

Gokhale Institute of Politic  
and Economics, Poona 4.

Dhananjayrao Gadgil L.



GIPE-PUNE-0108:

# ECONOMIC RHYTHM

## A THEORY OF BUSINESS CYCLES

BY

**ERNST WAGEMANN**

*Professor in the University of Berlin, President of the Statistical Office  
of the German Reich, Director of the German Institute for Business  
Cycle Research, Honorary Fellow of the Royal Statistical  
Society, Honorary Member of the International  
Institute of Statistics*

TRANSLATED BY

**D. H. BLELLOCH**

*International Labor Office at Geneva*

WITH A PREFATORY NOTE BY

**WESLEY C. MITCHELL**

FIRST EDITION

SECOND IMPRESSION

**McGRAW-HILL BOOK COMPANY, Inc.**

**NEW YORK AND LONDON**

**1930**

**Gokhale Institute of Politics  
and Economics, Poona 4.**

X:74  
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10828

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THE MAPLE PRESS COMPANY, YORK, PA.

## PREFACE TO THE ENGLISH EDITION

The publishers, on the advice of eminent economists in the United States, decided to undertake the publication of an English edition of this book. Personally, the author was inclined to fear that, in making such a decision, they might run the risk of "carrying coals to Newcastle." America is justly regarded as the country where the methods of economic forecasting were originated and where they have been carried to a high degree of perfection, thanks to the labors of such distinguished scholars as Mitchell, Bullock, Persons, Snyder, Hardy, Ayres and others. This important branch of economic science has, however, been transplanted to Europe in the meantime, where its cultivation has yielded new and interesting fruit. This is due not merely to the special development of European science, but also to the quite different economic organization of the Old World, which is certainly more diversified and more complicated and perhaps also more liable to variation than that of America which reveals a tendency towards rapid progress in a straight line. This European peculiarity would appear to render a more comprehensive and complex system of economic observation necessary. Experience teaches the European that economic rhythm can only be studied by the use of a multiplicity of methods and instruments, just as medicine can never succeed in curing all maladies by adopting one single line of attack.

The author wishes that he could venture to regard the present work as a small contribution towards the repayment of the debt which Europe owes to America in the field of research into economic dynamics.

He takes this opportunity of expressing his hearty thanks to Mr. D. H. Belloch for substantial labor on the translation, as well as his deep sense of gratitude to his

friend, Dr. Constantine E. McGuire, for his most valuable help and advice in many directions of this undertaking.

ERNST WAGEMANN.

BERLIN, GERMANY,  
*April*, 1930.

## PREFATORY NOTE

American students of business cycles will welcome the opportunity afforded by this translation to become better acquainted with Dr. Ernst Wagemann's *Konjunkturlehre*. This treatise, published two years ago in Berlin, has a character all its own derived from the author's varied experience. Growing up in Chile, Dr. Wagemann has been able to look at European conditions with the partial detachment that sharpens insight. Rising to the presidency of the Imperial Statistical Office, he has become thoroughly familiar with one of the most efficient statistical organizations in the world. A university professor, he has had the stimulus to scientific inquiry which comes from association with scholars. As director of the Institut für Konjunkturforschung, he has dealt practically with the fascinating but difficult problem of forecasting future business developments from analysis of current conditions. Perhaps no other investigator has enjoyed such a combination of advantages for studying business cycles.

The outcome is what one might expect. In all his work, Dr. Wagemann makes use whenever possible of statistical data and statistical technique. But his interest is the scientific interest of a university professor. The data and technique are means to a larger end. Most American forecasters have held rigidly aloof from "theorizing" about business cycles. The wisdom of this attitude is doubtful; for theorizing, properly understood, means an effort to comprehend a subject in general terms. Dr. Wagemann feels an urge to understand and to explain how cyclical fluctuations come about, quite as strong as his urge to develop a successful technique of forecasting. Indeed, each effort promotes the other. His work should contribute not a little toward closing the unfortunate gap which has developed in the United States between business-cycle "statisticians" and business-cycle "theorists."

The forecasting technique which Wagemann uses has been deeply influenced by a critical study of the methods developed by Warren M. Persons and his colleagues in the Harvard group.

But Wagemann thinks that the "great plural-curve barometers" have "failed"—that of the Harvard service among others. The next step, as he sees matters, is to use a more comprehensive system of indicators. Production, employment, movements of goods into storage and out of storage, foreign trade in its bearing on the domestic market, the volume of business transactions, credit conditions, commodity prices, and the interrelations among the prices of commodities, securities and loans are all represented independently in his present scheme. Conclusions are based upon an analytic study of the changes in these variables, regard being had not merely to the figures, but also to what we know at large concerning the way in which one business factor influences other factors.

How this plan will work in the long run remains to be seen. So far, Dr. Wagemann feels pleased with his results. But experience will suggest improvements, as in all scientific work. Perhaps American students will attempt to better Wagemann's technique of analysis, as he has attempted to better the practice of earlier American workers. That is the type of international competition which enriches all parties.

WESLEY C. MITCHELL.



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TABLE II.—ECONOMIC SERIES, 1900 TO 1913 (MONTHLY).—(Continued)

Period	Movement of the three markets				Prices and production of coal and pig iron				
	Discount rate in Berlin, per cent per annum	Fixed-interest securities (six & per cent bonds)	Index of stock prices (1913 = 100)	Index of variable commodity prices (1913 = 100)	Price of Westphalian coal at colliery, marks per ton	Coal miner's wage (average per shift), marks*	Soft-coal production, thousands of tons per working day	Price of pig iron at smelter, marks per ton	Pig-iron production, thousands of tons per calendar day
1904 July.....	2.60	101.3	83.2	78.0	9.38		383.9	64.00	27.3
August.....	2.62	101.3	85.7	78.4	9.38	3.99	384.1	64.00	27.5
September.....	3.09	101.4	86.8	78.7	9.38		374.3	64.00	27.8
October.....	3.69	101.1	88.4	79.4	9.38		398.7	64.00	28.0
November.....	3.99	101.0	89.8	81.1	9.38	4.00	414.2	64.00	27.8
December.....	3.94	101.6	90.8	81.7	9.38		406.2	64.00	28.1
1905 January.....	2.56	101.7	90.4	82.0	9.38		292.0	64.00	24.7
February.....	1.93	101.7	92.6	81.4	9.38	3.94	345.8	64.00	24.0
March.....	2.22	101.9	93.4	81.6	9.38		445.8	64.00	28.9
April.....	1.91	101.8	93.9	82.0	9.53		415.8	64.00	29.8
May.....	2.30	101.8	92.9	82.6	9.53	4.01	418.8	64.00	30.7
June.....	2.34	101.7	92.7	83.6	9.53		389.3	64.00	30.6
July.....	2.12	101.6	94.0	84.4	9.53		412.6	64.00	30.4
August.....	2.23	101.6	94.8	85.6	9.53	4.06	408.3	64.00	31.2
September.....	2.99	101.5	95.8	86.4	9.53		414.4	64.00	31.8
October.....	4.00	101.2	95.6	88.5	9.53		415.2	67.00	32.5
November.....	4.62	101.2	93.6	90.8	9.53	4.07	428.9	67.00	32.9
December.....	4.99	101.2	92.4	93.4	9.53		434.8	67.50	33.2
1906 January.....	3.81	101.3	92.9	93.6	9.53		457.0	70.00	32.9
February.....	3.35	101.4	93.5	92.0	10.25	4.17	455.0	70.00	33.4
March.....	4.02	101.3	93.5	93.0	10.25		460.7	70.00	33.9
April.....	3.44	101.3	96.3	94.6	10.25		439.4	70.00	33.7
May.....	3.39	101.1	94.0	96.3	10.25	4.26	445.1	70.00	33.8
June.....	3.68	101.3	93.0	96.9	10.25		413.6	70.00	33.6
July.....	3.49	100.9	91.2	96.9	10.25		443.0	70.00	33.6
August.....	3.43	100.7	92.8	98.1	10.25	4.43	450.1	70.00	34.4
September.....	4.23	100.5	92.6	101.0	10.25		447.3	76.00	34.6
October.....	4.83	100.3	92.4	103.8	10.25		451.8	76.00	34.6
November.....	5.27	100.4	92.8	104.8	10.75	4.59	456.8	76.00	35.4
December.....	5.58	100.7	94.2	105.8	10.75		449.8	78.00	34.5
1907 January.....	4.90	100.2	93.1	106.4	10.75		473.0	78.00	34.3
February.....	4.68	100.1	91.6	106.9	10.75	4.70	463.4	81.00	34.9
March.....	5.40	99.7	88.2	106.5	10.88		477.7	81.00	35.5
April.....	4.65	99.7	87.0	106.9	11.25		458.4	81.00	35.9
May.....	4.44	99.3	86.2	108.2	11.25	4.81	445.1	81.00	35.3
June.....	4.66	98.8	84.1	107.1	11.25		458.3	81.00	34.8
July.....	4.44	98.2	84.3	106.2	11.25		473.6	81.00	36.3
August.....	4.62	97.9	82.6	101.6	11.25	4.94	468.7	78.00	36.1
September.....	5.08	98.0	85.3	100.3	11.25		463.4	78.00	36.4
October.....	4.91	97.7	85.3	96.9	11.25		470.4	78.00	36.7
November.....	5.61	97.3	83.2	93.8	11.25	4.99	483.8	78.00	37.1
December.....	7.07	97.7	83.4	89.6	11.25		491.9	78.00	35.7
1908 January.....	4.98	97.5	83.9	89.2	11.25		483.8	71.00	34.2
February.....	4.48	97.1	84.2	88.3	11.25	4.87	505.7	71.00	34.3
March.....	4.49	97.3	83.6	87.7	11.25		479.8	71.00	33.8
April.....	4.11	97.3	85.2	85.7	11.25		483.2	71.00	32.7
May.....	3.91	97.4	85.1	84.2	11.25	4.82	488.9	71.00	32.6
June.....	3.33	97.2	83.5	83.5	11.25		447.2	71.00	31.9
July.....	2.76	97.1	83.0	82.1	11.25		489.3	69.00	32.6
August.....	2.82	97.3	85.9	82.6	11.25	4.82	488.6	69.00	30.2
September.....	3.14	96.9	87.4	82.5	11.25		491.6	69.00	31.0
October.....	2.79	97.0	85.8	82.4	11.25		487.7	69.00	30.4
November.....	2.54	97.9	86.1	82.9	11.25	4.76	507.1	69.00	31.0
December.....	2.92	98.6	86.3	82.3	11.25		475.3	69.00	32.8

\* Quarterly average of actual shifts of entire pay roll in Dortmund coal-mine district.



TABLE II.—ECONOMIC SERIES, 1900 TO 1913 (MONTHLY).—(Continued)

Period	Movement of the three markets				Prices and production of coal and pig iron				
	Discount rate in Berlin, per cent per annum	Fixed-interest securities (six & per cent bonds)	Index of stock prices (1913 = 100)	Index of variable commodity prices (1913 = 100)	Price of Westphalian coal at colliery, marks per ton	Coal miner's wage (average per shift), marks	Soft-coal production, thousands of tons per working day	Price of pig iron at smelter, marks per ton	Pig-iron production, thousands of tons per calendar day
1909 January	2.24	99.6	86.6	81.8	11.25		480.4	60.00	33.0
February	2.17	99.9	86.9	81.7	11.25	4.56	481.3	58.50	33.9
March	2.66	99.5	85.4	81.9	11.25		478.4	58.00	34.6
April	1.98	99.6	87.6	82.3	11.25		487.7	58.00	34.9
May	2.32	99.6	88.6	84.0	10.75	4.45	489.6	57.50	35.2
June	2.91	99.5	88.3	84.3	10.75		460.5	57.50	35.6
July	2.28	99.6	89.2	84.2	10.75		491.7	56.00	35.2
August	2.13	99.5	92.0	83.9	10.75	4.48	489.0	54.50	35.5
September	3.06	99.5	93.9	85.0	10.75		490.0	55.50	35.6
October	3.83	99.0	94.4	86.7	10.75		499.0	58.50	36.3
November	4.47	99.2	95.3	85.1	10.75	4.48	507.6	58.00	37.3
December	4.34	99.3	97.4	85.8	10.75		501.1	60.00	37.6
1910 January	3.09	99.5	98.6	86.5	10.75		497.0	61.00	38.0
February	2.94	99.3	99.2	86.3	10.75	4.48	483.1	63.00	39.0
March	3.52	99.3	99.7	85.8	10.75		489.2	63.50	40.3
April	3.14	99.2	98.6	84.7	10.75		485.6	63.50	40.1
May	3.19	99.5	99.8	84.4	10.75	4.51	491.1	64.00	40.7
June	3.23	99.2	99.5	83.4	10.75		482.6	64.00	40.6
July	3.03	99.2	99.3	83.6	10.75		501.2	64.00	39.6
August	3.33	99.1	101.3	84.5	10.75	4.57	494.8	63.50	40.6
September	3.85	99.2	103.2	84.9	10.75		500.8	63.50	41.1
October	4.15	99.4	102.8	84.6	10.75		511.1	64.00	41.7
November	4.50	99.1	102.2	85.4	10.75	4.61	530.0	64.00	42.4
December	4.53	99.3	102.5	85.5	10.75		522.9	64.00	42.2
1911 January	3.50	99.3	102.2	85.9	10.75		520.3	64.00	42.6
February	3.07	99.4	103.6	86.1	10.75	4.64	486.1	64.00	42.1
March	3.34	99.1	103.7	85.9	10.75		518.9	64.00	42.7
April	2.96	99.2	102.9	85.8	10.75		532.9	64.00	42.8
May	2.84	99.1	101.7	87.0	10.75	4.66	533.6	64.00	42.3
June	3.38	98.7	101.8	87.0	10.75		493.3	64.00	42.1
July	2.46	99.1	102.4	87.8	10.75		523.5	64.00	41.6
August	3.03	98.6	101.5	89.1	10.75	4.72	514.7	64.00	41.4
September	4.16	98.2	98.1	89.8	10.75		523.6	64.00	41.7
October	4.32	98.5	97.3	90.8	10.75		526.1	66.75	43.1
November	4.51	98.4	99.8	91.3	10.75	4.75	553.6	66.75	43.8
December	4.86	98.8	102.4	92.3	10.75		559.7	67.50	44.4
1912 January	3.33	98.6	103.2	92.8	10.75		560.2	67.50	44.7
February	3.79	98.1	102.0	93.8	10.75	4.83	585.8	70.00	46.1
March	4.72	97.9	100.4	94.6	10.75		492.8	70.00	46.7
April	3.75	98.1	103.1	96.3	11.63		585.9	70.00	48.4
May	3.91	97.3	104.3	98.3	11.63	5.00	589.4	70.00	48.1
June	4.14	97.8	102.7	100.3	11.63		555.6	70.00	48.4
July	3.36	97.1	104.5	101.0	11.63		584.4	70.00	48.6
August	3.93	96.9	106.7	101.5	11.63	5.09	589.3	70.00	49.3
September	4.38	96.8	108.4	105.1	11.63		596.3	70.00	50.6
October	4.19	96.3	103.2	105.9	11.63		596.4	74.00	52.7
November	5.23	96.0	102.5	104.5	11.63	5.17	592.2	74.50	51.2
December	5.94	96.7	101.1	105.0	11.63		619.4	74.50	50.5
1913 January	4.68	96.6	103.9	104.0	11.63		636.0	74.50	52.0
February	5.15	96.2	102.7	102.4	11.63	5.28	650.4	74.50	53.4
March	5.90	96.2	101.9	101.1	11.63		642.2	74.50	52.6
April	4.56	95.8	100.0	102.4	12.38		608.5	74.50	53.0
May	5.31	95.6	99.5	103.6	12.38	5.37	570.7	74.50	53.0
June	5.53	94.5	97.3	100.4	12.38		637.2	74.50	53.7
July	4.65	94.4	99.3	98.1	12.38		637.0	74.50	53.2
August	4.88	94.3	99.9	98.8	12.37	5.42	636.3	74.50	52.9
September	5.35	95.0	100.2	99.4	12.37		629.1	74.50	53.0
October	4.71	94.4	97.9	98.3	12.37		627.5	74.50	53.3
November	4.45	94.5	98.3	96.6	12.37	5.38	638.7	74.50	53.3
December	4.57	95.0	99.0	95.2	12.37		624.0	74.50	52.0

\* Quarterly average of actual shifts of entire pay roll in Dortmund coal-mine district.

TABLE III.—NUMBER OF MEN AND WOMEN GAINFULLY EMPLOYED IN THE  
GERMAN REICH (PRESENT AREA)  
(Thousands)

Year	Men	Women	Total	Yearly increase or decline over preceding year			
				Men	Women	Total	
DEVELOPMENT HERETOFORE							
Middle	1882	11,931	4,954	16,885			
	1895	13,855	5,901	19,756	+148	+ 73	+221
	1907	16,655	8,501	25,156	+233	+217	+450
	1913	18,300	9,370	27,670	+274	+145	+419
Beginning	1924	20,218	11,362	31,580	+267	+ 75	+342
	1925	20,463	11,419	31,882	+245	+ 57	+302
	1926	20,745	11,558	32,303	+282	+139	+421
	1927	21,018	11,686	32,704	+273	+128	+401
	1928	21,311	11,825	33,136	+293	+139	+432
PREDICTABLE DEVELOPMENT							
Beginning	1929	21,574	11,938	33,512	+263	+113	+376
	1930	21,836	12,045	33,881	+262	+107	+369
	1931	21,907	12,081	33,988	+ 71	+ 36	+107
	1932	21,856	12,050	33,906	- 51	- 31	- 82
	1933	21,786	11,999	33,785	- 70	- 51	-121
	1934	21,715	11,953	33,668	- 71	- 46	-117
	1935	21,806	11,963	33,769	+ 91	+ 10	+101
	1936	22,028	12,071	34,099	+222	+108	+330
	1937	22,301	12,184	34,485	+273	+113	+386
	1938	22,462	12,240	34,702	+161	+ 56	+217
	1939	22,594	12,281	34,875	+132	+ 41	+173
1940	22,685	12,312	34,997	+ 91	+ 31	+122	

TABLE IV.—CLASSIFICATION OF INDUSTRY ON THE BASIS OF THE INDUSTRIAL EMPLOYMENT CENSUS OF 1925

## A. INDUSTRIES PRODUCING MEANS OF PRODUCTION

Classes of goods	Thousands of persons	Production, thousands per hour
<b>I. Sources of power:</b>		
1. Coal.....	679	3,498
a. Bituminous <sup>1</sup> .....	574	2,748
b. Lignite <sup>1</sup> .....	105	750
2. Peat, petroleum.....	16	24
3. Electricity.....	85	222 <sup>2</sup>
4. Gas.....	47	80
Total sources of power.....	827	3,824
<b>II. Basic materials:</b>		
1. Iron and non-ferrous metals <sup>1</sup> .....	514	3,059
a. Eartha.....	46	179
b. Iron, steel, and alloys <sup>2</sup> .....	388	2,599
c. Non-ferrous metals and alloys.....	80	281
2. Chemicals <sup>3</sup> .....	267	998 <sup>4</sup>
3. Paper and manufactures of paper.....	554	978
a. Pulp and paper.....	115	735
b. Paper manufactures.....	156	84
c. Printed matter <sup>5</sup> .....	283	159
4. Leather <sup>7</sup> .....	67	131
5. Wood and manufactures of wood <sup>8</sup> .....	137	371
6. Building materials.....	397	736
a. Gravel, sand, stone.....	126	127
b. Lime, gypsum, cement <sup>9</sup> .....	54	242
c. Brick and tile <sup>10</sup> .....	189	296
d. Concrete and artificial stone <sup>11</sup> .....	48	71
Total for basic materials.....	1,936	6,273
<b>III. Construction:</b>		
1. Building trades.....	1,679	459
a. Excavation, foundation, and concrete.....	1,058	418
b. Building construction.....	421	26
c. Tinware, gas, and water installation.....	106	6
d. Electrotechnical installations.....	99	10
2. Machines, vehicles, and apparatus.....	1,366	2,244
a. Machines and apparatus <sup>12</sup> .....	1,045	1,934
b. Structural steel.....	31	47
c. Shipbuilding.....	28	59
d. Vehicles and aircraft.....	225	143
e. Railroad rolling stock.....	37	61
3. Electrotechnical products <sup>13</sup> .....	341	386
4. Tools and hardware.....	341	232
a. Forged materials.....	125	48
b. Locks and hardware.....	90	35
c. Tools.....	126	149
5. Wheelwright's materials.....	104	109
6. Packing industries.....	49	62
7. Finishing industries <sup>14</sup> .....	24	49
Total for construction.....	3,914	3,541
<b>Total for industries producing means of production.....</b>	<b>6,677</b>	<b>13,638</b>

<sup>1</sup> Including combined factories.<sup>2</sup> Net amount employed in driving machinery. No account taken of power employed in generation (about 5,500,000,000 hp.).<sup>3</sup> Including the half of the factories combined with iron and metallurgical production. The other half is calculated in group A III (construction).<sup>4</sup> Net amount employed in primary machine driving. The amount employed in generation for the electrochemical and electrometallurgical industries, about 250,000,000 hp., is not included.<sup>5</sup> Without the industries dealing with pharmaceuticals, photochemicals, technological chemicals, essential oils, cosmetics, soap; wax, incandescent mantles; also, without chemical works connected with salt mines.<sup>6</sup> Including the combined output of press and publishing industries.<sup>7</sup> Tanning and technical leather articles; the production of harness and other leather goods is calculated in group B III.<sup>8</sup> Sawmills, etc., amber industries (1,000 persons); woodworking is included in group B III.<sup>9</sup> Including asphalt and chalk industries.<sup>10</sup> Including total for building-materials industries.<sup>11</sup> Including total of ceramic industries.<sup>12</sup> Including the half of the factories combined with iron and steel industries.<sup>13</sup> Not including electrotechnical installations.<sup>14</sup> One half of the rubber industries; the other half is taken care of under B III.

TABLE IV.—CLASSIFICATION OF INDUSTRY ON THE BASIS OF THE INDUSTRIAL EMPLOYMENT CENSUS OF 1925.—(Continued)

## B. INDUSTRIES PRODUCING CONSUMPTION GOODS

Classes of goods	Thousand of persons	Production, thousands per hour
<b>I. Necessities and luxuries:</b>		
1. Milling and banking.....	466	760
a. Flour.....	91	613
b. Baking.....	375	147
2. Sugar.....	34	100
3. Confectionary.....	73	89
4. Meat and fish.....	286	221
5. Butter, margarine, and cheese.....	58	109
6. Oil, vinegar, mustard.....	22	72
7. Preserves, pastry, soups.....	48	70
8. Water.....	10	141
9. Beverages.....	144	262
a. Coffee.....	9	13
b. Beer.....	91	215
c. Wine and brandy.....	31	29
d. Mineral water, etc.....	13	5
10. Tobacco.....	215	24
Total of food, drink, and tobacco.....	1,356	1,848
<b>II. Clothing, etc.:</b>		
1. Yarns and textile goods.....	743	1,094
a. Silk and rayon.....	87	74
b. Wool.....	222	298
c. Cotton.....	318	587
d. Linen, flax, jute.....	116	135
2. Clothing.....	807	19
3. Hosiery and underclothing <sup>11</sup> .....	207	69
4. Lace, ribbons, and twine.....	56	18
5. Furs, hats, caps, neckwear.....	157	29
6. Gloves.....	45	4
7. Shoes.....	388	57
8. Cleansing.....	187	32
a. Barbering trades.....	117	1
b. Laundry and cleaning trades.....	70	31
Total for clothing, etc.....	2,590	1,322
<b>III. Household goods, social interests, and luxuries:</b>		
1. Furniture.....	440	367
2. Furnishings, curtains, oilcloth.....	157	95
3. Lamps, ornaments, enamelware.....	405	300
4. Porcelain, glass.....	255	164
5. Wooden kitchenware.....	216	116
6. Leather goods, linoleum.....	98	25
7. Hard- and soft-rubber goods.....	34	48
8. Watches, optical goods, binoculars.....	153	56
9. Musical and theatrical instruments.....	119	44
10. Candles, perfumery, pharmaceutical goods.....	82	68
11. Photography.....	16	
Total for household goods, social interests, and luxuries.....	1,975	1,283
<b>Total for industries producing consumption goods.....</b>	<b>5,921</b>	<b>4,453</b>

<sup>11</sup> Not including glove-materials industries.

TABLE V.—THE ECONOMIC AREAS OF THE EARTH ACCORDING TO THE DISTINGUISHING CHARACTERISTICS OF THEIR ECONOMIC STRUCTURE  
(A tentative classification)

Country	Population in 1925, millions	Area in 1925, thousands of sq. km.	Density of population 1925, sq. km.	Consumption of machinery			Imports, 1925	Exports, 1925	Excess of imports (-) or of exports (+) expressed as percentage of imports	Total foreign trade turn-over per capita, marks	Proportion of finished goods	
				Total, millions of marks	Per capita, marks	Per sq. km., marks	Millions of marks				Percentage of imports	Percentage of exports
							8	9				
1	2	3	4	5	6	7	8	9	10	11	12	13
<b>I. MATURE CAPITALISTIC STAGE</b>												
(Mature density; relatively extensive employment of machinery; per capita foreign trade substantial)												
Great Britain and northern Ireland	44.0	241.4	182	2,351	53.4	9,739	23,660	15,684	-34	894	37.6	76.2
Switzerland.....	4.0	41.3	97	212	53.0	5,133	2,020	1,647	-18	917	36.9	76.1
Germany.....	63.2	470.6	134	2,264	35.8	4,811	12,362	8,799	-29	335	14.4	71.3
Belgian Luxemburg.....	8.0	33.0	242	199	24.9	6,030	3,558	2,896	-19	807	22.0	55.9
Netherlands.....	7.4	34.2	216	168	22.7	4,912	4,143	3,050	-26	972	36.3	35.5
Sweden.....	6.1	410.5	(15)	122	20.0	(297)	1,631	1,533	-6	519	39.3	39.5
Denmark.....	3.4	43.0	79	59	17.4	1,372	1,720	1,588	-8	973	....	10.1
Austria.....	6.6	83.8	79	102	15.5	1,217	1,668	1,119	-33	422	33.1	75.6
France.....	40.6	551.0	74	570	14.0	1,034	8,841	9,174	+ 4	444	14.2	69.3
Norway.....	2.8	309.9	(9)	39	13.9	(126)	1,021	773	-24	641	37.4	20.6
Czechoslovakia.....	14.0	140.4	100	191	13.6	1,360	2,195	2,345	+ 7	324	23.0	62.1

Italy.....	39.7	310.0	128	387	9.7	1,248	4,376	3,056	-30	187	15.5	39.9
Finland.....	3.5	343.6	(10)	32	9.1	(93)	582	587	+ 1	334		
Hungary.....	8.0	92.9	86	72	9.0	775	630	596	- 5	153	49.2	34.1
Latvia.....	1.8	65.8	27	15.5	8.6	236	226	145	-36	206	47.3	14.1
Irish Free State.....	3.0	68.9	44	24	8.0	348	1,247	879	-30	709		
Estonia.....	1.1	47.6	23	6	5.5	126	108	108	± 0	196	31.6	40.8
Spain.....	22.0	505.2	44	90	4.1	178	1,818	1,284	-29	141	44.8	25.8
Poland.....	28.8	388.3	74	115	4.0	296	1,232	1,033	-16	79	44.0	22.3
Portugal.....	6.1	91.9	66	15	2.5	163	511	178	-65	113	8.9	5.1
Lithuania <sup>1</sup> .....	2.2	55.9	39	5	2.3	89	104	100	- 4	93	53.8	7.0
Bulgaria.....	5.4	103.1	52	12	2.2	116	222	172	-23	73	72.3	2.8
Greece.....	5.6	147.6	38	13	2.3	88	674	300	-55	174		
Jugoslavia.....	12.2	249.0	49	26	2.1	104	627	638	+ 2	104		
Rumania.....	17.2	294.2	58	28	1.6	95	611	589	- 4	70		
Europe (not including Russia, Turkey, and other small states).....	356.7	5,123	85 <sup>2</sup>	7,118	20.0	1,706 <sup>3</sup>	75,787	58,273	- 23	376	28	61
United States.....	115.4	7,839	15	14,465	125.3	1,845	17,369	20,239	+17	326	20.9	32.9
Canada.....	9.4	9,660	(1)	876	93.2	(91)	3,895	5,524	+42	1,002	61.5	40.2
Japan.....	62.0	382	162	381	6.1	997	4,282	3,822	-11	131		
Mature capitalistic states.....	543.5	23,004	42 <sup>2</sup>	22,840	42.0	1,773 <sup>3</sup>	101,333	87,858	-13	348	28	53

<sup>1</sup> Including Memel.

<sup>2</sup> Without Sweden, Norway, Finland.

<sup>3</sup> Without Sweden, Norway, Finland, Canada.

NOTE.—The data for columns 2 to 4 correspond mainly to the end of 1925 and are taken from the "Statistical Yearbook" of Germany; but wherever other data of official origin were ascertainable, use was made of them—as regards recent censuses, in particular. Average values in column 5 according to the publication of the Verein of Deutscher Maschinenbauanstalten entitled "Die Maschinenindustrie der Welt," p. 189. In columns 8 to 11, so far as possible, only special trade is considered.

TABLE V.—THE ECONOMIC AREAS OF THE EARTH ACCORDING TO THE DISTINGUISHING CHARACTERISTICS OF THEIR ECONOMIC STRUCTURE.—(Continued)  
(A tentative classification)

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Country	Population in 1925, millions	Area in 1925, thousands of sq. km.	Density of population 1925, sq. km.	Consumption of machinery			Imports, 1925	Exports, 1925	Excess of imports (-) or of exports (+) expressed as percentage of imports	Total foreign trade turnover per capita, marks	Proportion of finished goods	
				Total, millions of marks	Per capita, marks	Per sq. km., marks					Millions of marks	Percentage of imports
							1	2				

ECONOMIC RHYTHM

II. PARTLY CAPITALISTIC STAGE

(Dense population; slight use of machines; insignificant per capita foreign trade)

European Russia.....	115.5	5,803	20	561	4.9	97	1,596	1,216	- 24	24	36.6	4.6
Ceylon.....	4.5	66	68	...	...	...	551	798	+ 45	300		
British India.....	321.5	4,675	69	225	0.7	48	3,318	5,767	+ 74	28		
China.....	433.0	11,081	39	88	0.2	8	3,342	2,737	- 18	14	45.6	17.0
Philippine Islands.....	11.9	296	40	...	...	..	501	622	+ 24	94		
Indo-China.....	19.8	711	28	...	...	..	530	608	+ 15	57		
Dutch East Indies.....	51.0	1,900	27	58	1.1	31	1,379	3,012	+118	86	68.8	1.6
Siam.....	9.8	518	19	6	0.6	12	303	369	+ 22	69	71.5	
British Malay states.....	2.5	142	18	...	...	..	2,317	3,048	+ 32			

Asiatic Turkey.....	11.3	864	13	11	1.0	13	555	442	- 20	88		
Perma.....	9.0	1,627	(6)	.....	...	..	(18.5)	(3.5)	(- 81)	2.4	55.8	14.1
Asia (not including Russia or Japan.....)	874.3	21,880	40	388	0.5	20	12,815	17,407	+ 36	35	54	9
Egypt.....	14.1	900	16	41	2.9	46	1,186	1,233	+ 4	172	59.1	
Morocco.....	5.5	415	13	7	1.3	17	239	113	- 53	64		
Algiers.....	6.1	575	11	17	2.8	30	657	482	- 27	187	67.5	7.3
Tunis.....	2.1	125	17	4	1.9	32	218	170	- 22	185		
Partly capitalistic states.....	1,017.6	29,698	34	1,018	1.0	38	16,711	20,621	+ 23	37	52	8



TABLE V.—THE ECONOMIC AREAS OF THE EARTH ACCORDING TO THE DISTINGUISHING CHARACTERISTICS OF THEIR ECONOMIC STRUCTURE.—(Continued)  
(A tentative classification)

Country	Popu- lation in 1925, millions	Area in 1925, thous- ands of sq. km.	Density of popu- lation 1925, sq. km.	Consumption of machinery			Imports, 1925	Exports, 1925	Excess of im- ports (-) or of ex- ports (+) ex- pressed as per- centage of im- ports	Total foreign trade turn- over per capita, marks	Proportion of finished goods	
				Total, millions of marks	Per capita, marks	Per sq. km., marks	Millions of marks				Percent- age of imports	Percent- age of exports
							8	9				
1	2	3	4	5	6	7	8	9	10	11	12	13
<b>III. INCIPIENT CAPITALISM</b> (Slight density; slight use of machines; considerable per capita foreign trade)												
Argentina.....	10.1	2,987	3.4	143	14.2	48	3,367	3,333	- 1	663		
Chile.....	3.9	752	5.2	43	11.0	57	620	948	+53	402	69.7	4.3
Peru.....	5.6	1,434	3.9	35	6.3	24	313	372	+19	122	66.3	0.3
Mexico.....	14.2	1,960	7.2	88	6.2	45	860	1,502	+75	166	84.0	1.0
Uruguay.....	1.7	187	9.1	9	5.3	48	299	408	+36	416	78.0	
Brazil.....	36.9	8,511	4.3	104	2.8	12	1,730	2,060	+19	103	55.6	
Colombia.....	6.9	1,283	5.4	18	2.6	14	354	348	- 2	102		
Bolivia.....	3.0	1,590	1.9	6	2.0	4	98	172	+76	90	66.8	0.4
Ecuador.....	2.0	307	6.5	...	...	...	52	61	+17	57	....	8.6
Venezuela.....	3.0	1,020	2.9	...	...	...	246	262	+ 7	169		

Paraguay.....	0.9	445	2.0	.....	.....	.....	41	41	± 0	91		
Cuba.....	3.0	115	(20.1)	63	(21.0)	(548)	1,249	1,487	+19	(912)		
Central and South American states	91.2	20,600	4.4	509	6.0	27	9,229	10,994	+19	222	67	3
Australia.....	6.0	7,704	0.8	279	46.5	36	2,811	3,074	+ 9	961	80.9	7.9
New Zealand.....	1.4	268	5.2	47	33.6	175	1,063	1,110	+ 4	1,552	70.6	1.3
Union of South Africa.....	7.5	1,226	6.1	99	13.2	81	1,281	1,621	+27	387	76.3	
Incipient capitalistic states.....	106.1	29,798	3.6	934	9.3	33	14,384	16,799	+17	294	73	4

IV. NON-CAPITALISTIC STATES

(Slight density; little or no use of machines; no significant foreign trade)

Asiatic Russia.....	30.7	16,035	1.9									
Belgian Congo.....	7.2	2,356	3.1	.....	.....	..	175	126	-28	42	75.0	8.9
French West Africa.....	13.5	4,852	2.8	.....	.....	..	223	180	-19	30		
Sudan.....	5.9	2,628	2.2									
Tripoli.....	0.8	1,500	0.5									
Non-capitalistic states.....	58.1	27,371	2.1	.....	.....	..	(398)	(306)	-23	34	(75)	(9)

TABLE VI.—PRINCIPAL ECONOMIC SERIES, 1924 TO 1929 (MONTHLY)

Year and month	Index figure for industrial production (July, 1924, to June, 1920 = 100)	Production			Foreign trade <sup>a</sup>			Turnover				
		Fully employed <sup>1</sup> to every 100 members of labor unions			Imports	Exports <sup>4</sup>	Excess	General turnover calculated from yield of turnover tax quarterly, billions of marks	Business credits of banks of issue	Currency circulation	Total bills	Total long-term credits <sup>7</sup>
		All branches of industry <sup>2</sup>	Producers'-goods industries <sup>3</sup>	Consumers'-goods industries <sup>4</sup>								
					Net value of commodities, millions of marks				Million of marks			
1924 Jan.....	65.9	.....	.....	.....	562.2	431.0	131.2	.....	1,163	2,278	1,925	
Feb.....	77.4	.....	.....	.....	725.8	465.9	259.9	15.12	1,557	2,634	1,719	
Mar.....	89.3	.....	.....	.....	688.6	457.0	231.6	.....	2,007	2,824	2,440	
April.....	97.5	.....	.....	.....	800.6	482.7	317.9	.....	2,177	2,825	2,335	
May.....	77.0	.....	.....	.....	886.9	515.7	371.2	16.89	2,187	2,918	2,510	
June.....	83.9	.....	.....	.....	734.3	476.2	258.1	.....	2,125	3,129	2,335	
July.....	84.1	.....	.....	.....	534.5	573.1	+ 38.6	.....	2,031	3,300	2,487	
Aug.....	82.6	.....	.....	.....	437.2	588.8	+151.6	19.26	2,217	3,535	2,534	
Sept.....	91.6	.....	.....	.....	618.5	563.1	55.4	.....	2,488	3,708	2,767	
Oct.....	96.2	.....	.....	.....	847.4	611.4	235.9	.....	2,736	3,826	3,076	
Nov.....	103.3	.....	.....	.....	1,034.2	642.4	391.8	24.72	2,884	3,956	3,034	
Dec.....	105.4	92.5	93.0	91.4	1,214.4	740.7	473.7	.....	3,044	4,274	3,296	
1925 Jan.....	108.9	93.0	93.4	92.2	1,265.6	696.0	569.6	.....	2,923	4,209	3,359	376.5
Feb.....	112.7	94.0	94.4	93.1	1,061.5	630.2	431.3	25.11	3,043	4,391	3,321	333.1
Mar.....	113.7	94.5	94.7	94.0	1,017.9	708.4	309.5	.....	3,014	4,479	3,770	274.5
April.....	109.0	95.2	95.5	94.4	998.5	670.8	825.7	.....	3,116	4,503	3,467	201.3
May.....	106.7	95.7	96.2	94.6	983.5	728.8	254.6	25.29	3,185	4,772	3,746	195.7
June.....	104.7	95.6	96.2	94.3	995.1	686.6	308.5	.....	3,260	4,775	3,887	199.9
July.....	103.5	95.2	95.5	94.5	1,138.1	743.8	394.4	.....	3,301	4,891	4,046	211.4
Aug.....	101.2	93.8	93.9	93.8	1,171.1	725.7	445.4	25.96	3,277	4,983	3,707	165.5
Sept.....	105.2	92.8	92.4	93.7	1,047.0	777.7	269.3	.....	3,295	5,056	4,402	244.1
Oct.....	103.8	89.6	89.0	90.7	1,068.0	845.4	222.6	.....	3,233	5,066	4,617	232.2
Nov.....	106.8	85.5	86.4	83.5	851.8	791.1	60.7	29.20	3,044	4,977	3,479	433.7
Dec.....	101.6	76.2	77.9	72.6	766.2	794.2	+ 28.0	.....	3,186	5,181	3,256	495.7
1926 Jan.....	95.4	70.5	73.4	64.2	715.0	795.3	+ 80.4	.....	2,775	4,846	3,012	446.1
Feb.....	95.3	69.6	73.2	61.9	662.5	782.9	+120.4	24.00	2,631	4,924	2,988	359.5
Mar.....	92.5	68.2	70.5	63.1	649.4	923.1	+273.8	.....	2,464	5,050	3,153	361.8
April.....	89.9	71.4	74.6	64.4	719.8	779.3	+ 59.5	.....	2,186	5,030	2,859	733.6
May.....	90.9	71.6	74.8	64.7	706.7	728.9	+ 22.2	26.76	2,066	5,043	2,751	539.3
June.....	93.4	71.9	74.2	66.9	793.7	758.4	35.3	.....	2,130	5,169	2,904	752.0
July.....	94.5	72.6	74.5	68.5	927.6	820.4	107.2	.....	1,969	5,282	2,796	712.8

	Aug.....	101.3	74.6	76.0	71.4	925.0	830.5	94.5	27.97	3,040	5,305	2,727	503.1
	Sept.....	106.2	78.1	78.7	76.7	831.1	832.5	+ 1.5	.....	2,215	5,460	2,761	575.6
	Oct.....	111.0	81.1	81.8	79.8	996.5	874.7	.....	.....	2,156	5,495	2,196	541.2
	Nov.....	118.7	83.2	83.5	82.7	1,004.3	869.4	134.9	30.83	2,057	5,421	3,118	735.1
	Dec.....	120.3	84.0	85.0	81.9	1,070.8	817.6	253.2	.....	2,374	5,800	3,273	946.6
1927	Jan.....	120.3	84.7	85.4	83.1	1,091.0	792.3	298.7	.....	1,969	5,390	3,029	485.9
	Feb.....	122.0	85.9	86.4	84.7	1,089.5	750.4	339.1	28.59	2,273	5,458	3,166	901.9
	Mar.....	123.3	88.3	88.5	87.8	1,083.0	832.2	250.8	.....	2,515	5,573	3,830	574.6
	April.....	122.3	89.7	89.4	90.3	1,094.0	793.2	300.7	.....	2,593	5,657	3,374	562.4
	May.....	124.3	91.6	91.3	92.2	1,170.9	833.1	337.8	29.87	2,958	5,679	3,654	523.6
	June.....	121.0	92.3	92.2	92.4	1,193.7	747.1	446.7	.....	3,072	5,765	3,693	563.8
	July.....	121.0	93.2	93.2	93.3	1,274.6	846.5	428.1	.....	3,005	5,871	3,728	622.5
	Aug.....	121.9	93.8	93.8	93.7	1,153.0	867.4	285.6	31.75	3,162	5,883	3,909	369.0
	Sept.....	126.9	94.6	94.7	94.2	1,168.7	932.5	236.2	.....	3,325	6,143	4,029	369.3
	Oct.....	125.0	95.2	95.6	94.4	1,240.0	961.7	278.3	.....	3,274	6,131	4,219	505.1
	Nov.....	129.3	94.9	95.6	93.4	1,284.8	912.5	372.4	34.82	2,764	5,990	4,197	483.1
	Dec.....	126.5	92.7	94.2	89.7	1,266.0	953.6	312.4	.....	3,395	6,331	4,296	494.6
1928	Jan.....	127.8	92.3	93.4	89.9	1,359.2	861.9	497.4	.....	2,661	5,922	4,506	401.3
	Feb.....	129.2	92.3	93.6	89.5	1,247.0	941.9	305.0	32.19	2,650	5,964	3,964	687.4
	Mar.....	128.1	92.5	94.0	89.5	1,229.2	1,021.2	208.0	.....	2,927	6,222	4,663	461.9
	April.....	124.6	92.4	94.2	88.6	1,174.9	920.4	254.5	.....	2,783	6,113	4,126	581.8
	May.....	121.5	91.7	93.9	87.0	1,086.9	893.9	193.0	32.41	2,703	6,177	4,246	948.3
	June.....	118.8	91.0	94.0	84.5	1,108.4	890.4	218.0	.....	2,808	6,371	4,412	854.9
	July.....	117.5	90.4	93.6	83.6	1,183.6	913.7	269.9	.....	2,786	6,252	4,335	499.5
	Aug.....	117.8	89.4	93.0	83.9	1,085.5	1,025.3	60.3	34.04	2,924	6,386	4,457	337.1
	Sept.....	117.6	90.1	92.9	84.1	1,088.2	1,057.9	30.3	.....	2,879	6,567	4,276	616.9
	Oct.....	116.0	89.9	92.6	84.2	1,162.0	1,125.0	37.0	.....	2,633	6,388	4,742	574.9
	Nov.....	95.5	89.2	91.7	83.7	1,173.8	1,009.0	164.8	35.63	2,569	6,433	4,443	655.3
	Dec.....	115.2	87.1	90.3	80.1	1,102.6	977.5	125.1	.....	3,042	6,653	4,487	595.4
1929	Jan.....	123.5	85.8	89.1	78.9	1,317.3	1,035.5	282.3	.....	2,071	6,135	4,552	608.2
	Feb.....	117.3	84.3	87.8	78.8	1,016.6	920.2	96.5	31.06	2,368	6,247	4,014	581.0
	Mar.....	121.0	85.2	88.5	78.1	1,021.9	930.3	91.6	.....	2,677	6,538	4,446	494.3
	April.....	128.7	87.5	90.1	81.8	1,254.9	1,163.6	91.3	.....	3,377	6,304	4,656	464.4
	May.....	124.1	87.8	90.6	81.8	1,132.5	1,097.5	35.0	32.87	3,431	6,310	4,392	372.5
	June.....	125.6	88.9	91.7	82.7	1,077.5	1,014.9	62.6	.....	3,361	6,503	4,183	484.4
	July.....	121.8	88.7	91.4	82.8	1,227.3	1,030.6	196.7	.....	2,972	6,350	4,607	342.8
	Aug.....	124.0 <sup>1</sup>	88.6	91.1	83.1	1,072.6	1,123.2	+ 50.6	.....	3,011	6,540	4,073	377.7
	Sept.....	124.8 <sup>2</sup>	88.2	90.6	83.0	1,038.3	1,136.7	+ 98.4	.....	3,006	6,576	3,907	363.5
	Oct.....	.....	.....	.....	.....	.....	.....	.....	.....	2,828	6,473	.....	.....

<sup>1</sup> Inclusive of the part-time workers calculated on a full-time basis; since June, 1929, on a more extensive basis.  
<sup>2</sup> Without building and clothing industries and those connected with food and luxuries.  
<sup>3</sup> Without building industries.  
<sup>4</sup> Without clothing, food, and luxuries industries.  
<sup>5</sup> Since, October, 1928, on a new basis of calculation.  
<sup>6</sup> Without reparation deliveries.  
<sup>7</sup> Domestic and foreign issues of public and private industries, mortgage credits, and municipal loans.  
<sup>8</sup> Provisional.

TABLE VI.—PRINCIPAL ECONOMIC SERIES, 1924 TO 1929 (MONTHLY).—(Continued)

Year and month	The markets											
	Money rate		Average yield of gold mortgage bonds (5, 6, 7, 8, 10 %) <sup>1</sup>	Average price of stocks	Index figure for 10 variable commodity prices	Prices and wages				Cost-of-living index	Regulated wages per hour in the Reich	
	Discount rate	Time money				Wholesale price index					Skilled Workers	Unskilled Workers
			Total	Agricultural products	Industrial raw materials and semi-manufactured	Finished goods	Pfennigs					
	% per annum	% per annum	%	1913 = 100				1913-14 = 100				
1924 Jan.....	.....	28.25	.....	136.07	133.1	140.6	116.3	150.5	162.2	125.9	58.4	45.0
Feb.....	.....	22.53	.....	150.28	143.9	136.7	113.3	145.3	158.1	119.9	58.4	44.1
Mar.....	.....	30.00	.....	118.51	157.2	137.5	114.5	146.1	158.0	121.9	58.9	43.2
April.....	.....	44.45	.....	85.28	158.5	139.6	114.1	149.7	162.8	125.3	64.1	45.7
May.....	.....	44.31	.....	71.00	140.6	138.0	109.1	147.9	166.7	126.9	68.4	48.9
June.....	.....	32.59	.....	57.79	129.9	130.5	98.0	142.2	160.8	123.5	70.4	51.2
July.....	.....	22.92	.....	59.35	124.9	127.9	104.4	134.8	151.7	126.4	71.8	51.1
Aug.....	.....	18.81	10.27	84.66	134.0	132.8	118.5	135.2	149.8	128.7	72.2	51.4
Sept.....	.....	16.78	9.28	84.92	142.9	138.9	132.6	136.9	151.6	129.4	72.3	51.5
Oct.....	.....	14.42	9.59	80.23	143.3	141.6	141.6	135.2	151.8	134.9	73.4	52.4
Nov.....	.....	13.81	9.44	84.14	158.8	140.5	135.1	138.3	150.9	135.4	75.2	53.9
Dec.....	9.20	12.61	9.02	97.48	167.7	142.5	137.9	141.9	150.0	135.4	77.4	55.2
1925 Jan.....	8.31	11.28	8.76	117.14	174.2	143.5	136.7	145.1	150.7	135.6	77.8	55.5
Feb.....	8.01	11.92	8.57	113.75	162.5	142.7	134.1	144.9	152.6	135.6	78.6	56.2
Mar.....	8.00	11.26	8.55	108.05	154.7	141.3	129.8	144.2	154.3	136.0	80.5	57.7
April.....	8.00	10.13	8.69	102.74	150.1	138.6	124.3	142.0	154.9	136.7	82.4	58.8
May.....	7.97	10.48	8.75	95.28	143.2	139.0	127.1	139.6	156.5	135.5	84.5	60.4
June.....	7.76	10.68	9.07	83.85	138.7	140.9	131.5	139.7	157.2	138.3	86.6	61.9
July.....	7.88	10.87	9.25	80.74	140.9	142.8	134.8	141.1	157.7	143.3	87.7	63.0
Aug.....	7.68	10.84	9.30	73.65	138.7	144.3	138.5	140.8	158.8	145.0	88.4	64.4
Sept.....	7.18	10.59	9.22	78.05	138.1	144.4	138.5	140.4	159.6	144.9	90.4	65.1
Oct.....	7.09	10.82	9.21	73.61	133.3	143.1	136.1	139.7	159.6	143.5	90.7	66.0
Nov.....	6.78	10.65	9.32	67.04	129.3	141.6	133.8	138.5	159.5	141.4	92.5	68.4
Dec.....	6.75	10.29	9.25	64.41	122.2	139.8	130.7	136.5	159.2	141.2	92.6	68.5

1926	Jan.	6.27	8.99	8.83	71.84	120.8	135.8	122.3	134.4	158.0	139.8	92.6	66.6
	Feb.	5.46	7.43	8.32	78.94	118.1	134.3	120.9	132.7	157.1	138.8	93.7	66.6
	Mar.	5.00	6.78	7.99	83.56	115.9	133.1	119.8	131.2	156.0	138.3	92.7	66.6
	April.	4.86	6.01	7.65	91.00	112.1	132.7	121.5	129.6	154.3	139.6	93.6	66.5
	May.	4.69	5.93	7.67	89.71	109.9	132.3	122.5	128.6	152.5	139.9	92.6	66.5
	June.	4.52	5.77	7.64	95.11	111.1	131.9	124.0	127.6	149.9	140.5	92.4	66.4
	July.	4.54	5.80	7.58	102.84	112.3	133.1	128.7	128.4	146.5	142.4	92.5	66.3
	Aug.	4.61	5.88	7.53	112.69	117.7	134.0	131.8	128.9	145.1	142.5	92.5	66.4
	Sept.	4.88	6.23	7.53	115.69	120.9	134.9	134.1	129.9	144.4	142.0	93.3	66.8
	Oct.	4.84	6.34	7.52	126.94	120.2	136.2	139.7	128.5	143.9	142.2	93.2	66.9
	Nov.	4.63	6.41	7.49	134.26	122.1	137.1	142.8	128.3	143.5	143.6	93.3	66.9
	Dec.	4.73	7.39	7.29	133.40	124.0	137.1	143.7	128.4	142.3	144.3	93.4	67.0
1927	Jan.	4.20	6.27	7.15	152.15	122.2	135.9	140.3	128.8	141.6	144.6	93.5	67.1
	Feb.	4.23	5.92	7.10	161.12	121.3	135.6	139.1	129.3	141.6	145.4	93.7	67.3
	Mar.	4.59	7.28	7.14	155.95	123.1	135.0	136.0	130.3	142.0	144.9	94.3	67.7
	April.	4.62	7.07	7.15	164.85	128.2	134.8	135.2	129.9	144.3	146.4	96.1	69.0
	May.	4.90	7.63	7.20	158.08	127.8	137.1	139.3	131.2	144.3	146.5	95.6	72.7
	June.	5.39	8.24	7.30	144.49	128.0	137.9	139.9	131.6	146.0	147.7	99.5	72.9
	July.	5.90	8.45	7.33	148.79	129.2	137.6	137.5	132.2	147.1	150.0	99.5	72.9
	Aug.	5.83	8.22	7.36	146.34	129.0	137.9	136.8	133.0	148.3	146.6	99.6	72.9
	Sept.	5.90	8.28	7.41	140.91	129.1	139.7	138.9	134.1	150.7	147.1	99.7	73.1
	Oct.	6.69	8.67	7.52	137.26	132.1	139.8	137.7	134.0	152.9	150.2	100.6	73.9
	Nov.	6.76	8.80	7.65	124.50	134.7	140.1	137.3	134.0	154.6	150.6	100.9	74.1
	Dec.	6.87	9.05	7.62	131.73	136.1	139.6	135.6	133.9	155.6	151.3	101.3	74.3
1928	Jan.	6.27	7.98	7.57	138.77	140.9	138.7	132.2	134.4	156.1	150.8	101.6	75.2
	Feb.	6.20	7.77	7.61	135.31	139.6	137.9	130.1	133.6	156.8	150.6	101.9	75.4
	Mar.	6.72	7.89	7.66	133.22	138.2	138.5	131.3	133.5	157.3	150.6	102.1	75.6
	April.	6.70	7.98	7.69	138.70	138.3	139.5	133.5	133.8	157.6	150.7	103.5	77.1
	May.	6.66	8.00	7.72	142.60	135.5	141.2	135.9	135.3	158.4	150.6	106.3	79.0
	June.	6.62	8.07	7.75	144.51	133.7	141.3	136.0	135.0	159.1	151.4	106.5	79.3
	July.	6.74	8.18	7.77	141.21	135.0	141.6	136.6	135.1	159.6	152.6	106.8	79.2
	Aug.	6.69	8.42	7.81	140.62	133.8	141.5	137.6	134.3	159.5	153.5	106.8	79.7
	Sept.	6.65	8.70	7.84	140.87	132.2	139.9	134.2	133.5	159.5	152.3	106.8	79.9
	Oct.	6.58	8.56	7.87	139.11	129.5	140.1	134.8	133.4	160.0	152.1	107.5	80.6
	Nov.	6.28	8.23	7.88	138.76	128.0	140.3	135.2	133.5	159.9	152.3	107.6	80.6
	Dec.	6.31	8.89	7.88	140.48	131.2	139.9	134.1	134.1	159.5	152.7	107.9	81.1
1929	Jan.	5.80	7.57	7.90	138.63	130.3	138.9	131.7	134.0	158.8	153.1	108.1	81.2
	Feb.	5.81	7.31	7.92	133.58	126.6	139.3	133.9	133.6	158.2	154.4	108.2	81.3
	Mar.	6.31	7.65	7.96	132.58	129.4	139.6	133.7	134.3	158.0	156.5	108.2	81.4
	April.	6.63	8.08	8.00	132.92	126.8	137.1	128.2	133.1	157.8	153.6	108.6	81.8
	May.	7.49	9.76	8.11	127.56	118.4	135.5	125.8	131.3	157.5	153.5	110.8	83.4
	June.	7.50	10.00	8.11	130.47	120.7	135.1	124.7	131.5	157.5	153.4	111.0	83.6
	July.	7.40	9.85	8.11	128.03	118.8	137.8	132.4	131.3	157.3	154.4	111.1	83.7
	Aug.	7.18	9.75	8.15	126.54	117.8	138.1	132.6	131.5	157.5	154.0	111.1	83.7
	Sept.	7.18	9.74	8.19	125.03	120.2	138.1	132.6	131.6	157.2	153.6	111.1	83.7
	Oct.	7.28	9.71	8.22	117.70	117.2	137.2	131.7	130.9	156.6	153.5	111.2	83.7

<sup>1</sup> After January, 1928, only gold mortgage bonds of the mortgage banks.

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