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**STUDIES IN RAILWAY EXPANSION
AND THE
CAPITAL MARKET IN ENGLAND
1825-1873**

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Studies in
Railway Expansion
and the
Capital Market in England
1825-1873

SEYMOUR BROADBRIDGE



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None of the above-mentioned people is, however, in any way responsible for the views expressed in this book.

SEYMOUR BROADBRIDGE

Sheffield, April 1967

Introduction

THIS book is a study of mid-nineteenth-century railway finances. It also provides, incidentally, an outline of the early history of the Lancashire & Yorkshire Railway, which was one of the twelve largest companies in the country before the Amalgamation Act of 1921. The company's position in the industrial centre of Britain made it an important part of the railway network, but it has not been favoured by railway historians; there is no history of the Lancashire & Yorkshire which may be put alongside Tomlinson's study of the North Eastern, nor MacDermot's of the Great Western, nor even Stretton's of the Midland. This study is not, however, to be compared with the standard histories of the great railway companies of the nineteenth century. The emphasis is on finance, and no attempt is made to cover the history of the Lancashire & Yorkshire from its origins in the 1825 scheme for a line between Manchester and Leeds to the amalgamation of the Company with the London & North Western preparatory to the formation of the L.M.S. in 1921. Chapter I of Part I describes the development of the Company's network and is intended to provide a background to the study of the railway's finances. It shows how the territorial expansion of the Company took place. Without this background the rest of the book would be more difficult to understand.

Chapter I has been divided into three sections to emphasise the significance of the years 1841, 1850 and 1873 in the history of the Lancashire & Yorkshire. The main line of the Manchester & Leeds, which was the nucleus of the Lancashire & Yorkshire, was completed in 1841. 1850 was the year which marked the end of the expansive era of the 1840s: with minor exceptions, most of the projects of that decade were finished by then. 1873 saw the first down-swing in the dividend after the boom of the early 1870s, a decline which was to be a persistent trend. These dates have not been made the rigid limits of the three sections; in places they overlap, where the development of the networks of particular companies has been traced, in an attempt to avoid the confusion that arises when construction is separated from incorporation, and in an attempt to deal more effectively with the congestion of the 1840s. Section I, therefore, includes an account of the other constituent companies of the Lancashire & Yorkshire which were sanctioned in the 1830s.

The narrative of these lines takes us into the 1840s. Section II encompasses the transformation of the Manchester & Leeds into the Lancashire & Yorkshire, which was the result of the boom of 1844 and 1845. For the sake of clarity, it carries the story of some of the projects of those years beyond 1850.

Chapter 2 is an analysis of the financial results of operating the Manchester & Leeds and its successor, and is based upon a series of statistical tables presented in the Appendix. These are tables of traffic receipts and traffic expenses, of gross receipts and outgoings on revenue account, of net traffic receipts and net revenue, of dividends and interest, and of capital. The difficulties involved in any attempt to understand and use nineteenth century railway accounts are described in a short introduction to the chapter. The character and actions of railway directorates were freely impugned in the years of our period, and it follows that the published accounts were suspect to many. We shall see that some at least of the criticisms and accusations were, in the years 1846 to 1849, only too well justified. At times the various accounts, presented biannually to the proprietors, are almost incomprehensible, and since reclassification of items was necessary, the Appendix contains extensive notes on the compilation of the tables.

The plans to use loan capital as one of the bases of the equity-holder's prosperity foundered in the years 1844 and 1845. At the same time the not extravagant hopes of the period 1836 to 1843, hopes for an expanding traffic and prosperity on the Manchester & Leeds proper, became submerged in the mania. The Company had itself to blame for some of the misfortunes after 1845, but it was proper for its directors to point to mitigating circumstances—even some of the militant shareholders recognised this in 1850, and, in any case, the shareholders themselves were at fault. In the Hudson age they were enthusiastic about absorptions and amalgamations; enthusiastic about aggrandisement in general, and their attitude would have made it difficult for the directors to call a halt, even if they had wanted to.

The low level of dividends from 1848 is easily explained: both capital and facilities had expanded too rapidly; receipts were diluted. By 1850, when business was definitely reviving, the railways had become so over-capitalised that they still out-stripped the economy. The over-capitalisation of the Lancashire & Yorkshire lasted until the mid-1850s, and although by 1857 the growth of both the local and the national economy had produced more traffic than the Company could cope with, it is still necessary to draw attention to the effects of the mania on the capital *structure* of the railways, and

to ask how far the accusations of extravagance and mistaken financial policies are justified. Some light will be thrown on the relative fortunes of the various kinds of capital stock between 1842 and 1873. Although the Company had no intention of giving extensive permanent preferences in the 1840s, and although the story of the preference shares of the Lancashire & Yorkshire is very complicated, there is no doubt that ordinary stock suffered. It is only the higher level of dividends after 1860 that makes the ordinary shareholder's return at all comparable with that of preferred stocks, and these grew so rapidly in the 1860s that when the operating results deteriorated after 1873, the equity-holder's relative position weakened once again. Even the promise of 1860 was rather spoilt by the American Civil War. The setback was comparatively brief, and until 1873 there was almost unbroken prosperity, but by then the bad times of the later 1870s and 1880s were on the horizon. In each year between 1870 and 1873 Company officials expressed their hope that the disturbing rise in expenses was at an end. But they were wrong; the increase in working expenses outstripped the increase in gross traffic receipts by £133,000 in 1873, and the boom was over.

Part II is a study of the railway capital market. It is directly linked to Part I because much of the material used relates to the group of companies which amalgamated in the Lancashire & Yorkshire in 1847, but it also ranges over the wider aspects of the early capital market. Chapter 3 describes the methods of raising, and the sources of loan capital, and is based principally on the *Reports and Accounts*, which were published biannually, and the Proceedings of the Finance Committees of the Manchester & Leeds and Lancashire & Yorkshire Railways. The Proceedings of the Board of Directors are also used. Immediately the major obstacle to writing a coherent, comprehensive account of the financial dealings of the Company becomes clear. The Manchester & Leeds was by no means the first in the railway field, but railway accounting, and methods of keeping minute-books, were in their infancy. Practice in recording even the same item changed, and there are many gaps.

T. S. Ashton once wrote that blue-books provided detail of the pathology, rather than the physiology, of social life, and he suggested that business records would help to provide a more balanced picture of economic and social history.¹ Unfortunately, the Finance Committee minutes also provide a great deal of its pathology, often at the expense of its physiology, and they certainly do not present a complete record of the Company's finances. Their content depended

¹ T. S. Ashton, *Iron and Steel in the Industrial Revolution*, Preface to the First Edition (1924).

very much upon which particular financial problem, or aspect of its finances, was uppermost in the Committee's mind. In spite of this, there is information which, when used with the *Reports and Accounts*, throws some light on both the methods of raising temporary capital that were employed by the Company, and the sources that were tapped.

The first section of Chapter 3 distinguishes three methods of raising loan capital, and of these, only one proved to be of really lasting significance, although all were important at one time or another. The most important method throughout the period 1837 to 1873 was that of raising money on mortgage debentures. This money is called temporary because it could be withdrawn at the end of the stated life of the mortgage, but in effect much of it remained permanently with the Company, and one of the financial characteristics of the later 1860s was the large-scale conversion of this loan debt into 4 per cent Debenture Stock, that is, into permanent stock. The end of the period witnessed a significant development in another method of raising temporary finance. In the 1860s, and particularly in the early 1870s, there is a very pronounced tendency for shareholders to pay up the full amount of shares, in advance of calls, probably because dividends were so high, and they hoped to encourage the Company to make calls quickly. Thus the second method of raising temporary money, that of accepting money in advance, was important at the very beginning and at the end of our period. The remaining method, the raising of money on promissory notes, or on bonds, was important from an early date, but was affected by legislation in 1844, which restricted the legal life of bonds. Until the later 1840s, however, this method was used to a considerable extent by the Company.

The second section of Chapter 3 deals with the sources of temporary capital. This bears little resemblance to the Chapter on share capital, because the information available is of a different kind, and we are, therefore, restricted to a description of the kinds of sources which were drawn upon. Both banks and insurance companies were important and, in addition, banks proved to be vital creditors at dividend time. The Company put its business in the hands of several banks in Lancashire and Yorkshire for two main reasons. First, so that advances might be obtained more easily, and secondly, as evidence of its keenness to bring business to the towns it served. It is also shown that the Company and several of the banks were linked through the presence on the railway board of partners or directors of these banks. The treatment of the next group—individual creditors—is not easy, because the information about them consists

largely of a mass of names which, in contrast to the subscription contracts and Parliamentary Papers used in Chapter 4, were seldom accompanied by any indication of occupation, status or address. This is doubly unfortunate because individual creditors were the most important source of loans, but it is possible to deal with this source only in general terms, apart from shareholders and directors of the Company, who are more easily distinguished. The remaining sources which were all much less important, are briefly outlined, and then, in the final section some general remarks are made about the size of loans, their duration, and the rate of interest they carried. As far as the rate of interest is concerned, the most striking characteristic is its stability over the whole period, within the range $3\frac{1}{2}$ to 5 per cent, but there was a pronounced tendency towards a secular decline between 1850 and 1870. Over the whole period there does not appear to be any consistent correlation between the length of loans and the rates they carried. Whether or not a loan would receive a larger rate if it were invested for a longer period would depend as much upon the Company's current attitude towards the loan debt as against stock, as upon any other factor. There was great inconsistency in this matter.

Chapter 4 investigates the sources from which a group of companies in Lancashire and the West Riding derived their permanent share capital. Its two sections discuss the geographical sources and the functional sources of share capital in the years 1835 to 1845. Chapter 5, which seeks to show how far the results of the study contained in Chapters 4 fit into the traditional account of the relevant aspects of railway finance in this period, is also a contribution to the reconsideration of the early railway capital market.

Any analysis of share capital sources is limited by the amount and quality of the material available, and this particular study of share capital sources has been further limited to the period before the great mania of 1845: none of the contracts used was a product of that furore of speculation. Since the Lancashire & Yorkshire failed to build a number of lines which were projected in 1845 and sanctioned in 1846 and 1847, and since there can be no doubt that it was the schemes of 1845 which provided, in the wildly speculative atmosphere of that year, the greatest scope for the 'men of straw', 1845 seemed a convenient dividing date. While it is not implied that any contracts should be dismissed out of hand—one of the objects of these chapters is to argue that contracts may be valuable evidence—the absence of lists of shareholders, for the Lancashire & Yorkshire, as distinct from subscribers, makes the task of testing the validity of the contracts an extremely difficult operation. Much of the material upon

which we must depend for the sources of share capital is unacceptable at its face value, if only because of the harsh things that have been said about subscription contracts. This means that detailed tests of validity have to be made. If there were shareholders' registers and transfer books this would be a simple, if arduous task. There are none for the Lancashire & Yorkshire and so other means have to be devised. Because of this, any presentation of results in an unduly abbreviated form would be misleading as there are many qualifications to be stated. But it is believed that the generalisations on the early railway capital market made by, for instance, G. H. Evans,² can only be tested by the kind of study contained in these chapters.

The major conclusions of this part of the book are as follows: firstly, concerning the various constituent companies of the Lancashire & Yorkshire, it was found that the overwhelming proportion of the capital promised to the companies came from what might be termed 'locally interested' counties—Lancashire, Yorkshire and Cheshire. For reasons given, the contracts may be used and accepted as substantially accurate evidence of railway share capital sources. Where it can be established that subscribers remained shareholders, it is found that the majority of these were the 'interested' people. Of the subscribers, merchants and manufacturers contributed the greater proportion of the capital promised to the companies. So far as merchants are concerned, this is by no means a new conclusion. Manufacturers, on the other hand, have not received anything like the attention they appear to merit as suppliers of railway companies' capital. In some of the lists they were decidedly important, and this has suggested some reflections on industrial surpluses and 'ploughing back'.

Much has been said on the participation of clerks, clergymen, widows, spinsters and others in railway finance. The percentage contributions of these classes of people to the lists that have been analysed make it clear that, for the Lancashire & Yorkshire at least, they were unimportant as sources of subscriptions, let alone actual share capital. There is, moreover, no evidence that they participated in the promising of capital to any greater extent, relative to other groups, in periods of boom as opposed to periods of comparative depression or normal business.

A second group of conclusions are those which have been suggested by both the material relating directly to the constituent companies of the Lancashire & Yorkshire, and to railways in general. In Chapter 5 it is argued that the traditional view of pre-1840s railways—that they were 'locally' financed—is an inaccurate one.

² G. H. Evans, *British Corporation Finance, 1775–1850* (1936), *passim*.

The high proportions of initial capital subscribed to our companies by residents of Lancashire, and, to a lesser extent, Yorkshire, are to be regarded not as confirmation of the traditional account of early railway financing, but as confirmation of the paramount influence of Lancashire and its bordering areas in the early railway capital market. The activities of the 'Liverpool party' have been emphasised, but their incompatibility with the 'local finance' concept does not seem to have been recognised. Some participation of Lancashire business men in railway financing on a national scale need not have been incompatible with a predominance of local financiers in their particular lines, but the evidence suggests that the Lancashire interest in railways extended to a major interest in most of the important companies of the 1830s, if not in later concerns. The importance of Lancashire in the financing of companies nearer home was, therefore, a natural outcome of the situation in the early railway capital market, not, as Evans believed, of 'remoteness from capital centres' which brought about 'local finance' in transport undertakings.

Appendix

THE severe criticisms of the financial practices of early Victorian railways have a salutary effect on anyone using their published accounts. They prevent an uncritical analysis of the financial results; they focus attention on suspect items; and they sometimes necessitate an independent classification of the figures. In this Appendix, most of the descriptions of the tables, and most of the figures themselves, are not to be found in the accounts. They are products of a reclassification of the items given in the accounts, and they are explained in detail. The reclassification would have been necessary regardless of any question of misallocation between capital and revenue accounts, not only because of the need to obtain figures for an analysis which the compilers of the accounts might not have appreciated, but also because of the changes in and the inconsistencies of the statements, and the belated imposition of a standard form of railway account in 1868.

The series begin in 1842 because although the Manchester & Leeds began working its main line throughout in March 1841, 1842 was the first full calendar year of operation. In any case, the results for 1841 are complicated by the carrying over of various traffic results from the piecemeal opening of the line before March 1841, and of some additional balances. There are ten tables of figures for the period 1842 to 1873:

Table	I	Gross Traffic Receipts	<i>p.</i> 177
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TABLE I
GROSS TRAFFIC RECEIPTS, 1842 TO 1873¹

<i>Year</i>	<i>Gross Traffic Receipts £000's</i>	<i>Year</i>	<i>Gross Traffic Receipts £000's</i>	<i>Year</i>	<i>Gross Traffic Receipts £000's</i>
1842	227	1853	966	1864	2,024
1843	242	1854	1,014	1865	2,142
1844	289	1855	1,064	1866	2,386
1845	334	1856	1,178	1867	2,487
1846	338	1857	1,229	1868	2,563
1847	357	1858	1,224	1869	2,549
1848	443	1859	1,753	1870	2,653
1849	553	1860	1,954	1871	2,907
1850	740	1861	1,932	1872	3,164
1851	831	1862	1,719	1873	3,318
1852	885	1863	1,832		

Notes:

1. Reference should be made to the notes to Table IV: Gross Receipts on Revenue Account.

2. 'Rents', an item occurring in receipts on revenue account in the Company's accounts, are not included.

3. 'Hull Docks', an item occurring in receipts on revenue account after 1869, is not included. The Lancashire & Yorkshire *subscribed* to Hull Docks, which were opened in July 1869, and the receipts entered presumably consisted of dividends.²

4. From 1851 the item 'Blackburn Working Expenses' appears on both sides of the revenue account. As it was a self-cancelling item it had been omitted from the figures for gross traffic receipts and for working expenses. This item disappeared from the revenue account in 1860.

5. From 1851 the item 'Liverpool & Southport Working Expenses' also appears on both sides of the revenue account. As it was a self-cancelling item until 1855 it has been omitted from the figures for 1851 to 1854 included. But in 1855 the figure given under this heading had to be included as the entries on either side of the revenue account no longer cancelled one another, and, moreover, the Liverpool & Southport became the property of the Lancashire & Yorkshire in that year. In 1858 the item disappeared from the revenue account; presumably it was absorbed into the general figures for the Lancashire & Yorkshire.

¹ In this, and in subsequent tables, all figures are to the nearest £1,000.

² Cf. *Reports & Accounts*, 17 February 1869.

6. The item 'Liverpool & Southport Toll', which appeared in the years 1851 to 1857, is included in gross traffic receipts.

7. The 'Preston & Wyre' entries are included: the Preston & Wyre was worked by the Lancashire & Yorkshire, which took two-thirds of the receipts and paid two-thirds of the working expenses of this railway.

8. The Manchester, Bolton & Bury Canal receipts and working expenses are also included in gross traffic receipts and in working expenses. Similar items for the Preston & Longridge (which first appeared in the accounts in 1869), and the Blackburn, Chorley & Wigan (which first appeared in 1870), have been included. For all three the figures appear on both sides of the revenue account, and in each case the figures differ.

TABLE II
WORKING EXPENSES, 1842 TO 1873

<i>Year</i>	<i>Working Expenses</i> £000's	<i>Year</i>	<i>Working Expenses</i> £000's	<i>Year</i>	<i>Working Expenses</i> £000's
1842	55	1853	378	1864	775
1843	66	1854	391	1865	833
1844	77	1855	400	1866	920
1845	96	1856	436	1867	997
1846	106	1857	458	1868	1,106
1847	125	1858	492	1869	1,083
1848	159	1859	663	1870	1,153
1849	224	1860	740	1871	1,272
1850	300	1861	785	1872	1,437
1851	307	1862	701	1873	1,724
1852	341	1863	720		

Notes

1. The notes to Tables I and V should be referred to

2. The difference between 'Working Expenses' and 'Gross Expenditure on Revenue Account' consists in the omission from the former of interest charges, rates, taxes, government duty, depreciation allowances (when charged), and a few miscellaneous, sometimes non-recurring, charges.

3. The figures given in this table differ from those given in the accounts up to 1868. *Included* in the above totals of working expenses are the expenses for the Preston & Wyre, Preston & Longridge, Blackburn, Chorley & Wigan, and the Manchester, Bolton & Bury Canal. *Excluded* are the expenses for the Blackburn (1851-60), and

the Liverpool & Southport (1851-54). See notes to Table I for explanations of these items.

4. The item 'Working Expenses' was dropped from the railway's accounts after 1867. The Company adopted the new form of accounts prescribed by the Regulation of Railways Act, 1868, although adoption could have been deferred until 1869.

TABLE III
NET TRAFFIC RECEIPTS, 1842 TO 1873

<i>Year</i>	<i>Net Traffic Receipts £000's</i>	<i>Year</i>	<i>Net Traffic Receipts £000's</i>	<i>Year</i>	<i>Net Traffic Receipts £000's</i>
1842	172	1853	588	1864	1,249
1843	176	1854	623	1865	1,309
1844	212	1855	664	1866	1,466
1845	238	1856	742	1867	1,490
1846	232	1857	771	1868	1,457
1847	232	1858	732	1869	1,466
1848	284	1859	1,090	1870	1,500
1849	329	1860	1,214	1871	1,635
1850	440	1861	1,147	1872	1,727
1851	524	1862	1,018	1873	1,594
1852	544	1863	1,112		

Note:

1. Net Traffic Receipts are obtained by subtracting Working Expenses from Gross Traffic Receipts.

TABLE IV
GROSS RECEIPTS ON REVENUE ACCOUNT, 1842 TO 1873

<i>Year</i>	<i>Gross Receipts on Rev. Acc. £000's</i>	<i>Year</i>	<i>Gross Receipts on Rev. Acc. £000's</i>	<i>Year</i>	<i>Gross Receipts on Rev. Acc. £000's</i>
1842	232	1853	1,000	1864	2,039
1843	249	1854	1,048	1865	2,162
1844	291	1855	1,091	1866	2,408
1845	339	1856	1,209	1867	2,499
1846	341	1857	1,255	1868	2,570
1847	360	1858	1,242	1869	2,554
1848	446	1859	1,754	1870	2,675
1849	561	1860	1,956	1871	2,918
1850	752	1861	1,943	1872	3,185
1851	878	1862	1,725	1873	3,333
1852	923	1863	1,839		

Notes

1. Gross Receipts on Revenue Account include, in addition to Gross Traffic Receipts, the favourable balance of rents, any favourable balances of interest from the bankers, and various items which are not included in Gross Traffic Receipts, and which are dealt with under that heading.

TABLE V
GROSS EXPENDITURE ON REVENUE ACCOUNT,
1842 TO 1873

<i>Year</i>	<i>Gross Expend. on Rev. Acc. £000's</i>	<i>Year</i>	<i>Gross Expend. on Rev. Acc. £000's</i>	<i>Year</i>	<i>Gross Expend. on Rev. Acc. £000's</i>
1842	174	1853	651	1864	1,183
1843	169	1854	645	1865	1,268
1844	189	1855	685	1866	1,392
1845	201	1856	728	1867	1,469
1846	180	1857	770	1868	1,497
1847	183	1858	810	1869	1,462
1848	231	1859	1,078	1870	1,527
1849	345	1860	1,137	1871	1,662
1850	561	1861	1,179	1872	1,823
1851	600	1862	1,122	1873	2,111
1852	635	1863	1,132		

Notes

1 Reference should be made to Table II.

2 Gross Expenditure on Revenue Account *includes* interest on loans, bonds, and 4 per cent Debenture Stock (the issue of which was authorised in August 1859), bond and stamp charges, depreciation allowances (when charged), charges for leased lines (but see Note 3 below), 'bad debts', and working expenses. It *excludes* all dividends on ordinary, preference and guaranteed shares.

3. In the Company's 'Statement of Nett Revenue' there is entered, from 1850 to 1868, a charge for the Sheffield & Barnsley Railway as a leased line. But the charge was to meet interest on guaranteed Barnsley stock, and when the new Parliamentary form of accounts was adopted in 1868, the Barnsley stock charge was in fact omitted from the 'leased line' charges and included in the dividend and interest (on guaranteed stock) account. The charge for the Sheffield & Barnsley has, therefore, been omitted from the figures given above for the whole period from 1850.

TABLE VI
NET REVENUE, 1842 TO 1873

<i>Year</i>	<i>Net Revenue</i> £000's	<i>Year</i>	<i>Net Revenue</i> £000's	<i>Year</i>	<i>Net Revenue</i> £000's
1842	58	1853	349	1864	856
1843	80	1854	403	1865	894
1844	102	1855	406	1866	1,016
1845	138	1856	481	1867	1,030
1846	161	1857	485	1868	1,073
1847	177	1858	432	1869	1,092
1848	215	1859	676	1870	1,148
1849	216	1860	819	1871	1,256
1850	191	1861	764	1872	1,362
1851	278	1862	603	1873	1,222
1852	288	1863	707		

Notes:

1. Net Revenue is obtained by subtracting Gross Expenditure on Revenue Account from Gross Receipts on Revenue Account. It is the balance applicable to dividends on both ordinary and guaranteed and preference stock, excluding Debenture Stock. Whether the Debenture Stock interest should have been included in the figures for Gross Expenditure on Revenue Account, and therefore excluded from the figures for net revenue is, perhaps, open to question. The Stock was designed to put the loan debt of the Company on a permanent footing, and from 1861 permanent 4 per cent Debenture Stock was issued to replace mortgage debentures. It could be argued, therefore, that the new Stock was in the same category as other guaranteed stock. But, in justification of the decision to exclude the interest on it from net revenue figures, it may be said that the Company regarded the interest as different in kind from guaranteed stock interest or dividends, that when Parliament imposed a standardised form of accounts in 1868, the Debenture Stock charge was put in the same account as the mortgage interest, and, finally, that to omit Debenture Stock interest from the figures in Table X (Interest Paid on Loan Capital), would distort the series. The Stock still represented capital expenditure which was financed by loan capital: the latter was merely made permanent.

2. Table VI presents the *annual* results. Its figures do not contain any surpluses brought forward from previous half-years. For this and other reasons (see Notes to Table VII) these figures do not correspond with those shown in the Company's 'Statement of Nett Revenue' as applicable to dividends and interest.

TABLE VII
BALANCES APPLICABLE TO DIVIDENDS AND
DEPRECIATION, 1842 TO 1873

<i>Year</i>	<i>Balances Applicable to Divis & Dep. £000's</i>	<i>Year</i>	<i>Balances Applicable to Divis & Dep. £000's</i>	<i>Year</i>	<i>Balances Applicable to Divis & Dep £000's</i>
1842	91	1853	360	1864	930
1843	95	1854	409	1865	977
1844	108	1855	437	1866	1,103
1845	144	1856	504	1867	1,128
1846	191	1857	519	1868	1,086
1847	218	1858	477	1869	1,102
1848	229	1859	735	1870	1,146
1849	235	1860	872	1871	1,281
1850	207	1861	823	1872	1,375
1851	277	1862	692	1873	1,233
1852	319	1863	777		

Notes

1. These figures are the sums which were annually applicable to dividends on ordinary and guaranteed stock, and to depreciation. The charge for loans and, later, Debenture Stock, was not met from these sums

2. Table VI presented independent calculations of the net revenue earned each year, money which might be applied to dividends on ordinary and guaranteed and preference stock, excluding Debenture Stock. It represents an attempt to assess the annual profits. Table VII differs from Table VI in that the Company's own statements of balances on net revenue account are accepted at their face value, and are used to extract the amount the Company had available each year to pay dividends and to set aside a sum for depreciation.

3. But, once again, Table VII shows figures which will not be found in the published accounts, although these, as they improved, and especially after the standard form was imposed in 1868, can be used with less adjustment. Even so, there are still several explanations to be made.

4. First of all, the problem of annual surpluses remains, even in this table. In Table VI the figures do not include any surpluses at all, neither straightforward surpluses left after the payment of dividends and interest, nor depreciation allowances. This table was compiled to show the year by year results of working the railway. The present table includes surpluses carried forward from December 31 of one

year into the first half of the next. To avoid double counting, any surpluses carried forward from June 30 into the second half of the year have been deducted from the Company's figures for balances applicable to interest and dividends.

5. Table VII also includes depreciation allowances. This is unsatisfactory, but inclusion seemed the best method in view of the many changes in policy over the question of depreciation allowances. The table is designed to show just how much money the Company had available to meet dividends. When the depreciation allowance was first introduced by the Lancashire & Yorkshire it was regarded as expendable as dividends. It was added to any surplus that might be available and carried over to the following year, when it might well be used to pay a dividend. It is necessary to trace the changes in attitude towards the depreciation allowance in order to have a clear idea of the problem involved.

An allowance for the depreciation of the track was first introduced by the Manchester & Leeds in 1842. In that year a total of £11,977 11s. 2d. was set aside as the beginnings of a depreciation fund. By the end of 1843 the fund amounted to £19,014 and already the directors were experiencing temptation. There was a great deal of controversy over the provision out of profits for the deterioration of the Company's capital assets. The controversy was to continue for a long time and the depreciation allowance must always occupy some space in any account of the financial practices of nineteenth-century railway companies. Added to this controversy was the great difference of opinion over the decision by the Board in 1842 to set aside an additional amount 'to secure the maintenance and gradual increase of the present rate of dividend'.³

Immediately there was a sizeable sum in reserve (in relation to the then comparatively small amount paid in dividends; see Table IX) the directors could see in it another function. The depreciation allowance, they said in March 1844, might be regarded as⁴

'partaking in some measure of the character of a surplus fund and applicable occasionally as such, with due regard to its primary object of replacing superannuated working stock.'

The last clause must have been added as a sop to their, or their proprietors' consciences. A depreciation fund does not partake of the character of a surplus fund, and is not applicable, under any logically

³ *Reports & Accounts*, 17 March 1842. See also *The Railway Times*, 19 March, 26 March, and 2 April 1842, for letters and controversy over this. Joseph Pease's views were quoted above, p. 148-49.

⁴ *Reports & Accounts*, 14 March 1844.

worked out financial system, to dividends. In the succeeding 'Statement(s) of Nett Revenue' the Board decided to use its depreciation fund for dividends; but it was completely nonplussed on the point of where in the accounts to put the figure. Should it be deducted from a surplus, or added to it? In 1844 and 1845 the directors did both. And if it were to be added, should each year's allowance only be added, or should the whole surplus be cumulative? They were not sure, and they again did both. One half-year they would state the amount of the full reserve fund (including depreciation allowance) but carried forward only the true surplus. Then in the next half-year the surplus carried forward would be the full one, including the depreciation allowance.⁵

Whatever they did with the accounts, it is certain that in the period 1844 to 1846 they used the surpluses, which included depreciation allowances, to meet dividend payments. This does not mean that in every half-year the full amount was paid as dividends, but, in any case, in 1846 it was decided to end the farce (although the directors put it differently) and close the depreciation fund.⁶

' the practice of setting aside out of revenue and maintaining a depreciation fund to provide for the renewal of stock may be dispensed with when the current charges for renewals become constant, as is now the case, and approach in amount to the sum annually set aside to cover such charges, a fund distinct from revenue is no longer required. '

The depreciation account was, therefore, to be closed at the end of the year, and renewal of stock was to be charged to current revenue 'as is the practice of other companies'.

For two years, from March 1847 to March 1849, the accounts were much abbreviated and one can only conclude that obscurity was the aim. A suspicious omission from each of the biannual accounts in those two years was any details of receipts and expenditure on capital account for each half-year. The accounts still contained the total cumulative receipts and expenditures at each date, but it is, for instance, impossible to say how much new money was received on advance call account in each half-year; only balances were given. In March 1849 the accounts for the half-year ending 31 December 1848 were a reversion to the pre-1847 form, and it is probably significant that for the first half of 1849 the 'Depreciation and Replacement Allowance' was restarted.⁷

⁵ *Ibid*, 1846 and 1847.

⁶ *Ibid*, 9 September 1846

⁷ *Ibid*, 5 September 1849. In their report of January 1849 a Committee of Shareholders, which enquired into the allocation of expenses, pressed for the re-establishment of the allowance.

But even this was not the end of the changes of mind over the allowance. In March 1851 a resolution was passed at the half-yearly general meeting stating that henceforth no depreciation fund was to be set aside for the maintenance of rolling stock. This was to be maintained out of revenue as a normal revenue charge. But £20,000 were to be appropriated each year from the revenue for the renewal of permanent way.⁸ From now until the end of our period the treatment of this renewal fund was consistent. The amount put by was flexible: it was decreased to £15,000 in 1853/54,⁹ but was increased to £25,000 in 1855, £35,000 in 1858, and was £60,000 in 1859.¹⁰ And it now occupied a permanent place as a deduction from the 'Balance Applicable to Dividends and Interest' in the 'Statement of Nett Revenue' or the 'Net Revenue Account' until 1868. It no longer entered into any surpluses which might be carried forward.

It will now be appreciated that obtaining from the accounts figures that are comparable year by year is sometimes difficult. It was necessary, for consistency, to include the depreciation allowance in the balances applicable to dividends because the Company did apply the allowance in that way in the early years. When it did not, in the 1850s and 1860s, the amount set aside has still been included in the figures in Table VII. The attempt to assess the true annual results is contained in Table VI.

6. We have now arrived at the point where the figures in Table VII are applicable to dividends and depreciation. In their 'Statement of Nett Revenue' the Board began by stating any surplus carried forward from the previous year, less some miscellaneous items such as 'bad debts'. The account then showed a deduction from the balance on revenue account on behalf of the depreciation fund. Then the interest on calls in advance and loans (including, after 1861, the interest on 4 per cent Debenture Stock) was deducted; next were listed, and subtracted from the remainder, the charges for leased lines; and, finally, dividends on guaranteed stock were subtracted from the balance. What remained was applicable to the 'general dividend'. This was the procedure towards which the Company progressed, and which was achieved in the 1850s. In compiling Table VII most of the deductions for the leased lines have been accepted, with, again, the major exception of the Sheffield & Barnsley, and also with the minor exception of the charge for the Blackburn Railway. The former was dealt with in Note 3 to Table V. The Blackburn charge was a once only charge of £2,000, which appeared in the accounts in the first half of 1858, and was really a

⁸ *Ibid.*, 5 March 1851.

⁹ *Ibid.*, 1 March 1854 and 7 March 1855.

¹⁰ *Ibid.*, 5 March 1856, 16 February 1859, and 15 February 1860.

dividend on the Blackburn shares: the Lancashire & Yorkshire had purchased the railway. The charge has been transferred to guaranteed dividend payments. Another, separate, Blackburn charge appeared in the Net Revenue account for the first half of 1859 as a deduction.

As stated in Note 1 to this table, dividends on guaranteed stock have been included in the Balances.

7. Finally, it must be said that all this juggling with the figures was embarked upon with some trepidation. But justification for the classifications adopted, not only for this, but also for the other tables, seems to be afforded by the accounts for 1868. The new form of accounts prescribed by the Act of 1868 made the calculation of net revenue applicable to dividends and depreciation easier. It was found that the basis on which net revenue applicable to these payments was made, was vindicated by the form of accounts adopted in that year. From 1868 the calculation of the Balances involved the use of only two figures in the accounts for the first half, and only three (deduction of the surplus carried over from 30 June) in the second half, of each year. To take another example, the calculation of gross expenditure on revenue account, while an item with a nomenclature used by neither the Company nor the Act, was nevertheless rendered easier by the reduction of the number of figures involved from about sixteen to six (The number of different sums involved varied from time to time)

The basic nature of the changes introduced by the Act of 1868 have been touched upon already. The section of the Act on railway accounts was, of course, designed to effect a proper allocation of receipts and expenditure between capital and revenue account. In effect the Lancashire & Yorkshire for some years had been using the allocation prescribed, but the placing of the various sums was changed in 1868. Most of the leased line charges were then allocated either to expenditure on revenue account or to interest charges or to interest on guaranteed stock. In 1868 the Sheffield & Barnsley charge was transferred to the last category, but in 1867 the Company anticipated the Act by transferring a charge for the Blackburn Railway from leased line charges to interest on guaranteed stock. Before 1868 'Stamps and Commission on Loans' charges were charged to Revenue Account; in 1868 the charges were transferred to Net Revenue Account.¹¹

¹¹ Before 1868 here means between 1845 and 1868. Before 1845 bond and mortgage stamp charges went to Capital Account, although right from the opening of the line in 1841 interest on loans was correctly debited to revenue account, with only one or two lapses.

Practically speaking, the 1868 Act, as far as I can tell, effected only a more logical presentation of the accounts of the Lancashire & Yorkshire Railway, not a different allocation of expenses between capital and revenue. Compared with the 1840s, the accounts of the 1860s, both before 1868, and after the adoption of the new form, were much more detailed, comprehensive, and easy to follow. From 1868, particular attention was paid to presenting, in a more illuminating fashion, detail of the capital structure, capital receipts, and analysis of expenditure on revenue account. This was done by means of abstracts.

TABLE VIII
ANALYSIS OF THE CAPITAL STRUCTURE, 1842 TO 1873

<i>Year</i>	<i>Ordinary £000's</i>	<i>Guaranteed and Pref. £000's</i>	<i>Loan £000's</i>	<i>Total £000's</i>
1842	1,299	37	1,627	2,963
1843	1,300	39	1,761	3,100
1844	1,329	39	1,837	3,205
1845	1,574	39	1,817	3,430
1846	2,752	519	1,677	4,948
1847	4,552	628	2,374	7,554
1848	5,163	1,716	2,393	9,272
1849	6,042	1,990	2,612	10,644
1850	5,823	2,639	3,163	11,625
1851	5,848	2,806	3,116	11,770
1852	7,599	1,326	2,843	11,768
1853	7,927	1,326	2,797	12,050
1854	8,147	1,327	2,799	12,273
1855	8,193	1,313	3,186	12,692
1856	8,464	1,054	3,302	12,820
1857	8,892	1,278	3,376	13,546
1858	9,246	1,107	3,336	13,689
1859	12,065	1,870	4,311	18,246
1860	12,078	2,214	4,524	18,816
1861	12,080	2,651	4,527	19,158
1862	12,081	2,758	4,620	19,459
1863	12,082	3,006	4,575	19,663
1864	12,083	3,171	4,798	20,052
1865	12,085	3,469	4,830	20,384
1866	12,609	4,142	5,336	22,087
1867	12,429	4,422	5,601	22,452
1868	12,694	4,382	5,671	22,747

TABLE VIII—*continued*
ANALYSIS OF THE CAPITAL STRUCTURE, 1842 TO 1873

<i>Year</i>	<i>Ordinary £000's</i>	<i>Guaranteed and Pref. £000's</i>	<i>Loan £000's</i>	<i>Total £000's</i>
1869	12,694	4,675	5,675	23,044
1870	12,694	4,940	5,654	23,288
1871	13,335	4,569	5,998	23,902
1872	13,335	4,948	5,971	24,254
1873	13,335	5,827	6,171	25,333

Notes

1 The figures in this table are not mere authorisations or nominal amounts. They are the sums actually paid up on the various accounts on the 31 December of each year. They do not include sums received on shares which were forfeited owing to non-payment of calls, nor do they include calls paid in advance.

2 The figures for capital paid up on loan include, when the Stock was issued, sums paid into the Company on Debenture Stock.

3 The figures for paid-up guaranteed stock include, from 1850, the sum of £260,050. Until 1868 the Company did not include the charge on this sum in their guaranteed payments. The sum represents the Sheffield & Barnsley stock on which a guaranteed £13,000 per annum was paid. The figure of £260,050 will not be found in the accounts, and the reasons for ignoring the way in which the Company treated this stock and charge were put forward in Note 3 to Table V—Gross Expenditure on Revenue Account (p. 180).

4 The decrease in paid-up ordinary capital in 1850 and 1867 was caused by the forfeiture of shares on which money had already been paid up.

5 It will be remembered, from the discussion of bonds and mortgages in Chapter 3, that the amount of bonds issued was affected by the provisions of the 1844 Act. The decline in bonds in 1849, 1850 and 1851, is hidden in the figures for paid-up loan capital by the increase in the amount of mortgages issued in those years. Bonds decreased from £502,000 in 1848 to £7,000 in 1851, and £2,000 in 1852.

6. The reader will no doubt realise that it is not necessary to explain every increase in paid-up capital by reference to new Parliamentary authorisations. Money was paid up on shares, and was borrowed on loan, often many years after the passing of the Act which authorised the raising of the capital.

7. In Chapter 2 it was stated that at times the accounts were in a hopeless muddle. The period particularly in mind was between the years 1846 and 1849. Added to the complexity and, at times, near incomprehensibility, of the accounts, was the problem of the Preference Fifths. In 1845 it was decided to issue £20 shares as Preference Fifths, with the ultimate aim of absorbing them into the Consolidated Stock of the Company, to replace the mortgage debt of the Manchester & Leeds. If the accounts in the years 1846 to 1849 were a muddle, the status of the Fifths was an even greater mix-up. Early on there were complaints about them; there was considerable litigation; and there were even two attempts to settle the problem by application to Parliament. The idea had been to allow these shares to participate in dividends immediately, and it was frankly admitted that the Company had paid, in 1845, dividends that were lower than could be afforded, in order to build up a reserve fund with which to meet the increased dividend which had to be paid in 1846. The new shares were to receive the full declared dividend on the nominal amount of the shares, less a deduction of 5 per cent on the unpaid portion. That, at least, was the gist of the statement of September 1845. But the matter was not as simple as that, and evidently a number of shareholders thought so.

In March 1848, when the accounts for the second half of 1847 were published the directors included, for the first time, and for the only time in this particular form, 'No. 5—Statement of Manchester & Leeds Revenue Charge for Interest and Dividends', which, they fondly hoped, according to their report, would make the whole business 'as intelligible as possible'. This was in response to the complaints and agitation about the Fifths. But it is most unlikely that anyone who had not carefully read the long report of 1845 and the resolutions passed at the meeting, would have made much sense of the directors' nice distinctions between 'productive', 'unproductive', and 'non-productive' Fifths share capital. Even if he had, the ordinary shareholder would most probably still have been in the dark.

Between September 1845 and March 1848 the directors appear to have decided to make a distinction between 'productive' and 'unproductive' *paid-up* money, and to call the amount of the Fifths stock, that remained *un-paid*, 'non-productive'. The 'productive' portion of the paid-up Fifths capital was no doubt the directors' estimate of the amount which represented lines already in operation. In accordance with their decision of 1845, the Board paid, in March 1848, 7 per cent on this portion. (A dividend at the rate of 7 per cent per annum was declared on ordinary shares for the second half of 1847.) The

'unproductive' portion of the Fifths capital was to receive 5 per cent, while the 'non-productive' portion was to receive a 2 per cent dividend (7 less 5 per cent on the unpaid portion) This last dividend was therefore paid at the expense of the ordinary dividend, although, to mitigate this, no doubt many proprietors held ordinary as well as this preference stock The charge for the 'non-productive' capital was, according to the accounts, charged to revenue, and so it is quite possible that here at least the Company was not paying dividends out of capital But we can be certain that the 'unproductive' as distinct from the 'non-productive' portion was serviced from capital receipts. 'Unproductive' capital amounted to £344,596 The dividend of 5 per cent meant a charge of £8,615 against revenue on the Preference Fifths account, but 'on which', Account No. 5 tells us, 'a corresponding charge for Interest is made to credit of Revenue and Debit of Capital'

The detailed information given in the accounts for the second half of 1847 was never repeated. It is impossible to be sure what was going on But while it is probable that not all of these bonus dividends were paid in the years 1848 to 1851, in view of the amount of litigation and controversy over the Fifths, there is a very strong impression that the accounts were varied in form in these years, as much from a desire to obscure issues as from lack of experience There is also the impression that the directors made fairly honest attempts to be consistent and proper, but that the confusion and the pressure of events in these years made them succumb to financial expediency They would, naturally, be very dependent upon their Company officials, and it was pointed out on p. 41 that the reaction of the Accountant's staff to the suggestion of the auditors that certain items should be charged to revenue and not to capital, was to warn the Board against such a course, because the margin for dividends was low.

Leaving aside the complications and malpractices of this period, it is interesting to note that throughout the 1840s there was never any intention of making the preferences permanent. The preference given to the 1841 issue expired at the end of 1846. The preference given to the Fifths would inevitably cease when all the nominal amount had been paid up The result in this case is seen in 1852, when the amount of preference and guaranteed capital dropped from £2,806,000 to £1,326,000 There is an exception the issue of 6 per cent Guaranteed shares in 1848 was a permanent one, and the charge for it may be traced throughout the period, with no complications. But the real era of guaranteed and preference capital was, for the Lancashire & Yorkshire, the period from 1861.

TABLE IX
 DIVIDENDS PAID ON ORDINARY, AND GUARANTEED
 AND PREFERENCE SHARES, 1842 TO 1873

Year	Ordinary £000's	Guaran. & Pref. £000's	Year	Ordinary £000's	Guaran. & Pref £000's
1842	71	4	1858	369	71
1843	81	4	1859	570	104
1844	97	4	1860	695	111
1845	111	4	1861	635	130
1846	98	74	1862	469	142
1847	130	74	1863	544	154
1848	143	72	1864	710	162
1849	182	45	1865	710	170
1850	116	67	1866	816	196
1851	188	72	1867	825	209
1852	234	72	1868	857	218
1853	275	72	1869	857	230
1854	315	72	1870	889	245
1855	350	72	1871	1,025	247
1856	409	66	1872	1,117	247
1857	415	68	1873	950	274

Notes:

1. Once more, until 1868, these figures are the result of independent calculations. In the years 1842 to 1845, inclusive, the only guaranteed dividend was that on the 1841 shares. These shares received 10 per cent, but as only £2 per share was paid up until 1846, the burden of the preference was small. The accounts did not separate the guaranteed dividend from the general dividend, and so the former was taken to be 4s. per annum on each of the 19,500 shares.

2. In 1846 the last preference dividends were paid on the 1841 shares and, in addition, an *estimate* had to be made of the amount paid on the Preference Fifths. As £446,000 were paid up on these £20 shares, and the general dividend was 7 per cent, the figure for 1846 is calculated as follows: £4,000 (on the 1841 shares); plus £31,000 (7 per cent of £446,000); plus £39,000 (2 per cent of

£1,950,000) The 2 per cent was the product, it may be remembered, of a dividend of 7 per cent less 5 per cent on the amount unpaid on the shares. Since £1,950,000 was the amount unpaid, it received a bonus dividend of 2 per cent. The total guaranteed dividend for 1846 was, therefore, £74,000.

It has been assumed that the Company did abide by its decisions of 1845 in the matter of paying dividends on the Fifths (although it did make a change in 1847), and also that the number of shares issued as Preference Fifths in 1846 was 119,805. This was the number issued by the end of 1847, according to the accounts published for the second half of that year; these accounts were the first to give the number of Fifths issued. Such an assumption is not very satisfactory, but from the amount paid up in December 1846, the estimate of the number of Fifths issued is unlikely to be very inaccurate, and some estimate had to be made.

3. In 1847 the Company paid a dividend of 6s. 6d. on each of the Fifths, for the first half of the year. Again, the number of such shares has been taken to be 119,805. The accounts for the first half of the year, like those for 1846, give no indication that part of the dividend paid was preference dividend. But the usual resolution authorising the payment of dividends included a payment of 6s. 6d. on the £20 shares. The calculation of the amount of dividend for the *second* half of the year is made easy by the Company's once-only statement, already referred to. In total, £74,000 were paid out as guaranteed dividends in 1847.

4. In 1848 the 6 per cent Preference or Guaranteed Shares (the Company used both descriptions at different times) were issued, and an estimate has been made of the amount paid on them. At the end of the year £313,950 had been paid up, and the amount of dividend has been estimated at £9,419. In addition, the Company paid 6s. on each of the 119,805 Fifths in the first half of 1848, and 4s. 6d. on each of the 119,798 Fifths in the second half. (The reduction was due either to forfeiture or merging of the shares.) The total amount paid out was, therefore, less than in 1847.

5. In 1851 it was decided to equalise dividends on Fifths and on old stock, and in 1852 the Fifths dropped out of the Net Revenue account.

6. From and including 1850 the guaranteed and preference dividend figures include £13,000 per annum for the Sheffield & Barnsley, a charge which the Lancashire & Yorkshire included in leased line charges until 1868. For an explanation of the decision to ignore the Company's treatment of this charge, see Note 3 to Table V, and Note 3 to Table VIII.

TABLE X
INTEREST PAID ON LOAN CAPITAL, 1842 TO 1873

<i>Year</i>	<i>Interest on all Money on Loan £000's</i>	<i>Deduction for Interest on Calls in Advance £000's</i>	<i>Interest on Loan Capital Proper £000's</i>
1842	80	—	80
1843	88	—	88
1844	92	—	92
1845	78	—	78
1846	56	3	53
1847	41	2	39
1848	38	4	34
1849	63	—	63
1850	134	—	134
1851	144	—	144
1852	133	—	133
1853	123	—	123
1854	117	—	117
1855	129	—	129
1856	138	—	138
1857	146	1	145
1858	150	—	150
1859	199	8	191
1860	192	4	188
1861	195	1	194
1862	198	8	190
1863	195	9	186
1864	198	7	191
1865	213	11	202
1866	226	11	215
1867	237	2	235
1868	245	4	241
1869	243	4	239
1870	239	4	235
1871	246	7	239
1872	256	10	246
1873	250	7	243

Notes:

1. Interest on all money on loan includes interest paid on bonds, mortgage debentures, Debenture Stock, calls paid in advance, bond and mortgage stamp duties and charges, and, at various times, commission on loans. It excludes all dividends on ordinary and guaranteed and preference stock, and charges for leased lines.

2. Up to March 1841 all interest charges were debited to capital.

o

After that date, when the complete line was opened, interest on loans was charged to revenue account, but bond and mortgage stamp charges continued to be debited to capital until 1845, when these items were included in the 'General Charges' schedule and were therefore charged to revenue and included in working expenses. After June 1868 'Stamps and Commission on Loans' charges appear in the net Revenue Account, and not in the Revenue Account, together with other interest charges. Throughout the period, and irrespective of the varying practice in the financial statements, these interest charges have been debited to net revenue, and therefore wherever bond and mortgage stamp charges appeared in working expenses (that is, between 1845 and 1868), they have been subtracted.

3 The much-varied form of accounts renders interest on calls in advance another problem. Between 1842 and 1852 it appears that the item 'interest on loans chargeable to revenue' was a balance, that is, favourable interest items, such as interest on bank deposits, had been used partially to offset interest payments, and therefore the burden of interest may, at times, be understated. This further complication cannot, however, be very serious.

Interest on calls in advance was separated for the first time in 1862. For the years up to 1862 an estimate has been made of the amount that would have been paid out as interest on such money. It should be remembered that the figures are to the nearest £1,000, and that a dash does not mean that there was no interest paid at all. In most years there were certain sums paid in advance, but not always has it been estimated that they were sufficient to carry a thousand pounds in interest. The estimates are, it is hoped, fairly conservative, and are based on the amount of calls in advance shown by the accounts, and a 4 per cent interest rate. As a check the figure for 1862 was calculated on this basis, and compared with the actual amount separated in the accounts. The estimate was £9,000, the actual figure was £8,000.

4. More important than either interest on calls in advance, or interest on favourable balances at the banks, is the problem of 'productive' loan capital. Just as the distinction between 'productive' and 'unproductive' paid-up share capital gave the Lancashire & Yorkshire, and other companies, great opportunities for financial juggling, so did the similar distinction between 'productive' and 'unproductive' paid-up loan capital afford the Company the chance of an arbitrary allocation of interest to either capital or revenue account. There is a strong suspicion that in 1847 and 1848 this chance was taken. In the accounts for the second half of 1847 it is stated that the total of 'Loans productive' was £1,449,012, yet interest was paid on only £781,390 in the second half of 1848. The

respective totals of paid-up loan capital are £2,374,000 and £2,393,000 (see Table VIII, p. 187), so the decrease cannot be explained by a decrease in the total amount on loan to the Company. It is quite obvious that a considerable amount of interest, an amount in excess of the figures given in Table X, was paid in the period 1846 to 1849 inclusive. Whether the debiting of a proportion of interest to capital was justified, is a matter for debate. If the loan capital which was serviced out of capital was genuinely 'unproductive' in the sense that it was money raised to build lines which were not yet in operation, then the Company was doing nothing more than following the practice, which it had adopted, together with the majority of other companies, in earlier years. It was the accepted thing to pay interest on loans out of capital receipts before the line was opened, if interest had not been paid there would not, of course, have been any loans. In these years, 1846 to 1849, there can be no doubt that part of the loan capital was genuinely 'unproductive'. But the extent of the drop in 1848 of the amount of 'productive' loan capital is unexplained, and, it is believed, inexplicable, except in terms of a deliberate understatement of the interest burden.

As in so many other things, the emergence from the 1840s saw improvement, but it is also worth pointing out that 1850 saw the completion of the greater part of the schemes sanctioned in the 1840s. Certainly a proclamation by the directors that in 1850 all schemes would be completed (all schemes, that is, which were prosecuted) could not be accompanied by further talk of 'unproductive' capital. In December the total loan capital on which interest was paid, at an average rate of £4 11s. 8d. per cent, was over £3½ million; a contrast to the figures of 1847 and 1848. Thus, much of the paid-up loan capital of 1846-49 must have been 'unproductive', but it is very likely that the figure of 'productive' loan capital for 1848 was deliberately understated.

The tables presented in this Appendix are the raw material for the analysis of the financial results between 1842 and 1873 contained in Chapter 2. The explanations of method have been long and, it is feared, rather involved at times. But to present a series of figures, many of which will not be found in the accounts, without an explanation of their compilation, would be asking too much from the reader. This method of approaching the financial results occasions some repetition of tables, but it also enables us to leave many of the methodological difficulties behind, and to concentrate on their analysis. Further tables are presented in Chapter 2, some of which contain series similar to those already put forward, but they do not require many notes.

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- 8 & 9 Vict. c. 166 (1845). *An Act for making a Railway from Liverpool to Wigan, Bolton, and Bury, with several Branches therefrom.*
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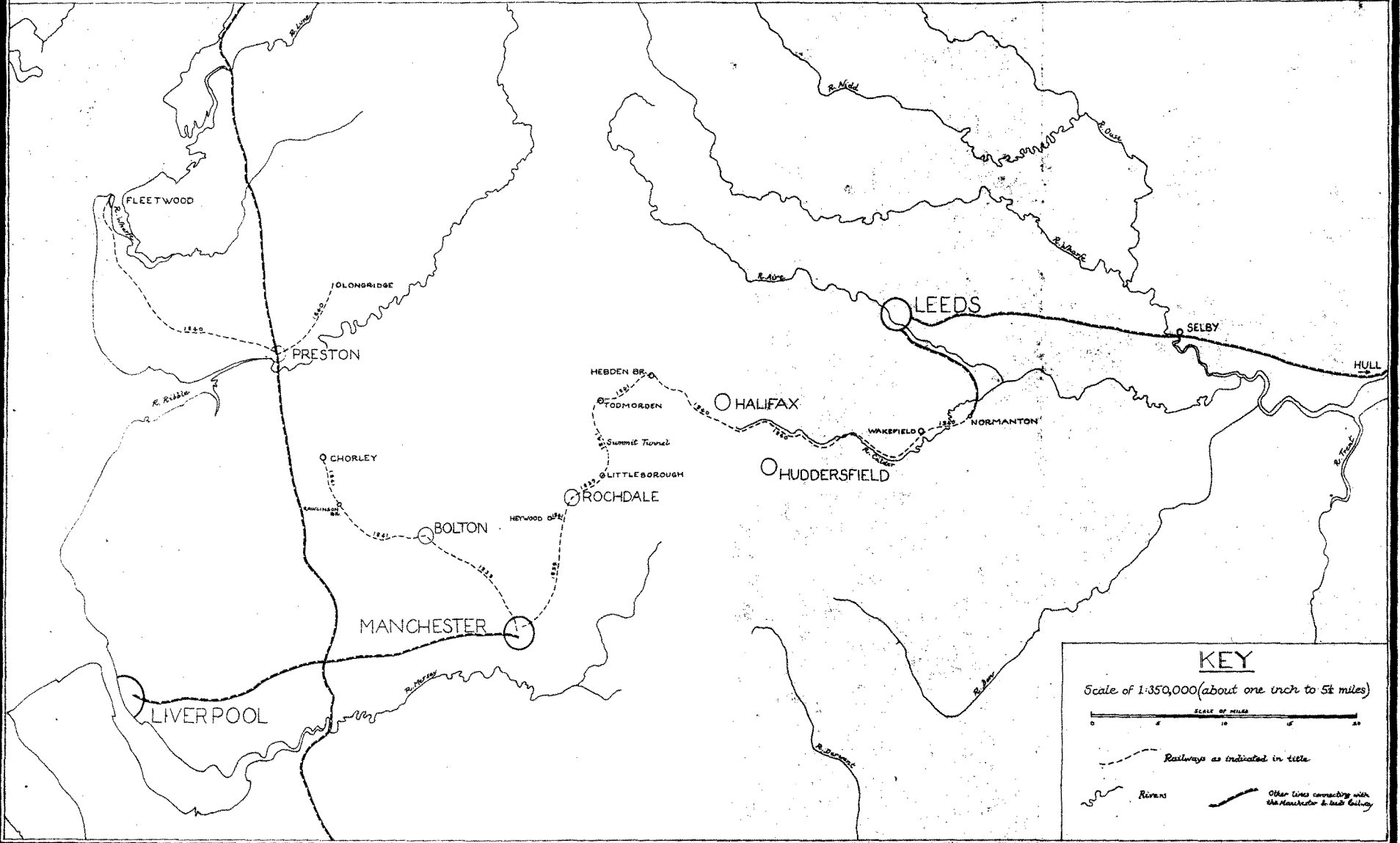
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THE MANCHESTER AND LEEDS RAILWAY IN 1841

With other lines built by that date and later absorbed by the Manchester and Leeds or Lancashire and Yorkshire Railway Companies



KEY

Scale of 1:350,000 (about one inch to 5½ miles)

SCALE OF MILES
0 5 10 15 20

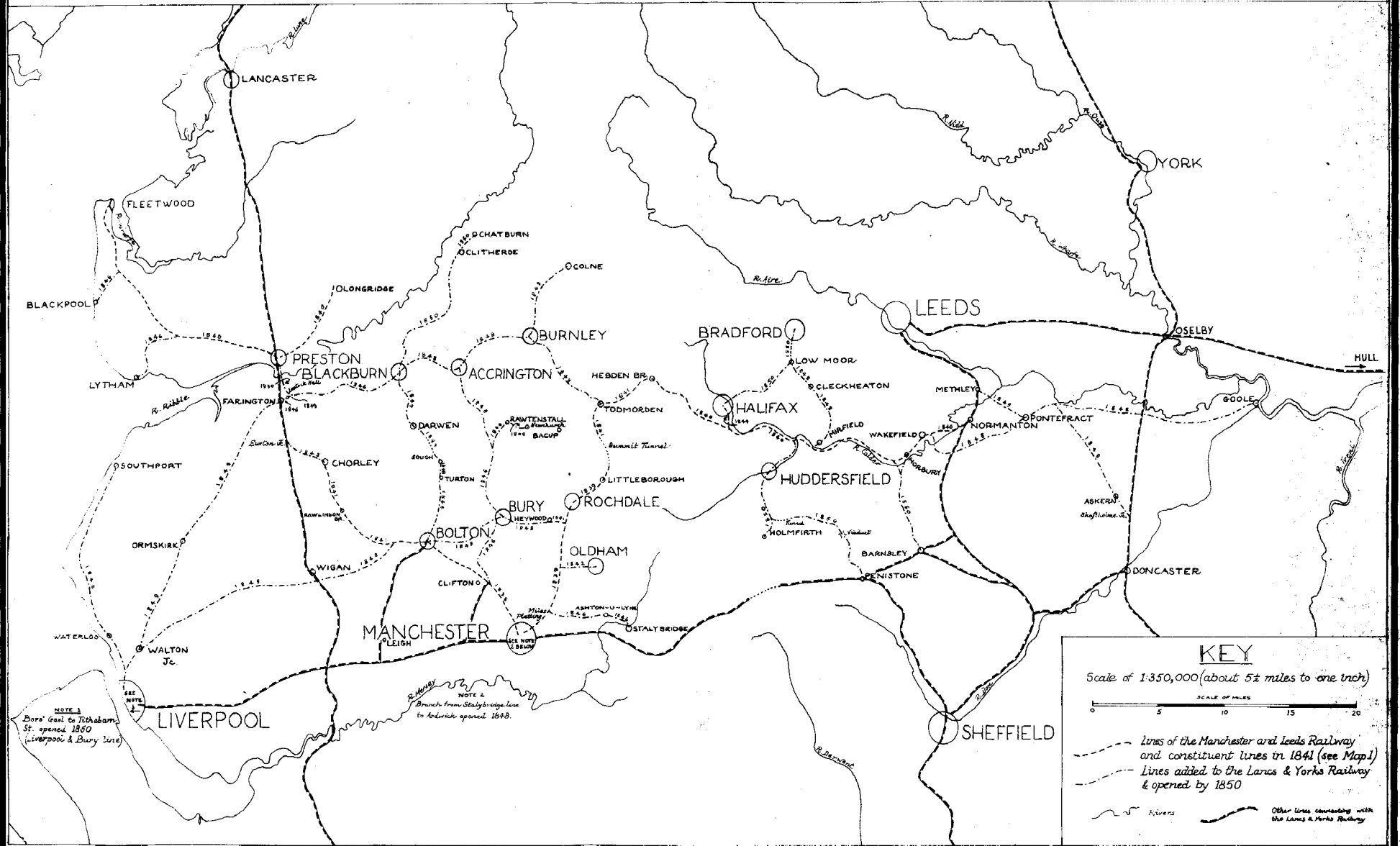
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~~~~ Rivers

— Other lines connecting with the Manchester & Leeds Railway

# THE LANCASHIRE AND YORKSHIRE RAILWAY IN 1850

With other lines built by that date and later absorbed by the Lancashire and Yorkshire Railway Company





# THE LANCASHIRE AND YORKSHIRE RAILWAY IN 1873

Showing lines opened by 1841 ; between 1842 and 1850 ; and between 1851 and 1873

