031	D	5.032	4.9748	4.9287	+.0461	+.035

## BANK CLEARINGS

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TABLE 28—Continued

## BANK CLEARINGS IN NEW YORK CITY

Date	1	2	3	4	5	Date	1	2	3	4	5
1887						1892					
J	4.964	4.9798	4.9310	+.0488	+.016	J	5.033	5.0040	4.9772	+.0268	+.026
F	4.949	4.9836	4.9330	-.0506	-.003	F	5.052	5.0032	4.9742	+.0290	-.004
M	4.976	4.9853	4.9352	+.0501	-.015	M	5.035	5.0009	4.9711	+.0298	-.013
A	5.013	4.9843	4.9376	-.0467	-.008	A	5.011	4.9983	4.9678	+.0305	.000
M	4.952	4.9805	4.9401	-.0404	+.002	M	4.970	4.9961	4.9644	+.0317	+.013
J	5.006	4.9743	4.9423	-.0320	-.011	J	4.976	4.9953	4.9609	+.0344	-.005
J	4.964	4.9663	4.9447	+.0216	-.041	J	4.958	4.9961	4.9574	+.0387	-.038
A	4.959	4.9572	4.9470	+.0102	-.053	A	4.970	4.9983	4.9538	+.0445	-.058
S	4.965	4.9479	4.9495	-.0016	-.014	S	4.984	5.0015	4.9503	+.0512	-.017
O	4.930	4.9391	4.9515	-.0124	+.053	O	4.962	5.0048	4.9466	+.0582	+.035
N	4.953	4.9311	4.9538	-.0227	+.037	N	4.996	5.0072	4.9429	+.0643	+.029
D	4.912	4.9244	4.9559	-.0315	+.034	D	5.035	5.0079	4.9392	+.0687	+.030
1888						1893					
J	4.893	4.9192	4.9581	-.0389	+.017	J	5.032	5.0056	4.9354	+.0702	+.028
F	4.887	4.9157	4.9600	-.0443	-.004	F	5.044	5.0000	4.9315	+.0685	-.004
M	4.902	4.138	4.9618	-.0480	-.016	M	5.031	4.9905	4.9278	+.0627	-.010
A	4.939	4.9139	4.9636	-.0497	-.006	A	4.970	4.9768	4.9240	+.0528	+.001
M	4.939	4.9159	4.9651	-.0492	+.005	M	4.981	4.9595	4.9203	+.0392	+.013
J	4.904	4.9197	4.9667	-.0470	-.009	J	4.947	4.9390	4.9165	+.0225	-.005
J	4.920	4.9253	4.9681	-.0428	-.041	J	4.925	4.9165	4.9128	+.0037	-.037
A	4.945	4.9322	4.9694	-.0372	-.054	A	4.858	4.8934	4.9091	-.0157	-.058
S	4.964	4.9402	4.9703	-.0301	-.013	S	4.807	4.8709	4.9056	-.0347	-.019
O	4.962	4.9485	4.9715	-.0230	+.051	O	4.827	4.8507	4.9021	-.0514	+.030
N	4.922	4.9570	4.9724	-.0154	+.035	N	4.849	4.8336	4.8986	-.0650	+.027
D	4.950	4.9651	4.9734	-.0083	+.032	D	4.824	4.8205	4.8955	-.0750	+.030
1889						1894					
J	4.978	4.9722	4.9742	-.0020	+.018	J	4.814	4.8115	4.8924	-.0809	+.030
F	4.988	4.9783	4.9752	+.0031	-.005	F	4.793	4.8062	4.8894	-.0832	-.004
M	4.986	4.9833	4.9752	+.0071	-.011	M	4.827	4.8042	4.8865	-.0823	-.007
A	4.967	4.9871	4.9771	+.0100	-.005	A	4.823	4.8046	4.8838	-.0792	+.003
M	4.988	4.9897	4.9780	+.0117	+.009	M	4.816	4.8068	4.8812	-.0744	+.013
J	5.018	4.9916	4.9790	-.0126	-.008	J	4.807	4.8101	4.8789	-.0688	-.006
J	5.012	4.9929	4.9801	-.0128	-.040	J	4.810	4.8143	4.8767	-.0624	-.036
A	5.003	4.9941	4.9812	-.0129	-.055	A	4.840	4.8193	4.8746	-.0553	-.059
S	4.968	4.9956	4.9824	-.0132	-.014	S	4.816	4.8253	4.8725	-.0472	-.022
O	5.019	4.9976	4.9837	+.0139	+.048	O	4.841	4.8326	4.8708	-.0382	+.026
N	4.995	5.0003	4.9850	+.0153	+.034	N	4.847	4.8412	4.8693	-.0281	+.026
D	4.978	5.0037	4.9864	+.0173	+.031	D	4.847	4.8511	4.8680	-.0169	+.030
1890						1895					
J	5.003	5.0076	4.9878	+.0198	+.021	J	4.856	4.8623	4.8669	-.0046	+.032
F	5.009	5.0117	4.9894	-.0223	-.006	F	4.827	4.8742	4.8662	+.0080	-.004
M	4.976	5.0152	4.9907	+.0245	-.017	M	4.864	4.8861	4.8657	+.0204	-.005
A	4.992	5.0180	4.9921	+.0259	-.003	A	4.892	4.8977	4.8655	+.0322	+.006
M	5.076	5.0193	4.9932	+.0261	+.011	M	4.949	4.9081	4.8654	+.0427	+.012
J	5.028	5.0186	4.9945	-.0241	-.006	J	4.923	4.9168	4.8659	+.0509	-.006
J	5.001	5.0159	4.9955	-.0204	-.040	J	4.945	4.9234	4.8667	+.0567	-.034
A	5.037	5.0111	4.9964	-.0147	-.057	A	4.933	4.9276	4.8678	+.0598	-.059
S	5.027	5.0041	4.9971	-.0070	-.014	S	4.922	4.9293	4.8692	+.0601	-.024
O	5.017	4.9953	4.9975	-.0022	+.044	O	4.954	4.9286	4.8711	+.0575	+.022
N	5.016	4.9854	4.9978	-.0124	+.032	N	4.912	4.9261	4.8735	+.0526	+.025
D	4.936	4.9750	4.9979	-.0229	+.030	D	4.942	4.9221	4.8762	+.0459	+.031
1891						1896					
J	4.957	4.9651	4.9978	-.0327	+.023	J	4.882	4.9172	4.8795	+.0377	+.035
F	4.920	4.9568	4.9974	-.0406	-.005	F	4.918	4.9119	4.8833	+.0286	-.005
M	4.912	4.9511	4.9968	-.0457	-.015	M	4.875	4.9067	4.8873	+.0194	-.002
A	4.987	4.9486	4.9959	-.0473	-.002	A	4.894	4.9016	4.8917	+.0099	+.008
M	4.959	4.9499	4.9945	-.0446	+.013	M	4.866	4.8967	4.8963	+.0004	+.012
J	4.934	4.9549	4.9932	-.0383	-.005	J	4.914	4.8920	4.9014	-.0094	-.008
J	4.942	4.9626	4.9917	-.0291	-.039	J	4.935	4.8877	4.9069	-.0192	-.032
A	4.947	4.9723	4.9898	-.0175	-.058	A	4.862	4.8838	4.9125	-.0287	-.059
S	5.059	4.9823	4.9875	-.0052	-.015	S	4.864	4.8806	4.9182	-.0376	-.027
O	4.986	4.9913	4.9854	+.0059	+.039	O	4.907	4.8787	4.9243	-.0456	+.019
N	5.962	4.9983	4.9829	+.0154	+.030	N	4.927	4.8786	4.9305	-.0519	+.025
D	4.992	5.0025	4.9801	+.0224	+.030	D	4.902	4.8810	4.9369	-.0559	+.031

## APPENDIX

TABLE 28—Continued  
BANK CLEARINGS IN NEW YORK CITY

Date	1	2	3	4	5	Date	1	2	3	4	5
1897						1902					
J	4.885	4.8862	4.9434	-0.0572	+.037	J	5.300	5.2855	5.2758	+.0097	+.049
F	4.870	4.8943	4.9500	-0.0557	-0.006	F	5.292	5.2866	5.2760	+.0106	-.011
M	4.887	4.9055	4.9566	-0.0511	.000	M	5.248	5.2918	5.2763	+.0155	+.002
A	4.863	4.9194	4.9635	-0.0441	+.012	A	5.362	5.2998	5.2767	+.0231	+.027
M	4.862	4.9353	4.9704	-0.0351	+.011	M	5.331	5.3089	5.2773	+.0316	+.011
J	4.943	4.9526	4.9772	-0.0246	-0.010	J	5.244	5.3177	5.2776	+.0401	-.025
J	4.992	4.9703	4.9842	-0.0139	-.031	J	5.353	5.3249	5.2781	+.0468	-.025
A	5.036	4.9876	4.9913	-0.0037	-0.059	A	5.330	5.3298	5.2786	+.0512	-.057
S	5.091	5.0032	4.9983	+.0049	-.030	S	5.394	5.3318	5.2793	+.0525	-.038
O	5.015	5.0161	5.0053	+.0108	+.017	O	5.365	5.3312	5.2800	+.0512	+.019
N	4.993	5.0256	5.0123	+.0133	+.024	N	5.317	5.3279	5.2810	+.0469	+.021
D	5.033	5.0314	5.0195	+.0119	+.031	D	5.272	5.3224	5.2821	+.0403	+.027
1898						1903					
J	5.037	5.0336	5.0266	+.0070	+.039	J	5.314	5.3149	5.2833	+.0316	+.051
F	5.105	5.0335	5.0337	-.0002	-.006	F	5.284	5.3060	5.2848	+.0212	-.012
M	5.040	5.0322	5.0408	-.0084	+.002	M	5.285	5.2958	5.2864	+.0094	+.002
A	4.965	5.0315	5.0480	-0.0165	+.016	A	5.271	5.2847	5.2882	-.0035	+.026
M	4.995	5.0334	5.0553	-0.0219	+.011	M	5.246	5.2728	5.2902	-.0174	+.009
J	5.049	5.0392	5.0624	-0.0232	-.012	J	5.308	5.2605	5.2923	-.0318	-.026
J	5.011	5.0496	5.0697	-0.0201	-0.029	J	5.309	5.2478	5.2946	-.0468	-.024
A	5.113	5.0650	5.0771	-0.0121	-.059	A	5.231	5.2350	5.2971	-.0621	-.054
S	5.089	5.0846	5.0847	-.0001	-.033	S	5.194	5.2223	5.2999	-.0776	-.039
O	5.041	5.1072	5.0921	+.0151	+.016	O	5.206	5.2102	5.3024	-.0922	+.021
N	5.098	5.1312	5.0997	+.0315	+.024	N	5.166	5.1992	5.3053	-.1061	+.020
D	5.146	5.1550	5.1072	+.0478	+.030	D	5.223	5.1903	5.3082	-.1177	+.026
1899						1904					
J	5.223	5.1769	5.1150	+.0619	+.041	J	5.210	5.1849	5.3115	-.1266	+.054
F	5.218	5.1962	5.1227	+.0735	-.007	F	5.196	5.1835	5.3144	-.1309	-.012
M	5.278	5.2119	5.1304	+.0815	+.002	M	5.189	5.1874	5.3175	-.1301	+.001
A	5.249	5.2237	5.1381	+.0856	+.020	A	5.180	5.1969	5.3206	-.1237	+.023
M	5.239	5.2316	5.1457	+.0859	+.012	M	5.187	5.2119	5.3239	-.1120	+.007
J	5.217	5.2353	5.1534	+.0819	-.015	J	5.209	5.2317	5.3269	-.0952	-.026
J	5.182	5.2349	5.1609	+.0740	-.028	J	5.247	5.2551	5.3299	-.0748	-.023
A	5.207	5.2305	5.1686	+.0619	-.059	A	5.229	5.2805	5.3331	-.0526	-.052
S	5.202	5.2222	5.1761	+.0461	-.036	S	5.290	5.3062	5.3364	-.0302	-.038
O	5.214	5.2106	5.1836	+.0270	+.015	O	5.359	5.3305	5.3393	-.0088	+.023
N	5.194	5.1961	5.1908	+.0053	+.024	N	5.424	5.3524	5.3424	+.0100	+.020
D	5.208	5.1796	5.1977	-.0181	+.029	D	5.412	5.3711	5.3453	+.0258	+.026
1900						1905					
J	5.134	5.1623	5.2045	-.0422	+.043	J	5.342	5.3862	5.3484	+.0378	+.055
F	5.157	5.1458	5.2111	-.0653	-.008	F	5.418	5.3978	5.3514	+.0464	-.013
M	5.190	5.1316	5.2172	-.0856	+.003	M	5.450	5.4061	5.3543	+.0518	.000
A	5.172	5.1216	5.2232	-10.106	+.024	A	5.441	5.4113	5.3571	+.0544	+.020
M	5.148	5.1171	5.2288	-11.117	+.012	M	5.401	5.4148	5.3597	+.0551	+.004
J	5.130	5.1194	5.2338	-11.144	-.019	J	5.376	5.4167	5.3624	+.0543	-.025
J	5.086	5.1287	5.2389	-11.02	-.027	J	5.367	5.4177	5.3650	+.0527	-.023
A	5.071	5.1450	5.2434	-0.984	-.059	A	5.402	5.4187	5.3675	+.0512	-.049
S	5.059	5.1674	5.2477	-0.0803	-.037	S	5.397	5.4203	5.3699	+.0504	-.038
O	5.153	5.1946	5.2515	-0.0569	+.016	O	5.388	5.4229	5.3724	+.0505	+.025
N	5.256	5.2246	5.2550	-0.0304	+.023	N	5.436	5.4267	5.3746	+.0521	+.018
D	5.255	5.2555	5.2582	-0.0027	+.028	D	5.469	5.4317	5.3769	+.0548	+.026
1901						1906					
J	5.332	5.2852	5.2611	+.0241	+.046	J	5.503	5.4370	5.3790	+.0586	+.056
F	5.313	5.3115	5.2636	+.0479	-.010	F	5.486	5.4440	5.3812	+.0628	-.013
M	5.344	5.3325	5.2657	+.0668	+.003	M	5.433	5.4499	5.3833	+.0666	-.001
A	5.433	5.3472	5.2676	+.0796	+.026	A	5.439	5.4549	5.3853	+.0696	+.016
M	5.466	5.3547	5.2694	+.0853	+.012	M	5.452	5.4584	5.3872	+.0712	+.001
J	5.382	5.3551	5.2706	+.0845	-.023	J	5.439	5.4600	5.3891	+.0709	-.023
J	5.319	5.3490	5.2718	+.0772	-.026	J	5.391	5.4600	5.3908	+.0692	-.022
A	5.259	5.3380	5.2728	+.0652	-.058	A	5.501	5.4589	5.3924	+.0665	-.046
S	5.264	5.3242	5.2737	+.0505	-.038	S	5.479	5.4568	5.3938	+.0630	-.036
O	5.266	5.3101	5.2745	+.0356	+.017	O	5.452	5.4543	5.3954	+.0589	+.027
N	5.305	5.2978	5.2750	+.0228	+.022	N	5.441	5.4518	5.3966	+.0552	+.017
D	5.282	5.2892	5.2755	+.0137	+.027	D	5.449	5.4489	5.3977	+.0512	+.025

## BANK CLEARINGS

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TABLE 28—Continued

## BANK CLEARINGS IN NEW YORK CITY

Date	1	2	3	4	5	Date	1	2	3	4	5
1907						1912					
J	5.437	5.4447	5.3986	+.0461	+.056	J	5.409	5.4162	5.4187	-.0025	+.046
F	5.430	5.4389	5.3995	+.0394	-.012	F	5.410	5.4202	5.4167	+.0035	+.008
M	5.491	5.4306	5.4002	+.0304	-.002	M	5.441	5.4250	5.4141	+.0109	-.007
A	5.395	5.4190	5.4006	+.0184	+.013	A	5.461	5.4301	5.4114	+.0187	+.008
M	5.376	5.4040	5.4009	+.0031	-.002	M	5.457	5.4353	5.4086	+.0267	.005
J	5.347	5.3863	5.4010	-.0147	-.020	J	5.422	5.4400	5.4061	+.0339	+.002
J	5.394	5.3665	5.4009	-.0344	-.021	J	5.427	5.4440	5.4035	+.0405	-.020
A	5.391	5.3455	5.4008	-.0553	-.044	A	5.430	5.4464	5.4011	+.0453	-.047
S	5.338	5.3254	5.4005	-.0751	-.035	S	5.424	5.4473	5.3987	+.0486	-.030
O	5.394	5.3071	5.4000	-.0929	+.028	O	5.484	5.4466	5.3965	+.0501	+.031
N	5.247	5.2918	5.3996	-.1078	+.016	N	5.453	5.4441	5.3946	+.0495	+.015
D	5.213	5.2803	5.3989	-.1186	+.024	D	5.435	5.4400	5.3930	+.0470	+.019
1908						1913					
F	5.282	5.2736	5.3981	-.1245	+.056	J	5.436	5.4349	5.3915	+.0434	+.043
R	5.238	5.2714	5.3974	-.1260	-.011	F	5.453	5.4290	5.3902	+.0388	-.010
M	5.252	5.2739	5.3967	-.1228	-.003	M	5.415	5.4230	5.3894	+.0336	-.009
A	5.252	5.2808	5.3958	-.1149	+.010	A	5.420	5.4176	5.3889	+.0287	+.009
M	5.337	5.2918	5.3951	-.1033	-.004	M	5.415	5.4136	5.3888	+.0248	-.005
J	5.287	5.3055	5.3946	-.0891	-.015	J	5.407	5.4115	5.3889	+.0226	+.005
J	5.350	5.3216	5.3940	-.0724	-.021	J	5.394	5.4114	5.3894	+.0220	-.019
A	5.346	5.3390	5.3936	-.0546	-.043	A	5.387	5.4135	5.3901	+.0234	-.048
S	5.388	5.3565	5.3933	-.0368	-.034	S	5.424	5.4168	5.3914	+.0254	-.029
O	5.339	5.3733	5.3932	-.0199	+.029	O	5.417	5.4202	5.3929	+.0273	+.031
N	5.421	5.3890	5.3933	-.0043	+.015	N	5.386	5.4224	5.3948	+.0276	+.017
D	5.454	5.4030	5.3934	+.0096	+.022	D	5.392	5.4222	5.3970	+.0252	+.020
1909						1914					
J	5.402	5.4152	5.3936	+.0216	+.055	J	5.442	5.4182	5.3995	+.0187	+.038
F	5.401	5.4260	5.3941	-.0319	-.010	F	5.424	5.4100	5.4020	+.0080	-.012
M	5.387	5.4356	5.3947	-.0409	-.004	M	5.413	5.3979	5.4052	-.0073	-.010
A	5.450	5.4443	5.3954	-.0489	+.008	A	5.446	5.3825	5.4085	-.0260	+.009
M	5.423	5.4526	5.3963	-.0563	-.006	M	5.372	5.3649	5.4123	-.0474	-.004
J	5.493	5.4607	5.3974	-.0633	-.011	J	5.409	5.3668	5.4162	-.0694	+.008
J	5.450	5.4682	5.3987	-.0695	-.021	J	5.439	5.3297	5.4202	-.0905	-.018
A	5.490	5.4748	5.4000	-.0748	-.043	S	5.218	5.3150	5.4246	-.1096	-.048
S	5.484	5.4800	5.4014	-.0786	-.033	S	5.216	5.3043	5.4294	-.1251	-.028
O	5.482	5.4831	5.4029	+.0802	+.029	O	5.227	5.2986	5.4342	-.1356	+.031
N	5.466	5.4834	5.4045	+.0789	+.014	N	5.237	5.2987	5.4393	-.1406	+.018
D	5.484	5.4809	5.4062	+.0747	+.021	D	5.303	5.3056	5.4446	-.1390	+.021
1910						1915					
J	5.507	5.4753	5.4080	+.0673	+.053	J	5.337	5.3195	5.4501	-.1306	+.034
F	5.473	5.4669	5.4098	-.0571	-.009	F	5.380	5.3399	5.4557	-.1152	-.015
M	5.470	5.4563	5.4116	+.0447	-.005	M	5.397	5.3659	5.4616	-.0957	-.010
A	5.437	5.4444	5.4135	-.0308	+.007	M	5.460	5.3959	5.4677	-.0718	+.008
M	5.407	5.4317	5.4154	+.0163	-.006	M	5.448	5.4276	5.4739	-.0463	-.003
J	5.451	5.4195	5.4172	+.0023	-.006	J	5.417	5.4587	5.4802	-.0215	+.010
J	5.426	5.4086	5.4191	-.0105	-.021	J	5.465	5.4874	5.4868	+.0006	-.017
A	5.363	5.3996	5.4208	-.0212	-.044	S	5.488	5.5122	5.4936	+.0186	-.048
S	5.349	5.3929	5.4226	-.0297	-.032	S	5.532	5.5324	5.5006	+.0318	-.026
O	5.376	5.3888	5.4242	-.0354	+.030	O	5.584	5.5486	5.5079	+.0407	+.030
N	5.402	5.3870	5.4256	-.0386	+.014	N	5.577	5.5614	5.5153	+.0461	+.019
D	5.393	5.3872	5.4270	-.0398	+.020	D	5.577	5.5720	5.5225	+.0495	+.023
1911						1916					
J	5.390	5.3888	5.4280	-.0392	+.050	J	5.570	5.5815	5.5300	+.0515	+.029
F	5.424	5.3915	5.4288	-.0373	-.008	F	5.600	5.5907	5.5378	+.0529	-.017
M	5.397	5.3944	5.4293	-.0349	-.006	M	5.617	5.6000	5.5457	+.0543	-.010
A	5.359	5.3974	5.4295	-.0321	+.007	A	5.581	5.6092	5.5538	+.0554	+.007
M	5.415	5.4002	5.4295	-.0293	-.006	M	5.610	5.6184	5.5619	+.0565	-.002
J	5.440	5.4024	5.4291	-.0267	-.002	J	5.609	5.6275	5.5703	+.0572	+.013
F	5.406	5.4041	5.4284	-.0243	-.021	J	5.584	5.6364	5.5786	+.0578	-.017
A	5.422	5.4056	5.4276	-.0220	-.045	A	5.626	5.6453	5.5871	+.0584	-.047
S	5.410	5.4071	5.4263	-.0192	-.031	S	5.703	5.6550	5.5955	+.0595	-.025
N	5.415	5.4085	5.4247	-.0162	+.030	O	5.676	5.6647	5.6040	+.0607	+.029
D	5.399	5.4130	5.4211	-.0126	+.015	N	5.725	5.6748	5.6125	+.0623	+.019
				-.0081	+.019	D	5.712	5.6847	5.6211	+.0634	+.025

## APPENDIX

TABLE 28—Continued

## BANK CLEARINGS IN NEW YORK CITY

Date	1	2	3	4	5	Date	1	2	3	4	5
1917						1918					
J	5.662	5.6933	5.6297	+.0636	+.026	J	5.653	5.6736	5.7184	-.0448	+.024
F	5.680	5.7000	5.6382	+.0618	-.020	F	5.663	5.6730	5.7242	-.0512	-.022
M	5.672	5.7042	5.6465	+.0577	-.010	M	5.659	5.6731	5.7293	-.0562	-.009
A	5.684	5.7053	5.6547	+.0508	+.005	A	5.668	5.6740	5.7340	-.0600	+.004
M	5.702	5.7042	5.6628	+.0414	-.001	M	5.701	5.6756	5.7385	-.0629	.000
J	5.746	5.7007	5.6707	+.0300	+.016	J	5.677	5.6783	5.7426	-.0643	+.018
A	5.721	5.6904	5.6856	+.0048	-.046	A	5.730	5.6873	5.7500	-.0627	-.046
S	5.690	5.6852	5.6929	-.0077	-.025	S	5.683	5.6937	5.7533	-.0596	-.025
O	5.677	5.6808	5.6999	-.0191	+.028	O	5.711	5.7017	5.7564	-.0547	+.026
N	5.676	5.6774	5.7064	-.0290	+.018	N	5.699	5.7112	5.7591	-.0479	+.017
D	5.646	5.6750	5.7124	-.0374	+.027	D	5.701	5.7222	5.7616	-.0394	+.029
						1919					
						J	5.738	5.7349	5.7639	-.0290	+.023

## BANK DEBITS IN NEW YORK CITY

Date	1	2	3	4	5	Date	1	2	3	4	5
1919						1922					
J	5.744	5.7410	5.7699	-.0289	+.023	J	5.767	5.7856	5.7997	-.0141	+.022
F	5.738	5.7553	5.7720	-.0167	-.024	F	5.791	5.7960	5.7998	-.0038	-.020
M	5.738	5.7712	5.7740	-.0028	-.007	M	5.816	5.8054	5.7999	+.0055	+.002
A	5.759	5.7880	5.7759	+.0121	+.003	A	5.836	5.8135	5.8002	+.0133	+.003
M	5.817	5.8053	5.7778	+.0275	-.000	M	5.843	5.8205	5.8007	+.0198	+.001
J	5.837	5.8220	5.7795	+.0425	+.020	J	5.842	5.8262	5.8011	+.0251	+.025
A	5.873	5.8372	5.7812	+.0560	-.014	J	5.818	5.8308	5.8017	+.0291	-.015
S	5.861	5.8500	5.7827	+.0673	-.045	A	5.817	5.8341	5.8025	+.0316	-.046
O	5.858	5.8594	5.7842	+.0752	-.025	S	5.834	5.8360	5.8034	+.0326	-.027
N	5.871	5.8650	5.7856	+.0794	+.022	S	5.846	5.8362	5.8045	+.0317	+.011
D	5.877	5.8667	5.7869	+.0798	+.014	M	5.796	5.8348	5.8057	+.0291	+.006
	5.873	5.8648	5.7882	+.0766	+.031	D	5.793	5.8319	5.8070	+.0249	+.035
1920						1923					
J	5.860	5.8599	5.7895	+.0704	+.022	J	5.832	5.8278	5.8085	+.0193	+.021
F	5.817	5.8528	5.7906	+.0622	-.023	F	5.850	5.8229	5.8103	+.0126	-.018
M	5.861	5.8445	5.7917	+.0528	-.004	M	5.857	5.8179	5.8122	+.0057	+.005
A	5.849	5.8358	5.7927	+.0431	+.003	A	5.830	5.8134	5.8143	-.0009	+.004
M	5.799	5.8273	5.7938	+.0335	+.001	M	5.824	5.8094	5.8166	-.0072	+.001
J	5.798	5.8194	5.7946	+.0248	+.022	J	5.820	5.8064	5.8190	-.0126	+.026
A	5.803	5.8122	5.7953	+.0169	-.014	J	5.788	5.8045	5.8217	-.0172	-.016
S	5.794	5.8055	5.7961	+.0094	-.046	A	5.764	5.8034	5.8247	-.0213	-.046
O	5.794	5.7993	5.7967	+.0026	-.026	S	5.769	5.8032	5.8277	-.0245	-.028
N	5.817	5.7869	5.7976	-.0107	+.019	O	5.783	5.8040	5.8307	-.0267	+.008
D	5.826	5.7802	5.7980	-.0178	+.033	N	5.820	5.8060	5.8340	-.0280	+.004
						D	5.818	5.8092	5.8376	-.0284	+.035
1921						1924					
J	5.788	5.7732	5.7984	-.0252	+.022	J	5.832	5.8138	5.8412	-.0274	+.021
F	5.756	5.7660	5.7988	-.0328	-.023	F	5.852	5.8198	5.8448	-.0250	-.016
M	5.750	5.7587	5.7990	-.0403	-.002	M	5.833	5.8269	5.8487	-.0218	+.009
A	5.733	5.7519	5.7992	-.0473	+.003	A	5.832	5.8350	5.8524	-.0174	+.006
M	5.742	5.7464	5.7992	-.0528	+.001	M	5.838	5.8436	5.8563	-.0127	+.001
J	5.748	5.7427	5.7993	-.0566	+.024	J	5.838	5.8522	5.8602	-.0080	+.026
A	5.737	5.7414	5.7993	-.0579	-.015	J	5.857	5.8606	5.8640	-.0034	-.017
S	5.736	5.7431	5.7994	-.0563	-.046	A	5.875	5.8685	5.8678	+.0007	-.046
O	5.756	5.7477	5.7994	-.0517	-.026	S	5.868	5.8758	5.8720	+.0038	-.028
N	5.739	5.7550	5.7994	-.0444	+.015	O	5.855	5.8826	5.8759	+.0067	+.006
D	5.758	5.7643	5.7995	-.0352	+.008	N	5.882	5.8891	5.8800	+.0091	+.003
	5.788	5.7749	5.7996	-.0247	+.034	D	5.911	5.8954	5.8841	+.0113	+.034

## BANK CLEARINGS

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TABLE 28—Continued  
BANK DEBITS IN NEW YORK CITY

Date	1	2	3	4	5	Date	1	2	3	4	5
1925						1930					
J	5.931	5.9015	5.8881	+.0134	+.020	J	6.031	6.1399		+.018	
F	5.927	5.9076	5.8925	+.0151	-.014	F	6.056	6.1180		-.010	
M	5.918	5.9136	5.8966	+.0170	+.012	M	6.099	6.0943		+.020	
A	5.895	5.9195	5.9008	+.0187	+.007	A	6.100	6.0699		+.010	
M	5.926	5.9253	5.9051	+.0202	+.001	M	6.082	6.0457		.000	
J	5.927	5.9310	5.9097	+.0213	+.026	J	6.074	6.0228		+.025	
J	5.932	5.9366	5.9144	+.0222	-.018	J	6.001	6.0021		-.021	
A	5.921	5.9421	5.9193	+.0227	-.046	A	5.954	5.9844		-.047	
S	5.939	5.9474	5.9242	+.0232	-.029	S	5.990	5.9697		-.030	
O	5.966	5.9524	5.9297	+.0227	+.004	O	5.997	5.9573		.000	
N	5.952	5.9568	5.9351	+.0217	+.032	N	5.875	5.9468		.000	
D	5.957	5.9604	5.9407	+.0197	+.033	D	5.941	5.9373		+.030	
1926						1931					
J	5.973	5.9621	5.9464	+.0167	+.020	J	5.881	5.9279		+.018	
F	5.960	5.9647	5.9527	+.0120	-.012	F	5.884	5.9181		+.010	
M	6.012	5.9635	5.9501	+.0064	+.015	M	5.929	5.9077		+.020	
A	5.982	5.9655	5.9658	-.0003	+.008	A	5.941	5.8962		+.010	
M	5.932	5.9650	5.9723	-.0073	+.001	M	5.908	5.8835		.000	
J	5.947	5.9643	5.9796	-.0153	+.026	J	5.911	5.8695		+.025	
J	5.969	5.9640	5.9866	-.0226	-.019	J	5.852	5.8537		-.021	
A	5.973	5.9645	5.9937	-.0292	-.046	A	5.809	5.8362		-.047	
S	5.960	5.9661	6.0010	-.0349	-.029	S	5.853	5.8170		-.030	
O	5.964	5.9691	6.0085	-.0394	+.003	O	5.824	5.7967		.000	
N	5.933	5.9732	6.0162	-.0430	+.001	N	5.683	5.7755		.000	
D	5.990	5.9786	6.0239	-.0453	+.032	D	5.763	5.7543		+.030	
1927						1932					
J	5.985	5.9849	6.0311	-.0464	+.019	J	5.738	5.7336		+.018	
F	6.002	5.9918	6.0388	-.0470	-.011	F	5.705	5.7139		-.010	
M	6.029	5.9991	6.0462	-.0471	+.017	M	5.697	5.6954		+.020	
A	6.019	6.0069	6.0534	-.0465	+.005	A	5.705	5.6781		+.010	
M	6.003	6.0150	6.0605	-.0455	+.001	M	5.620	5.6624		.000	
J	6.016	6.0233	6.0676	-.0443	+.026	J	5.650	5.6485		+.025	
J	6.016	6.0319	6.0743	-.0424	-.020	J	5.634	5.6368		-.021	
A	6.055	6.0406	6.0811	-.0405	-.046	A	5.685	5.6279		-.047	
S	6.076	6.0492	6.0874	-.0382	-.030	S	5.704	5.6219		-.030	
O	6.039	6.0576	6.0336	-.0360	+.002	O	5.621	5.6188		.000	
N	6.044	6.0657	6.0794	-.0337	+.001	N	5.515	5.6186		.000	
D	6.068	6.0736	6.1051	-.0315	+.031	D	5.624	5.6204		+.030	
1928						1933					
J	6.068	6.0815	6.1104	-.0289	+.019	J	5.585	5.6235		+.018	
F	6.063	6.0898	6.1153	-.0255	-.010	F	5.643	5.6275		-.010	
M	6.141	6.0986	6.1199	-.0213	+.019	M	*	5.6318		+.020	
A	6.134	6.1078	6.1242	-.0164	+.010	A	5.592	5.6362		+.010	
M	6.163	6.1175	6.1278	-.0103	+.001	M	5.654	5.6408		.000	
J	6.154	6.1273	6.1312	-.0039	+.026	J	5.722	5.6459		+.025	
J	6.074	6.1368	6.1339	-.0029	-.020	J	5.769	5.6515		-.021	
A	6.101	6.1461	6.1362	-.0029	-.047	A	5.672	5.6573		-.047	
S	6.141	6.1554	6.1380	-.0174	-.030	S	5.644	5.6627		-.030	
O	6.163	6.1648	6.1392	-.0256	+.001	O	5.632	5.6673		.000	
N	6.181	6.1747	6.1398	-.0349	+.000	N	5.609	5.6701		.000	
D	6.200	6.1853	6.1397	+.0456	+.031	D	5.593	5.6708		+.030	
1929						1934					
J	6.228	6.1963	6.1392	+.0571	+.019	J	5.637	5.6695		+.018	
F	6.228	6.2069	6.1377	+.0692	-.010	F	5.684	5.6664		-.010	
M	6.232	6.2165	6.1357	+.0808	+.020	M	5.682	5.6622		+.020	
A	6.194	6.2238	6.1332	+.0906	+.010	A	5.742	5.6578		+.010	
M	6.208	6.2279	6.1299	+.0980	+.000	M	5.675			.000	
J	6.133	6.2281			+.026	J	5.685		+.025		
J	6.222	6.2245			-.021	J	5.671		+.021		
A	6.245	6.2172			-.047	A	5.645		-.047		
S	6.255	6.2065			-.030	S	5.603		-.030		
O	6.309	6.1932			+.001	O	5.598		.000		
N	6.252	6.1777			.000	N	5.578		.000		
D	6.079	6.1598			+.030	D	5.661		+.030		

\*Not available, complete data not having been reported on account of bank holidays.

## APPENDIX

TABLE 28—Concluded

## BANK DEBITS IN NEW YORK CITY

Date	1	2	3	4	5	Date	1	2	3	4	5
1935						1936					
J	5.667				+.018	J	5.744				
F	5.661				-.010						
M	5.690				+.020						
A	5.714				+.010						
M	5.672				.000						
J	5.693				+.025						
J	5.753				-.021						
A	5.724				-.047						
S	5.699				-.030						
O	5.705				.000						
N	5.714				.000						
D	5.726				+.030						

TABLE 29

DAILY AVERAGE BANK CLEARINGS OUTSIDE NEW YORK CITY,<sup>1</sup> MONTHLY,  
JANUARY 1875 - JANUARY 1919, INCLUSIVE; DAILY AVERAGE  
BANK DEBITS FOR 140 OUTSIDE CITIES, MONTHLY,  
JANUARY 1919 - JANUARY 1936

- Col. 1. Logarithms of Data (in thousands of dollars) Adjusted for Seasonal Fluctuations.
- Col. 2. Cyclical Curve (logarithms).
- Col. 3. Trend Curve (logarithms).
- Col. 4. Deviations of Cyclical Curve (logarithms)  
from Trend Curve (logarithms).
- Col. 5. Changing Seasonal Fluctuations (logarithms).

For details of the nature of the graduations given in Columns 2 and 3 and of the seasonal given in Column 5 of this table, see Appendix D.

<sup>1</sup> See Table 27.

## APPENDIX

TABLE 29

## BANK CLEARINGS OUTSIDE NEW YORK CITY

Date	1	2	3	4	5	Date	1	2	3	4	5
1875						1880					
J	4.458	4.4802	4.4948	-.0146	+.031	J	4.568	4.5506	4.5281	+.0225	+.031
F	4.473	4.4796	4.4927	-.0131	-.007	F	4.565	4.5557	4.5341	+.0216	-.009
M	4.515	4.4795	4.4903	-.0108	+.005	M	4.582	4.5590	4.5402	+.0188	-.012
A	4.490	4.4799	4.4880	-.0081	-.010	A	4.583	4.5611	4.5462	+.0149	-.006
M	4.468	4.4806	4.4853	-.0047	-.003	M	4.545	4.5622	4.5521	+.0101	-.005
J	4.529	4.4815	4.4829	-.0014	-.005	J	4.540	4.5631	4.5584	+.0047	-.006
A	4.470	4.4822	4.4802	+.0020	-.026	J	4.558	4.5643	4.5644	-.0001	-.024
S	4.502	4.4822	4.4775	+.0047	-.041	A	4.556	4.5666	4.5702	-.0036	-.043
O	4.461	4.4814	4.4746	+.0068	-.031	S	4.558	4.5705	4.5761	-.0056	-.024
N	4.440	4.4797	4.4719	+.0078	+.033	O	4.544	4.5765	4.5818	-.0053	+.037
D	4.505	4.4771	4.4691	+.0080	+.046	N	4.597	4.5849	4.5875	-.0026	+.038
	4.460	4.4739	4.4664	+.0075	+.009	D	4.623	4.5954	4.5931	+.0023	+.026
1876						1881					
J	4.470	4.4705	4.4636	+.0069	+.032	J	4.611	4.6075	4.5987	+.0088	+.029
F	4.462	4.4672	4.4609	+.0063	-.007	F	4.633	4.6205	4.6038	+.0167	-.011
M	4.500	4.4644	4.4583	+.0061	+.002	M	4.617	4.6333	4.6089	+.0244	-.014
A	4.436	4.4623	4.4558	+.0065	-.009	A	4.626	4.6448	4.6138	+.0310	-.005
M	4.453	4.4607	4.4532	+.0075	-.003	M	4.654	4.6544	4.6185	+.0359	-.004
J	4.484	4.4595	4.4510	+.0085	-.006	J	4.698	4.6614	4.6228	+.0386	-.004
A	4.439	4.4584	4.4487	+.0097	-.027	J	4.624	4.6657	4.6269	+.0388	-.022
S	4.485	4.4571	4.4465	+.0106	-.041	A	4.700	4.6676	4.6307	+.0369	-.043
O	4.446	4.4556	4.4444	+.0112	-.031	S	4.688	4.6675	4.6342	+.0333	-.022
N	4.428	4.4538	4.4426	+.0112	+.034	O	4.672	4.6659	4.6374	+.0285	+.037
D	4.459	4.4520	4.4408	+.0112	+.044	N	4.659	4.6634	4.6402	+.0232	+.036
	4.460	4.4502	4.4391	+.0111	+.013	D	4.663	4.6605	4.6428	+.0177	+.027
1877						1882					
J	4.441	4.4487	4.4375	+.0112	+.033	J	4.630	4.6575	4.6451	+.0124	+.027
F	4.456	4.4477	4.4363	+.0114	-.007	F	4.641	4.6547	4.6470	+.0077	-.012
M	4.458	4.4468	4.4351	+.0117	-.002	M	4.641	4.6524	4.6487	+.0037	-.016
A	4.434	4.4462	4.4342	+.0120	-.009	A	4.644	4.6503	4.6500	+.0005	-.005
M	4.477	4.4455	4.4333	+.0122	-.004	M	4.641	4.6493	4.6510	-.0017	-.004
J	4.406	4.4443	4.4327	+.0116	-.006	J	4.649	4.6489	4.6517	-.0028	-.003
A	4.427	4.4425	4.4323	+.0102	-.028	J	4.661	4.6493	4.6522	-.0029	-.019
S	4.446	4.4402	4.4322	+.0080	-.041	A	4.663	4.6504	4.6523	-.0019	-.044
O	4.445	4.4373	4.4322	+.0051	-.030	S	4.679	4.6522	4.6523	-.0001	-.021
N	4.429	4.4341	4.4326	+.0015	+.035	O	4.646	4.6542	4.6521	+.0021	+.038
D	4.447	4.4309	4.4331	-.0022	+.042	N	4.661	4.6563	4.6517	+.0046	+.034
	4.429	4.4276	4.4337	-.0061	+.018	D	4.641	4.6579	4.6510	+.0069	+.027
1878						1883					
J	4.475	4.4246	4.4347	-.0101	+.033	J	4.657	4.6591	4.6502	+.0089	+.025
F	4.406	4.4218	4.4358	-.0140	-.007	F	4.660	4.6596	4.6493	+.0103	-.014
M	4.379	4.4193	4.4373	-.0180	-.005	M	4.661	4.6596	4.6483	+.0113	-.017
A	4.398	4.4169	4.4392	-.0223	-.008	A	4.639	4.6502	4.6472	+.0120	-.004
M	4.423	4.4149	4.4411	-.0262	-.004	M	4.664	4.6588	4.6459	+.0129	-.004
J	4.383	4.4133	4.4435	-.0302	-.006	J	4.673	4.6584	4.6446	+.0138	-.001
A	4.453	4.4122	4.4461	-.0339	-.027	J	4.660	4.6582	4.6433	+.0149	-.017
S	4.394	4.4116	4.4488	-.0372	-.042	A	4.668	4.6579	4.6421	+.0158	-.045
O	4.436	4.4119	4.4517	-.0398	-.028	S	4.652	4.6574	4.6409	+.0165	-.020
N	4.456	4.4131	4.4548	-.0417	+.035	O	4.654	4.6562	4.6397	+.0165	+.038
D	4.390	4.4151	4.4583	-.0432	+.041	N	4.641	4.6544	4.6385	+.0159	+.033
	4.390	4.4183	4.4620	-.0437	+.021	D	4.644	4.6515	4.6374	+.0141	+.027
1879						1884					
J	4.435	4.4226	4.4662	-.0436	+.033	J	4.648	4.6486	4.6364	+.0122	+.022
F	4.437	4.4282	4.4704	-.0422	-.008	F	4.642	4.6437	4.6355	+.0082	-.015
M	4.407	4.4355	4.4748	-.0393	-.009	M	4.633	4.6381	4.6347	+.0034	-.018
A	4.482	4.4446	4.4795	-.0349	-.007	A	4.657	4.6316	4.6339	-.0023	-.003
M	4.442	4.4554	4.4843	-.0289	-.004	M	4.660	4.6249	4.6332	-.0083	-.003
J	4.453	4.4679	4.4892	-.0213	-.006	J	4.594	4.6170	4.6326	-.0156	+.001
A	4.507	4.4816	4.4943	-.0127	-.026	J	4.602	4.6103	4.6322	-.0219	-.015
S	4.481	4.5097	4.5052	-.0045	-.027	A	4.594	4.6039	4.6320	-.0281	-.045
O	4.570	4.5227	4.5109	+.0118	+.036	S	4.597	4.5981	4.6320	-.0339	-.020
N	4.536	4.5339	4.5167	+.0172	+.039	N	4.563	4.5892	4.6322	-.0430	+.032
D	4.544	4.5433	4.5223	+.0210	+.024	D	4.606	4.5867	4.6326	-.0459	+.027

## BANK CLEARINGS

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TABLE 29—Continued

## BANK CLEARINGS OUTSIDE NEW YORK CITY

Date	1	2	3	4	5	Date	1	2	3	4	5
1885						1890					
J	4.608	4.5860	4.6331	-.0471	+.020	J	4.820	4.8134	4.8092	+.0042	+.017
F	4.580	4.5871	4.6338	-.0467	-.016	F	4.813	4.8211	4.8119	+.0092	-.017
M	4.584	4.5901	4.6348	-.0447	-.018	M	4.817	4.8283	4.8146	+.0137	-.018
A	4.606	4.5946	4.6359	-.0413	-.002	A	4.833	4.8346	4.8172	+.0174	+.001
M	4.579	4.6003	4.6371	-.0368	-.002	M	4.860	4.8396	4.8198	+.0198	+.004
J	4.612	4.6069	4.6385	-.0316	+.002	J	4.838	4.8429	4.8221	+.0208	+.003
J	4.631	4.6140	4.6400	-.0260	-.014	J	4.853	4.8445	4.8244	+.0201	-.013
A	4.598	4.6211	4.6417	-.0206	-.045	A	4.849	4.8443	4.8267	+.0176	-.046
S	4.618	4.6282	4.6437	-.0155	-.020	S	4.856	4.8424	4.8289	+.0135	-.023
O	4.640	4.6351	4.6457	-.0106	+.038	O	4.854	4.8392	4.8308	+.0084	+.036
N	4.656	4.6416	4.6479	-.0063	+.031	N	4.837	4.8352	4.8328	+.0024	+.030
D	4.666	4.6478	4.6502	-.0024	+.026	D	4.813	4.8309	4.8344	-.0035	+.024
1886						1891					
J	4.646	4.6534	4.6526	+.0008	+.018	J	4.819	4.8267	4.8359	-.0092	+.018
F	4.664	4.6585	4.6553	+.0032	-.017	F	4.817	4.8232	4.8372	-.0140	-.016
M	4.681	4.6629	4.6580	+.0049	-.018	M	4.804	4.8208	4.8384	-.0176	-.018
A	4.652	4.6670	4.6608	+.0062	-.002	A	4.828	4.8197	4.8396	-.0196	+.002
M	4.642	4.6709	4.6636	+.0073	-.001	M	4.810	4.8200	4.8404	-.0204	+.004
J	4.678	4.6748	4.6665	+.0083	+.003	J	4.809	4.8217	4.8413	-.0196	+.003
J	4.695	4.6791	4.6697	+.0094	-.013	J	4.829	4.8253	4.8420	-.0167	+.013
A	4.683	4.6842	4.6729	+.0113	-.045	A	4.830	4.8291	4.8424	-.0133	-.046
S	4.694	4.6900	4.6762	+.0138	-.020	S	4.870	4.8333	4.8426	-.0093	-.025
O	4.682	4.6966	4.6795	+.0171	+.038	O	4.844	4.8376	4.8428	-.0052	+.035
N	4.708	4.7038	4.6830	+.0208	+.031	N	4.829	4.8416	4.8429	-.0013	+.031
D	4.720	4.7112	4.6866	+.0246	+.026	D	4.840	4.8444	4.8428	+.0016	+.025
1887						1892					
J	4.691	4.7183	4.6902	+.0281	+.017	J	4.838	4.8475	4.8426	+.0049	+.019
F	4.707	4.7248	4.6939	+.0209	-.017	F	4.873	4.8503	4.8423	+.0080	-.016
M	4.752	4.7303	4.6977	+.0326	-.018	M	4.859	4.8533	4.8419	+.0114	-.017
A	4.745	4.7343	4.7015	+.0328	-.001	A	4.849	4.8569	4.8412	+.0157	+.002
M	4.758	4.7371	4.7054	+.0317	-.000	M	4.840	4.8613	4.8408	+.0205	+.005
J	4.767	4.7384	4.7093	+.0291	+.004	J	4.873	4.8666	4.8400	+.0266	+.002
J	4.727	4.7383	4.7132	-.0251	-.012	J	4.861	4.8726	4.8393	+.0333	-.014
J	4.735	4.7371	4.7171	-.0200	-.045	A	4.879	4.8788	4.8385	+.0403	-.046
A	4.738	4.7352	4.7210	-.0142	-.020	S	4.882	4.8842	4.8375	+.0467	-.026
S	4.714	4.7327	4.7248	+.0079	+.038	O	4.869	4.8880	4.8366	+.0514	+.034
N	4.747	4.7302	4.7286	+.0016	+.030	N	4.882	4.8900	4.8355	+.0545	+.031
D	4.724	4.7281	4.7324	-.0043	+.025	D	4.891	4.8884	4.8342	+.0542	+.025
1888						1893					
J	4.716	4.7267	4.7362	-.0095	+.016	J	4.888	4.8834	4.8329	+.0505	+.020
F	4.729	4.7264	4.7399	-.0135	-.017	F	4.894	4.8753	4.8317	+.0436	-.015
M	4.716	4.7273	4.7435	-.0162	-.018	M	4.883	4.8644	4.8303	+.0341	-.016
A	4.725	4.7295	4.7470	-.0175	.000	A	4.873	4.8504	4.8289	+.0217	+.003
M	4.742	4.7329	4.7503	-.0174	+.001	M	4.874	4.8362	4.8272	+.0090	+.004
J	4.734	4.7371	4.7537	-.0166	+.004	J	4.827	4.8212	4.8257	-.0045	+.002
J	4.736	4.7420	4.7569	-.0149	-.012	J	4.791	4.8065	4.8239	-.0174	-.015
J	4.758	4.7473	4.7600	-.0127	-.046	A	4.723	4.7927	4.8223	-.0296	-.046
A	4.747	4.7525	4.7630	-.0105	-.021	S	4.746	4.7806	4.8208	-.0402	-.027
S	4.781	4.7575	4.7659	-.0084	+.037	O	4.754	4.7708	4.8193	-.0485	+.033
N	4.754	4.7620	4.7689	-.0069	+.030	N	4.779	4.7639	4.8177	-.0538	+.031
D	4.759	4.7658	4.7718	-.0060	+.024	D	4.774	4.7601	4.8162	-.0561	+.026
1889						1894					
J	4.774	4.7690	4.7748	-.0058	+.017	J	4.784	4.7593	4.8146	-.0553	+.021
F	4.778	4.7714	4.7776	-.0062	-.017	F	4.759	4.7611	4.8130	-.0519	-.015
M	4.773	4.7733	4.7806	-.0073	-.018	M	4.776	4.7648	4.8116	-.0468	-.015
A	4.762	4.7749	4.7836	-.0087	+.001	A	4.771	4.7696	4.8101	-.0405	+.004
M	4.778	4.7763	4.7863	-.0100	+.003	M	4.780	4.7747	4.8089	-.0342	+.004
J	4.773	4.7779	4.7893	-.0114	+.003	J	4.772	4.7794	4.8076	-.0282	+.002
J	4.799	4.7801	4.7921	-.0120	-.012	J	4.768	4.7833	4.8064	-.0231	-.016
A	4.786	4.7831	4.7950	-.0119	-.046	A	4.804	4.7864	4.8052	-.0188	-.046
S	4.773	4.7872	4.7978	-.0106	-.022	S	4.790	4.7891	4.8042	-.0151	-.027
O	4.800	4.7924	4.8005	-.0081	+.037	O	4.800	4.7917	4.8032	-.0115	+.031
N	4.795	4.7987	4.8034	-.0047	+.030	N	4.799	4.7947	4.8022	-.0075	+.030
D	4.789	4.8058	4.8063	-.0005	+.024	D	4.798	4.7985	4.8013	-.0028	+.027

## APPENDIX

TABLE 29—Continued

## BANK CLEARINGS OUTSIDE NEW YORK CITY

Date	1	2	3	4	5	Date	1	2	3	4	5
1895						1900					
J	4.810	4.8030	4.8006	+.0024	+.022	J	4.969	4.9758	4.9743	+.0015	+.026
F	4.776	4.8082	4.8000	+.0082	-.014	F	4.972	4.9729	4.9787	-.0058	-.011
M	4.797	4.8138	4.7995	+.0143	-.014	M	4.973	4.9702	4.9830	-.0128	-.006
A	4.814	4.8194	4.7990	+.0204	+.004	A	4.968	4.9682	4.9872	-.0190	+.008
M	4.833	4.8246	4.7985	+.0261	+.003	M	4.975	4.9672	4.9912	-.0240	-.002
J	4.824	4.8292	4.7983	+.0309	+.002	J	4.981	4.9675	4.9952	-.0277	.000
J	4.854	4.8330	4.7981	+.0349	-.016	J	4.968	4.9694	4.9991	-.0297	-.015
A	4.837	4.8356	4.7982	+.0374	-.047	A	4.970	4.9730	5.0028	-.0298	-.047
S	4.827	4.8370	4.7983	+.0387	-.028	S	4.956	4.9783	5.0063	-.0280	-.028
O	4.862	4.8370	4.7987	+.0383	+.030	O	4.979	4.9851	5.0098	-.0247	+.026
N	4.845	4.8356	4.7994	+.0362	+.030	N	4.995	4.9931	5.0131	-.0200	+.025
D	4.837	4.8328	4.8002	+.0326	+.028	D	4.993	5.0017	5.0164	-.0147	+.024
1896						1901					
J	4.818	4.8288	4.8011	+.0277	+.022	J	5.016	5.0106	5.0194	-.0088	+.026
F	4.809	4.8238	4.8023	+.0215	-.014	F	5.014	5.0192	5.0224	-.0032	-.011
M	4.800	4.8183	4.8038	+.0145	-.013	M	5.020	5.0272	5.0252	+.0020	-.005
A	4.815	4.8125	4.8054	+.0071	+.005	A	5.056	5.0342	5.0280	+.0062	+.008
M	4.802	4.8069	4.8071	-.0002	+.002	M	5.069	5.0403	5.0300	+.0097	-.003
J	4.815	4.8017	4.8093	-.0076	+.001	J	5.047	5.0451	5.0332	+.0119	.000
J	4.819	4.7971	4.8114	-.0143	-.016	J	5.052	5.0488	5.0357	+.0131	-.014
A	4.774	4.7935	4.8137	-.0202	-.047	A	5.054	5.0515	5.0381	+.0134	-.047
S	4.784	4.7909	4.8163	-.0254	-.028	S	5.029	5.0533	5.0402	+.0131	-.028
O	4.795	4.7894	4.8189	-.0295	+.029	O	5.049	5.0546	5.0426	+.0120	+.026
N	4.796	4.7893	4.8216	-.0323	+.029	N	5.053	5.0556	5.0447	+.0109	+.024
D	4.812	4.7906	4.8247	-.0341	+.028	D	5.041	5.0567	5.0467	+.0100	+.023
1897						1902					
J	4.784	4.7934	4.8279	-.0345	+.023	J	5.067	5.0580	5.0486	+.0094	+.027
F	4.798	4.7978	4.8310	-.0332	-.013	F	5.055	5.0597	5.0304	+.0093	-.010
M	4.798	4.8037	4.8344	-.0307	-.011	M	5.054	5.0617	5.0523	+.0094	-.003
A	4.803	4.8109	4.8378	-.0269	+.006	A	5.081	5.0641	5.0543	+.0098	+.008
M	4.793	4.8192	4.8410	-.0218	+.001	M	5.081	5.0665	5.0563	+.0102	-.005
J	4.818	4.8283	4.8445	-.0162	+.001	J	5.048	5.0690	5.0582	+.0108	-.001
J	4.838	4.8376	4.8479	-.0103	-.016	J	5.090	5.0713	5.0600	+.0113	-.014
A	4.853	4.8466	4.8514	-.0048	-.048	A	5.063	5.0734	5.0618	+.0116	-.046
S	4.894	4.8547	4.8550	-.0003	-.029	S	5.089	5.0752	5.0637	+.0115	-.027
O	4.858	4.8616	4.8584	+.0032	+.027	O	5.083	5.0769	5.0656	+.0113	+.026
N	4.867	4.8658	4.8620	+.0048	+.028	N	5.063	5.0785	5.0675	+.0110	+.023
D	4.873	4.8702	4.8658	+.0044	+.028	D	5.071	5.0801	5.0694	+.0107	+.022
1898						1903					
J	4.867	4.8721	4.8696	+.0025	+.024	J	5.084	5.0816	5.0712	+.0104	+.027
F	4.890	4.8727	4.8733	-.0006	-.012	F	5.083	5.0832	5.0731	+.0101	-.010
M	4.883	4.8727	4.8711	-.0044	-.010	M	5.075	5.0847	5.0751	+.0096	-.002
A	4.857	4.8727	4.8810	-.0083	+.006	A	5.087	5.0859	5.0772	+.0087	+.008
M	4.866	4.8737	4.8849	-.0112	-.000	M	5.075	5.0866	5.0794	+.0072	-.006
J	4.888	4.8756	4.8887	-.0131	+.001	J	5.101	5.0868	5.0816	+.0052	-.002
J	4.851	4.8795	4.8929	-.0134	-.016	J	5.105	5.0863	5.0839	+.0024	-.013
A	4.892	4.8855	4.8971	-.0116	-.048	A	5.079	5.0850	5.0864	-.0014	-.046
S	4.888	4.8928	4.9014	-.0086	-.029	S	5.090	5.0831	5.0888	-.0057	-.027
O	4.878	4.9024	4.9057	-.0033	+.027	O	5.090	5.0806	5.0914	-.0108	+.026
N	4.911	4.9133	4.9101	+.0032	+.027	N	5.064	5.0779	5.0939	-.0160	+.022
D	4.931	4.9249	4.9146	+.0103	+.027	D	5.078	5.0753	5.0966	-.0213	+.021
1899						1904					
J	4.946	4.9366	4.9190	+.0176	+.025	J	5.067	5.0731	5.0991	-.0260	+.027
F	4.966	4.9483	4.9237	+.0246	-.012	F	5.076	5.0718	5.1018	-.0300	-.010
M	4.983	4.9586	4.9283	+.0303	-.008	M	5.076	5.0717	5.1045	-.0328	-.001
A	4.963	4.9674	4.9329	+.0345	+.007	A	5.074	5.0730	5.1072	-.0342	+.008
M	4.972	4.9745	4.9374	+.0371	-.001	M	5.057	5.0756	5.1101	-.0345	-.008
J	4.972	4.9797	4.9419	+.0378	+.001	J	5.080	5.0796	5.1128	-.0332	-.002
J	4.970	4.9830	4.9467	+.0363	-.016	J	5.074	5.0847	5.1157	-.0310	-.013
A	4.982	4.9846	4.9514	+.0332	-.048	A	5.091	5.0906	5.1184	-.0278	-.045
S	4.994	4.9846	4.9561	+.0285	-.029	S	5.104	5.0970	5.1211	-.0241	-.026
O	4.985	4.9834	4.9606	+.0228	+.026	O	5.101	5.1035	5.1238	-.0203	+.026
N	4.982	4.9814	4.9651	+.0163	+.026	N	5.133	5.1100	5.1265	-.0165	+.022
D	4.977	4.9788	4.9697	+.0091	+.026	D	5.135	5.1163	5.1292	-.0129	+.020

## BANK CLEARINGS

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TABLE 29—Continued

## BANK CLEARINGS OUTSIDE NEW YORK CITY

Date	1	2	3	4	5	Date	1	2	3	4	5	
1905						1910	J	5.260	5.2671	5.2402	+.0269	+.025
J	5.106	5.1222	5.1319	-.0097	+.027	F	5.263	5.2685	5.2426	+.0259	-.009	
F	5.121	5.1279	5.1344	-.0065	-.010	M	5.285	5.2692	5.2450	+.0242	+.006	
M	5.140	5.1333	5.1370	-.0037	+.001	A	5.274	5.2692	5.2477	+.0215	+.008	
A	5.133	5.1385	5.1396	-.0011	+.008	M	5.256	5.2687	5.2502	+.0185	-.014	
M	5.149	5.1437	5.1421	+.0016	-.009	I	5.270	5.2668	5.2529	+.0139	-.005	
I	5.147	5.1488	5.1445	+.0343	-.003	J	5.259	5.2656	5.2555	+.0101	-.012	
J	5.136	5.1537	5.1469	+.0068	-.012	A	5.261	5.2644	5.2581	+.0063	-.044	
A	5.157	5.1584	5.1493	+.0091	-.044	S	5.262	5.2634	5.2607	+.0027	-.023	
S	5.164	5.1628	5.1518	+.0110	-.026	O	5.256	5.2626	5.2634	-.0008	+.028	
O	5.156	5.1669	5.1541	+.0128	+.026	N	5.269	5.2622	5.2660	-.0038	+.022	
N	5.175	5.1705	5.1564	+.0141	+.022	D	5.267	5.2621	5.2687	-.0066	+.019	
D	5.178	5.1737	5.1586	+.0151	+.019							
1906						1911	J	5.262	5.2625	5.2713	-.0088	+.024
J	5.201	5.1766	5.1608	+.0158	+.027	F	5.261	5.2632	5.2739	-.0107	-.009	
F	5.194	5.1790	5.1630	+.0160	-.010	M	5.272	5.2643	5.2764	-.0121	+.006	
M	5.185	5.1811	5.1652	+.0159	+.002	A	5.252	5.2654	5.2787	-.0131	+.008	
A	5.167	5.1831	5.1673	+.0158	+.008	M	5.270	5.2674	5.2809	-.0135	-.014	
M	5.179	5.1850	5.1692	+.0158	-.010	I	5.280	5.2692	5.2830	-.0138	-.005	
I	5.186	5.1870	5.1713	+.0157	-.004	J	5.267	5.2713	5.2849	-.0136	-.012	
J	5.176	5.1896	5.1733	+.0163	-.012	A	5.277	5.2736	5.2868	-.0132	-.044	
A	5.198	5.1930	5.1752	+.0178	-.043	S	5.282	5.2761	5.2885	-.0124	-.023	
S	5.183	5.1973	5.1770	+.0203	-.025	O	5.265	5.2786	5.2900	-.0114	+.028	
O	5.210	5.2027	5.1788	+.0239	+.027	N	5.283	5.2815	5.2913	-.0098	+.022	
N	5.216	5.2089	5.1807	+.0282	+.022	D	5.278	5.2848	5.2926	-.0078	+.019	
D	5.206	5.2154	5.1824	+.0330	+.019							
1907						1912	J	5.290	5.2883	5.2936	-.0053	+.023
J	5.225	5.2216	5.1842	+.0374	+.027	F	5.301	5.2921	5.2943	-.0022	-.009	
F	5.225	5.2206	5.1859	+.0407	-.010	M	5.291	5.2961	5.2951	+.0010	+.006	
M	5.222	5.2298	5.1877	+.0421	+.003	A	5.311	5.3002	5.2957	+.0045	+.008	
A	5.223	5.2312	5.1893	+.0419	+.008	M	5.311	5.3043	5.2961	+.0082	-.014	
M	5.234	5.2280	5.1908	+.0372	-.011	I	5.308	5.3081	5.2965	+.0116	-.005	
I	5.217	5.2331	5.1922	+.0309	-.004	J	5.309	5.3116	5.2968	+.0148	-.012	
J	5.234	5.2158	5.1937	+.0221	-.012	A	5.318	5.3144	5.2969	+.0175	-.044	
A	5.230	5.2066	5.1950	+.0116	-.043	S	5.305	5.3168	5.2969	+.0199	-.023	
S	5.213	5.1956	5.1965	-.0009	-.024	O	5.333	5.3184	5.2969	+.0213	+.029	
O	5.240	5.1859	5.1977	-.0118	+.027	N	5.325	5.3194	5.2969	+.0225	+.022	
N	5.132	5.1755	5.1990	-.0235	+.021	D	5.313	5.3198	5.2970	+.0228	+.020	
D	5.109	5.1671	5.2003	-.0332	+.019							
1908						1913	J	5.331	5.3198	5.2970	+.0228	+.022
J	5.155	5.1593	5.2015	-.0422	+.026	F	5.334	5.3192	5.2970	+.0222	-.010	
F	5.143	5.1535	5.2027	-.0492	-.010	M	5.306	5.3189	5.2972	+.0217	+.005	
M	5.145	5.1501	5.2039	-.0538	+.004	A	5.317	5.3186	5.2975	+.0211	+.007	
A	5.156	5.1494	5.2051	-.0557	+.007	M	5.318	5.3186	5.2978	+.0208	-.014	
M	5.153	5.1502	5.2062	-.0560	-.013	J	5.308	5.3189	5.2982	+.0207	-.004	
J	5.157	5.1545	5.2076	-.0531	-.005	A	5.319	5.3196	5.2987	+.0209	-.011	
A	5.177	5.1597	5.2088	-.0491	-.011	S	5.308	5.3204	5.2993	+.0211	-.043	
S	5.165	5.1679	5.2099	-.0420	-.043	O	5.328	5.3215	5.3001	+.0214	-.022	
O	5.192	5.1761	5.2111	-.0350	-.024	N	5.332	5.3221	5.3008	+.0213	+.029	
N	5.181	5.1844	5.2124	-.0280	+.027	D	5.306	5.3225	5.3019	+.0206	+.023	
D	5.191	5.1923	5.2138	-.0215	+.021							
1909						1914	J	5.321	5.3045	5.3045	+.0166	+.021
J	5.202	5.2065	5.2167	-.0102	+.026	F	5.319	5.3190	5.3060	+.0130	-.011	
F	5.209	5.2126	5.2182	-.0056	-.003	M	5.316	5.3162	5.3077	+.0085	+.004	
M	5.220	5.2184	5.2199	-.0015	+.005	A	5.324	5.3124	5.3096	+.0028	+.007	
A	5.227	5.2240	5.2217	+.0323	+.008	M	5.301	5.3084	5.3116	-.0032	-.014	
M	5.219	5.2298	5.2234	+.0064	-.013	J	5.317	5.3037	5.3138	-.0101	-.003	
J	5.237	5.2356	5.2254	+.0102	-.005	A	5.325	5.2989	5.3163	-.0174	-.011	
A	5.238	5.2414	5.2274	+.0140	-.012	S	5.284	5.2944	5.3189	-.0245	-.042	
S	5.242	5.2470	5.2294	+.0176	-.044	O	5.271	5.2871	5.3246	-.0375	+.030	
O	5.256	5.2522	5.2313	+.0209	-.023	N	5.260	5.2850	5.3279	-.0429	+.023	
N	5.252	5.2568	5.2335	+.0233	+.028	D	5.279	5.2843	5.3312	-.0469	+.021	
D	5.265	5.2607	5.2356	+.0251	+.022							
	5.271	5.2638	5.2379	+.0259	+.019							

## APPENDIX

TABLE 29—Continued  
BANK CLEARINGS OUTSIDE NEW YORK CITY

Date	1	2	3	4	5	Date	1	2	3	4	5
1915						1917					
J	5.286	5.2851	5.3349	-.0498	+.019	J	5.514	5.5117	5.4876	+.0241	+.017
F	5.305	5.2877	5.3386	-.0509	-.013	F	5.517	5.5212	5.4965	+.0247	-.017
M	5.308	5.2923	5.3428	-.0505	+.003	M	5.532	5.5298	5.5055	+.0243	+.001
A	5.315	5.2986	5.3471	-.0485	+.005	A	5.537	5.5372	5.5145	+.0227	+.002
M	5.305	5.3066	5.3516	-.0450	-.014	M	5.554	5.5433	5.5233	+.0200	-.014
J	5.314	5.3157	5.3561	-.0404	-.001	J	5.548	5.5482	5.5326	+.0156	+.002
J	5.319	5.3257	5.3613	-.0356	-.011	J	5.541	5.5523	5.5414	+.0109	-.011
A	5.313	5.3360	5.3665	-.0305	-.041	A	5.563	5.5561	5.5303	+.0058	-.036
S	5.335	5.3465	5.3718	-.0253	-.019	S	5.546	5.5601	5.5392	+.0009	-.016
O	5.353	5.3568	5.3774	-.0206	+.030	O	5.578	5.5648	5.5682	-.0034	+.030
N	5.383	5.3670	5.3833	-.0163	+.023	N	5.596	5.5703	5.5768	-.0063	+.021
D	5.393	5.3772	5.3893	-.0121	+.022	D	5.562	5.5774	5.5851	-.0077	+.024
1916						1918					
J	5.384	5.3874	5.3995	-.0081	+.018	J	5.567	5.5852	5.5934	-.0082	+.015
F	5.410	5.3978	5.4019	-.0041	-.015	F	5.572	5.5936	5.6014	-.0078	-.019
M	5.421	5.4083	5.4086	-.0030	+.002	M	5.597	5.6021	5.6092	-.0071	.000
A	5.409	5.4188	5.4157	+.0031	+.004	A	5.615	5.6104	5.6168	-.0364	+.001
M	5.435	5.4293	5.4229	+.0064	-.014	M	5.626	5.6179	5.6241	-.0062	-.013
J	5.432	5.4397	5.4307	+.0090	.000	J	5.616	5.6245	5.6311	-.0066	+.003
J	5.423	5.4499	5.4381	+.0118	-.011	J	5.641	5.6301	5.6379	-.0078	-.010
A	5.454	5.4600	5.4461	+.0139	-.030	A	5.665	5.6347	5.6441	-.0094	-.035
S	5.471	5.4703	5.4537	+.0166	-.018	S	5.642	5.6387	5.6499	-.0112	-.014
O	5.480	5.4806	5.4621	+.0185	+.030	O	5.661	5.6423	5.6558	-.0135	+.029
N	5.509	5.4910	5.4702	+.0208	+.022	N	5.644	5.6458	5.6611	-.0153	+.018
D	5.502	5.5015	5.4789	+.0226	+.023	D	5.635	5.6495	5.6659	-.0164	+.025
						1919					
						J	5.657	5.6538	5.6703	-.0165	+.01

## BANK DEBITS FOR 140 OUTSIDE CITIES

Date	1	2	3	4	5	Date	1	2	3	4	5
1919						1921					
J	5.719	5.7158	5.7324	-.0166	+.015	I	5.751	5.7635	5.7685	-.0050	+.013
F	5.709	5.7208	5.7366	-.0158	-.020	F	5.737	5.7509	5.7680	-.0171	-.020
M	5.698	5.7269	5.7406	-.0137	.000	M	5.726	5.7392	5.7675	-.0283	+.001
A	5.709	5.7341	5.7443	-.0102	.000	A	5.724	5.7288	5.7668	-.0380	.000
M	5.744	5.7425	5.7477	-.0052	-.013	M	5.708	5.7201	5.7660	-.0459	-.013
J	5.764	5.7520	5.7508	+.0012	+.005	J	5.715	5.7134	5.7653	-.0519	+.008
J	5.789	5.7623	5.7537	+.0088	-.010	J	5.700	5.7089	5.7646	-.0557	-.010
A	5.790	5.7734	5.7562	+.0172	-.034	A	5.716	5.7064	5.7637	-.0573	-.034
S	5.793	5.7784	5.7584	+.0261	-.013	S	5.725	5.7059	5.7630	-.0571	-.011
O	5.787	5.7952	5.7605	+.0347	+.028	O	5.707	5.7068	5.7623	-.0555	+.025
N	5.791	5.8052	5.7623	+.0429	+.015	N	5.716	5.7089	5.7617	-.0528	+.010
D	5.818	5.8141	5.7640	+.0501	+.027	D	5.721	5.7115	5.7611	-.0496	+.029
1920						1922					
J	5.832	5.8215	5.7652	+.0563	+.014	J	5.697	5.7144	5.7606	-.0462	+.012
F	5.806	5.8264	5.7664	+.0608	-.020	F	5.720	5.7175	5.7601	-.0426	-.020
M	5.834	5.8312	5.7674	+.0638	.000	M	5.725	5.7208	5.7598	-.0390	+.002
A	5.831	5.8332	5.7682	+.0650	.000	A	5.717	5.7243	5.7595	-.0352	+.001
M	5.816	5.8330	5.7688	+.0642	-.013	M	5.733	5.7285	5.7593	-.0308	-.012
J	5.829	5.8308	5.7693	+.0615	+.007	J	5.749	5.7336	5.7593	-.0257	+.009
J	5.837	5.8263	5.7696	+.0567	-.010	J	5.732	5.7396	5.7594	-.0198	-.010
A	5.818	5.8195	5.7697	+.0498	-.033	A	5.744	5.7465	5.7596	-.0131	-.035
S	5.831	5.8109	5.7697	+.0412	-.012	S	5.753	5.7540	5.7600	-.0060	-.011
O	5.802	5.8005	5.7694	+.0311	+.027	O	5.750	5.7616	5.7604	+.0012	+.024
N	5.801	5.7888	5.7691	+.0197	+.012	N	5.749	5.7689	5.7611	+.0078	+.008
D	5.793	5.7763	5.7688	+.0075	+.028	D	5.771	5.7756	5.7619	+.0137	+.030

## BANK CLEARINGS

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TABLE 29—Continued

## BANK DEBITS FOR 140 OUTSIDE CITIES

Date	1	2	3	4	5	Date	1	2	3	4	5
1923						1928					
J	5.791	5.7813	5.7628	+.0185	+.011	J	5.898	5.9039	5.9225	-.0186	+.009
F	5.800	5.7859	5.7640	+.0219	-.019	F	5.890	5.9069	5.9247	-.0178	-.015
M	5.799	5.7892	5.7653	+.0239	+.003	M	5.915	5.9102	5.9267	-.0165	+.006
A	5.795	5.7915	5.7667	+.0248	+.002	A	5.920	5.9134	5.9286	-.0152	+.005
M	5.807	5.7928	5.7681	+.0247	-.011	M	5.936	5.9167	5.9303	-.0136	-.007
J	5.804	5.7931	5.7698	+.0233	+.010	J	5.946	5.9199	5.9319	-.0120	+.009
J	5.778	5.7928	5.7717	+.0211	-.010	J	5.896	5.9228	5.9332	-.0104	-.009
A	5.783	5.7918	5.7738	+.0180	-.036	A	5.918	5.9256	5.9339	-.0083	-.040
S	5.770	5.7904	5.7759	+.0145	-.010	S	5.921	5.9285	5.9345	-.0060	-.010
O	5.781	5.7885	5.7782	+.0103	+.023	O	5.931	5.9316	5.9346	-.0030	+.020
N	5.785	5.7867	5.7806	+.0061	+.006	N	5.933	5.9353	5.9345	+.0008	+.003
D	5.788	5.7850	5.7831	+.0019	+.030	D	5.952	5.9396	5.9344	+.0052	+.029
1924						1929					
J	5.785	5.7838	5.7859	-.0021	+.011	J	5.949	5.9444	5.9342	+.0102	+.009
F	5.799	5.7833	5.7887	-.0054	-.018	F	5.956	5.9496	5.9333	+.0163	-.014
M	5.788	5.7838	5.7916	+.0078	+.004	M	5.952	5.9546	5.9320	+.0226	+.006
A	5.796	5.7850	5.7945	-.0095	+.003	A	5.946	5.9589	5.9304	+.0285	+.005
M	5.789	5.7871	5.7975	-.0104	-.010	M	5.939	5.9622	5.9282	+.0340	-.007
J	5.775	5.7898	5.8005	-.0107	+.010	J	5.936	5.9641	5.9641	+.009	+.009
J	5.790	5.7932	5.8035	-.0103	-.010	J	5.972	5.9644	5.9644	-.009	-.009
A	5.795	5.7970	5.8066	-.0096	-.037	A	6.000	5.9630	5.9630	-.040	-.040
S	5.794	5.8012	5.8098	-.0086	-.010	S	5.969	5.9602	5.9602	-.010	-.010
O	5.807	5.8058	5.8121	-.0069	+.022	O	5.998	5.9558	5.9558	+.019	+.019
N	5.793	5.8106	5.8157	-.0051	+.003	N	5.975	5.9500	5.9500	+.003	+.003
D	5.818	5.8158	5.8187	-.0029	+.030	D	5.910	5.9430	5.9430	+.029	+.029
1925						1930					
J	5.847	5.8211	5.8216	-.0005	+.010	J	5.911	5.9349	5.9349	+.008	+.008
F	5.839	5.8266	5.8245	+.0021	-.017	F	5.900	5.9259	5.9259	+.014	+.014
M	5.832	5.8320	5.8273	+.0047	+.004	M	5.900	5.9160	5.9160	+.007	+.007
A	5.834	5.8362	5.8300	+.0062	+.003	A	5.904	5.9056	5.9056	+.005	+.005
M	5.829	5.8410	5.8326	+.0084	-.010	M	5.902	5.8951	5.8951	-.006	-.006
J	5.849	5.8454	5.8353	+.0101	+.010	J	5.906	5.8848	5.8848	+.009	+.009
J	5.852	5.8493	5.8379	+.0114	-.009	J	5.883	5.8750	5.8750	-.009	-.009
A	5.845	5.8526	5.8404	+.0122	-.038	A	5.870	5.8657	5.8657	-.040	-.040
S	5.853	5.8565	5.8429	+.0136	-.010	S	5.860	5.8574	5.8574	-.010	-.010
O	5.869	5.8589	5.8456	+.0133	+.021	O	5.864	5.8497	5.8497	+.019	+.019
N	5.848	5.8609	5.8481	+.0128	+.004	N	5.815	5.8424	5.8424	+.002	+.002
D	5.860	5.8625	5.8507	+.0118	+.030	D	5.843	5.8352	5.8352	+.029	+.029
1926						1931					
J	5.872	5.8636	5.8531	+.0105	+.010	J	5.837	5.8280	5.8280	+.008	+.008
F	5.872	5.8643	5.8558	+.0085	-.016	F	5.799	5.8202	5.8202	-.014	-.014
M	5.874	5.8646	5.8585	+.0061	+.005	M	5.790	5.8119	5.8119	+.007	+.007
A	5.872	5.8645	5.8611	+.0034	+.004	A	5.811	5.8030	5.8030	+.005	+.005
M	5.849	5.8643	5.8638	+.0005	-.009	M	5.790	5.7935	5.7935	-.006	-.006
J	5.844	5.8640	5.8667	-.0027	+.010	J	5.802	5.7835	5.7835	+.009	+.009
J	5.885	5.8639	5.8696	-.0057	-.009	J	5.783	5.7726	5.7726	-.009	-.009
A	5.865	5.8641	5.8725	-.0084	-.039	A	5.767	5.7608	5.7608	-.040	-.040
S	5.862	5.8649	5.8755	-.0106	-.010	S	5.754	5.7482	5.7482	-.010	-.010
O	5.864	5.8661	5.8787	-.0126	+.021	O	5.748	5.7347	5.7347	+.019	+.019
N	5.853	5.8679	5.8816	-.0137	+.004	N	5.667	5.7205	5.7205	+.002	+.002
D	5.869	5.8700	5.8847	-.0147	+.029	D	5.713	5.7058	5.7058	+.029	+.029
1927						1932					
J	5.870	5.8725	5.8879	-.0154	+.009	J	5.702	5.6909	5.6909	+.008	+.008
F	5.887	5.8751	5.8910	-.0159	-.016	F	5.661	5.6760	5.6760	-.014	-.014
M	5.883	5.8777	5.8942	-.0165	+.006	M	5.639	5.6613	5.6613	+.007	+.007
A	5.891	5.8803	5.8973	-.0170	+.004	A	5.675	5.6470	5.6470	+.005	+.005
M	5.876	5.8829	5.9004	-.0175	-.008	M	5.611	5.6332	5.6332	-.006	-.006
J	5.890	5.8855	5.9035	-.0180	+.010	J	5.625	5.6204	5.6204	+.009	+.009
J	5.878	5.8881	5.9065	-.0184	-.009	J	5.615	5.6088	5.6088	-.009	-.009
A	5.891	5.8906	5.9024	-.0188	-.039	A	5.619	5.5987	5.5987	-.040	-.040
S	5.902	5.8932	5.9122	-.0190	-.010	S	5.604	5.5906	5.5906	-.010	-.010
O	5.889	5.8957	5.9149	-.0192	+.020	O	5.581	5.5846	5.5846	+.019	+.019
N	5.897	5.8983	5.9175	-.0192	+.008	N	5.560	5.5808	5.5808	+.002	+.002
D	5.903	5.9010	5.9200	-.0190	+.029	D	5.588	5.5789	5.5789	+.029	+.029

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TABLE 29—Concluded  
BANK DEBITS FOR 140 OUTSIDE CITIES

Date	1	2	3	4	5	Date	1	2	3	4	5
1933						1935					
J	5.582	5.5788			+.008	J	5.679				+.008
F	5.584	5.5801			-.014	F	5.687				-.014
M	*	5.5826			+.007	M	5.702				+.007
A	5.544	5.5859			+.005	A	5.715				+.005
M	5.576	5.5902			-.006	M	5.709				-.006
J	5.627	5.5952			+.009	J	5.716				+.009
A	5.660	5.6010			-.009	J	5.739				-.009
S	5.641	5.6075			-.040	A	5.743				-.040
O	5.620	5.6144			.010	S	5.713				-.010
N	5.597	5.6279			+.019	O	5.719				+.019
D	5.603	5.6338			+.002	N	5.746				+.002
					+.029	D	5.754				+.029
1934						1936					
J	5.621	5.6387			+.008	J	5.744				+.008
F	5.638	5.6426			-.014						
M	5.650	5.6458			+.007						
A	5.667	5.6486			+.005						
M	5.669				-.006						
J	5.683				+.009						
A	5.661				-.009						
S	5.676				-.040						
O	5.643				-.010						
N	5.650				+.019						
D	5.648				+.002						
	5.676				+.029						

\*Not available, complete data not having been reported on account of bank holidays.

BANK CLEARINGS

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TABLE 30

DEFLATED<sup>1</sup> BANK CLEARINGS OUTSIDE NEW YORK CITY, MONTHLY,  
JANUARY 1875-JANUARY 1919, INCLUSIVE; DEFLATED<sup>1</sup> BANK  
DEBITS FOR 140 OUTSIDE CITIES, MONTHLY,  
JANUARY 1919-JANUARY 1936

- Col. 1. Logarithms of Data Adjusted for Seasonal Fluctuations.
- Col. 2. Cyclical Curve (logarithms).
- Col. 3. Trend Curve (logarithms).
- Col. 4. Deviations of Cyclical Curve (logarithms) from Trend  
Curve (logarithms).
- Col. 5. Changing Seasonal Fluctuations (logarithms).

For details of the nature of the graduations given in Columns 2 and 3 and of the seasonal given in Column 5 of this table, see Appendix D.

<sup>1</sup> Deflated by dividing the Clearings Figures of Table 27 by Carl Snyder's "Index of General Price Level."

## APPENDIX

TABLE 30

## DEFLATED BANK CLEARINGS OUTSIDE NEW YORK CITY

Date	1	2	3	4	5	Date	1	2	3	4	5
1875						1880					
J	4.489	4.5110	4.5284	-.0174	+.031	J	4.649	4.6363	4.6146	+.0217	+.031
F	4.505	4.5115	4.5272	-.0157	-.007	F	4.645	4.6393	4.6199	+.0194	-.009
M	4.547	4.5127	4.5260	-.0133	+.005	M	4.658	4.6407	4.6252	+.0155	-.012
A	4.521	4.5145	4.5251	-.0106	-.010	A	4.658	4.6412	4.6304	+.0108	-.006
M	4.505	4.5167	4.5240	-.0073	-.003	M	4.626	4.6412	4.6353	+.0059	-.005
J	4.565	4.5189	4.5228	-.0039	-.005	J	4.621	4.6411	4.6407	+.0004	-.006
J	4.511	4.5215	4.5216	-.0001	-.026	J	4.639	4.6417	4.6459	-.0042	-.024
A	4.543	4.5235	4.5204	+.0031	-.041	A	4.637	4.6435	4.6508	-.0073	-.043
S	4.501	4.5249	4.5192	+.0057	-.031	S	4.634	4.6471	4.6557	-.0086	-.024
O	4.486	4.5255	4.5181	+.0074	+.033	O	4.620	4.6528	4.6605	-.0077	+.037
N	4.556	4.5252	4.5169	+.0083	+.046	N	4.673	4.6608	4.6653	-.0045	+.038
D	4.512	4.5243	4.5158	+.0085	+.009	D	4.699	4.6706	4.6701	+.0003	+.026
1876						1881					
J	4.522	4.5232	4.5146	+.0086	+.032	J	4.682	4.6819	4.6748	+.0071	+.029
F	4.519	4.5220	4.5135	+.0085	-.007	F	4.703	4.6938	4.6791	+.0147	-.011
M	4.555	4.5211	4.5126	+.0085	+.002	M	4.688	4.7054	4.6835	+.0219	-.014
A	4.492	4.5207	4.5118	+.0089	-.009	A	4.697	4.7156	4.6876	+.0280	-.005
M	4.513	4.5205	4.5109	+.0096	-.003	M	4.724	4.7239	4.6916	+.0323	-.004
J	4.545	4.5204	4.5103	+.0101	-.006	J	4.769	4.7297	4.6952	+.0345	-.004
J	4.505	4.5203	4.5097	+.0106	-.027	J	4.694	4.7329	4.6987	+.0342	-.022
A	4.550	4.5198	4.5091	+.0107	-.041	A	4.765	4.7339	4.7020	+.0319	-.043
S	4.512	4.5191	4.5088	+.0103	-.031	S	4.753	4.7330	4.7051	+.0279	-.022
O	4.494	4.5180	4.5086	+.0094	+.034	O	4.733	4.7308	4.7078	+.0230	+.037
N	4.524	4.5170	4.5084	+.0086	+.044	N	4.719	4.7278	4.7103	+.0175	+.036
D	4.526	4.5161	4.5083	+.0078	+.013	D	4.728	4.7245	4.7127	+.0118	+.027
1877						1882					
J	4.502	4.5155	4.5083	+.0072	+.033	J	4.704	4.7212	4.7149	+.0063	+.027
F	4.521	4.5156	4.5086	+.0070	-.007	F	4.707	4.7184	4.7167	+.0017	-.012
M	4.528	4.5159	4.5090	+.0069	-.002	M	4.706	4.7161	4.7183	-.0022	-.016
A	4.504	4.5167	4.5095	+.0072	-.009	A	4.710	4.7145	4.7197	-.0052	-.005
M	4.553	4.5177	4.5101	+.0076	-.004	M	4.706	4.7137	4.7209	-.0072	-.004
J	4.482	4.5183	4.5108	+.0075	-.006	J	4.714	4.7138	4.7218	-.0080	-.003
J	4.503	4.5185	4.5118	+.0067	-.028	J	4.727	4.7143	4.7225	-.0077	-.019
A	4.521	4.5184	4.5130	+.0054	-.041	A	4.728	4.7165	4.7230	-.0065	-.044
S	4.526	4.5177	4.5142	+.0035	-.030	S	4.744	4.7190	4.7235	-.0045	-.021
O	4.509	4.5166	4.5158	+.0008	+.035	O	4.711	4.7216	4.7238	-.0022	+.038
N	4.533	4.5155	4.5174	-.0019	+.042	N	4.731	4.7244	4.7240	+.0004	+.034
D	4.515	4.5142	4.5190	-.0048	+.018	D	4.711	4.7267	4.7239	+.0028	+.027
1878						1883					
J	4.561	4.5130	4.5210	-.0080	+.033	J	4.728	4.7287	4.7238	+.0049	+.025
F	4.498	4.5119	4.5231	-.0112	-.007	F	4.730	4.7302	4.7236	+.0066	-.014
M	4.470	4.5109	4.5253	-.0144	-.005	M	4.731	4.7312	4.7235	+.0077	-.017
A	4.489	4.5099	4.5280	-.0181	-.008	A	4.710	4.7319	4.7232	+.0087	-.004
M	4.520	4.5091	4.5306	-.0213	-.004	M	4.735	4.7328	4.7228	+.0100	-.004
J	4.480	4.5086	4.5335	-.0249	-.006	J	4.749	4.7337	4.7224	+.0113	-.001
J	4.550	4.5086	4.5366	-.0280	-.027	J	4.735	4.7348	4.7220	+.0128	-.017
A	4.491	4.5089	4.5398	-.0309	-.042	A	4.748	4.7360	4.7217	+.0143	-.045
S	4.533	4.5102	4.5431	-.0329	-.028	S	4.733	4.7371	4.7216	+.0155	-.020
O	4.553	4.5123	4.5465	-.0342	+.035	O	4.735	4.7376	4.7214	+.0162	+.038
N	4.487	4.5152	4.5501	-.0349	+.041	N	4.722	4.7375	4.7212	+.0163	+.033
D	4.493	4.5193	4.5540	-.0347	+.021	D	4.730	4.7364	4.7211	+.0153	+.027
1879						1884					
J	4.538	4.5244	4.5581	-.0337	+.033	J	4.734	4.7353	4.7212	+.0141	+.022
F	4.539	4.5306	4.5622	-.0316	-.008	F	4.729	4.7321	4.7214	+.0107	-.015
M	4.509	4.5383	4.5664	-.0281	-.009	M	4.724	4.7282	4.7216	+.0066	-.018
A	4.584	4.5474	4.5700	-.0235	-.007	A	4.749	4.7233	4.7218	+.0015	-.003
M	4.545	4.5577	4.5754	-.0177	-.004	M	4.751	4.7180	4.7222	-.0042	-.003
J	4.555	4.5693	4.5800	-.0107	-.006	J	4.691	4.7114	4.7226	-.0112	+.001
J	4.609	4.5815	4.5847	-.0032	-.026	J	4.699	4.7060	4.7232	-.0172	-.015
A	4.543	4.5938	4.5895	+.0043	-.042	A	4.691	4.7008	4.7240	-.0232	-.045
S	4.578	4.6054	4.5945	+.0109	-.027	S	4.694	4.6962	4.7250	-.0288	-.020
O	4.667	4.6159	4.5997	+.0162	+.036	O	4.688	4.6924	4.7259	-.0335	+.038
N	4.628	4.6246	4.6048	+.0198	+.039	N	4.665	4.6897	4.7270	-.0373	+.032
D	4.630	4.6314	4.6097	+.0217	+.024	D	4.708	4.6883	4.7283	-.0400	+.027

## BANK CLEARINGS

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TABLE 30—Continued

## DEFLATED BANK CLEARINGS OUTSIDE NEW YORK CITY

Date	1	2	3	4	5	Date	1	2	3	4	5
1885						1890					
J	4.710	4.6886	4.7297	-.0411	+.020	J	4.917	4.9102	4.9074	+.0028	+.017
F	4.682	4.6906	4.7312	-.0406	-.016	F	4.910	4.9178	4.9101	+.0077	-.017
M	4.686	4.6944	4.7330	-.0386	-.018	M	4.914	4.9250	4.9127	+.0123	-.018
A	4.709	4.6995	4.7348	-.0353	-.002	A	4.930	4.9313	4.9153	+.0160	+.001
M	4.687	4.7056	4.7368	-.0312	-.002	M	4.957	4.9364	4.9179	+.0185	+.004
J	4.720	4.7124	4.7389	-.0265	+.002	J	4.935	4.9399	4.9203	+.0196	+.003
J	4.739	4.7196	4.7411	-.0215	-.014	J	4.950	4.9417	4.9226	+.0191	-.013
A	4.706	4.7266	4.7434	-.0168	-.045	A	4.946	4.9419	4.9250	+.0169	-.046
S	4.725	4.7335	4.7458	-.0123	-.020	S	4.953	4.9405	4.9272	+.0133	-.023
O	4.743	4.7401	4.7483	-.0082	+.038	O	4.951	4.9380	4.9292	+.0088	+.036
N	4.758	4.7461	4.7508	-.0047	+.031	N	4.940	4.9348	4.9314	+.0034	+.030
D	4.769	4.7518	4.7534	-.0016	+.026	D	4.915	4.9314	4.9332	-.0018	+.024
1886						1891					
J	4.748	4.7569	4.7563	+.0006	+.018	J	4.922	4.9282	4.9348	-.0066	+.018
F	4.767	4.7614	4.7592	+.0022	-.017	F	4.919	4.9257	4.9364	-.0107	-.016
M	4.784	4.7653	4.7622	+.0031	-.018	M	4.907	4.9242	4.9379	-.0137	-.018
A	4.754	4.7689	4.7652	+.0037	-.002	A	4.931	4.9240	4.9394	-.0154	+.002
M	4.745	4.7724	4.7683	+.0041	-.001	M	4.912	4.9249	4.9405	-.0156	+.004
J	4.781	4.7761	4.7713	+.0048	+.003	J	4.917	4.9271	4.9417	-.0146	+.003
J	4.797	4.7804	4.7746	+.0058	-.013	J	4.937	4.9310	4.9428	-.0118	-.013
A	4.786	4.7856	4.7779	+.0077	-.045	A	4.938	4.9348	4.9436	-.0088	-.046
S	4.796	4.7917	4.7811	+.0106	-.020	S	4.978	4.9389	4.9444	-.0055	-.025
O	4.784	4.7988	4.7843	+.0145	+.038	O	4.947	4.9429	4.9450	-.0021	+.035
N	4.810	4.8066	4.7877	+.0189	+.031	N	4.937	4.9466	4.9456	+.0010	+.031
D	4.822	4.8146	4.7913	+.0233	+.026	D	4.943	4.9489	4.9460	+.0029	+.025
1887						1892					
J	4.799	4.8224	4.7948	+.0276	+.017	J	4.940	4.9514	4.9464	+.0050	+.019
F	4.815	4.8295	4.7983	+.0312	-.017	F	4.975	4.9536	4.9466	+.0070	-.016
M	4.855	4.8355	4.8019	+.0336	-.018	M	4.961	4.9560	4.9469	+.0091	-.017
A	4.848	4.8399	4.8056	+.0343	-.001	A	4.952	4.9589	4.9468	+.0121	+.002
M	4.841	4.8429	4.8093	+.0336	.000	M	4.942	4.9628	4.9469	+.0159	+.005
J	4.875	4.8444	4.8130	+.0314	+.004	J	4.976	4.9676	4.9468	+.0208	+.002
J	4.835	4.8443	4.8166	+.0277	-.012	J	4.963	4.9733	4.9466	+.0267	-.014
A	4.843	4.8430	4.8202	+.0228	-.045	A	4.982	4.9795	4.9465	+.0330	-.046
S	4.846	4.8409	4.8239	+.0170	-.020	S	4.984	4.9851	4.9462	+.0389	-.026
O	4.822	4.8380	4.8274	+.0106	+.038	O	4.975	4.9894	4.9460	+.0434	+.034
N	4.850	4.8351	4.8310	+.0041	+.030	N	4.985	4.9922	4.9457	+.0465	+.031
D	4.826	4.8325	4.8345	-.0020	+.025	D	4.993	4.9915	4.9450	+.0465	+.025
1888						1893					
J	4.819	4.8305	4.8381	-.0076	+.016	J	4.991	4.9878	4.9443	+.0435	+.020
F	4.831	4.8295	4.8416	-.0121	-.017	F	4.990	4.9811	4.9440	+.0371	-.015
M	4.818	4.8206	4.8448	-.0152	-.018	M	4.991	4.9719	4.9432	+.0287	-.016
A	4.827	4.8310	4.8481	-.0171	-.000	A	4.981	4.9599	4.9425	+.0174	+.003
M	4.844	4.8336	4.8512	-.0176	+.001	M	4.987	4.9475	4.9414	+.0061	+.004
J	4.838	4.8371	4.8544	-.0173	+.004	J	4.945	4.9344	4.9407	-.0063	+.002
J	4.838	4.8413	4.8574	-.0161	-.012	J	4.910	4.9217	4.9397	-.0180	-.015
A	4.855	4.8461	4.8603	-.0142	-.046	A	4.842	4.9098	4.9388	-.0290	-.046
S	4.844	4.8508	4.8631	-.0123	-.021	S	4.863	4.8995	4.9379	-.0384	-.027
O	4.878	4.8534	4.8659	-.0105	+.037	O	4.873	4.8913	4.9373	-.0460	+.033
N	4.851	4.8595	4.8688	-.0093	+.030	N	4.898	4.8860	4.9365	-.0505	+.031
D	4.850	4.8630	4.8715	-.0085	+.024	D	4.899	4.8835	4.9356	-.0521	+.026
1889						1894					
J	4.871	4.8660	4.8743	-.0083	+.017	J	4.909	4.8840	4.9346	-.0506	+.021
F	4.875	4.8682	4.8770	-.0088	-.017	F	4.884	4.8869	4.9338	-.0469	-.015
M	4.870	4.8700	4.8798	-.0098	-.018	M	4.901	4.8916	4.9331	-.0415	-.015
A	4.859	4.8716	4.8827	-.0111	+.001	A	4.896	4.8974	4.9322	-.0348	+.004
M	4.875	4.8731	4.8853	-.0122	+.003	M	4.911	4.9035	4.9316	-.0281	+.004
J	4.870	4.8748	4.8882	-.0134	+.003	J	4.903	4.9091	4.9309	-.0218	+.002
J	4.890	4.8771	4.8909	-.0138	-.012	J	4.899	4.9138	4.9305	-.0167	-.016
A	4.882	4.8802	4.8937	-.0135	-.046	A	4.934	4.9175	4.9300	-.0125	-.046
S	4.870	4.8843	4.8963	-.0120	-.022	S	4.921	4.9206	4.9295	-.0089	-.027
O	4.897	4.8895	4.8990	-.0095	+.037	O	4.931	4.9233	4.9292	-.0059	+.031
N	4.892	4.8957	4.9018	-.0061	+.030	N	4.930	4.9262	4.9287	-.0025	+.030
D	4.886	4.9027	4.9046	-.0019	+.024	D	4.929	4.9296	4.9284	+.0012	+.027

## APPENDIX

TABLE 30—Continued

## DEFLATED BANK CLEARINGS OUTSIDE NEW YORK CITY

Date	1	2	3	4	5	Date	1	2	3	4	5	
						1900						
1895	J 4.941	4.9335	4.9282	+.0053	+.022	J 5.061	5.0703	5.0743	-.0040	+.026		
	F 4.907	4.9379	4.9283	+.0096	-.014	F 5.063	5.0668	5.0777	-.0109	-.011		
M 4.928	4.9426	4.9283	+.0143	-.014	M 5.064	5.0636	5.0808	-.0172	-.006			
A 4.945	4.9474	4.9282	+.0192	+.004	A 5.059	5.0613	5.0838	-.0225	+.008			
M 4.958	4.9518	4.9282	+.0236	+.003	M 5.067	5.0600	5.0864	-.0264	-.002			
J 4.949	4.9558	4.9284	+.0274	+.002	J 5.073	5.0600	5.0892	-.0292	-.000			
J 4.979	4.9592	4.9284	+.0308	-.016	J 5.060	5.0616	5.0919	-.0303	-.015			
A 4.962	4.9616	4.9290	+.0326	-.047	A 5.067	5.0648	5.0945	-.0297	-.047			
S 4.952	4.9631	4.9296	+.0335	-.028	S 5.053	5.0696	5.0969	-.0273	-.028			
O 4.987	4.9634	4.9302	+.0332	+.030	O 5.070	5.0757	5.0994	-.0237	+.026			
N 4.970	4.9626	4.9312	+.0314	+.030	N 5.082	5.0829	5.1016	-.0187	+.025			
D 4.968	4.9607	4.9324	+.0283	+.028	D 5.080	5.0905	5.1038	-.0133	+.024			
1896	J 4.948	4.9577	4.9336	+.0241	+.022	1901	J 5.102	5.0983	5.1051	-.0074	+.026	
F 4.940	4.9538	4.9350	+.0188	-.014	F 5.100	5.1057	5.1077	-.0020	-.011			
M 4.931	4.9494	4.9366	+.0128	-.013	M 5.106	5.1125	5.1095	+.0030	-.005			
A 4.946	4.9445	4.9384	+.0061	+.005	A 5.142	5.1183	5.1114	+.0069	+.008			
M 4.932	4.9396	4.9401	-.0005	+.002	M 5.150	5.1233	5.1130	+.0103	-.003			
J 4.945	4.9350	4.9423	-.0073	+.001	J 5.128	5.1271	5.1149	+.0122	.000			
J 4.955	4.9307	4.9444	-.0137	-.016	J 5.133	5.1298	5.1165	+.0133	-.014			
A 4.910	4.9272	4.9465	-.0193	-.047	A 5.135	5.1317	5.1180	+.0137	-.047			
S 4.921	4.9245	4.9489	-.0244	-.028	S 5.110	5.1328	5.1192	+.0136	-.028			
O 4.926	4.9229	4.9513	-.0284	+.029	O 5.130	5.1335	5.1208	+.0127	+.026			
N 4.927	4.9225	4.9538	-.0313	+.029	N 5.129	5.1338	5.1221	+.0117	+.024			
D 4.942	4.9234	4.9565	-.0331	+.028	D 5.117	5.1342	5.1234	+.0108	+.023			
1897	J 4.915	4.9257	4.9594	-.0337	+.023	1902	J 5.143	5.1348	5.1246	+.0102	+.027	
F 4.929	4.9296	4.9620	-.0324	-.013	F 5.131	5.1357	5.1258	+.0099	-.010			
M 4.929	4.9350	4.9651	-.0301	-.011	M 5.129	5.1367	5.1270	+.0097	-.003			
A 4.934	4.9416	4.9680	-.0264	+.006	A 5.157	5.1381	5.1285	+.0096	+.008			
M 4.924	4.9493	4.9708	-.0215	+.001	M 5.152	5.1394	5.1298	+.0096	-.005			
J 4.949	4.9578	4.9736	-.0158	+.001	J 5.119	5.1407	5.1312	+.0095	-.001			
J 4.968	4.9665	4.9764	-.0099	-.016	J 5.160	5.1417	5.1324	+.0093	-.014			
A 4.984	4.9750	4.9794	-.0044	-.048	A 5.134	5.1426	5.1337	+.0089	-.046			
S 5.019	4.9827	4.9825	+.0002	-.029	S 5.159	5.1431	5.1349	+.0082	-.027			
O 4.983	4.9892	4.9853	+.0039	+.027	O 5.148	5.1437	5.1364	+.0073	+.026			
N 4.998	4.9941	4.9883	+.0058	+.028	N 5.129	5.1443	5.1378	+.0065	+.023			
D 4.998	4.9972	4.9914	+.0058	+.028	D 5.136	5.1450	5.1392	+.0058	+.022			
1898	J 4.992	4.9989	4.9944	+.0045	+.024	1903	J 5.150	5.1459	5.1404	+.0055	+.027	
F 5.015	4.9994	4.9973	+.0021	-.012	F 5.143	5.1470	5.1418	+.0052	-.010			
M 5.008	4.9992	5.0003	-.0011	-.010	M 5.136	5.1482	5.1433	+.0049	-.002			
A 4.988	4.9991	5.0034	-.0043	+.006	A 5.152	5.1493	5.1448	+.0045	+.008			
M 4.991	4.9998	5.0065	-.0067	-.000	M 5.140	5.1500	5.1465	+.0035	-.006			
J 5.013	5.0013	5.0094	-.0081	+.001	J 5.167	5.1504	5.1481	+.0023	-.002			
J 4.976	5.0047	5.0127	-.0080	-.016	J 5.170	5.1502	5.1498	+.0004	-.013			
M 5.017	5.0099	5.0160	-.0061	-.048	A 5.144	5.1492	5.1517	-.0025	-.046			
S 5.003	5.0162	5.0194	-.0032	-.029	S 5.156	5.1477	5.1536	-.0059	-.027			
O 5.0245	5.0228	5.0017	+.027	-.027	O 5.155	5.1456	5.1555	-.0099	+.026			
N 5.029	5.0338	5.0262	+.0076	+.027	N 5.129	5.1433	5.1574	-.0141	+.022			
D 5.050	5.0436	5.0297	+.0139	+.027	D 5.145	5.1409	5.1594	-.0185	+.021			
1899	J 5.060	5.0534	5.0330	+.0204	+.025	1904	J 5.133	5.1389	5.1614	-.0225	+.027	
F 5.079	5.0630	5.0367	+.0263	-.012	F 5.140	5.1376	5.1634	-.0258	-.010			
M 5.096	5.0711	5.0402	+.0309	-.008	M 5.141	5.1374	5.1654	-.0280	-.001			
A 5.071	5.0776	5.0437	+.0339	+.007	A 5.139	5.1384	5.1674	-.0290	+.008			
M 5.079	5.0853	5.0305	+.0348	+.001	M 5.123	5.1405	5.1696	-.0291	-.008			
J 5.072	5.0804	5.0342	+.0322	-.016	J 5.145	5.1440	5.1715	-.0275	-.002			
J 5.084	5.0860	5.0577	+.0283	-.048	A 5.157	5.1536	5.1757	-.0221	-.045			
A 5.096	5.0841	5.0610	+.0231	-.029	S 5.169	5.1592	5.1776	-.0184	-.026			
S 5.082	5.0812	5.0644	+.0168	+.026	O 5.161	5.1649	5.1795	-.0146	+.026			
N 5.078	5.0779	5.0677	+.0102	+.026	N 5.193	5.1705	5.1815	-.0110	+.022			
D 5.073	5.0742	5.0711	+.0031	+.026	D 5.190	5.1758	5.1835	-.0077	+.020			

## BANK CLEARINGS

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TABLE 30—Continued

## DEFLATED BANK CLEARINGS OUTSIDE NEW YORK CITY

Date	1	2	3	4	5	Date	1	2	3	4	5
1905						1910					
J	5.162	5.1806	5.1854	-.0048	.027	J	5.277	5.2842	5.2618	+.0224	+.025
F	5.177	5.1852	5.1871	-.0019	-.010	F	5.280	5.2845	5.2636	+.0209	-.009
M	5.195	5.1894	5.1890	+.0004	.001	M	5.298	5.2842	5.2654	+.0188	+.006
A	5.189	5.1934	5.1908	+.0026	.008	A	5.288	5.2835	5.2675	+.0160	+.008
M	5.204	5.1973	5.1926	+.0047	-.009	M	5.269	5.2825	5.2693	+.0132	-.014
J	5.202	5.2011	5.1943	+.0068	-.003	J	5.283	5.2804	5.2714	+.0090	-.005
J	5.187	5.2046	5.1960	+.0086	-.012	J	5.277	5.2792	5.2733	+.0059	-.012
A	5.207	5.2081	5.1976	+.0105	-.044	A	5.274	5.2781	5.2752	+.0029	-.044
S	5.210	5.2112	5.1995	+.0117	-.026	S	5.275	5.2774	5.2771	+.0003	-.023
O	5.201	5.2141	5.2011	+.0130	+.026	O	5.270	5.2770	5.2791	-.0021	+.028
N	5.220	5.2166	5.2027	+.0139	+.022	N	5.282	5.2770	5.2810	-.0040	+.022
D	5.224	5.2187	5.2043	+.0144	+.019	D	5.284	5.2773	5.2830	-.0057	+.019
1906						1911					
J	5.242	5.2206	5.2058	+.0148	.027	J	5.280	5.2780	5.2850	-.0070	+.024
F	5.234	5.2220	5.2074	+.0146	-.010	F	5.274	5.2789	5.2867	-.0078	-.009
M	5.226	5.2231	5.2090	+.0141	.002	M	5.285	5.2801	5.2885	-.0084	+.006
A	5.207	5.2242	5.2104	+.0138	.008	A	5.270	5.2812	5.2901	-.0089	+.008
M	5.220	5.2251	5.2117	+.0134	-.010	M	5.288	5.2827	5.2920	-.0093	-.014
J	5.227	5.2260	5.2132	+.0128	-.004	J	5.293	5.2839	5.2936	-.0097	-.005
J	5.217	5.2274	5.2146	+.0128	-.012	J	5.281	5.2851	5.2950	-.0099	-.012
A	5.235	5.2295	5.2159	+.0136	-.043	A	5.291	5.2864	5.2963	-.0099	-.044
S	5.220	5.2323	5.2170	+.0153	-.025	S	5.295	5.2877	5.2975	-.0098	-.023
O	5.247	5.2361	5.2183	+.0178	+.027	O	5.274	5.2888	5.2983	-.0095	+.028
N	5.249	5.2407	5.2196	+.0211	+.022	N	5.292	5.2903	5.2994	-.0091	+.022
D	5.233	5.2457	5.2207	+.0250	+.019	D	5.287	5.2921	5.3004	-.0083	+.019
1907						1912					
J	5.252	5.2504	5.2219	+.0285	.027	J	5.294	5.2940	5.3011	-.0071	+.023
F	5.251	5.2542	5.2230	+.0312	-.010	F	5.303	5.2964	5.3015	-.0051	-.009
M	5.249	5.2566	5.2243	+.0323	+.003	M	5.295	5.2991	5.3021	-.0030	+.006
A	5.250	5.2575	5.2254	+.0321	+.008	A	5.311	5.3018	5.3025	-.0007	+.008
M	5.261	5.2543	5.2263	+.0280	-.011	M	5.311	5.3049	5.3028	+.0021	-.014
J	5.243	5.2498	5.2274	+.0224	-.004	J	5.289	5.3079	5.3031	+.0048	-.005
J	5.261	5.2433	5.2284	+.0149	-.012	J	5.308	5.3108	5.3033	+.0075	-.012
A	5.257	5.2352	5.2292	+.0060	-.043	A	5.318	5.3132	5.3034	+.0098	-.044
S	5.240	5.2256	5.2301	-.0045	-.024	S	5.305	5.3155	5.3034	+.0121	-.023
O	5.271	5.2174	5.2309	-.0135	+.027	O	5.329	5.3171	5.3034	+.0137	+.029
N	5.168	5.2085	5.2318	-.0233	+.021	N	5.320	5.3182	5.3034	+.0148	+.022
D	5.145	5.2016	5.2326	-.0310	+.019	D	5.313	5.3189	5.3035	+.0154	+.020
1908						1913					
J	5.192	5.1951	5.2334	-.0383	+.026	J	5.331	5.3191	5.3035	+.0156	+.022
F	5.179	5.1904	5.2343	-.0439	-.010	F	5.334	5.3187	5.3035	+.0152	-.010
M	5.186	5.1879	5.2351	-.0472	+.004	M	5.306	5.3185	5.3037	+.0148	+.005
A	5.192	5.1877	5.2358	-.0481	+.007	A	5.317	5.3184	5.3040	+.0144	+.007
M	5.189	5.1888	5.2367	-.0479	-.013	M	5.318	5.3184	5.3042	+.0142	-.014
J	5.198	5.1930	5.2376	-.0446	-.005	J	5.312	5.3188	5.3045	+.0143	-.004
J	5.218	5.1979	5.2384	-.0405	-.011	J	5.319	5.3195	5.3048	+.0147	-.011
A	5.201	5.2056	5.2391	-.0335	-.043	A	5.308	5.3202	5.3052	+.0150	-.043
S	5.229	5.2131	5.2401	-.0270	-.024	S	5.324	5.3213	5.3057	+.0156	-.022
O	5.217	5.2206	5.2411	-.0205	+.027	O	5.328	5.3217	5.3061	+.0156	+.029
N	5.227	5.2276	5.2420	-.0144	+.021	N	5.306	5.3219	5.3067	+.0152	+.023
D	5.239	5.2349	5.2431	-.0082	+.019	D	5.321	5.3215	5.3074	+.0141	+.020
1909						1914					
J	5.234	5.2398	5.2442	-.0044	+.026	J	5.327	5.3202	5.3081	+.0121	+.021
F	5.240	5.2448	5.2453	-.0005	-.009	F	5.319	5.3180	5.3089	+.0091	-.011
M	5.252	5.2495	5.2467	+.0028	+.005	M	5.316	5.3151	5.3098	+.0053	+.004
A	5.258	5.2539	5.2480	+.0059	+.008	A	5.324	5.3113	5.3108	+.0005	+.007
M	5.246	5.2584	5.2492	+.0092	-.013	M	5.301	5.3074	5.3116	-.0042	-.014
J	5.264	5.2629	5.2507	+.0122	-.005	J	5.317	5.3029	5.3128	-.0099	-.003
J	5.265	5.2653	5.2523	+.0150	-.012	J	5.325	5.2984	5.3140	-.0156	-.011
A	5.269	5.2714	5.2538	+.0176	-.044	A	5.280	5.2942	5.3151	-.0209	-.042
S	5.279	5.2751	5.2552	+.0198	-.023	S	5.277	5.2906	5.3162	-.0256	-.021
O	5.274	5.2782	5.2568	+.0214	+.028	O	5.271	5.2875	5.3176	-.0301	+.030
N	5.282	5.2806	5.2585	+.0221	+.022	N	5.264	5.2857	5.3191	-.0334	+.023
D	5.289	5.2822	5.2599	+.0223	+.019	D	5.279	5.2851	5.3205	-.0354	+.021

## APPENDIX

TABLE 30—Continued

## DEFLATED BANK CLEARINGS OUTSIDE NEW YORK CITY

Date	1	2	3	4	5	Date	1	2	3	4	5
1915						1917					
J	5.286	5.2857	5.3221	-.0364	+.019	J	5.407	5.4011	5.3861	+.0150	+.017
F	5.305	5.2878	5.3237	-.0359	-.013	F	5.403	5.4030	5.3896	+.0134	-.017
M	5.308	5.2915	5.3254	-.0339	+.003	M	5.411	5.4045	5.3933	+.0112	+.001
A	5.311	5.2962	5.3272	-.0310	+.005	A	5.403	5.4055	5.3969	+.0086	+.002
M	5.300	5.3019	5.3293	-.0274	-.014	M	5.411	5.4060	5.4002	+.0058	-.014
J	5.308	5.3081	5.3312	-.0231	-.001	J	5.397	5.4063	5.4039	+.0024	+.002
J	5.310	5.3146	5.3336	-.0190	-.011	J	5.391	5.4067	5.4072	-.0005	-.011
A	5.300	5.3209	5.3359	-.0150	-.041	A	5.411	5.4075	5.4105	-.0030	-.036
S	5.318	5.3271	5.3379	-.0108	-.019	S	5.393	5.4089	5.4138	-.0049	-.016
O	5.324	5.3327	5.3403	-.0076	+.030	O	5.425	5.4113	5.4172	-.0059	+.030
N	5.353	5.3382	5.3428	-.0046	+.023	N	5.447	5.4146	5.4203	-.0057	+.021
D	5.360	5.3436	5.3453	-.0017	+.022	D	5.406	5.4187	5.4231	-.0044	+.024
1916						1918					
J	5.343	5.3491	5.3479	+.0012	+.018	J	5.409	5.4232	5.4261	-.0029	+.015
F	5.363	5.3547	5.3506	+.0041	-.015	F	5.408	5.4279	5.4289	-.0010	-.019
M	5.368	5.3606	5.3534	+.0072	+.002	M	5.430	5.4321	5.4315	+.0006	.000
A	5.352	5.3664	5.3564	+.0100	+.004	A	5.442	5.4356	5.4340	+.0016	+.001
M	5.378	5.3720	5.3595	+.0125	-.014	M	5.447	5.4381	5.4364	+.0017	-.013
J	5.372	5.3773	5.3630	+.0143	.000	J	5.431	5.4396	5.4387	+.0009	+.003
J	5.362	5.3820	5.3659	+.0161	-.011	J	5.451	5.4402	5.4410	-.0008	-.010
A	5.387	5.3862	5.3693	+.0169	-.039	A	5.466	5.4401	5.4428	-.0027	-.035
S	5.392	5.3899	5.3722	+.0177	-.018	S	5.438	5.4397	5.4444	-.0047	-.014
O	5.394	5.3932	5.3758	+.0174	+.030	O	5.451	5.4394	5.4461	-.0067	+.029
N	5.408	5.3960	5.3791	+.0169	+.022	N	5.434	5.4395	5.4477	-.0082	+.018
D	5.398	5.3987	5.3825	+.0162	+.023	D	5.420	5.4401	5.4490	-.0089	+.025
						1919					
						J	5.446	5.4415	5.4500	-.0085	+.015

## DEFLATED BANK DEBITS FOR 140 OUTSIDE CITIES

Date	1	2	3	4	5	Date	1	2	3	4	5
1919						1921					
I	5.508	5.5035	5.5121	-.0086	+.015	I	5.503	5.5123	5.5269	-.0146	+.013
F	5.503	5.5058	5.5132	-.0074	-.020	F	5.502	5.5090	5.5273	-.0183	-.020
M	5.489	5.5091	5.5143	-.0052	.000	M	5.497	5.5063	5.5279	-.0216	+.001
A	5.495	5.5132	5.5153	-.0021	.000	A	5.501	5.5042	5.5283	-.0241	.000
M	5.522	5.5180	5.5161	+.0019	-.013	M	5.493	5.5029	5.5288	-.0259	-.013
J	5.534	5.5233	5.5169	+.0064	+.005	J	5.505	5.5025	5.5294	-.0269	+.008
J	5.548	5.5288	5.5177	+.0111	-.010	J	5.496	5.5032	5.5300	-.0268	-.010
A	5.544	5.5340	5.5184	+.0156	-.034	A	5.512	5.5048	5.5305	-.0257	-.034
S	5.548	5.5386	5.5190	+.0196	-.013	S	5.523	5.5074	5.5311	-.0237	-.011
O	5.537	5.5423	5.5198	+.0225	+.028	O	5.505	5.5105	5.5318	-.0213	+.025
N	5.533	5.5448	5.5204	+.0244	+.015	N	5.514	5.5140	5.5325	-.0185	+.010
D	5.553	5.5462	5.5210	+.0252	+.027	D	5.523	5.5174	5.5333	-.0159	+.029
1920						1922					
I	5.558	5.5464	5.5212	+.0252	+.014	I	5.504	5.5206	5.5343	-.0137	+.012
F	5.531	5.5457	5.5218	+.0239	-.020	F	5.531	5.5236	5.5350	-.0114	-.020
M	5.551	5.5443	5.5223	+.0220	.000	M	5.535	5.5263	5.5361	-.0098	+.002
A	5.539	5.5423	5.5228	+.0195	.000	A	5.524	5.5289	5.5371	-.0082	+.001
M	5.520	5.5399	5.5232	+.0167	-.013	M	5.536	5.5318	5.5382	-.0064	-.012
J	5.531	5.5371	5.5238	+.0133	+.007	J	5.550	5.5353	5.5393	-.0340	+.009
J	5.540	5.5340	5.5242	+.0098	-.010	J	5.532	5.5394	5.5406	-.0012	-.010
A	5.520	5.5309	5.5246	+.0059	-.033	A	5.540	5.5442	5.5418	+.0024	-.035
S	5.541	5.5270	5.5251	+.0019	-.012	S	5.549	5.5494	5.5433	+.0061	-.011
O	5.518	5.5231	5.5254	-.0023	+.027	O	5.543	5.5547	5.5447	+.0100	+.024
N	5.530	5.5194	5.5259	-.0065	+.012	N	5.539	5.5598	5.5463	+.0135	+.008
D	5.539	5.5157	5.5263	-.0106	+.028	D	5.558	5.5644	5.5477	+.0167	+.030

## BANK CLEARINGS

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TABLE 30—Continued

## DEFLATED BANK DEBITS FOR 140 OUTSIDE CITIES

Date	1	2	3	4	5	Date	1	2	3	4	5
1923						1928	5.660	5.6640	5.6756	-.0116	+.009
J	5.579	5.5683	5.5493	+.0190	+.011	J	5.652	5.6657	5.6772	-.0115	-.015
F	5.585	5.5713	5.5510	+.0203	-.019	F	5.652	5.6657	5.6778	-.0109	+.006
M	5.581	5.5733	5.5528	+.0205	+.003	M	5.674	5.6678	5.6787	-.0102	+.005
A	5.579	5.5743	5.5546	+.0197	+.002	A	5.677	5.6700	5.6802	-.0102	+.005
M	5.587	5.5747	5.5563	+.0184	-.011	M	5.688	5.6723	5.6817	-.0094	-.007
J	5.584	5.5743	5.5583	+.0160	+.010	J	5.700	5.6747	5.6830	-.0083	+.009
J	5.561	5.5734	5.5603	+.0131	-.010	J	5.650	5.6767	5.6841	-.0074	-.009
A	5.565	5.5720	5.5623	+.0097	-.036	A	5.672	5.6786	5.6849	-.0063	-.040
S	5.552	5.5704	5.5641	+.0063	-.010	S	5.671	5.6805	5.6856	-.0051	-.010
O	5.561	5.5684	5.5662	+.0022	+.023	O	5.683	5.6825	5.6858	-.0033	+.020
N	5.564	5.5668	5.5683	-.0015	+.006	N	5.682	5.6851	5.6859	-.0008	+.003
D	5.567	5.5654	5.5703	-.0049	+.030	D	5.701	5.6881	5.6863	+.0018	+.029
1924						1929	5.696	5.6917	5.6867	+.0050	+.009
J	5.562	5.5645	5.5726	-.0081	+.011	J	5.703	5.6958	5.6865	+.0093	-.014
F	5.576	5.5644	5.5746	-.0102	-.018	M	5.697	5.6999	5.6860	+.0139	+.006
M	5.568	5.5653	5.5769	-.0116	+.004	A	5.693	5.7035	5.6853	+.0182	+.005
A	5.578	5.5667	5.5792	-.0125	+.003	M	5.686	5.7065	5.6842	+.0223	-.007
M	5.572	5.5689	5.5815	-.0126	-.010	I	5.683	5.7085	5.7085	+.009	+.009
J	5.561	5.5716	5.5837	-.0121	+.010	J	5.715	5.7085	5.7085	-.009	-.040
J	5.572	5.5748	5.5858	-.0110	-.010	A	5.742	5.7086	5.7069	+.010	+.019
A	5.575	5.5783	5.5880	-.0097	-.037	S	5.708	5.7069	5.7041	+.003	+.029
S	5.576	5.5820	5.5903	-.0083	-.010	O	5.741	5.7041	5.6955	+.009	+.029
O	5.590	5.5859	5.5923	-.0064	+.022	N	5.734	5.7002	5.6937	+.002	+.002
N	5.574	5.5898	5.5944	-.0046	+.005	D	5.669	5.6955	5.6937	+.009	+.009
D	5.592	5.5939	5.5963	-.0026	+.030						
1925						1930	5.670	5.6900	5.6839	+.008	+.014
J	5.619	5.5979	5.5985	-.0006	+.010	F	5.663	5.6773	5.6773	+.007	+.005
F	5.611	5.6019	5.6005	+.0014	+.017	M	5.662	5.6703	5.6634	+.006	+.006
M	5.605	5.6057	5.6025	+.0032	+.004	A	5.664	5.6768	5.6684	+.009	+.009
A	5.609	5.6083	5.6045	+.0038	+.005	M	5.667	5.6703	5.6650	+.009	+.009
M	5.603	5.6116	5.6064	+.0052	-.010	J	5.678	5.6568	5.6568	+.010	+.010
J	5.620	5.6146	5.6084	+.0062	+.010	J	5.660	5.6508	5.6453	+.019	+.019
J	5.621	5.6172	5.6103	+.0069	-.009	A	5.650	5.6453	5.6408	+.010	+.010
A	5.612	5.6195	5.6122	+.0073	-.038	S	5.638	5.6408	5.6371	+.019	+.019
S	5.621	5.6226	5.6141	+.0085	-.010	O	5.652	5.6371	5.6337	+.002	+.002
O	5.633	5.6244	5.6162	+.0082	+.021	N	5.609	5.6337	5.6306	+.029	+.029
N	5.610	5.6259	5.6181	+.0078	+.004	D	5.645	5.6306	5.6306	+.009	+.009
D	5.622	5.6271	5.6202	+.0069	+.030						
1926						1931	5.641	5.6275	5.6238	+.008	-.014
J	5.634	5.6280	5.6221	+.0059	+.010	F	5.604	5.6238	5.6196	+.007	+.007
F	5.637	5.6286	5.6243	+.0043	-.016	M	5.594	5.6196	5.6149	+.005	+.005
M	5.642	5.6289	5.6265	+.0024	+.005	A	5.620	5.6149	5.6097	-.006	-.006
A	5.639	5.6290	5.6285	+.0005	+.004	M	5.605	5.6097	5.6042	+.009	+.009
M	5.616	5.6291	6.5306	-.0015	-.009	J	5.626	5.6042	5.5981	+.009	+.009
J	5.611	5.6293	5.6329	-.0036	+.010	J	5.610	5.5981	5.5914	-.009	-.009
J	5.653	5.6298	5.6352	-.0054	-.009	A	5.594	5.5914	5.5841	-.010	-.010
A	5.632	5.6307	5.6374	-.0067	-.039	S	5.587	5.5841	5.5762	+.019	+.019
S	5.626	5.6321	5.6398	-.0077	-.010	O	5.590	5.5762	5.5675	+.002	+.002
O	5.632	5.6339	5.6423	-.0084	+.021	N	5.527	5.5675	5.5563	+.029	+.029
N	5.618	5.6362	5.6444	-.0083	+.004	D	5.557	5.5563	5.5485	+.008	+.008
D	5.636	5.6387	5.6469	-.0082	+.029						
1927						1932	5.562	5.5485	5.5385	+.008	-.014
J	5.639	5.6414	5.6494	-.0080	+.009	F	5.527	5.5385	5.5283	+.007	+.007
F	5.656	5.6442	5.6517	-.0075	-.016	M	5.502	5.5283	5.5182	+.005	+.005
M	5.653	5.6468	5.6542	-.0074	+.006	A	5.548	5.5182	5.5084	-.006	-.006
A	5.663	5.6492	5.6566	-.0074	+.004	M	5.490	5.5084	5.4994	+.009	+.009
M	5.646	5.6515	5.6589	-.0074	-.008	J	5.514	5.4994	5.4915	-.009	-.009
J	5.657	5.6536	5.6613	-.0077	+.010	J	5.504	5.4915	5.4849	-.040	-.040
J	5.648	5.6555	5.6637	-.0082	-.009	A	5.498	5.4849	5.4799	-.010	-.010
A	5.658	5.6571	5.6658	-.0087	-.039	S	5.483	5.4799	5.4766	+.019	+.019
S	5.664	5.6586	5.6678	-.0092	-.010	O	5.464	5.4766	5.4750	+.002	+.002
O	5.650	5.6599	5.6698	-.0099	+.020	D	5.481	5.4750	5.4747	+.029	+.029
N	5.658	5.6611	5.6718	-.0107	+.003						
D	5.662	5.6625	5.6737	-.0112	+.029						

## APPENDIX

TABLE 30—Concluded

## DEFLATED BANK DEBITS FOR 140 OUTSIDE CITIES

Date	1	2	3	4	5	Date	1	2	3	4	5
1933						1935					
J	5.478	5.4755			+.008	J	5.530				+.008
F	5.491	5.4771			-.014	F	5.535				-.014
M	*	5.4793			+.007	M	5.553				+.007
A	5.451	5.4816			+.005	A	5.563				+.005
M	5.472	5.4844			-.006	M	5.554				-.006
J	5.520	5.4872			+.009	J	5.558				+.009
J	5.539	5.4904			-.009	J	5.578				-.009
A	5.520	5.4937			-.040	A	5.579				-.040
S	5.490	5.4972			.010	S	5.546				-.010
O	5.480	5.5006			+.019	O	5.549				+.019
N	5.473	5.5039			+.002	N	5.573				+.002
D	5.482	5.5067			+.029	D	5.591				+.029
1934						1936					
J	5.497	5.5089			+.008	J	5.568				+.008
F	5.504	5.5106			-.014						
M	5.516	5.5120			+.007						
A	5.530	5.5133			+.005						
M	5.535				-.006						
J	5.546				+.009						
J	5.521				-.009						
A	5.536				-.040						
S	5.500				-.010						
O	5.507				+.019						
N	5.502				+.002						
D	5.530				+.029						

\*Not available, complete data not having been reported on account of bank holidays.

## PIG IRON PRODUCTION

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TABLE 31

DAILY AVERAGE PIG IRON PRODUCTION<sup>1</sup> IN THE UNITED STATES, MONTHLY,  
JANUARY 1877-JANUARY 1936

- Col. 1. Logarithms of Data (see Table 27—Column 4).
- Col. 2. Cyclical Curve (logarithms).
- Col. 3. Trend Curve (logarithms).
- Col. 4. Deviations of Cyclical Curve (logarithms) from Trend  
Curve (logarithms).

For details of the nature of the graduations given in Columns 2 and 3 of this table, see Appendix D.

<sup>1</sup> These figures do not include charcoal pig iron.

## APPENDIX

TABLE 31

PIG IRON PRODUCTION<sup>1</sup> IN THE UNITED STATES

Date	1	2	3	4	Date	1	2	3	4
1877					1882				
J	.673	.6661	.6627	+.0034	J	1.041	1.0161	1.0197	-.0036
F	.679	.6683	.6652	+.0031	F	1.055	1.0199	1.0216	-.0017
M	.684	.6706	.6681	+.0025	M	1.051	1.0239	1.0233	+.0006
A	.686	.6733	.6715	+.0018	A	1.043	1.0281	1.0247	+.0034
M	.681	.6771	.6752	+.0019	M	1.033	1.0323	1.0258	+.0065
J	.674	.6821	.6789	+.0032	J	1.024	1.0363	1.0266	+.0097
A	.672	.6886	.6831	+.0055	J	1.013	1.0400	1.0271	+.0129
S	.676	.6965	.6877	+.0088	A	1.010	1.0434	1.0274	+.0160
O	.685	.7053	.6926	+.0127	S	1.020	1.0467	1.0273	+.0194
N	.699	.7147	.6977	+.0170	O	1.047	1.0501	1.0271	+.0230
D	.716	.7241	.7029	+.0212	N	1.063	1.0535	1.0267	+.0268
	.735	.7331	.7084	+.0247	D	1.073	1.0369	1.0262	+.0307
1878					1883				
J	.756	.7410	.7140	+.0270	J	1.079	1.0600	1.0256	+.0344
F	.771	.7476	.7200	+.0276	F	1.080	1.0623	1.0248	+.0375
M	.777	.7522	.7261	+.0261	M	1.075	1.0632	1.0241	+.0391
A	.771	.7548	.7324	+.0224	A	1.060	1.0623	1.0235	+.0388
M	.760	.7550	.7389	+.0161	M	1.048	1.0593	1.0229	+.0364
J	.751	.7530	.7455	+.0075	J	1.045	1.0542	1.0223	+.0319
A	.736	.7490	.7524	-.0034	J	1.043	1.0476	1.0219	+.0257
S	.726	.7435	.7595	-.0160	A	1.041	1.0401	1.0216	+.0185
O	.720	.7374	.7666	-.0292	S	1.038	1.0325	1.0211	+.0114
N	.726	.7317	.7740	-.0423	O	1.032	1.0256	1.0210	+.0046
D	.732	.7273	.7816	-.0543	N	1.026	1.0199	1.0210	-.0011
	.738	.7254	.7890	-.0636	D	1.016	1.0156	1.0213	-.0057
1879					1884				
J	.741	.7269	.7063	-.0694	J	.997	1.0126	1.0218	-.0092
F	.744	.7323	.8040	-.0717	F	.985	1.0105	1.0224	-.0119
M	.747	.7421	.8119	-.0698	M	.992	1.0092	1.0232	-.0140
A	.751	.7562	.8197	-.0635	A	1.009	1.0082	1.0242	-.0160
M	.759	.7744	.8273	-.0529	M	1.019	1.0073	1.0254	-.0181
J	.777	.7959	.8352	-.0393	J	1.025	1.0063	1.0267	-.0204
A	.806	.8197	.8430	-.0233	J	1.031	1.0052	1.0283	-.0231
S	.835	.8449	.8509	-.0060	A	1.010	1.0037	1.0299	-.0262
O	.864	.8700	.8587	+.0113	S	.993	1.0016	1.0319	-.0303
N	.894	.8940	.8666	+.0274	O	.996	.9989	1.0339	-.0350
D	.921	.9155	.8743	+.0412	N	1.004	.9956	1.0362	-.0406
	.946	.9338	.8821	+.0517	D	.975	.9918	1.0386	-.0468
1880					1885				
J	.966	.9483	.8896	+.0587	J	.957	.9877	1.0411	-.0534
F	.982	.9588	.8972	+.0616	F	.991	.9840	1.0438	-.0598
M	.989	.9654	.9047	+.0607	M	1.004	.9812	1.0466	-.0634
A	.989	.9688	.9120	+.0568	A	.996	.9800	1.0495	-.0695
M	.978	.9696	.9190	+.0506	M	.987	.9813	1.0528	-.0715
J	.958	.9688	.9259	+.0429	J	.982	.9852	1.0560	-.0708
A	.935	.9671	.9328	+.0343	J	.993	.9921	1.0595	-.0674
S	.927	.9654	.9397	+.0257	A	.996	1.0020	1.0632	-.0612
O	.935	.9641	.9463	+.0178	S	.991	1.0144	1.0670	-.0526
N	.949	.9637	.9528	+.0109	O	1.010	1.0289	1.0709	-.0420
D	.961	.9642	.9592	+.0050	N	1.049	1.0451	1.0751	-.0300
	.974	.9657	.9653	+.0004	D	1.083	1.0624	1.0793	-.0169
1881					1886				
J	.987	.9682	.9709	-.0027	J	1.086	1.0805	1.0837	-.0032
F	.997	.9714	.9767	-.0053	F	1.078	1.0991	1.0882	+.0109
M	1.001	.9754	.9820	-.0066	M	1.108	1.1179	1.0929	+.0250
A	.999	.9798	.9871	-.0073	A	1.153	1.1362	1.0979	+.0383
M	.991	.9844	.9918	-.0074	M	1.177	1.1532	1.1031	+.0501
J	.984	.9891	.9966	-.0075	J	1.185	1.1683	1.1081	+.0602
A	.977	.9937	1.0009	-.0072	J	1.180	1.1805	1.1136	+.0669
S	.975	.9980	1.0048	-.0068	A	1.170	1.1893	1.1190	+.0703
O	.980	1.0020	1.0084	-.0064	S	1.173	1.1946	1.1249	+.0697
N	.986	1.0056	1.0117	-.0061	O	1.187	1.1966	1.1307	+.0659
D	.998	1.0091	1.0147	-.0056	N	1.194	1.1961	1.1368	+.0593
	1.015	1.0125	1.0173	-.0048	D	1.200	1.1942	1.1427	+.0515

<sup>1</sup> Except charcoal pig iron.

# PIG IRON PRODUCTION

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TABLE 31—Continued

## PIG IRON PRODUCTION<sup>1</sup> IN THE UNITED STATES

Date	1	2	3	4	Date	1	2	3	4
1887					1892				
J	1.211	1.1921	1.1486	+.0435	J	1.412	1.4082	1.3276	+.0806
F	1.219	1.1907	1.1546	+.0361	F	1.413	1.4062	1.3252	+.0810
M	1.223	1.1906	1.1605	+.0301	M	1.407	1.3992	1.3228	+.0764
A	1.231	1.1917	1.1665	+.0252	A	1.389	1.3895	1.3204	+.0691
M	1.166	1.1939	1.1727	+.0212	M	1.370	1.3795	1.3180	+.0615
J	1.084	1.1965	1.1786	+.0179	J	1.360	1.3718	1.3156	+.0562
J	1.113	1.1988	1.1846	+.0142	J	1.344	1.3679	1.3132	+.0547
A	1.188	1.2004	1.1905	+.0099	A	1.322	1.3681	1.3108	+.0573
S	1.245	1.2011	1.1962	+.0049	S	1.326	1.3714	1.3087	+.0627
O	1.264	1.2009	1.2018	-.0009	O	1.354	1.3760	1.3065	+.0695
N	1.266	1.2002	1.2072	-.0070	N	1.377	1.3794	1.3043	+.0751
D	1.255	1.1991	1.2125	-.0134	D	1.379	1.3793	1.3024	+.0769
1888					1893				
J	1.211	1.1982	1.2179	-.0197	J	1.372	1.3741	1.3005	+.0736
F	1.164	1.1978	1.2230	-.0252	F	1.376	1.3630	1.2986	+.0644
M	1.161	1.1981	1.2279	-.0298	M	1.386	1.3461	1.2968	+.0493
A	1.181	1.1994	1.2328	-.0334	A	1.393	1.3240	1.2951	+.0289
M	1.193	1.2020	1.2373	-.0353	M	1.388	1.2976	1.2936	+.0040
J	1.183	1.2061	1.2419	-.0358	J	1.354	1.2681	1.2021	-.0240
J	1.182	1.2118	1.2462	-.0344	J	1.254	1.2366	1.2007	-.0541
A	1.204	1.2191	1.2504	-.0313	A	1.114	1.2045	1.2896	-.0851
J	1.223	1.2276	1.2547	-.0271	S	1.027	1.1736	1.2885	-.1149
S	1.245	1.2368	1.2589	-.0221	O	1.021	1.1459	1.2876	-.1417
O	1.273	1.2459	1.2630	-.0171	N	1.095	1.1236	1.2870	-.1634
N	1.293	1.2542	1.2671	-.0129	D	1.146	1.1092	1.2866	-.1774
1889					1894				
J	1.291	1.2611	1.2711	-.0100	J	1.151	1.1042	1.2862	-.1820
F	1.283	1.2662	1.2751	-.0089	F	1.179	1.1092	1.2862	-.1770
M	1.284	1.2697	1.2792	-.0095	M	1.236	1.1237	1.2865	-.1628
A	1.273	1.2721	1.2832	-.0111	A	1.236	1.1459	1.2869	-.1410
M	1.254	1.2741	1.2871	-.0130	M	1.095	1.1730	1.2873	-.1143
J	1.247	1.2764	1.2912	-.0148	J	1.026	1.2018	1.2881	-.0863
J	1.256	1.2799	1.2952	-.0153	J	1.159	1.2298	1.2890	-.0592
A	1.260	1.2850	1.2991	-.0141	A	1.281	1.2549	1.2902	-.0353
S	1.273	1.2924	1.3030	-.0106	S	1.334	1.2764	1.2918	-.0154
O	1.305	1.3023	1.3069	-.0046	O	1.349	1.2947	1.2933	+.0014
N	1.331	1.3146	1.3108	+.0038	N	1.371	1.3105	1.2951	+.0154
D	1.346	1.3291	1.3146	+.0145	D	1.375	1.3246	1.2972	+.0274
1890					1895				
J	1.355	1.3449	1.3182	+.0267	J	1.363	1.3379	1.2996	+.0383
F	1.366	1.3606	1.3219	+.0387	F	1.345	1.3509	1.3019	+.0490
M	1.376	1.3746	1.3252	+.0494	M	1.335	1.3635	1.3046	+.0589
A	1.381	1.3850	1.3283	+.0567	A	1.331	1.3758	1.3073	+.0685
M	1.385	1.3903	1.3312	+.0591	M	1.329	1.3879	1.3101	+.0778
J	1.379	1.3893	1.3340	+.0553	J	1.351	1.4001	1.3132	+.0869
J	1.361	1.3820	1.3365	+.0455	J	1.386	1.4125	1.3166	+.0959
A	1.355	1.3688	1.3386	+.0302	A	1.423	1.4251	1.3200	+.1051
S	1.371	1.3515	1.3402	+.0113	S	1.453	1.4374	1.3235	+.1139
O	1.377	1.3319	1.3416	-.0097	O	1.479	1.4481	1.3276	+.1205
N	1.381	1.3123	1.3427	-.0304	N	1.494	1.4557	1.3316	+.1241
D	1.363	1.2949	1.3436	-.0487	D	1.482	1.4583	1.3357	+.1226
1891					1896				
J	1.300	1.2813	1.3440	-.0627	J	1.460	1.4547	1.3401	+.1146
F	1.240	1.2729	1.3440	-.0711	F	1.437	1.4443	1.3449	+.0994
M	1.179	1.2704	1.3438	-.0734	M	1.422	1.4276	1.3498	+.0778
A	1.144	1.2739	1.3432	-.0693	A	1.420	1.4061	1.3549	+.0512
M	1.211	1.2832	1.3424	-.0592	M	1.411	1.3820	1.3600	+.0220
J	1.312	1.2976	1.3412	-.0436	J	1.396	1.3576	1.3656	-.0080
J	1.362	1.3159	1.3400	-.0241	J	1.361	1.3353	1.3712	-.0359
A	1.372	1.3367	1.3384	-.0017	A	1.286	1.3167	1.3767	-.0600
S	1.390	1.3580	1.3364	+.0216	S	1.208	1.3028	1.3822	-.0794
O	1.414	1.3776	1.3345	+.0431	O	1.200	1.2944	1.3882	-.0938
N	1.423	1.3936	1.3323	+.0613	N	1.259	1.2916	1.3939	-.1023
D	1.420	1.4048	1.3301	+.0747	D	1.317	1.2943	1.3998	-.1055

<sup>1</sup> Except charcoal pig iron.

## APPENDIX

TABLE 31—Continued

PIG IRON PRODUCTION<sup>1</sup> IN THE UNITED STATES

Date	1	2	3	4	Date	1	2	3	4
1897					1902				
J	1.349	1.3024	1.4051	-.1027	J	1.666	1.6613	1.6359	+.0254
F	1.366	1.3152	1.4107	-.0955	F	1.652	1.6625	1.6373	+.0252
M	1.381	1.3321	1.4161	-.0840	M	1.668	1.6636	1.6389	+.0247
A	1.386	1.3518	1.4216	-.0698	A	1.692	1.6651	1.6404	+.0247
M	1.382	1.3732	1.4268	-.0536	M	1.697	1.6668	1.6421	+.0247
J	1.375	1.3948	1.4318	-.0370	J	1.683	1.6690	1.6437	+.0253
J	1.369	1.4152	1.4367	-.0215	J	1.668	1.6723	1.6453	+.0270
A	1.394	1.4335	1.4415	-.0080	A	1.675	1.6769	1.6470	+.0299
S	1.434	1.4491	1.4460	+.0031	S	1.675	1.6832	1.6485	+.0347
O	1.466	1.4618	1.4505	+.0113	O	1.679	1.6908	1.6503	+.0405
N	1.489	1.4720	1.4547	+.0173	N	1.679	1.6990	1.6519	+.0471
D	1.500	1.4800	1.4589	+.0211	D	1.695	1.7069	1.6538	+.0531
1898					1903				
J	1.500	1.4864	1.4628	+.0236	J	1.677	1.7130	1.6558	+.0572
F	1.505	1.4913	1.4667	+.0246	F	1.696	1.7163	1.6579	+.0584
M	1.507	1.4950	1.4704	+.0246	M	1.710	1.7160	1.6602	+.0558
A	1.505	1.4974	1.4740	+.0234	A	1.729	1.7119	1.6627	+.0492
M	1.497	1.4985	1.4776	+.0209	M	1.743	1.7042	1.6653	+.0389
J	1.485	1.4984	1.4813	+.0171	J	1.746	1.6935	1.6682	+.0253
J	1.472	1.4975	1.4851	+.0124	J	1.698	1.6807	1.6714	+.0093
A	1.471	1.4964	1.4889	+.0073	A	1.705	1.6664	1.6747	-.0083
S	1.482	1.4958	1.4929	+.0029	S	1.714	1.6515	1.6780	-.0265
O	1.499	1.4965	1.4971	-.0006	O	1.663	1.6366	1.6819	-.0453
N	1.517	1.4987	1.5012	-.0025	N	1.540	1.6226	1.6858	-.0632
D	1.526	1.5029	1.5054	-.0025	D	1.436	1.6093	1.6898	-.0805
1899					1904				
J	1.526	1.5088	1.5098	-.0010	J	1.474	1.5988	1.6939	-.0951
F	1.511	1.5162	1.5142	+.0020	F	1.620	1.5920	1.6983	-.1063
M	1.518	1.5251	1.5189	+.0062	M	1.670	1.5898	1.7029	-.1131
A	1.537	1.5350	1.5238	+.0112	A	1.716	1.5930	1.7073	-.1143
M	1.543	1.5459	1.5290	+.0169	M	1.695	1.6016	1.7119	-.1103
J	1.554	1.5576	1.5340	+.0236	J	1.635	1.6150	1.7163	-.1013
J	1.565	1.5699	1.5393	+.0306	J	1.558	1.6319	1.7208	-.0889
A	1.570	1.5823	1.5444	+.0379	A	1.578	1.6507	1.7252	-.0745
S	1.581	1.5940	1.5497	+.0443	S	1.656	1.6697	1.7296	-.0599
O	1.598	1.6041	1.5349	+.0492	O	1.672	1.6878	1.7337	-.0459
N	1.612	1.6116	1.5602	+.0514	N	1.695	1.7044	1.7375	-.0331
D	1.617	1.6156	1.5653	+.0503	D	1.717	1.7195	1.7412	-.0217
1900					1905				
J	1.618	1.6154	1.5704	+.0450	J	1.760	1.7333	1.7449	-.0116
F	1.618	1.6111	1.5753	+.0358	F	1.756	1.7464	1.7481	-.0017
M	1.612	1.6028	1.5800	+.0228	M	1.796	1.7591	1.7512	+.0079
A	1.613	1.5916	1.5845	+.0071	A	1.807	1.7714	1.7539	+.0175
M	1.618	1.5788	1.5890	-.0102	M	1.802	1.7830	1.7566	+.0264
J	1.607	1.5658	1.5931	-.0273	J	1.777	1.7933	1.7588	+.0345
J	1.563	1.5540	1.5970	-.0430	J	1.750	1.8018	1.7610	+.0408
A	1.516	1.5449	1.6005	-.0556	A	1.774	1.8081	1.7629	+.0452
S	1.496	1.5392	1.6041	-.0649	S	1.802	1.8123	1.7647	+.0476
O	1.480	1.5375	1.6072	-.0697	O	1.821	1.8149	1.7662	+.0487
N	1.488	1.5400	1.6102	-.0702	N	1.827	1.8165	1.7677	+.0488
D	1.523	1.5466	1.6129	-.0663	D	1.819	1.8177	1.7692	+.0485
1901					1906				
J	1.573	1.5566	1.6152	-.0586	J	1.824	1.8190	1.7703	+.0487
F	1.607	1.5694	1.6176	-.0482	F	1.833	1.8206	1.7716	+.0490
M	1.614	1.5838	1.6197	-.0359	M	1.844	1.8222	1.7727	+.0495
A	1.621	1.5989	1.6216	-.0227	A	1.840	1.8236	1.7738	+.0498
M	1.633	1.6134	1.6233	-.0099	M	1.831	1.8245	1.7745	+.0500
J	1.640	1.6265	1.6250	+.0015	J	1.819	1.8252	1.7756	+.0496
J	1.644	1.6375	1.6266	+.0109	J	1.813	1.8260	1.7765	+.0495
A	1.638	1.6459	1.6282	+.0177	A	1.793	1.8276	1.7773	+.0503
S	1.640	1.6520	1.6298	+.0222	S	1.818	1.8309	1.7780	+.0529
O	1.649	1.6561	1.6312	+.0249	O	1.850	1.8364	1.7788	+.0576
N	1.657	1.6585	1.6328	+.0257	N	1.863	1.8446	1.7795	+.0651
D	1.611	1.6601	1.6343	+.0258	D	1.858	1.8549	1.7802	+.0747

<sup>1</sup> Except charcoal pig iron.

# PIG IRON PRODUCTION

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TABLE 31—Continued

## PIG IRON PRODUCTION<sup>1</sup> IN THE UNITED STATES

Date	1	2	3	4	Date	1	2	3	4
1907					1912				
I	1.852	1.8661	1.7809	+.0852	J	1.822	1.8458	1.8748	-.0290
F	1.864	1.8735	1.7814	+.0921	F	1.860	1.8567	1.8744	-.0177
M	1.856	1.8844	1.7819	+.1025	M	1.890	1.8679	1.8740	-.0061
A	1.869	1.8873	1.7822	+.1051	A	1.899	1.8794	1.8735	+.0059
M	1.870	1.8836	1.7826	+.1010	M	1.909	1.8908	1.8726	+.0182
J	1.872	1.8722	1.7828	+.0894	J	1.910	1.9019	1.8714	+.0305
A	1.862	1.8531	1.7827	+.0704	J	1.891	1.9125	1.8703	+.0422
S	1.861	1.8268	1.7826	+.0442	A	1.909	1.9225	1.8691	+.0534
O	1.862	1.7945	1.7824	+.0121	S	1.915	1.9316	1.8680	+.0636
N	1.877	1.7584	1.7820	-.0236	O	1.938	1.9399	1.8668	+.0731
D	1.785	1.7206	1.7815	-.0609	N	1.943	1.9469	1.8657	+.0812
	1.600	1.6835	1.7809	-.0974	D	1.953	1.9525	1.8649	+.0876
1908					1913				
I	1.528	1.6497	1.7802	-.1305	I	1.955	1.9562	1.8640	+.0922
F	1.570	1.6214	1.7795	-.1581	F	1.966	1.9575	1.8635	+.0940
M	1.598	1.6001	1.7786	-.1785	M	1.950	1.9561	1.8631	+.0930
A	1.584	1.5875	1.7779	-.1904	A	1.963	1.9518	1.8628	+.0890
M	1.575	1.5838	1.7771	-.1933	M	1.959	1.9449	1.8629	+.0820
J	1.561	1.5890	1.7764	-.1874	J	1.943	1.9358	1.8632	+.0726
A	1.642	1.6211	1.7754	-.1543	A	1.914	1.9138	1.8646	+.0492
S	1.675	1.6444	1.7751	-.1307	S	1.922	1.9023	1.8655	+.0368
O	1.704	1.6699	1.7749	-.1050	O	1.915	1.8911	1.8667	+.0244
N	1.721	1.6957	1.7749	-.0792	N	1.872	1.8804	1.8681	+.0123
D	1.749	1.7205	1.7752	-.0547	D	1.806	1.8699	1.8696	+.0003
1909					1914				
I	1.763	1.7435	1.7757	-.0322	I	1.784	1.8593	1.8713	-.0120
F	1.785	1.7646	1.7764	-.0118	F	1.829	1.8481	1.8732	-.0251
M	1.772	1.7841	1.7774	+.0067	M	1.879	1.8362	1.8751	-.0389
A	1.763	1.8024	1.7788	+.0236	A	1.879	1.8234	1.8772	-.0538
M	1.784	1.8199	1.7801	+.0398	M	1.829	1.8100	1.8796	-.0696
J	1.809	1.8374	1.7819	+.0555	J	1.806	1.7965	1.8820	-.0855
A	1.832	1.8546	1.7839	+.0707	J	1.800	1.7836	1.8845	-.1009
S	1.861	1.8714	1.7862	+.0852	A	1.809	1.7722	1.8871	-.1149
O	1.900	1.8873	1.7887	+.0986	S	1.798	1.7631	1.8900	-.1269
N	1.924	1.9015	1.7914	+.1101	O	1.759	1.7574	1.8929	-.1355
D	1.929	1.9129	1.7944	+.1185	N	1.704	1.7558	1.8961	-.1403
	1.930	1.9207	1.7977	+.1230	D	1.689	1.7590	1.8992	-.1402
1910					1915				
J	1.925	1.9243	1.8011	+.1232	J	1.713	1.7676	1.9023	-.1347
F	1.933	1.9230	1.8048	+.1182	F	1.777	1.7819	1.9058	-.1239
M	1.927	1.9172	1.8086	+.1086	M	1.823	1.8015	1.9092	-.1077
A	1.918	1.9071	1.8124	+.0947	A	1.849	1.8259	1.9129	-.0870
M	1.887	1.8937	1.8164	+.0773	M	1.863	1.8538	1.9166	-.0628
J	1.878	1.8782	1.8207	+.0575	J	1.900	1.8836	1.9205	-.0369
J	1.841	1.8619	1.8248	+.0371	J	1.917	1.9136	1.9244	-.0108
A	1.832	1.8459	1.8291	+.0168	A	1.953	1.9420	1.9283	+.0137
S	1.836	1.8312	1.8334	-.0022	S	1.978	1.9674	1.9322	+.0352
O	1.829	1.8183	1.8377	-.0194	O	2.003	1.9889	1.9364	+.0525
N	1.804	1.8077	1.8419	-.0342	N	2.005	2.0059	1.9403	+.0656
D	1.759	1.7994	1.8459	-.0465	D	2.014	2.0184	1.9443	+.0741
1911					1916				
J	1.754	1.7934	1.8500	-.0566	J	2.012	2.0269	1.9484	+.0785
F	1.807	1.7894	1.8537	-.0643	F	2.027	2.0319	1.9525	+.0794
M	1.845	1.7874	1.8574	-.0700	M	2.032	2.0341	1.9566	+.0775
A	1.838	1.7873	1.8607	-.0734	A	2.032	2.0342	1.9607	+.0735
M	1.786	1.7889	1.8636	-.0747	M	2.035	2.0328	1.9646	+.0682
J	1.775	1.7921	1.8662	-.0741	J	2.030	2.0305	1.9688	+.0617
J	1.762	1.7967	1.8684	-.0717	J	2.017	2.0279	1.9729	+.0550
A	1.793	1.8026	1.8704	-.0678	A	2.014	2.0255	1.9770	+.0485
S	1.823	1.8095	1.8721	-.0626	S	2.028	2.0239	1.9811	+.0428
O	1.831	1.8173	1.8732	-.0559	O	2.054	2.0234	1.9856	+.0378
N	1.824	1.8260	1.8740	-.0480	N	2.043	2.0240	1.9898	+.0342
D	1.819	1.8356	1.8744	-.0388	D	2.011	2.0254	1.9940	+.0314

<sup>1</sup>Except charcoal pig iron.

## APPENDIX

TABLE 31—Continued

PIG IRON PRODUCTION<sup>1</sup> IN THE UNITED STATES

Date	1	2	3	4	Date	1	2	3	4
1917					1922				
J	2.007	2.0272	1.9981	+.0291	J	1.725	1.6958	1.8407	-.1449
F	1.975	2.0284	2.0023	+.0261	F	1.765	1.7357	1.8427	-.1070
M	2.021	2.0286	2.0064	+.0222	M	1.818	1.7734	1.8452	-.0718
A	2.046	2.0273	2.0104	+.0169	A	1.839	1.8071	1.8479	-.0408
M	2.042	2.0243	2.0142	+.0101	M	1.872	1.8365	1.8511	-.0146
J	2.037	2.0198	2.0176	+.0022	J	1.896	1.8619	1.8546	+.0073
J	2.033	2.0142	2.0307	-.0065	J	1.890	1.8544	1.8583	+.0261
A	2.020	2.0081	2.0337	-.0156	A	1.768	1.9049	1.8623	+.0426
S	2.019	2.0021	2.0362	-.0241	S	1.831	1.9248	1.8663	+.0585
O	2.028	1.9968	2.0284	-.0316	O	1.930	1.9445	1.8707	+.0738
N	2.029	1.9930	2.0296	-.0366	N	1.978	1.9643	1.8753	+.0890
D	1.968	1.9912	2.0302	-.0390	D	1.998	1.9840	1.8801	+.1039
1918					1923				
J	1.801	1.9920	2.0304	-.0384	J	2.018	2.0033	1.8849	+.1184
F	1.918	1.9956	2.0297	-.0341	F	2.029	2.0212	1.8892	+.1314
M	2.016	2.0020	2.0284	-.0264	M	2.056	2.0372	1.8949	+.1423
A	2.040	2.0109	2.0266	-.0157	A	2.073	2.0508	1.9001	+.1507
M	2.046	2.0215	2.0242	-.0027	M	2.096	2.0614	1.9055	+.1559
J	2.045	2.0327	2.0210	+.0117	J	2.068	2.0683	1.9106	+.1577
J	2.043	2.0426	2.0171	+.0255	J	2.074	2.0709	1.9159	+.1550
A	2.039	2.0497	2.0126	+.0371	A	2.046	2.0686	1.9212	+.1474
S	2.057	2.0523	2.0070	+.0453	S	2.018	2.0606	1.9269	+.1337
O	2.051	2.0492	2.0015	+.0477	O	2.007	2.0471	1.9322	+.1149
N	2.048	2.0308	1.9952	+.0446	N	1.984	2.0284	1.9376	+.0908
D	2.044	2.0247	1.9886	+.0361	D	1.974	2.0057	1.9429	+.0628
1919					1924				
J	2.027	2.0051	1.9813	+.0238	J	1.968	1.9808	1.9483	+.0325
F	2.021	1.9823	1.9739	+.0084	F	2.025	1.9559	1.9536	+.0023
M	1.999	1.9587	1.9664	-.0077	M	2.048	1.9333	1.9587	-.0254
A	1.917	1.9341	1.9590	-.0249	A	2.033	1.9148	1.9637	-.0489
M	1.833	1.9165	1.9513	-.0348	M	1.926	1.9016	1.9687	-.0671
J	1.848	1.9010	1.9440	-.0430	J	1.830	1.8942	1.9734	-.0792
J	1.894	1.8907	1.9366	-.0459	J	1.760	1.8924	1.9779	-.0855
A	1.947	1.8860	1.9291	-.0431	A	1.784	1.8955	1.9822	-.0867
S	1.919	1.8871	1.9215	-.0344	S	1.835	1.9028	1.9859	-.0631
O	1.779	1.8936	1.9146	-.0210	O	1.903	1.9132	1.9894	-.0762
N	1.902	1.9054	1.9078	-.0024	N	1.923	1.9258	1.9915	-.0657
D	1.929	1.9218	1.9011	+.0207	D	1.980	1.9399	1.9953	-.0554
1920					1925				
J	1.988	1.9418	1.8952	+.0466	J	2.036	1.9544	1.9978	-.0434
F	2.012	1.9643	1.8893	+.0750	F	2.060	1.9683	1.9997	-.0314
M	2.037	1.9876	1.8838	+.1038	M	2.061	1.9807	2.0013	-.0206
A	1.961	2.0092	1.8787	+.1905	A	2.036	1.9944	2.0025	-.0121
M	1.984	2.0270	1.8738	+.1532	M	1.976	1.9969	2.0034	-.0065
J	2.006	2.0383	1.8693	+.1690	J	1.950	2.0000	2.0037	-.0037
J	1.995	2.0407	1.8651	+.1756	J	1.934	2.0002	2.0039	-.0037
A	2.007	2.0324	1.8611	+.1713	A	1.941	1.9986	2.0040	-.0054
S	2.018	2.0125	1.8572	+.1553	S	1.958	1.9966	2.0039	-.0073
O	2.026	1.9811	1.8537	+.1274	O	1.989	1.9959	2.0038	-.0079
N	1.990	1.9388	1.8504	+.0684	N	2.003	1.9972	2.0034	-.0062
D	1.941	1.8877	1.8476	+.0401	D	2.021	2.0011	2.0030	-.0019
1921					1926				
J	1.892	1.8308	1.8451	-.0143	J	2.029	2.0072	2.0026	+.0046
F	1.840	1.7715	1.8427	-.0713	F	2.019	2.0145	2.0024	+.0123
M	1.712	1.7135	1.8407	-.1272	M	2.045	2.0218	2.0025	+.0193
A	1.600	1.6608	1.8591	-.1783	A	2.061	2.0281	2.0027	+.0254
M	1.595	1.6168	1.8378	-.2210	M	2.050	2.0327	2.0030	+.0297
J	1.550	1.5842	1.8371	-.2529	J	2.033	2.0353	2.0038	+.0315
J	1.445	1.5650	1.8366	-.2716	J	2.017	2.0363	2.0048	+.0315
A	1.488	1.5600	1.8364	-.2764	A	2.014	2.0359	2.0059	+.0300
S	1.517	1.5684	1.8362	-.2678	S	2.019	2.0348	2.0073	+.0275
O	1.604	1.5890	1.8369	-.2479	O	2.032	2.0333	2.0091	+.0242
N	1.674	1.6193	1.8378	-.2185	N	2.033	2.0315	2.0109	+.0206
D	1.726	1.6560	1.8391	-.1831	D	1.999	2.0293	2.0131	+.0162

<sup>1</sup> Except charcoal pig iron.

# PIG IRON PRODUCTION

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**TABLE 31—Concluded**  
**PIG IRON PRODUCTION<sup>1</sup> IN THE UNITED STATES**

Date	1	2	3	4	Date	1	2	3	4
1927					1932				
J	2.001	2.0264	2.0155	+.0109	J	1.497	1.5093		
F	2.021	2.0226	2.0181	+.0045	F	1.522	1.4750		
M	2.051	2.0177	2.0207	-.0030	M	1.494	1.4407		
A	2.057	2.0119	2.0235	-.0116	A	1.454	1.4062		
M	2.039	2.0054	2.0264	-.0210	M	1.403	1.3719		
J	2.013	1.9986	2.0294	-.0308	J	1.321	1.3386		
J	1.979	1.9920	2.0323	-.0403	J	1.266	1.3081		
A	1.978	1.9859	2.0351	-.0492	A	1.233	1.2827		
S	1.966	1.9808	2.0376	-.0568	S	1.296	1.2651		
O	1.953	1.9770	2.0404	-.0634	O	1.318	1.2579		
N	1.946	1.9748	2.0428	-.0680	N	1.323	1.2624		
D	1.939	1.9743	2.0450	-.0707	D	1.246	1.2787		
1928					1933				
J	1.966	1.9756	2.0470	-.0714	J	1.264	1.3057		
F	2.000	1.9788	2.0487	-.0699	F	1.297	1.3411		
M	2.014	1.9836	2.0502	-.0666	M	1.243	1.3823		
A	2.026	1.9896	2.0513	-.0617	A	1.318	1.4271		
M	2.025	1.9965	2.0522	-.0557	M	1.457	1.4734		
J	2.012	2.0040	2.0523	-.0483	J	1.625	1.5200		
J	1.996	2.0118	2.0520	-.0402	J	1.762	1.5655		
A	2.005	2.0098	2.0513	-.0315	A	1.772	1.6086		
S	2.009	2.0280	2.0501	-.0221	S	1.705	1.6470		
O	2.037	2.0364	2.0484	-.0120	O	1.641	1.6785		
N	2.042	2.0449	2.0458	-.0009	N	1.558	1.7006		
D	2.036	2.0532	2.0423	+.0109	D	1.581	1.7119		
1929					1934				
J	2.045	2.0609	2.0380	+.0229	J	1.593	1.7118		
F	2.059	2.0676	2.0326	+.0350	F	1.654	1.7021		
M	2.079	2.0726	2.0268	+.0458	M	1.718	1.6854		
A	2.087	2.0735	2.0205	+.0550	A	1.761	1.6650		
M	2.100	2.0762	2.0138	+.0624	M	1.819			
J	2.093	2.0748			J	1.808			
J	2.087	2.0717			J	1.597			
A	2.083	2.0671			A	1.532			
S	2.067	2.0616			S	1.476			
O	2.064	2.0540			O	1.497			
N	2.026	2.0474			N	1.504			
D	1.961	2.0380			D	1.520			
1930					1935				
J	1.960	2.0266			J	1.678			
F	2.006	2.0129			F	1.759			
M	2.020	1.9970			M	1.757			
A	2.026	1.9792			A	1.744			
M	2.018	1.9602			M	1.746			
J	1.990	1.9407			J	1.714			
J	1.930	1.9211			J	1.691			
A	1.911	1.9019			A	1.754			
S	1.880	1.8829			S	1.772			
O	1.844	1.8638			O	1.805			
N	1.794	1.8444			N	1.838			
D	1.730	1.8246			D	1.832			
1931					1936				
J	1.743	1.8046			J	1.815			
F	1.785	1.7846							
M	1.817	1.7649							
A	1.828	1.7459							
M	1.808	1.7270							
J	1.737	1.7077							
J	1.674	1.6869							
A	1.616	1.6636							
S	1.591	1.6374							
O	1.578	1.6081							
N	1.566	1.5765							
D	1.500	1.5433							

<sup>1</sup> Except charcoal pig iron.

APPENDIX

TABLE 32

UNITED STATES BUREAU OF LABOR STATISTICS INDEX NUMBER OF  
WHOLESALE PRICES OF COMMODITIES, MONTHLY,  
JANUARY 1890 - JANUARY 1936

Col. 1. Logarithms of Index.

Col. 2. Cyclical Curve (logarithms).

For details of the nature of the graduation given in Column 2 of this table, see Appendix D.

## WHOLESALE PRICES

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TABLE 32

	1	2		1	2		1	2		1	2	
1890			1895	J	1.6739	1.6832	J	1.7559	1.7524	J	1.7825	1.7792
F	1.7388	1.7406	F	1.6712	1.6857	F	1.7582	1.7543	F	1.7853	1.7793	
M	1.7404	1.7420	M	1.6739	1.6882	M	1.7582	1.7553	M	1.7803	1.7793	
A	1.7412	1.7438	A	1.6955	1.6904	A	1.7574	1.7553	A	1.7810	1.7792	
M	1.7451	1.7460	M	1.6998	1.6922	M	1.7490	1.7545	M	1.7731	1.7790	
J	1.7435	1.7483	J	1.7024	1.6936	J	1.7443	1.7529	J	1.7731	1.7788	
J	1.7459	1.7507	J	1.6990	1.6943	J	1.7466	1.7509	J	1.7738	1.7785	
A	1.7619	1.7531	A	1.6946	1.6942	A	1.7459	1.7483	A	1.7789	1.7784	
S	1.7664	1.7552	S	1.6902	1.6932	S	1.7490	1.7456	S	1.7753	1.7784	
O	1.7642	1.7571	O	1.6937	1.6911	O	1.7427	1.7431	O	1.7774	1.7785	
N	1.7566	1.7585	N	1.6902	1.6880	N	1.7435	1.7408	N	1.7789	1.7788	
D	1.7528	1.7595	D	1.6840	1.6842	D	1.7412	1.7390	D	1.7853	1.7796	
1891			1896	J	1.6812	1.6800	J	1.7419	1.7377	J	1.7860	1.7804
F	1.7528	1.7594	F	1.6767	1.6757	F	1.7380	1.7369	F	1.7839	1.7815	
M	1.7619	1.7585	M	1.6712	1.6718	M	1.7364	1.7368	M	1.7825	1.7826	
A	1.7649	1.7569	A	1.6693	1.6685	A	1.7356	1.7371	A	1.7860	1.7839	
M	1.7597	1.7547	M	1.6628	1.6661	M	1.7332	1.7379	M	1.7875	1.7853	
J	1.7466	1.7519	J	1.6580	1.6644	J	1.7332	1.7391	J	1.7875	1.7869	
J	1.7443	1.7485	J	1.6542	1.6634	J	1.7364	1.7406	J	1.7760	1.7886	
A	1.7435	1.7445	A	1.6542	1.6629	A	1.7435	1.7423	A	1.7868	1.7907	
S	1.7388	1.7399	S	1.6561	1.6628	S	1.7490	1.7441	S	1.7903	1.7931	
O	1.7372	1.7349	O	1.6684	1.6629	O	1.7490	1.7462	O	1.7980	1.7960	
N	1.7348	1.7296	N	1.6822	1.6631	N	1.7528	1.7484	N	1.8035	1.7993	
D	1.7308	1.7244	D	1.6776	1.6635	D	1.7612	1.7507	D	1.8082	1.8030	
1892			1897	J	1.6693	1.6638	J	1.7544	1.7533	J	1.8062	1.8069
F	1.7218	1.7196	F	1.6656	1.6642	F	1.7536	1.7561	F	1.8122	1.8106	
M	1.7193	1.7155	M	1.6656	1.6647	M	1.7521	1.7592	M	1.8082	1.8140	
A	1.7127	1.7126	A	1.6656	1.6647	A	1.7589	1.7624	A	1.8091	1.8166	
M	1.7033	1.7111	M	1.6609	1.6653	M	1.7657	1.7659	M	1.8169	1.8183	
J	1.7059	1.7112	J	1.6580	1.6662	J	1.7657	1.7659	J	1.8202	1.8189	
J	1.7050	1.7128	J	1.6532	1.6673	J	1.7694	1.7695	J	1.8202	1.8184	
A	1.7152	1.7158	A	1.6561	1.6689	A	1.7716	1.7731	A	1.8202	1.8169	
S	1.7193	1.7198	S	1.6730	1.6711	S	1.7634	1.7765	S	1.8228	1.8146	
O	1.7202	1.7244	O	1.6857	1.6737	O	1.7686	1.7795	O	1.8254	1.8117	
N	1.7243	1.7292	N	1.6822	1.6767	N	1.8001	1.7820	N	1.8102	1.8085	
D	1.7324	1.7337	N	1.6803	1.6799	N	1.7832	1.7837	N	1.8102	1.8085	
D	1.7404	1.7376	D	1.6822	1.6829	D	1.7889	1.7846	D	1.8007	1.8053	
1893			1898	J	1.6812	1.6855	J	1.7966	1.7846	J	1.7945	1.8021
F	1.7528	1.7406	F	1.6866	1.6874	F	1.7924	1.7839	F	1.7882	1.7993	
M	1.7574	1.7423	M	1.6884	1.6885	M	1.7803	1.7824	M	1.7910	1.7969	
A	1.7497	1.7427	A	1.6893	1.6888	A	1.7782	1.7806	A	1.7938	1.7953	
M	1.7451	1.7415	M	1.6893	1.6888	M	1.7709	1.7784	M	1.7938	1.7944	
J	1.7404	1.7387	M	1.7143	1.6883	M	1.7709	1.7784	M	1.7938	1.7944	
J	1.7259	1.7344	J	1.6840	1.6874	J	1.7709	1.7762	J	1.7966	1.7944	
A	1.7152	1.7289	J	1.6812	1.6861	J	1.7679	1.7742	J	1.8000	1.7953	
S	1.7016	1.7225	A	1.6812	1.6849	A	1.7694	1.7724	A	1.7993	1.7969	
O	1.7160	1.7156	S	1.6794	1.6839	S	1.7745	1.7710	S	1.8014	1.7992	
N	1.7235	1.7088	O	1.6785	1.6835	O	1.7686	1.7700	N	1.8028	1.8019	
D	1.7093	1.7024	N	1.6812	1.6838	N	1.7657	1.7695	N	1.8069	1.8049	
D	1.7024	1.6967	D	1.6840	1.6849	D	1.7649	1.7694	D	1.8116	1.8080	
1894			1899	J	1.6893	1.6872	J	1.7760	1.7697	J	1.8102	1.8112
F	1.6955	1.6919	F	1.6964	1.6906	F	1.7832	1.7703	F	1.8122	1.8144	
M	1.6866	1.6879	M	1.6972	1.6952	M	1.7818	1.7711	M	1.8143	1.8177	
A	1.6767	1.6846	A	1.7042	1.7008	A	1.7731	1.7721	A	1.8209	1.8212	
M	1.6749	1.6819	M	1.7050	1.7072	M	1.7672	1.7732	M	1.8280	1.8249	
J	1.6739	1.6780	J	1.7101	1.7142	J	1.7664	1.7744	J	1.8312	1.8288	
J	1.6767	1.6767	J	1.7152	1.7214	J	1.7672	1.7754	J	1.8319	1.8330	
A	1.6840	1.6762	A	1.7243	1.7283	A	1.7723	1.7764	A	1.8338	1.8374	
S	1.6955	1.6763	S	1.7372	1.7348	S	1.7767	1.7772	S	1.8382	1.8418	
O	1.6831	1.6772	O	1.7435	1.7406	O	1.7774	1.7780	O	1.8463	1.8461	
N	1.6803	1.6787	N	1.7466	1.7455	N	1.7832	1.7785	N	1.8507	1.8501	
D	1.6767	1.6808	D	1.7536	1.7494	D	1.7860	1.7789	D	1.8549	1.8535	

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TABLE 32—Continued

	1	2		1	2		1	2		1	2
1910	J 1.8537	1.8563	1915	J 1.8332	1.8331	1920	J 2.1978	2.1965	1925	J 2.0124	2.0043
F 1.8531	1.8582	F 1.8363	1.8326	F 2.1962	2.2066	M 2.0063	F 2.0170	2.0078	M 2.0179	F 2.0170	2.0110
M 1.8627	1.8590	M 1.8338	1.8323	M 2.2003	2.2141	A 2.2188	M 2.0082	2.0137	A 2.0082	M 2.0069	2.0158
A 1.8645	1.8587	A 1.8370	1.8324	A 2.2188	2.2183	M 2.2232	M 2.0069	2.0158	J 2.0128	J 2.0183	2.0170
M 1.8573	1.8572	M 1.8389	1.8332	J 2.2214	2.2134	J 2.2196	J 2.0183	2.0175	J 2.0128	J 2.0183	2.0175
J 1.8513	1.8544	J 1.8344	1.8351	J 2.2196	2.2036	A 2.2079	A 2.0166	2.0172	A 2.0166	A 2.0164	2.0172
J 1.8513	1.8505	J 1.8407	1.8381	S 2.1909	2.1700	S 2.1909	S 2.0145	2.0164	S 2.0145	S 2.0153	2.0164
A 1.8500	1.8455	A 1.8563	1.8422	O 2.1590	2.1476	O 2.1590	O 2.0154	2.0153	N 2.0191	N 2.0191	2.0139
S 1.8445	1.8399	S 1.8344	1.8474	N 2.1252	2.1226	D 2.0817	D 2.0145	2.0124	D 2.0145	D 2.0145	2.0124
O 1.8319	1.8339	O 1.8463	1.8535	D 2.0817	2.0964						
N 1.8222	1.8278	N 1.8555	1.8603								
D 1.8235	1.8220	D 1.8592	1.8676								
1911	J 1.8202	1.8168	1916	J 1.8865	1.8754	1921	J 2.0569	2.0703	1926	J 2.0137	2.0109
F 1.8089	1.8124	F 1.8949	1.8835	F 2.0028	2.0453	M 2.0103	M 2.0026	2.0078	F 2.0086	F 2.0094	2.0078
M 1.8109	1.8090	M 1.9053	1.8919	M 2.0226		A 1.9952	A 2.0013	2.0061	M 2.0026	M 2.0026	2.0061
A 1.8014	1.8067	A 1.9122	1.9006	A 1.9952	2.0031	M 1.9832	M 2.0002	2.0042	J 2.0017	J 2.0021	2.0042
M 1.7993	1.8055	M 1.9165	1.9098	M 1.9832	1.9871	J 1.9704	J 1.9751	1.9751	J 1.9978	J 1.9998	1.9998
J 1.7993	1.8053	J 1.9186	1.9196	J 1.9704	1.9668	A 1.9708	A 1.9619	1.9619	A 1.9961	A 1.9972	1.9972
J 1.8055	1.8062	J 1.9212	1.9300	J 1.9704	1.9619	S 1.9704	S 1.9598	1.9598	S 1.9987	S 1.9945	1.9945
A 1.8162	1.8081	A 1.9299	1.9413	A 1.9704	1.9600	O 1.9736	O 1.9974	1.9974	O 1.9974	O 1.9918	1.9918
S 1.8202	1.8107	S 1.9390	1.9535	O 1.9741	1.9616	N 1.9741	N 1.9930	1.9930	N 1.9930	N 1.9891	1.9891
O 1.8209	1.8139	O 1.9595	1.9667	D 1.9680	1.9642	D 1.9680	D 1.9908	1.9908	D 1.9908	D 1.9908	1.9908
N 1.8189	1.8175	N 1.9886	1.9809								
D 1.8149	1.8213	D 1.9965	1.9958								
1912	J 1.8195	1.8252	1917	J 2.0090	2.0111	1922	J 1.9610	1.9673	1927	J 1.9845	1.9842
F 1.8241	1.8290	F 2.0191	2.0263	F 1.9680	1.9705	M 1.9676	M 1.9764	1.9804	F 1.9814	F 1.9822	1.9804
M 1.8293	1.8325	M 2.0322	2.0407	M 1.9739	1.9775	A 1.9694	A 1.9736	1.9790	M 1.9764	M 1.9776	1.9790
A 1.8432	1.8357	A 2.0573	2.0539	M 1.9827	1.9812	M 1.9827	M 1.9741	1.9779	A 1.9736	A 1.9756	1.9779
M 1.8451	1.8386	M 2.0817	2.0654	J 1.9836	1.9853	J 1.9836	J 1.9736	1.9773	J 1.9745	J 1.9772	1.9773
J 1.8389	1.8410	J 2.0864	2.0749	J 1.9874	1.9895	A 1.9939	A 1.9786	1.9776	J 1.9745	J 1.9772	1.9776
J 1.8382	1.8429	J 2.0899	2.0822	J 1.9974	1.9895	S 1.9970	S 1.9983	1.9983	J 1.9786	J 1.9776	1.9776
A 1.8432	1.8444	A 2.0962	2.0876	A 1.9939	1.9939	O 1.9983	O 2.0019	2.0019	S 1.9836	S 1.9783	1.9783
A 1.8482	1.8453	S 2.0917	2.0913	O 1.9983	2.0019	N 2.0022	N 2.0051	2.0051	O 1.9850	O 1.9795	1.9795
S 1.8500	1.8459	O 2.0871	2.0938	D 2.0030	2.0074	D 2.0030	D 1.9841	1.9841	N 1.9836	N 1.9809	1.9809
O 1.8463	1.8460	O 2.0892	2.0957								
D 1.8457	1.8460	D 2.0896	2.0973								
1913	J 1.8470	1.8458	1918	J 2.0969	2.0992	1923	J 2.0086	2.0088	1928	J 1.9841	1.9839
F 1.8439	1.8455	F 2.0988	2.1015	F 2.0141	2.0094	M 2.0191	M 1.9902	1.9862	F 1.9814	F 1.9852	1.9862
M 1.8445	1.8452	M 2.1018	2.1044	M 2.0166	2.0083	A 2.0166	A 1.9850	1.9868	M 1.9800	M 1.9862	1.9862
A 1.8432	1.8448	A 2.1082	2.1078	M 2.0082	2.0071	M 2.0082	M 1.9890	1.9871	A 1.9850	A 1.9868	1.9871
M 1.8382	1.8445	M 2.1076	2.1114	J 2.0013	2.0055	J 2.0013	J 1.9854	1.9870	M 1.9890	M 1.9871	1.9870
J 1.8389	1.8440	J 2.1106	2.1152	J 1.9930	2.0036	A 1.9903	A 2.0015	2.0015	J 1.9886	J 1.9867	1.9867
J 1.8420	1.8435	J 2.1206	2.1188	A 1.9987	1.9992	S 1.9987	S 1.9939	1.9939	A 1.9895	A 1.9862	1.9862
A 1.8432	1.8427	A 2.1281	2.1220	O 1.9974	1.9997	O 1.9974	O 1.9967	1.9967	O 1.9854	O 1.9849	1.9849
A 1.8488	1.8419	S 2.1383	2.1246	N 1.9930	1.9942	N 1.9930	N 1.9814	1.9843	N 1.9814	N 1.9843	1.9843
A 1.8476	1.8410	O 2.1345	2.1265	D 1.9917	1.9918	D 1.9917	D 1.9814	1.9814	D 1.9814	D 1.9814	1.9814
O 1.8457	1.8400	N 2.1345	2.1276								
D 1.8395	1.8389	D 2.1345	2.1281								
1914	J 1.8363	1.8378	1919	J 2.1284	2.1281	1924	J 1.9983	1.9896	1929	J 1.9818	1.9833
F 1.8344	1.8368	F 2.1133	2.1280	F 1.9987	1.9878	M 1.9934	M 1.9866	1.9824	F 1.9796	F 1.9828	1.9824
M 1.8325	1.8357	M 2.1183	2.1279	M 1.9981	1.9859	A 1.9881	A 1.9800	1.9820	M 1.9827	M 1.9827	1.9820
A 1.8300	1.8347	A 2.1239	2.1284	M 1.9981	1.9859	M 1.9981	M 1.9764	1.9816	A 1.9800	A 1.9820	1.9816
M 1.8287	1.8340	M 2.1313	2.1298	J 1.9773	1.9865	J 1.9773	J 1.9786	1.9811	M 1.9764	M 1.9816	1.9811
J 1.8287	1.8334	J 2.1323	2.1326	J 1.9803	1.9877	J 1.9803	J 1.9845	1.9806	J 1.9845	J 1.9806	1.9806
A 1.8280	1.8331	J 2.1495	2.1371	J 1.9803	1.9877	D 2.0065	D 1.9699	1.9704	A 1.9836	A 1.9795	1.9795
A 1.8463	1.8333	S 2.1495	2.1518	S 1.9872	1.9916	S 1.9872	S 1.9827	1.9781	S 1.9827	S 1.9781	1.9781
S 1.8325	1.8336	O 2.1511	2.1619	O 1.9921	1.9943	O 1.9921	O 1.9782	1.9761	O 1.9782	O 1.9761	1.9761
O 1.8293	1.8337	N 2.1599	2.1733	N 1.9961	1.9974	N 1.9961	N 1.9708	1.9736	N 1.9708	N 1.9736	1.9736
D 1.8280	1.8335	D 2.1775	2.1851	D 2.0065	2.0008	D 2.0065	D 1.9699	1.9704	D 1.9699	D 1.9704	1.9704

## WHOLESALE PRICES

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TABLE 32—Concluded

	1	2		1	2		1	2		1	2
1930			1932			1934			1936		
J	1.9661	1.9666	J	1.8280	1.8310	J	1.8585	1.8620	J	1.9063	
F	1.9610	1.9622	F	1.8215	1.8275	F	1.8669	1.8658			
M	1.9552	1.9574	M	1.8195	1.8241	M	1.8675	1.8685			
A	1.9542	1.9521	A	1.8162	1.8206	A	1.8651	1.8707			
M	1.9484	1.9464	M	1.8089	1.8168	M	1.8675				
J	1.9385	1.9404	J	1.8055	1.8127	J	1.8727				
J	1.9263	1.9340	J	1.8096	1.8084	J	1.8739				
A	1.9258	1.9275	A	1.8143	1.8040	A	1.8831				
S	1.9263	1.9207	S	1.8149	1.7999	S	1.8899				
O	1.9191	1.9139	O	1.8089	1.7965	O	1.8837				
N	1.9101	1.9070	N	1.8055	1.7939	N	1.8837				
D	1.9009	1.9003	D	1.7966	1.7926	D	1.8859				
1931			1933			1935					
J	1.8932	1.8937	J	1.7853	1.7925	J	1.8965				
F	1.8854	1.8873	F	1.7767	1.7939	F	1.9004				
M	1.8808	1.8812	M	1.7796	1.7967	M	1.8998				
A	1.8739	1.8754	A	1.7810	1.8009	A	1.9036				
M	1.8645	1.8697	M	1.7973	1.8064	M	1.9042				
J	1.8579	1.8641	J	1.8129	1.8130	J	1.9020				
J	1.8573	1.8586	J	1.8382	1.8204	J	1.8998				
A	1.8579	1.8532	A	1.8420	1.8283	A	1.9058				
S	1.8525	1.8480	S	1.8500	1.8364	S	1.9069				
O	1.8470	1.8432	O	1.8525	1.8441	O	1.9058				
N	1.8463	1.8387	N	1.8519	1.8512	N	1.9063				
D	1.8363	1.8346	D	1.8500	1.8572	D	1.9080				

## APPENDIX

TABLE 33

DR. WESLEY C. MITCHELL'S DATES OF HIGH AND LOW POINTS IN  
GENERAL BUSINESS IN THE UNITED STATES

(See *Recent Economic Changes*, Vol. II, p. 892, National Bureau of Economic Research  
Inc., 1929.)

High		Low	
June.....	1857	December.....	1858
October.....	1860	June.....	1861
April.....	1865	December.....	1867
June.....	1869	December.....	1870
October.....	1873	March.....	1879
March.....	1882	May.....	1885
March.....	1887	April.....	1888
July.....	1890	May.....	1891
January.....	1893	June.....	1894
December.....	1895	June.....	1897
June.....	1899	December.....	1900
September.....	1902	August.....	1904
May.....	1907	June.....	1908
January.....	1910	January.....	1912
January.....	1913	December.....	1914
August.....	1918	April.....	1919
January.....	1920	September.....	1921
May.....	1923	July.....	1924
October.....	1926	December.....	1927
June.....	1929	March.....	1933

## **APPENDIX B**

## APPENDIX B

PROFESSOR IRVING FISHER'S STATISTICAL MEASURES  
OF 'PRICE CHANGE'

IN DISCUSSING the relations between commodity prices and interest rates, Professor Irving Fisher designates *level* of commodity prices by the letter  $P$ , and *changes in that level* by  $P'$ . He uses a third symbol  $\bar{P}'$  to represent various moving averages of  $P'$ . In the course of merely verbal discussion, as distinct from mathematical or statistical presentation,  $P$  is usually referred to as 'commodity price level', and  $P'$  as 'change in commodity price level'. The third symbol  $\bar{P}'$  is usually defined in a semi-mathematical fashion either as 'the distributed lag of  $P''$  or as 'the weighted average of sundry successive  $P''$ s'.<sup>1</sup>

The symbol  $P$ , or the *level* of commodity prices, is defined mathematically as the successive values of an 'index number' of commodity prices. It may represent almost any index number that is readily available and that seems adequate for the particular purpose at hand. When discussing interest rates and commodity prices in the United States, Professor Fisher lets  $P$  represent one of the index numbers of American wholesale prices constructed by the United States Bureau of Labor Statistics.

The second symbol,  $P'$ , is repeatedly referred to merely as 'price change'.<sup>2</sup> But that expression seems always to be used as a contraction or abbreviation of the longer expression '*rate* of price change'. Even when Professor Fisher seems to have deliberately defined  $P'$  as 'price change' rather than 'rate of price change', the context will usually show that the latter is really meant.<sup>3</sup> The emphasized characteristics of  $P'$  are always those of a ratio or a function of a ratio,

<sup>1</sup> Cf. Irving Fisher, *The Theory of Interest*, p. 419.

<sup>2</sup> ' . . .  $i$  stands for interest rate and  $P'$  for price change . . .' *The Theory of Interest*, p. 412.

'In Chart 44, price change ( $P'$ ) is represented . . .' *Ibid.*, p. 414.

<sup>3</sup> For example, ' . . . the price change ( $P'$ ) is assumed to be at the rate of 5 per cent per annum' (*The Theory of Interest*, p. 413). If the author had intended  $P'$  to mean '*rate* of

## APPENDIX

rather than those of an arithmetic 'difference'. The various mathematical definitions are all such that the value of  $P'$  would be unaffected by *multiplying* by a constant the successive terms of the price index number from which it is calculated. But its value would be definitely changed by *adding* a constant to, or *subtracting* a constant from, those terms.

The third symbol,  $\bar{P}'$ , is mathematically always just what it is stated to be, 'a weighted average of sundry successive  $P''$ s'. But this is essentially an operative rather than an explanatory definition. It describes one way in which  $\bar{P}'$  may be calculated; but, in the absence of analysis, throws little light on what  $\bar{P}'$  means.

Professor Fisher verbally defines  $P'$  as the change in prices from one month (or year) to the next. He has proposed two arithmetic methods of measuring this 'change'. These arithmetic statements are, of course, the real definitions. The first of these arithmetic definitions appeared in an article published in 1923.<sup>4</sup> It was given as a measure of the rise or fall of prices 'for each month'. It was calculated for any particular month by dividing the price index for the succeeding month by the price index for the preceding month and subtracting unity. In other words, if the index numbers for three consecutive months be designated  $a$ ,  $b$ ,  $c$ , the value of  $P'$  for the month whose price index was  $b$  would be  $\frac{c}{a} - 1$ . This is one one-hundredth or one per cent of the percentage change in the price level from the first month to the third month. For example, if  $a = 100$  and  $c = 125$ ,  $P'$  would equal  $\frac{25}{100}$ .

It is not worth while to examine critically this 1923 definition of  $P'$ . Professor Fisher himself discarded it within eighteen months. Indeed, it is strange that, in December 1923, a year after the publication (December 1922) of his book *The Making of Index Numbers* with its detailed and exhaustive analysis of the problem of 'bias', he could

price change', we would expect him to have written '... the rate of price change ( $P'$ ) is assumed to be 5 per cent per annum'. However, on the chart (43) to which the discussion refers, we find such notations as  $P' = 5\%$ ,  $P' = 10\%$ , etc.

<sup>4</sup>"The Business Cycle largely a 'Dance of the Dollar,'" *Journal of the American Statistical Association*, December 1923, pp. 1024-28.

have proposed defining  $P'$  as  $\frac{c}{a} - 1$ . For the function  $\frac{c}{a} - 1$  has a pronounced upward 'bias'.<sup>5</sup>

The second arithmetic definition of  $P'$  appeared in an article published in 1925.<sup>6</sup> In that article Professor Fisher proposed that the value of  $P'$  for the month whose price index is  $b$  be defined (if  $a, b, c$  be, as before, the index numbers for three consecutive months) as  $\frac{c-a}{2b}$ , or, 'on an annual basis', as  $\frac{6(c-a)}{b}$ <sup>note 7</sup>. The value of  $\frac{c-a}{2b}$  (or  $\frac{6(c-a)}{b}$ ) is, of course, the same when  $a, b, c$ , are 0, 100, 10 as when they are 95, 100, 105 or 99, 10, 100.

<sup>5</sup> Professor Fisher speaks of  $P'$ , both when defined as  $\frac{c}{a} - 1$  and when defined (in his later work) as  $\frac{c-a}{2b}$ , as the 'slope' of  $P$  and as the 'derivative' of  $P$ . But the reader must be warned that, for purposes of analogical comparison, he uses these strictly mathematical terms in a loose and colloquial manner.

Strictly speaking, only if a 'slope' is constant over a period can it be termed *the* 'slope' of a curve *during* the period. And, of course, only if there be a 'curve' in the strict mathematical sense of that term can there be a 'slope'. The 'slope' of a curve at a specified point on the curve is the trigonometric 'tangent' of the straight line (geometrically) tangent to the curve at the point. Only if the curve itself be a straight line can its 'slope' be constant.

If the time scales and the price scales were assumed to be so related that the price figures were expressed in the time scale (the time interval from the abscissa of  $a$  to the abscissa of  $c$  being taken as unity), and if the points whose ordinates were  $a$  and  $c$  were joined by a straight line, the slope of that line (throughout its length) would be  $c - a$ .

Of course, if a new curve were now constructed each of whose infinite number of ordinates was the natural logarithm (to the base  $e$ ) of an ordinate of the original straight line having the same abscissa,  $\frac{c}{a} - 1$ , which equals  $\frac{c-a}{a}$ , would be the 'slope' of the tangent to this new curve at the point whose ordinate was  $\log a$ . But, as this new curve is *not* a straight line, only at this one point would  $\frac{c}{a} - 1$  be its 'slope'.

<sup>6</sup> "Our Unstable Dollar and the so-called Business Cycle", *Journal of the American Statistical Association*, Vol. XX, New Series No. 150, June 1925, pp. 179-202 incl.

<sup>7</sup> ". . . a derivative of  $P$ , namely, the curve  $P'$  . . . such that the *height* of  $P'$  is expressed by the same figure as the *slope* of  $P$ " (1925 article, p. 182). At the bottom of the page there is a note on the word *slope* which Professor Fisher had italicized. The note reads: "The slope for any given month is measured by subtracting the index for the preceding month from that for the succeeding month and reducing the result to a percentage of the given or intervening month. This percentage, being for two months, is multiplied by six to give a *per annum* rate."

## APPENDIX

The function  $\frac{c-a}{2b}$  contains a totally irrelevant variable. The value of  $b$  has no more logical place in a measure of price change from the level  $a$  to the level  $c$  than has the altitude of a balloon an hour ago to its change in altitude during the past two hours. The change in altitude of the balloon may be calculated from the change in altitude during the first hour and the change during the second hour; but the altitude at the end of the first hour will not affect the change in altitude during the two hours.<sup>8</sup>.

It may, of course, be argued that  $\frac{c-a}{2b}$  is not intended to measure price change from the middle of the first month to the middle of the third month but from the beginning to the end of the second month; that we are not measuring the change in the altitude of the balloon during the past two hours but during the single hour that ended half an hour ago; that, for the determination (by interpolation) of the probable price level at the *beginning* of the second month,  $b$  is as important as  $a$ ; and, similarly, as important as  $c$  for the determination of the price level at the *end* of the second month.

But, after the acceptance of this condition, the difficulties reappear in full force as soon as any attempt is made to develop a rational and systematic scheme of interpolation that will yield  $\frac{c-a}{2b}$  as a not-absurd function of the interpolated values, without introducing  $b$  otherwise than as it occurs in those interpolated values. For example, if the level of prices at the beginning of the second month be taken as the arithmetic average of  $a$  and  $b$  and the level at the end of the month as the arithmetic average of  $b$  and  $c$ , we are faced with the difficulty that a knowledge of the values of only these averages is insufficient to determine  $\frac{c-a}{2b}$ . The necessity of introducing  $b$  remains.<sup>9</sup>

<sup>8</sup> Of course,  $b$  is only technically irrelevant if it is introduced in such a manner that it eventually cancels out. For example,  $(\log c - \log b) + (\log b - \log a) = \log c - \log a$ ; and  $\frac{c}{b} \times \frac{b}{a} = \frac{c}{a}$ .

<sup>9</sup> If, through the three points  $(-\frac{1}{2}, \frac{a+b}{2})$ ,  $(0, b)$ ,  $(+\frac{1}{2}, \frac{b+c}{2})$ , a second degree parabola ( $y = A + Bx + Cx^2$ ) be drawn, and another curve be constructed such that each of its ordinates is the natural logarithm of an ordinate of this parabola,  $\frac{c-a}{2b}$  will be the slope of this new curve at the point  $(0, \log b)$ . But, not merely has  $b$  been directly introduced, but the slope is at a point only.

## FISHER'S MEASURES OF PRICE CHANGE A315

By itself,  $P'$  or  $\frac{c-a}{2b}$  is a highly erratic function. But Professor

Fisher makes much more use of  $\overline{P'}$  than of  $P'$ , and  $\overline{P'}$  is definitely less erratic than  $P'$ . The cumulation of  $P'$  tends to iron out some of its irregularities.<sup>10</sup> We discuss the reasons for this fact later in this appendix.

Professor Fisher describes  $\overline{P'}$  as 'the distributed lag of  $P''$  or as 'the weighted average of sundry successive  $P''$ 's'. It was in articles dealing with the relation of changes in commodity price levels to interest rates, bond yields and the activity of business in general that he approached the problem of deciding what particular weights should be assigned to the 'sundry successive  $P''$ 's'. He presented the hypothesis that any appreciable change in the general level of commodity prices influenced the level of interest rates, etc., for long periods, though the strength of such influence declined with the passage of time. Conversely, that though a present level of interest rates, for example, had been most powerfully affected by recent changes in commodity prices, it had also been influenced, though to a less degree, by changes that had occurred in the distant past.

One of Professor Fisher's early efforts to decide upon what relative weights should be assigned to the influences of recent and remote price changes led him to base those weights on the ordinates of a skew probability curve which had its maximum ordinate in the very near past. The present writer cannot say that he grieves over the fact that this hypothesis was soon thrown overboard. The combination of the  $\frac{c-a}{2b}$  method of measuring  $P'$  and the skew-probability weights for  $\overline{P'}$  would have left that latter function in a position to

<sup>10</sup> Though the erratic nature of  $P'$  may be very clearly illustrated by means of cumulations and averages. The function  $\frac{c-a}{2b}$  has no *systematic* upward or downward 'bias', but its cumulation can yield strange results. Consider, for example, a hypothetical monthly series running 1, 4, 16, 2, 8, 32, 4, 16, 64 . . . These figures show a pronounced upward trend; each is double that for the third month back. However, a moving three months' simple arithmetic average of the  $\frac{c-a}{2b}$  functions is constant and *negative*.

Its value is always  $-\frac{1}{16}$ . If the series were presented in reverse order, it would of course show a pronounced downward trend. But the three months' moving average of the  $\frac{c-a}{2b}$  functions would be constant and *positive*.

defy successfully any attempt at a simple presentation of its meaning. A right-angled triangle with the right angle on the  $x$ -axis and the maximum ordinate at the most recent month was substituted for the skew probability curve. Moreover, the renunciation was complete. It was no mere sop to the exigencies of computation. Professor Fisher announced that the results obtained with the right-angled triangle were distinctly more acceptable to him than were those that had been obtained through the use of the skew probability curve.<sup>11</sup> With the 'triangular' weighting, the function  $\bar{P}'$  is defined as a weighted average of  $n$  successive  $P'$ 's in which the earliest  $P'$  has a weight of 1, the next in time a weight of 2, the third a weight of 3, and the  $n$ th (or most recent)  $P'$  a weight of  $n$ . The function  $\bar{P}'$  therefore equals

$$\frac{P'_1 + 2P'_2 + 3P'_3 + \dots + nP'_n}{\Sigma n}.$$

Up to this point we have designated data by the letters  $a$ ,  $b$ , and  $c$  because single letters are so easy to remember without confusion. But, as the discussion from now on is in terms of hyperbolic functions, a different nomenclature is desirable. For  $a$ ,  $b$ , and  $c$  let us substitute the symbols  $e^{y_1}$ ,  $e^{y_2}$ ,  $e^{y_3}$ , where  $e$  stands for the base of the natural system of logarithms,<sup>12</sup> and  $y_1$ ,  $y_2$ ,  $y_3$  are  $\log a$ ,  $\log b$ , and  $\log c$ . Also, let  $z_1 = y_2 - y_1$  and, in general,  $z_n = y_{n+1} - y_n$ ; or in terms of the earlier notation,  $z_1 = \log b - \log a$  and  $z_n = \log c - \log b$ . In this new notation,

$$\begin{aligned} P'_n &= \frac{e^{y_{n+1}} - e^{y_n}}{2 e^{y_{n+1}}} = \frac{1}{2}(e^{z_{n+1}} - e^{-z_n}) \\ &= \frac{1}{2} \left( \sinh z_{n+1} + \sinh z_n + 2 \sinh^2 \frac{z_{n+1}}{2} - 2 \sinh^2 \frac{z_n}{2} \right). \text{ note 13} \end{aligned}$$

<sup>11</sup> Compare *The Theory of Interest*, p. 421.

<sup>12</sup> Unless otherwise stated, the logarithms referred to in this appendix are 'natural' logarithms (to the base  $e$ ) and not 'common' logarithms (to the base 10).

<sup>13</sup> As  $\sinh z$ , or the 'hyperbolic sine of  $z$ ' equals  $\frac{e^z - e^{-z}}{2}$ ,  $2 \sinh^2 \frac{z}{2} + 1 = \frac{e^z + e^{-z}}{2}$ .

Hence,  $e^{z_{n+1}} = \sinh z_{n+1} + 2 \sinh^2 \frac{z_{n+1}}{2} + 1$  and

$$-e^{-z_n} = \sinh z_n - 2 \sinh^2 \frac{z_n}{2} - 1.$$

Now, it is apparent that, if  $e^{y_{n+1}}$  be the geometric mean of  $e^{y_n}$  and  $e^{y_{n+2}}$ ,  $z_n$  will equal  $z_{n+1}$  and hence the  $\sinh^2 \frac{z}{2}$  terms in the expression for  $P'$  will cancel out and disappear. And, even with data that do not constitute a geometric progression, it is apparent that, if a total (or a simple unweighted arithmetic average) of  $n$  successive  $P''$ 's be taken, all but the first and last of the  $\sinh^2 \frac{z}{2}$  terms will cancel out and disappear. The unweighted arithmetic average of  $n$  successive  $P''$ 's from  $P'_1$  to  $P'_{n-1}$  equals

$$\frac{1}{2n} \left\{ (\sinh z_1 + 2 \sinh z_2 + 2 \sinh z_3 + \dots + 2 \sinh z_n + \sinh z_{n+1}) + 2 \left( \sinh^2 \frac{z_{n+1}}{2} - \sinh^2 \frac{z_1}{2} \right) \right\}.$$

Furthermore, the relative influence on the average exerted by the two  $\sinh^2$  terms that remain will tend to decrease as the value of  $n$  is increased. There will always be  $\frac{n}{2}$  times as many  $\sinh z$  terms as there are  $\sinh^2 \frac{z}{2}$  terms. If we assume (with Professor Fisher) that it is legitimate and proper to average arithmetically 'sundry successive  $P''$ 's', we must conclude that the  $\sinh z$  terms in the expression for  $P'$  are, at least for the purpose of analyzing the essential characteristics of such an average of  $P''$ 's, fundamental and the  $\sinh^2 \frac{z}{2}$  terms essentially extraneous and irrelevant.

And this conclusion (derived from the fact that the influence of the  $\sinh^2 \frac{z}{2}$  terms tends to decrease *pari passu* with increases in the number of  $P''$ 's in the average) is reinforced by considering some of the essential characteristics of these terms and of the complete functions of  $z_1$ , and  $z_{n+1}$ . In the first place, though the function  $\sinh^2 \frac{z}{2}$  may be thought of as a measure of *absolute* fluctuation, it cannot properly be thought of as a measure of advance or decline. Its value is not affected by the inherent algebraic sign of  $z$ . A decline of the data from 100 to 95 yields the same value for  $\sinh^2 \frac{z}{2}$  as an advance from 95 to 100. And similarly with the expression

$\sinh^2 \frac{z_{n+1}}{2} = \sinh^2 \frac{z_1}{2}$ . Whether this expression is, as a whole, positive or negative depends in no way on the inherent algebraic signs of  $z_{n+1}$  and  $z_1$ .<sup>14</sup> It depends only on the *absolute* values of  $z_{n+1}$  and  $z_1$  and the external algebraic signs that precede  $\sinh^2 \frac{z_{n+1}}{2}$  and  $\sinh^2 \frac{z_1}{2}$ . And the sign of the expression, even as thus derived, is, as may be seen from an examination of the complete function of  $z_{n+1}$ ,<sup>note 15</sup> and the complete function of  $z_1$ ,<sup>note 16</sup> essentially arbitrary and accidental.

If we remember that a  $z$  is not a raw datum (e.g., a price) but a function (the logarithm) of the ratio of a datum to the preceding datum, it would seem reasonable to assume that the time order of the  $z$ 's should not affect an arithmetic average of a function such as  $P'$  that is intended to measure data changes. In fact, the unweighted arithmetic average of successive  $P''$ 's is unaffected by

*Page A318, line 1, the expression should read:*

$$\sinh^2 \frac{z_{n+1}}{2} - \sinh^2 \frac{z_1}{2}.$$

metric averaging be considered legitimate, the case for treating as mere erratic elements the  $\sinh^2$  terms in the average would seem complete.

The function  $\overline{P'}$  is a weighted and not a simple arithmetic average of 'sundry successive  $P''$ 's'. But the conclusions we have arrived at concerning the essential irrelevancy of the  $\sinh^2$  elements hold with respect to the weighted average as definitely as they hold with respect to the unweighted average. After the collection and cancellation of terms,  $\overline{P'}$ <sup>note 17</sup> appears as

<sup>14</sup> The expression will vanish if  $z_{n+1}$  equals plus or minus  $z_1$ .

<sup>15</sup>  $\text{Sinh } z_{n+1} + 2 \sinh^2 \frac{z_{n+1}}{2}$ .

<sup>16</sup>  $\text{Sinh } z_1 - 2 \sinh^2 \frac{z_1}{2}$ .

<sup>17</sup>  $\overline{P'} = \frac{P'_1 + 2P'_2 + 3P'_3 + \dots + nP'_n}{\Sigma n}$ .

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$$\begin{aligned}
 & + \sinh z_1 - 2 \sinh^2 \frac{z_1}{2} \\
 & + 3 \sinh z_2 - 2 \sinh^2 \frac{z_2}{2} \\
 & + 5 \sinh z_3 - 2 \sinh^2 \frac{z_3}{2} \\
 & \cdot \\
 & + (2n - 1) \sinh z_n - 2 \sinh^2 \frac{z_n}{2} \\
 & + n \sinh z_{n+1} + 2n \sinh^2 \frac{z_{n+1}}{2}
 \end{aligned}$$

all divided by  $2 \sum n$ .

If the data constitute a geometrical progression,<sup>18</sup> the  $\sinh^2 \frac{z}{2}$  terms cancel out and disappear as they do in the *unweighted* average. It is true that, when the data are not so related to one another, no such wholesale cancellation of  $\sinh^2 \frac{z}{2}$  terms occurs as occurs in the case of the unweighted average. Indeed, each  $z$  is, in the weighted average, represented by a  $\sinh^2 \frac{z}{2}$  item. But the absence of any relation of the sign of these terms to advance or decline of the data is as complete as it was with the unweighted average. The  $\sinh^2 \frac{z}{2}$  terms are indices of mere absolute fluctuation. Their algebraic sum equals the deviation of the most recent  $\sinh^2 \frac{z}{2}$  (*i.e.*,  $\sinh^2 \frac{z_{n+1}}{2}$ ) from the arithmetic average of the  $n$  preceding  $\sinh^2 \frac{z}{2}$ 's, divided by  $\frac{n+1}{2}$ .<sup>note 19</sup> It is no more than a comparison of how the size of a particular function of the *extent* of the most recent fluctuation (*up or down*) compares with the average size of the function in the past  $n$  periods. As such, it is for our purposes, an erratic and meaningless expression.

<sup>18</sup> Or, more generally, if the ratio of the larger of each pair of adjacent data points to the smaller be constant, as would be the case, for example, if the data ran 2, 4, 8, 4, 8, 16, 8, 4.

<sup>19</sup>  $\frac{2 \sum n}{2n} = \frac{n+1}{2}$ .

## APPENDIX

But, if  $n$  be made large enough, this  $\sinh^2 \frac{z}{2}$  expression virtually vanishes from the picture. For example, if  $n = 120$  (as it does in one of Professor Fisher's quarterly commodity price illustrations) the deviation of  $\sinh^2 \frac{z_{121}}{2}$  from the average of the 120 preceding  $\sinh^2 \frac{z}{2}$ 's is divided by  $\frac{121}{2}$ . With data that fluctuate no more violently than do quarterly commodity price index numbers, the largeness of this divisor reduces the  $\sinh^2$  elements in the formula to complete negligibility.

If we remove these erratic (and commonly negligible)  $\sinh^2$  terms from the expression for  $\bar{P}'$ , we have

$$\bar{P}' = \frac{\sinh z_1 + 3 \sinh z_2 + 5 \sinh z_3 + \dots + (2n-1) \sinh z_n + n \sinh z_{n+1}}{2 \sum n}$$

But, as  $\sinh z = z + \frac{z^3}{3!} + \frac{z^5}{5!} + \dots$ ,<sup>20</sup> this expression equals

$$\begin{aligned} & + z_1 + \frac{z_{1,3}}{3!} + \frac{z_{1,5}}{5!} + \dots \\ & + 3z_2 + \frac{3z_{2,3}}{3!} + \frac{3z_{2,5}}{5!} + \dots \\ & + 5z_3 + \frac{5z_{3,3}}{3!} + \frac{5z_{3,5}}{5!} + \dots \\ & \quad \cdot \\ & + (2n-1)z_n + \frac{(2n-1)z_{n,3}}{3!} + \frac{(2n-1)\sum z_{n,5}}{5!} + \dots \\ & + nz_{n+1} + \frac{nz_{n+1,3}}{3!} + \frac{nz_{n+1,5}}{5!} + \dots \end{aligned}$$

all divided by  $2 \sum n$ .

If the values assumed by  $z$  be small ('absolutely' and not algebraically), this function will approximate

$$\frac{z_1 + 3z_2 + 5z_3 + \dots + (2n-1)z_n + nz_{n+1}}{2 \sum n}$$

This is the value obtained by neglecting all powers of  $z$  greater than unity. Such a treatment of the function, in which cubes are the next

<sup>20</sup>  $e^z = 1 + z + \frac{z^2}{2!} + \frac{z^3}{3!} + \dots$

and  $\sinh z = \frac{e^z - e^{-z}}{2}$

higher power after unity, is, for the purposes of our present analysis, quite warranted.<sup>21</sup>

But, as  $z_n = y_{n+1} - y_n$ , this expression equals  $(y_2 - y_1) + (3y_3 - 3y_2) + (5y_4 - 5y_3) + \dots + \left\{ (2n-3)y_n - (2n-3)y_{n-1} \right\} + \left\{ (2n-1)y_{n+1} - (2n-1)y_n \right\} + (ny_{n+2} - ny_{n+1})$ , divided by  $2 \sum n$ ; which equals  $-y_1 - 2y_2 - 2y_3 - \dots - 2y_n - y_{n+1} + n(y_{n+1} + y_{n+2})$ , divided by  $2 \sum n$ . If  $Y_n = \frac{y_n + y_{n+1}}{2}$ , this expression becomes

$$-Y_1, -Y_2, -Y_3, \dots, -Y_n + nY_{n+1}, \text{ divided by } \Sigma n, \text{ or} \\ \frac{2}{n+1} (Y_{n+1} - \frac{Y_1 + Y_2 + \dots + Y_n}{n}).$$

In other words, the value to which  $\bar{P}'$  approximates (if the month to month—or year to year—fluctuations of the data are not too violent—and they are not with commodity price index numbers) may be described as follows. Take a two-months' moving average of the logarithms of the data (or take the logarithms of the geometric means of adjacent values). With this average as new data,  $\bar{P}'$  will approximate  $\frac{2}{n+1}$  times the deviation of a datum value from the arithmetic average of the  $n$  preceding data values.<sup>22</sup> It is the deviation of the logarithm of present price from an average of the logarithms of past prices.

The function  $\frac{2}{n+1} (Y_{n+1} - \frac{Y_1 + \dots + Y_n}{n})$  is the *slope* of the straight line joining  $Y_{n+1}$  to the mid point of the moving average  $\frac{Y_1 + \dots + Y_n}{n}$ . It is therefore *technically* correct to describe it as a measure of rate of price change. For example, if the  $Y$ 's all fell on the straight line  $Y = A + Bx$  (as would be the case if the original

<sup>21</sup> If  $z$  be 'absolutely' small,  $\sinh z$  does not differ greatly from  $z$ . For example, if prices one month are even as much as 125 per cent of what they were in the preceding month, the difference will be extremely small. If  $e^x = 1.25$  then  $z = .2231 \dots$  and  $\sinh z = .2250 \dots$

<sup>22</sup> If common, and not natural, logarithms are used, the result will, of course, be 0.434 ... times  $\bar{P}'$  instead of  $\bar{P}'$ .

data fell on a compound interest curve), the function would always equal  $B$ . No matter what the value of  $n$  the arithmetic average of the  $Y$ 's would advance *pari passu* with the value of the most recent  $Y$  from which the average was to be subtracted.

But no such condition would exist if the  $Y$ 's fell on a periodic curve such as a sine curve (plus a constant). If  $n$  equalled the number<sup>23</sup> of data points in one period or 'cycle', the function points would lie on another sine curve of smaller amplitude or 'swing' than the data curve, *but with maxima and minima on the same dates*. With an adjusted scale, it would be an exact reproduction of the data curve, though it would be technically correct to describe it as a measure of rate of change of that curve. But it might easily be more misleading than enlightening to do so.

A sine curve has no long-term trend. In general, if the data show no definite long-term trend, the average of the  $Y$ 's will, if  $n$  be taken sufficiently large, tend to be virtually constant. And  $\bar{P}'$  will therefore tend to reproduce the data—minus a constant.

There are innumerable examples of such trendless curves. Some of the most perfect are series that, from their mathematical nature, move within definite limits. The digits of the decimal development of an incommensurable number, such as the 707 calculated digits of  $\pi$ . The number of spots in each successive throw of a pair of dice. Percentages that cannot exceed one hundred, such as the percentage of blast furnaces in blast, etc.

Less perfect examples come from the field of percentages that never approach one hundred; the percentage of the population in receipt of poor relief, the percentage of banks in the hands of receivers, the ratio of bank reserves to bank deposits, etc.

But, even with series that possess unmistakable trends,  $\bar{P}'$  may closely approximate  $P$ . If the fluctuations of the data (from which the average is to be subtracted) happen to be extremely large as compared with the movements of the average,  $\bar{P}'$  will, over short periods, often virtually reproduce  $P$ .<sup>note 24</sup>

<sup>23</sup> Or a multiple of that number.

<sup>24</sup> Compare *The Theory of Interest*, Chart 49 (opp. p. 426). In this chart are presented quarterly figures for  $\bar{P}'$  and  $i$  (short term interest rates in the United States) for the period 1915–1927. In this period occurred the violent war and post-war movements

It is of course true, as Professor Fisher says, that "It certainly stands to reason that *in the long run* a high level of prices due to previous monetary and credit inflation ought not to be associated with any higher rate of interest than the low level before the inflation took place. It is inconceivable that, for instance, the rate of interest in France and Italy should tend to be permanently higher because of the depreciation of the franc and the lira, or that a billion-fold inflation as in Germany or Russia would, after stabilization, permanently elevate interest accordingly."<sup>25</sup>

The function  $\bar{P}'$  compares prices with a moving-average base instead of with zero, and therefore cannot remain high indefinitely. But the statistical evidence that the particular base introduced by  $\bar{P}'$  is, even empirically, a good base is not strong. Correlations between  $P$  and  $i$  usually run higher than those between  $\bar{P}'$  and  $i$ .

And again, if the substitution of  $\bar{P}'$  for  $P$ , instead of lowering, raised the coefficients of correlation noticeably, it is questionable whether we would be warranted in assuming that it was because  $\bar{P}'$  was a 'weighted average of sundry successive  $P$ 's' rather than because it was a deviation of  $P$  from a moving base. Professor Fisher writes, "It seems fantastic, at first glance, to ascribe to events which occurred last century any influence affecting the rate of interest today".<sup>26</sup> If for the word 'events' we substitute the words 'commodity price changes' (which are the 'events' Professor Fisher is discussing) and for the words 'any influence' the particular measure of that influence Professor Fisher proposes, we might be tempted to counter with, 'Why only at *first glance*?' He immediately continues with, "And yet that is what the correlations with distributed effects of  $P'$  show." But is it?

of prices and interest rates. The value of  $n$  is huge, 120. The similarity between  $\bar{P}'$  and  $P$ , both of which are given in the chart, is striking.

Professor Fisher found that the maximum correlation (+ 0.738) between  $\bar{P}'$  and  $i$  was obtained when  $n$  was made 120. But the correlation between  $P$  (the raw data) and  $i$  gave + 0.709 without lagging and, if  $i$  was lagged two quarters (half a year), + 0.891. (*The Theory of Interest*, pp. 427 and 431.)

<sup>25</sup> *The Theory of Interest*, p. 440. The italics are Professor Fisher's.

<sup>26</sup> *The Theory of Interest*, p. 428.

## **APPENDIX C**

THE MEANING OF GOLD YIELDS OF BONDS PAYABLE  
PRINCIPAL AND INTEREST IN CURRENCY  
(See Table 19 and Charts 25, 26 and 28)

1. THE meaning of bond yields in a year such as 1925 in the United States when there was no problem of currency depreciation in terms of gold.

If a 5 per cent \$1000 face value bond, with interest payable semi-annually, four years to run, sells for \$1036.63, it is said to yield 4 per cent per annum to the purchaser.<sup>1</sup>

Or, if the present value of each interest payment and of the principal payment be obtained by discounting at 2 per cent per half-year true discount each future payment, the sum of these present values will be \$1036.63. For example, there are eight interest payments of \$25, the first payable six months hence, the second one year hence, etc. There is also the principal payment of \$1000 payable four years hence. Now the present value of the first interest payment of \$25 is  $\$25 \div 1.02$  or \$24.51; the present value of the second interest payment of \$25 is  $\$25 \div (1.02)^2$  or \$24.03; etc. The use of 1.02 as a divisor instead of  $\sqrt{1.04}$  is, as mentioned in note 1, a convention of the bond tables. Now, the present values of the eight interest payments of \$25 each and the principal payment of \$1000 are: \$24.51; \$24.03; \$23.56; \$23.10; \$22.64; \$22.20; \$21.76; \$21.34, and \$853.49. The total of these present values is \$1036.63, the price paid for the bond.

2. The meaning of a *gold yield* of a bond in a period of depreciated currency, when the interest and principal of the bond are both payable in currency.

Bond No. 5 in Appendix A, Table 3 is a New York and Harlem Railroad 7 per cent bond which matured May 1, 1873. The interest was payable May 1 and November 1.

The average greenback price of this bond in January 1865 was \$1038.75. The average gold price of greenbacks in January 1865 was \$46.3 in gold for \$100 in greenbacks. Multiplying \$1038.75 by .463, we obtain \$480.94 as the gold price of this Harlem bond in January 1865. The gold yield to maturity of this bond at this gold price was calculated and found to be 16.43 per cent per annum.

The meaning of this yield may be illustrated as follows: The gold

<sup>1</sup>Really 2 per cent semi-annually under the convention on which the ordinary bond tables are constructed.

## APPENDIX

values of the seventeen future interest payments of \$35 each and the principal payment of \$1000 were, on the day on which each payment was made, \$24.32; \$23.99; \$27.77; \$23.81; \$25.83; \$24.86; \$25.11; \$26.26; \$25.96; \$27.30; \$30.39; \$31.44; \$31.44; \$31.20; \$31.15; \$31.18; \$29.90; \$854.25. Dividing the first interest payment by  $1.04713^{(note\ 2)}$ , the second interest payment by  $(1.04713)(1.08215)$ ; the third interest payment by  $(1.04713)(1.08215)^2$ , etc., we obtain a set of present values in gold of the future gold values of the future currency interest payments of \$35 each and the currency principal payment of \$1000. These present values (in gold) were \$23.23; \$21.21; \$22.68; \$17.97; \$18.02; \$16.02; \$14.96; \$14.45; \$13.20; \$12.83; \$13.20; \$12.62; \$11.66; \$10.69; \$9.87; \$9.13; \$8.09; \$231.06. The total of these present values (in gold) is \$480.89—five cents less than the gold price of the bond in January 1865. The gold yield of the bond was therefore a trifle less than 16.43 per cent per annum.

The yield (4 per cent) referred to in the first section of this Appendix is a 'promised' yield. If all payments are made on time, it will also be a 'realized' yield. The yield (16.43 per cent) referred to in the second section is a 'realized' yield—if the payments are made on time. It, of course, cannot be a 'promised' yield as the future cannot be known.

<sup>7</sup>  
<sup>12</sup>  
<sup>2</sup>  $1.04713 = (1.08215)^{\frac{7}{12}}$ . Assuming the purchase as on the 15th of the month, there are only three and one-half months from date of purchase (January 15, 1865) to the first interest payment (May 1, 1865).

## **APPENDIX D**

**METHODS FOR COMPUTING CYCLICAL AND TREND  
GRADUATIONS AND MOVING SEASONALS**

**CYCLICAL GRADUATION**

THIS is a 'smoothing' or graduation designed to depict as well as possible what the various series would be like if all seasonal and merely erratic fluctuations were removed. It is calculated by taking a 5-month moving total of a 5-month moving total of an 8-month moving total of a 12-month moving total and applying to the results a 17-month weighted moving total with the following simple weights: +7, -10, 0, 0, 0, 0, 0, 0, +10, 0, 0, 0, 0, 0, -10, +7; the final results being divided by 9600. To obtain a value for any given month, data for 43 months are used, 21 preceding the given month and 21 succeeding it. It is a 'fifth degree parabolic graduation' in that it is designed to fit a curve exactly representable by an equation of the form

$$y = A + Bx + Cx^2 + Dx^3 + Ex^4 + Fx^5$$

as closely as is possible with such simple multiples as 7 and 10. Its other mathematical characteristics, including its ability to describe cyclical material such as could be represented by a superposition of sine curves of various periods, are discussed in full in *The Smoothing of Time Series*, by Frederick R. Macaulay (National Bureau of Economic Research, 1931), pp. 73-5, etc.

**TREND GRADUATION**

This is a 'third degree parabolic graduation'. It will fit almost exactly any curve representable by an equation of the form

$$y = A + Bx + Cx^2 + Dx^3.$$

For a description of its mathematical characteristics see *The Smoothing of Time Series*, pp. 59-60, etc. To fit it to monthly data, take a 4-month moving total of an 8-month moving total of the data. Subtract a 17-month moving total of the data. Take a 2-month moving total of a 12-month moving total of the results. Divide by 360. This graduation was applied to the 43-term cyclical graduation described in the preceding section by taking as the 'months' to which this graduation was to be applied the Januaries, Mays, and Septembers of the 43-term graduation. Intermediate values were read off a large scale chart on which a smooth curve had been drawn through the calculated values with French curves.

**MOVING SEASONALS**

The moving seasonals of Chart 20 were constructed by taking a 7-month moving average of a 9-month moving average of the deviations of the data

for successive Januaries, Februaries, etc., from the 43-term graduation of the series as a whole. These twelve moving averages, one for each nominal month, were then smoothed with French curves. This preliminary moving seasonal was then corrected for irregularities in the algebraic sum of successive twelve-month periods by taking a 2-month moving average of a 12-month moving average of the preliminary moving seasonal and calling the deviations of the preliminary seasonal from this graduation the final moving seasonal.

## **APPENDIX E**

## SHORT TERM INTEREST RATES

THE MORE important of the short term interest rates presented in this study are those for call money, time money and commercial paper. The call money rates (Appendix A, Table 10, column 1 and Table 21) and the commercial paper rates (Appendix A, Table 10, column 3, and Table 23) are given monthly from January 1857; the time money rates (Appendix A, Table 10, column 2, and Table 22) from January 1890.<sup>1</sup> All three rates are from New York City markets. It was almost inevitable that these particular series should be chosen. No other short term interest series fulfilled so many of our requirements.<sup>2</sup>

First, the loans on which the rates are quoted are standardized. Though some call or time loans might carry higher or lower rates than those quoted, there was, at least hypothetically, a standard type of loan whose rate was quoted, and with which the non-standard loan could be compared.<sup>3</sup> Commercial paper rates might fluctuate but the loans on which the quotations were made were standardized. It is true that the standardization of all three types of loan was much less exact in the earlier than in the later period. Moreover, the standard loan itself seems to have changed somewhat with the passage of years. 'Commercial paper' in the 'sixties or even 'seventies was a more speculative investment than in the 'nineties.

<sup>1</sup> For the reasons why the time money rates are carried back only to January 1890 see the section on time money.

<sup>2</sup> Two other series of short term interest rates are presented in this book: commercial paper rates in Boston monthly, January 1831 to December 1860, and rates for bankers' acceptances in New York, January 1918 to January 1936. The Boston commercial paper rates will be found in Appendix A, Tables 24 and 25 and the New York bankers' acceptance rates in Appendix A, Table 26. The Boston rates are given for their general interest and because New York rates for this early period before 1857 are not obtainable in any such carefully collected manner. The New York bankers' acceptance rates are presented for their own sake and because they are often useful in checking the significance of an apparent change in direction of movement.

<sup>3</sup> The standard call or time loan in the earlier period was based on "mixed" collateral, worth in the market about 130 per cent of the amount of the loan. In the later period, 'all industrial' collateral began to be considered more and more acceptable. Non-standard loans were made at lower or higher rates. Collateral consisting entirely of government bonds usually called for a lower rate; collateral of a less marketable or more fluctuating type than the standard called for a higher rate. At present, curb market securities call for a higher rate than New York Stock Exchange securities.

Second, the published rates are in general accurate. Collection and publication seem to have been done usually with great regularity and care—though here again the rates of the earlier period are distinctly less reliable than those of the later period. However, even the early rates are seldom obscured by such hidden or difficult-to-measure considerations as the ‘commissions’ that occur in real estate mortgage transactions or the ‘balances’ required by banks of their customers.<sup>4</sup>

Third, all three rates are indices of money market conditions in New York City<sup>5</sup> and hence have very direct relations to the New York stock and bond markets. Though money market conditions in other centers may often have an appreciable effect on the New York security markets, it is much less direct and immediate. While changes in the rediscount rate of even the Bank of England have sometimes had a marked influence on American money rates and on the movement of the prices of American stocks and bonds, it has always been indirect, and in the earlier period covered by this study it was almost always quite negligible.

Fourth, they are relatively adequate indices. In this respect they are unlike the rates charged by ordinary banks or the rates at which money is borrowed on real estate. Tightness in the call money market manifests itself primarily in high rates, and not, as in the real estate mortgage market, by difficulty of obtaining loans.

Fifth, the rates have almost always applied to large volumes of loans.

Sixth, they are rates that can be carried far back in time. Short

<sup>4</sup> It is true that time loan rates have been, in some disturbed periods, quoted with ‘commissions’. However, something can always be learned about the amount of such ‘commissions’ from the financial newspapers and magazines of the period. Moreover, there is an impersonality in the time loan market that is lacking in the case of loans of a bank to its regular customers, whose individual credit determines, to a considerable extent, the treatment they receive.

<sup>5</sup> The fact that only a small proportion of the total borrowing of the country is done through call money, time money, or commercial paper (in the strict sense), but that most is done directly from the banks by their own commercial customers is not important for our purposes. These loans have no such homogeneity as the loans giving rise to the three rate series with which we are comparing them. Moreover, while they would be important in a discussion of the effect of interest charges on the cost of doing business, they do not have the direct relation to the security markets that is found in call rates, time rates or even commercial paper rates. Since the Federal Reserve system, with its rediscounting privileges, was established, the relation of commercial paper rates to time money rates is not so close as formerly.

economic series are often interesting and important but the dangers of generalizing from them are great. The newspapers and magazines are cluttered up with charts showing apparently interesting relationships between series extending over half a dozen years or so. All too often, when such series are extended over a longer period, it is found that the interesting relationships appear only in the half dozen years. The short term interest rate series presented in this study show interesting relationships over long periods.<sup>6</sup>

While the general nature of the loans giving rise to the three rates—on call money, time money, and commercial paper—is doubtless well known to the reader, a somewhat detailed description would seem appropriate at this point. Both call and time loans are made to stock or bond brokers, or to investment bankers, who place in the hands of the lenders stocks or bonds, or both, as collateral.<sup>7</sup> The proceeds of these loans are used for the most part to finance speculative operations in the financial markets or the distribution of new issues of securities.<sup>8</sup> ‘Commercial paper’ is a generic term applied to promissory notes on which merchants and manufacturers borrow money for use in the ordinary course of their business. No stock or bond collateral is deposited to secure the loan. The note may or may not bear an endorsement, and thus become ‘two name’ paper. Ordinarily the note

<sup>6</sup> No series used for purposes of comparison in this book is carried further back than January 1857. The only series that could be carried further back, easily and with no decrease in accuracy, was that for clearings in New York City, which can be carried back to October 1853. Some deadline seemed highly desirable as comparisons between the series was the primary object. No better deadline presented itself than January 1857. For further discussion of this date, see Ch. III.

<sup>7</sup> Call loans are sometimes made on the security of bankers' acceptances deposited with the lender. They usually bear a lower rate of interest than those having stocks or bonds as collateral, because the acceptance collateral enjoys an extremely dependable and steady market. The proceeds of this type of call loan are ordinarily used for a purpose different from that to which other call loans are put, and the volume of such call funds outstanding has never been of important proportions. The rates dealt with in this book apply only to call loans secured with stocks or bonds as collateral.

<sup>8</sup> Of course, ordinary bank loans are often secured by the deposit of stocks or bonds as collateral, but they are not time loans. What are technically known as time loans are made to stock and bond brokers and investment bankers on securities as collateral, and, as already stated, the proceeds are almost invariably used for speculative and investment distribution purposes. It is in this technical sense that we use the term ‘time loan’.

is accompanied by a financial statement of the borrower for the information of the purchaser of the paper. Generally, only those borrowers whose credit is well established and well known can make effective use of commercial paper as a means of procuring short term loans.

Neither call nor time loans are eligible for rediscount at the Federal Reserve banks. Commercial paper, when it meets the requirements laid down in the Federal Reserve Act, is eligible for rediscount.<sup>9</sup> Call loans are made for an indefinite period but subject to call on twenty-four hours' notice, the rate of interest being adjustable from day to day.<sup>10</sup> Time loans usually run from two to six months, though they are made for as short a period as one month or as long as six or seven months. Commercial paper now usually runs from four to six months. The amount of sixty to ninety day paper is at present quite negligible. Earlier, say before 1900, the proportion of such shorter term paper was much greater.

Call money rates are made in the New York Stock Exchange. The Money Committee of the New York Stock Exchange Clearing Corporation, after having studied the offerings from brokers and bankers whether made at fixed rates or at the market, and having examined the statements of brokers concerning what they wish to borrow and at what rates, fixes and posts at twenty minutes before eleven each morning a 'Renewal Rate'. This rate is set at the point that seems likely to result in placing a maximum amount of funds. This determination does not of itself, of course, obligate either borrower or lender to observe the rate. As a matter of fact, 'outside' rates, that is rates on transactions made elsewhere than at the money desk, often vary from the so-called 'official rate'—occasionally by

<sup>9</sup> The term 'commercial paper' is given a special and rather precise definition in the Federal Reserve Act for the purposes of administering the system set up under that law. The words are employed in a somewhat more inclusive sense here.

<sup>10</sup> Recent practice has developed what are sometimes called 'call loans specials'. These take the form of the ordinary call loan, but borrower and lender enter into a gentleman's agreement that renewals will be allowed from day to day at a fixed rate of interest for a specified term. Call loans made for sums over five thousand dollars are exempt from the New York State Usury Law. It is questionable whether time loans are exempt. It may also be noted that, generally speaking, call loans are now called as a matter of course in a somewhat more impersonal manner to suit the convenience of the lender than was formerly the case.

substantial margins. Nevertheless, in ordinary times some 95 per cent or more of the call loans, new and renewed, carry the renewal rate. There is no 'official' rate on new loans. The call money, rate employed throughout this book is the renewal rate, or in periods when exact information has been lacking, estimates of it.<sup>11</sup> Methods employed in these estimates are explained fully later in this appendix.

The years covered by this book fall into three periods with respect to the manner in which call rates on the New York Stock Exchange were actually made. In the first period, before September 1917, the rates were made at the 'Money Post' in almost exactly the same manner as the prices of stocks were made. The renewal rate was largely a matter of chance. After between \$2,000,000 and \$3,000,000 of new loans had been made, approximately the average of the rates of interest to be paid upon these loans was taken as the rate at which old loans should be renewed for that day. During the second period, September 1917-January 1919, the money market was under the supervision and control of the Money Committee. Since January 1919 the money desk on the floor of the Exchange has taken the place of the old 'money post'.<sup>12</sup>

<sup>11</sup> Formerly, the rates have sometimes varied very considerably according to the type of collateral, though variations due to this cause became less and less with the passage of time. The quotations used in constructing our index numbers were, in earlier times, those from 'mixed collateral'—i.e., rails and industrials listed on the New York Stock Exchange. At present, the distinction between rail and industrial collateral, for the purpose of determining rates, is not made.

<sup>12</sup> See Bartow Griffiss, *The New York Call Money Market*.

When a call loan is made, there are, of course, a lender and a borrower of money. Now, because the security behind the call loan is Stock Exchange collateral, there are a borrower and a lender of Stock Exchange collateral. The lender of money may be thought of as a borrower of collateral, and the borrower of money may be thought of as a lender of collateral. In general, they are not so thought of, because the essential element is that one individual wishes to borrow money and the other wishes to lend, while the passing of the collateral is thought of as a mere adjunct to the transaction. However, sometimes the demand is for collateral, not for money. When a broker has sold a stock short, he wishes to borrow that stock. He offers to lend money. However, when he wishes to borrow money, he must give a greater value of stock collateral than the amount of money that he wishes to borrow. When he wishes to borrow a stock, however, he must give a larger amount of money than the value of the stock. On this money that he lends the broker who lends him the stock he receives interest, though at a lower rate than the ruling rate for call loans. Sometimes this rate is so low as to be a zero, or even a minus rate. The stock is then said to be lending 'flat' or 'at a premium'. The rate of interest paid on this money is termed the 'lending rate on stocks' and is really a

Time loans are almost all placed by brokers acting as intermediaries between borrowers, usually stock brokers or investment bankers, and lenders, usually banks. There is no agency here performing functions similar or corresponding to the money desk of the New York Stock Exchange in the case of call loans.

The commercial paper market is an 'open market' in the sense that transactions are of a sort that do not bring the borrower and the lender into direct contact as is the case when a customer procures a loan from his bank. The borrower on commercial paper simply makes a promissory note, has it endorsed or not, according to circumstances (now ordinarily not), and offers it for sale to a broker, who buys it and holds it or, as is usually the case, sells it to a bank or other investor who wishes to place funds temporarily in such paper. The note may be bought and sold in this way several times before maturity. The holder at maturity, either directly or through a broker, presents it to the maker for payment. The rates on such loans naturally vary with maturity and also with the goodness of the name or names they bear. Such loans may be eligible for rediscount at the Reserve banks and their rates thus be more directly affected by the prevailing rediscount rate than are the rates of time loans, which are not eligible for rediscount. Member banks now as a matter of practice obtain needed funds from the Reserve system largely on their own notes with government bonds as collateral or upon customers' eligible paper without collateral.

The decrease during the last few years in the amount of commercial paper outstanding is due primarily to the elimination of the commercial paper 'broker'. Large corporations have established direct relations with entire chains of banks, and when they wish money they get it directly. Even smaller borrowers have recently tended more and more to deal directly with the banks. Bankers' acceptances have probably not taken up much of the commercial paper business. The overlap is small. For example, a large amount of commercial paper originates in the textile houses and these do not enter the acceptance (Footnote <sup>12</sup> concluded)

peculiar type of call money. In the early days, when there was often a demand for government bonds, the rate of interest paid on loans that were secured by them was often much lower than the rate on loans secured by other collateral, no matter how good the collateral might be. This low rate of interest on loans secured by government bonds was really a type of call loan, in its nature between the lending rate on stocks and ordinary call money.

market. Cotton financing is the biggest item in the acceptance market.

It is extremely difficult to collect any very reliable and continuous series of quotations for short term interest rates in New York City before 1866.<sup>18</sup> The *Commercial and Financial Chronicle* was first pub-

<sup>18</sup> There is one source for early commercial paper rates (almost certainly Boston rates) giving practically continuous and apparently uniform quotations monthly as far back as January 1831: Bigelow and Martin. The Bigelow series runs from January 1831 to December 1860 monthly. The Martin series runs from January 1831 into the 'nineties. For the period 1831-60 Martin seems to have copied, or at least used, Bigelow's table. Bigelow's table of Boston (?) rates is reproduced in Appendix A, Table 25. Martin's table (for the period 1831-1860) is reproduced in Appendix A, Table 24.

Erastus B. Bigelow, inventor of the power loom, a New England mill owner, published in 1862, at Boston, a large quarto entitled *The Tariff Question . . . with statistical and comparative tables*. Appendix 112 (pp. 204, 205) contains a table entitled *Statement of the Comparative Rates of Interest in England, France and the United States each month in each year, from 1831 to 1860. Compiled from authentic sources*. The American rates are described as "Street Rates on First Class Paper in Boston and New York, at the beginning, middle and end of the month". Where this table contains two quotations for a month, interpretation is sometimes difficult. In his discussion of these rates (pp. 66-69) Bigelow makes no statement concerning the "authentic sources" from which his table was compiled. The book was noticed and the interest table copied in the London *Economist* of December 27, 1862, pp. 1434, 1435. Again no discussion of sources. The book was reviewed by Leslie Stephen in *MacMillan's Magazine*, Vol. 7, p. 126. No references were made there to the interest tables.

Joseph G. Martin, a Boston stock broker, published from 1856 to 1897 a series of books on the History of the Boston Stock Market. The first, *Twenty-one Years in the Boston Stock Market*, (Boston, 1856), contained no American interest rates. The second, *Seventy-three Years History of the Boston Stock Market* (Boston, 1871), contained a table (pp. 37-40) entitled Interest Rates for Money, 1831-1871. No statement is made in this table or elsewhere in the book whether these are New York or Boston rates. The only comment is: "The following rates are for first-class, three to six months, bankable paper." However, when Martin reprints the same series of interest rates in his later book, *One Hundred Years' History of the Boston Stock Market (1798-1898)*, he calls the series The Course of the Boston Money Market.

Now, in view of the facts that Martin's first book (1856) contained no American interest rates, that Bigelow's book appeared in 1862 and that the table in Martin's second book (1871) (as far as can be gathered from the form in which Martin presents his material) is almost identical with Bigelow's table for the years 1831 to 1860, it seems fair to assume that Martin's early figures were taken from Bigelow's book. However, in spite of the dates of publication, it is possible that Bigelow obtained his interest rates from *unpublished* material collected by Martin. Martin was intensely interested in all that related to the statistical history of the Boston stock and money markets and was continually collecting quotations of all kinds. A large amount of his unpublished manuscript material is now in the Widener Library, Harvard University.

lished July 1, 1865, but only gradually began its careful collection of short term interest rate material. Though the amount of data in existence for the period before 1866 is quite large, it is extremely irregular with respect to both quality and periods for which there are quotations. Moreover, upon close examination, the material that does exist is found to be extremely heterogeneous; variations in quoted rates for the same date are sometimes traceable to the fact that the quotations are for different types of loan and sometimes seem the result merely of obtaining information from different primary sources, such as different brokers.

At present, the chief *primary* sources for interest rates in New York City in the period before the publication of the *Commercial and Financial Chronicle* are the daily newspapers, *Hunt's Merchants' Magazine*, and the *Bankers' Magazine*. Of these sources, the newspapers, as a group, are much the most regular in their quotations. Nevertheless, it is impossible to work continuously with one paper. Any one paper either stops quoting or its quotations become unmistakably very inaccurate. One of the signs of such inaccuracy is the quoting of an unchanging rate day after day for long periods, the context showing that proper attention is not being given to the subject. It might be thought that if we always had at least one newspaper giving quotations our problem could be easily solved. However, the newspapers do not always agree. When quoting commercial paper they are not always quoting the same grade. This is especially important to watch in this early period. The rate of discount on commercial paper 'not well known' was often two or three times as great as on 'first class acceptances'. The newspapers rather commonly quote 'commercial paper' without any specifications as to grade. Moreover, there is unmistakable evidence that this did not always mean the highest grade.

*Hunt's Merchants' Magazine* and the *Bankers' Magazine* are even more irregular in their quotations than the newspapers. For example, neither quotes interest rates of any kind during the important year 1857. Moreover, the dangers involved in shifting back and forth from one to the other are just as real as in the case of the newspapers.  
(Footnote <sup>18</sup> concluded)

Martin calls the rates Boston rates, and Bigelow calls them Boston and New York rates. Now Boston and New York rates were not identical, and an examination of the newspapers and periodicals has convinced me that the Bigelow-Martin rates are Boston and not New York rates.

Quotations for what is termed the same type of loan continually vary. Neither *Hunt's Merchants' Magazine* nor the *Bankers' Magazine* is always a primary source. For example, when *Hunt's Merchants' Magazine* in January 1859 (Vol. 40, p. 76) begins to quote interest rates again (having lapsed for some years) and we find back rates for October 25, November 24, December 6 and December 14, 1858, we must not assume that all these figures are primary sources. The October and November figures are almost certainly taken from the *Bankers' Magazine* of December 1858 (p. 510). In the same way *Hunt's Merchants' Magazine* figures from May 1861 to October 1861 are from the *Bankers' Magazine*. Crude mistakes that are obviously due to errors in copying often appear. Numerous mistakes are apparent even when *Hunt's Merchants' Magazine* is copying from its own files.<sup>14</sup>

Aside from the general heterogeneity of the data, another source of embarrassment in the early period is the difficulty of obtaining quotations when the prevailing rates are high. There are two reasons for this difficulty. First, in times of financial panic all newspaper quotations tended to cease. Not only was there an apparent prejudice against publication but also it was often extremely difficult to discover what the rates really were. 'High and irregular' runs the legend. Second, because of the usury laws, high rates were disguised by means of 'commissions'.<sup>15</sup>

Secondary sources for interest rates in the period before 1866 are magazine and newspaper articles, and brokers' annual reviews. So few of these articles and reviews are still in existence that they are of little value except as partial checks on the accuracy of complete tables such as Bigelow's or those we have constructed for this volume. For the period January 1862 to December 1865 we have used Wesley

<sup>14</sup> For example, comparison of dates in the table of rates in Vol. 42, p. 196 with the tables in Vol. 41, pp. 716, 580 and 452 is quite startling.

<sup>15</sup> The *Commercial and Financial Chronicle* was the first journal to make any attempt at regularly quoting these commissions. The earlier publications seldom even mentioned commissions, let alone quoting them. As an example of the results of this practice, the reader may examine the table of interest rates for 1868-70 drawn up by the then Manager of the New York Clearing House (*Commercial and Financial Chronicle*, February 4, 1871, p. 138). The rate for each week in 1869 is given as 7 per cent. During 1869 call loan rates, as averaged from quotations in the *Commercial and Financial Chronicle*, exceeded 7 per cent nineteen weeks out of the fifty-two, while corresponding average weekly rates on commercial paper exceeded 7 per cent every week in the year.

C. Mitchell's table of monthly call loan rates given in his *History of the Greenbacks*, p. 367. We checked with original sources and decided that Dr. Mitchell's figures were probably as good as could be constructed for this very difficult period. Dr. Mitchell makes some comments on the inadequacy of the sources for this war period 1862-65.

"To my knowledge there are no systematic records of rates of interest on long-time business loans, and the data for short-time loans are unusually meagre and doubtful. In 1860, *Hunt's Merchant's Magazine* and the *Bankers' Magazine*—the most prominent business periodicals of the day—were publishing each month tables showing the rates of interest paid in New York for loans of several different kinds. But during the War, they ceased these systematic reports and one can glean from them but occasional scattering statements" (p. 365).

"Under these circumstances, it seems justifiable to attempt constructing a new table from the reports of the daily newspapers. On examination, however, one finds that this course also is open to objection. In the first place, regular statements can be found only for one kind of transaction—loans on call. In the second place, whenever the rates for call loans rise above 7 per cent the reporter is apt to say merely that the ruling rate is 'the legal maximum plus a small commission'. In the third place, one is justified in feeling some suspicions of the accuracy of newspaper reports. However, I have compiled a table from the financial columns of the newspapers of the rate for call loans every Saturday from 1862 to 1865. In doing so, I have been compelled to supplement one paper by another, for no one gives the reports with perfect regularity for the whole period" (pp. 366-7).

In the period January 1866 to January 1923 we have relied almost entirely on the *Commercial and Financial Chronicle* and its *Financial Review*. These two sources are practically identical. Where they differ we have in the earlier period given a little more consideration to the *Chronicle*, in the later period to the *Financial Review*. There is some evidence, both internal and external, that in the later period the figures in the *Chronicle* were reconsidered and checked before being incorporated in the *Review*. In periods of violent fluctuation, when highs and lows gave little evidence concerning averages, we have examined newspapers and magazines other than the *Chronicle*. However, we have kept as close to the *Chronicle* as we could, being convinced that it was the best source and also that it was extremely undesirable to

move from source to source if we wished to have a homogeneous series of quotations.

In the period January 1923 to January 1936 we have kept to the *Chronicle* for time money rates and commercial paper rates, but have used the *Federal Reserve Bulletin* figures for call money rates. These figures are monthly averages of the daily renewal rates given by the *Chronicle*.

The sources most used in obtaining the original data, from which the monthly averages were constructed, were:

*I For Call Money Rates*

- Jan. 1857—Dec. 1859 *Journal of Commerce*  
Jan. 1860—Dec. 1861 *Hunt's Merchants' Magazine*  
Jan. 1862—Dec. 1865 Wesley C. Mitchell's *History of the Greenbacks*  
Jan. 1866—Dec. 1889 *Commercial and Financial Chronicle*  
Jan. 1890—Dec. 1919 *Financial Review* (published by the *Commercial and Financial Chronicle*) and *Commercial and Financial Chronicle*  
Jan. 1920—Dec. 1922 *Financial Review*  
Jan. 1923—Jan. 1936 *Federal Reserve Bulletins*

*II For 90-Day Time Money Rates*

- Jan. 1890<sup>16</sup>—Dec. 1923 *Financial Review*  
Jan. 1924 —Jan. 1936 *Commercial and Financial Chronicle*

*III For 60 to 90 Day Commercial Paper Rates<sup>17</sup>*

- Jan. 1857—Dec. 1859 *Journal of Commerce*  
Jan. 1860—Dec. 1861 *Hunt's Merchants' Magazine and Bankers' Magazine*

<sup>16</sup> No monthly index of time money rates was constructed further back than January 1890. Before the Federal Reserve system came into being, the movements of time money and of commercial paper rates were so similar that it is worth collecting figures for both rates only when the accuracy of the original data is sufficiently great to make the differences between the two rates significant. An examination of the sources for commercial paper rates and time money rates in the period before January 1890 suggests that significant differences between the two series would not be obtainable for very many years previous to 1890. In the earliest period it is practically impossible to get any continuous quotations for time money. However, beginning with January 1890, the *Commercial and Financial Chronicle* published in their *Financial Review*, each year, a very complete table of time money rates weekly for various maturities from thirty days to six months.

<sup>17</sup> The rates for January 1857 to December 1865 are attempts to estimate what the rates were for 60-90 day prime double name paper. In this early period it is often

- |                     |                                                                                 |
|---------------------|---------------------------------------------------------------------------------|
| Jan. 1862—June 1862 | <i>Hunt's Merchants' Magazine, Bankers' Magazine</i><br>and New York newspapers |
| July 1862—Dec. 1865 | New York newspapers                                                             |
| Jan. 1866—Jan. 1936 | <i>Financial Review and Commercial and Financial Chronicle</i>                  |

The above sets of sources are the ones most used in each period. All possible sources were used in the earliest period. No single source stood out in the way that the *Commercial and Financial Chronicle* does after 1867. For example, though the New York *Journal of Commerce* call money rates were weighted more heavily from January 1857 to December 1859 than the rates obtained from any other single source, quotations for odd months in 1858 and the entire year 1859 were obtained from *Hunt's Merchants' Magazine* and the *Bankers' Magazine*. Quotations for 1859 were also obtained from the *New York Herald*. An attempt was made to weigh and consider these various quotations and to determine to what extent they should influence us, if at all, in accepting the figures of the *Journal of Commerce*.

For commercial paper rates during the same period, January 1857 to December 1859, we weighted most heavily the same source as was most heavily weighted for call money rates, namely the *Journal of Commerce*. However, the *Bankers' Magazine* was quoting throughout 1857, irregularly in 1858, and throughout 1859. *Hunt's Merchants' Magazine* was quoting rates twice a month in the later part of 1858 and throughout 1859. The New York Chamber of Commerce published a compilation of monthly rates for the year 1858. To go into details as to where each item was found would be wearisome and futile. It may be mentioned, however, that for the early period the following newspapers were carefully examined:

*New York Herald*

*New York Evening Post* (daily and semi-weekly)

*New York Commercial Advertiser*

*New York Tribune* (daily and semi-weekly)

*New York Weekly Herald*

(Footnote <sup>17</sup> concluded)

not clear what grade of paper is being quoted. The rates for January 1866 to December 1923 are for 60-90 day prime double name paper. The rates for January 1924 to January 1936 are for 4-6 month prime double (or single) name paper. In this period 60-90 day paper was quoted nominally at the same rate as 4-6 month paper. The amount of the shorter maturity paper was becoming negligible.

*Journal of Commerce**New York Sun**New York Times**Shipping and Commercial List and New York Price Current*

In some cases, a few hours were sufficient to convince one that nothing helpful in the way of either figures or text was to be found. In other cases, useful information was found here and there.

No intricate mathematical method of averaging was used in getting monthly figures from the daily newspaper quotations. All quotations, and remarks on rates, obtainable from the various papers for a particular month were tabulated and an estimated average made from careful inspection. There were, of course, many gaps in the daily quotations. Many simple little devices were used in connection with the various sources.

In the period January 1860 to December 1861, where the most used sources given in the table above are *Hunt's Merchants' Magazine* and the *Bankers' Magazine*, the rates used are almost exact arithmetic averages of the rates obtained from these two sources. Newspaper quotations were scanty but seemed to corroborate the magazine rates. In 1866 and 1867 we did not accept the rates from the *Chronicle* without question as we did in the later period. The quotations were carefully checked with other sources and final estimates made.<sup>18</sup>

<sup>18</sup> We did not change Dr. Mitchell's figures for call money rates in the last six months of 1865 though compilations from the *Chronicle* gave appreciably different results, for we did not feel sufficient confidence in the accuracy of these earliest *Chronicle* figures. The rates we derived from the *Chronicle* compare as follows with Mitchell's rates derived from newspapers.

	1865		
	<i>Chronicle</i>		<i>Mitchell</i>
July	5.38		5.5
August	6.10		5.9
September	5.00		6.0
October	8.44		7.0
November	6.84		6.8
December	6.88		6.8

Before any conclusions are drawn from the table, attention should be called to the rather complicated manner in which the *Chronicle* was quoting all its rates at this time. Even the quotations for call money rates do not impress the reader with their adequacy and the commercial paper rates are almost unusable because they vary with the type of loan. Note the following quotations from the *Chronicle*:

## APPENDIX

The type of collateral influenced call money rates markedly for a considerable period during the regime of the national banking system. As an extreme example, attention may be drawn to the fact that loans on government bonds in the early days were somewhat analogous to loans based on short sales at present. In both cases, the real borrower—the party for whom the borrowing was most important—was the borrower of the security. Call loans with United States government bonds as collateral were made by banks to obtain bonds to deposit with the United States Treasury, in order that the bank might issue currency. They were primarily loans of government bonds, not loans of money.<sup>19</sup>

In the earlier period the call loan market was not developed to anything like its present degree. The call loan was not so strictly 'call' (Footnote <sup>18</sup> concluded)

*July 8, 1865, p. 42*

"... Dry goods bills are current at 6½ to 7½ per cent; grocers 6½ to 7½; produce commission 7½ to 9 per cent."

*July 15, 1865*

"Discounts are dull. There is a larger supply of bills, especially of grocers, but the demand is quiet, the rates ranging from 6 to 10 per cent. We quote the best grades of the several classes of paper as follows:—

Dry Goods	6½ to 7	Bankers	6 to 7
Grocers	6½ to 7	Produce Commission	9 to 10"

*November 11, 1865*

"Prime bills pass at 7 to 9 per cent, and second class names at 10 to 15 per cent. Bankers bills are current at 7 to 8 per cent, dry goods commission at 8 to 10, produce commission at 9 to 12 per cent, grocers at 9 to 10 per cent."

*March 31, 1866, p. 394*

"The following are the rates for the various classes of loans:

	<i>per cent</i>
Call loans	5 to ..
Loans on bonds and mortgage	6 to 7
Prime endorsed bills 2 months	6½ to 7½
Good endorsed bills 3 and 4 months	7 to 8
"    "—single names	9 to 10
Lower grades	10 to 15"

These last quotations are in a form distinctly easier to handle than the form in which the preceding quotations appeared. By 1868 the *Chronicle* quotations are all relatively easy to use.

<sup>19</sup> Compare . . . : "the demand for Government Bonds was so large to put in the Treasury as collateral that the rates to Government Bond dealers fell off 3 per cent, although this transaction is rather a loan of Government Bonds than a loan of money" (*Commercial and Financial Chronicle*, March 29, 1879), p. 317.

as at present, and the market was not so impersonal as it has become.<sup>20</sup>

In the period January 1890 to December 1923 almost complete reliance was placed on the time money figures contained in the *Financial Review* though for numerous dates these were checked and compared with the *Chronicle's* figures and text. This was especially true in periods when 'commissions' were being paid. The *Chronicle's* text was then used to help us to measure their effect on the rate actually paid. Throughout the period January 1890 to date the time loan rates are for loans with 'mixed collateral'.

In the period from 1857 to about 1910 our 'commercial paper' may be thought of as rather strictly rates for 60-90 day paper. After this period this short maturity paper becomes more and more rare, and the rates are, more and more, rates for 3 to 4 month paper. However, in this later period, what 60-90 day paper was made commonly went at the 3-4 month rate. After 1890, and until the very recent period, the quotations used were usually entitled 'double name choice 60-90 day paper'. In the early days where there were quotations for prime endorsed bills 2 month, and good endorsed bills 3 and 4 month, the method by which 'double name choice 60-90 day paper' was estimated was to use the quotation for 'prime endorsed bills 2 month' as the more important single piece of evidence, but sometimes to adjust the figures in the light of changes in the quotations for 'good endorsed bills 3 and 4 month', and sometimes in the light of the text. 'Prime paper' seemed usually to mean A No. 1 short time (2 month) endorsed notes.

Nearly all commercial paper is at present single name. In the earlier period there was a certain amount of extra fine two name paper. Present day newspaper and magazine quotations for 'double name choice 60-90 day paper' are really quotations for commercial paper that is either 60-90 day nor two name. They are really quotations for 4 to 6 month high grade single name paper.

Commercial paper is made by the larger department and men's furnishing stores, jobbers of dry goods, hardware, shoes, groceries,

<sup>20</sup> Compare . . . . "The precautionary feeling among lenders is naturally on the increase as the Fall months draw nearer, and its working is fairly illustrated in a circumstance we recently heard of a bank's calling in a loan from one party and lending to another at a much lower rate, simply because the latter was a better borrower and would pay up on call, without asking any extension" (*Ibid.*, August 16, 1873), p. 213.

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floor coverings, etc., the manufacturers of cotton, silk and woolen goods, clothing, etc.

In constructing monthly average rates from weekly averages for call money, time money or commercial paper, if the week-end (Saturday) occurred on the 1st or 2d of the month, it was considered as a week entirely in the preceding month. If the week-end occurred on the 4th, 5th or 6th of the month, the week was considered as entirely in the later month. If it occurred on the 3d of the month, the weeks average was considered a quotation for half a week in the earlier month and half a week in the later month.

Most of the monthly rates were constructed from weekly figures, except when conditions were so disturbed as to make it necessary to examine daily rates. In such disturbed times the *Chronicle* generally quoted daily rates or at least discussed them. When the *Chronicle* quoted them, no other source was commonly referred to.

In constructing monthly call rate averages from weekly rates, the first operation (with the data before 1890) was to obtain a set of weekly average rates. The *Chronicle* commonly quoted a high rate and a low rate for the week. If, for any particular week, the range between these rates was quite small, their arithmetic average was considered to be the weekly average rate.

But the actual 'high' and 'low' and estimated 'ruling' weekly rates given by the *Financial Reviews* back to the beginning of 1890 show in figures a condition that the *Chronicle* in the earlier years had so often verbally described. Almost invariably, when the difference between the 'high' rate and the 'low' rate is at all large, the 'ruling' rate is much closer to the 'low' than the 'high' rate. As we were unable to invent an 'average' (beyond the harmonic, for example) that gave a good description of the relation, we constructed a nomograph (designed to fit the *Financial Review* figures as closely as possible) from which, given a 'high' and a 'low' rate, it was possible to read a 'ruling' rate. When, in the period *before* 1890, the weekly range was large and reliable daily rates were not obtainable, we used this nomograph (in conjunction with any *verbal* comment) to calculate a weekly average or 'ruling' rate. If reliable daily rates were obtainable we used them to construct the weekly average, having first used the nomograph (and verbal comment) to obtain a daily average for any *day* in which the range was abnormally large.

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We believe this procedure gives a much better approximation to a weighted average of the rates of all the loans of the week than can be obtained by a blind use of arithmetic averages of high and low rates. But it naturally results in a series with no such stupendous peaks as series based on arithmetic averaging.

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