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THE SECURITIES MARKET

IN THE POPULAR VIEW, corporate financing is a process of selling securities—stocks and bonds—to the public through the capital, or securities, market. This is the aspect of business financing that is best known. Thousands, or even hundreds of thousands, of individuals may own shares in one of the large corporations. In 1935 there were, for example, 659,000 stockholders on the books of the American Telephone and Telegraph Company—a number almost equal to the number of voters in the five smallest states.[1]

The popular view covers one of the primary functions of the capital market, namely, to provide new funds for business expansion by tapping the savings of great numbers of individuals. A second major function of the market is to provide a mechanism for corporate liquidity adjustments, through the purchase and sale of readily marketable securities, including government obligations. The capital market has two other functions. It eases the problem of corporate refinancing as conditions change, permitting the conversion of less desirable securities to types more profitable at a given time. Finally, the capital market provides the means of intercorporate investment, through the purchase of securities of subsidiaries and affiliates.[2]

It has been said that if a capital market did not exist to perform these functions it would be necessary to invent one. It has also been said that corporations no longer need the capital market as they did in earlier periods of business development. The arresting phrase, "capital not wanted," [3] expresses a fairly widespread belief.

This chapter is concerned with the question of whether the securities market has shifted its functions or changed in importance over the period between the two World Wars.

In obtaining a sufficient answer to this question it is necessary to keep in mind the several functions of the market. It is not enough to note that the public bought fewer securities in the thirties than in the twenties nor the corollary of this, that business enterprises did not obtain as much "new funds" from the capital market in the second decade.

The short period of time, 1920–39, includes a period of high speculative activity in which the market played a role of exceptional significance. This was followed by the severe depression of the early thirties, which was in turn succeeded by a considerable expansion in the late thirties. With such a restricted time span under consideration, conclusions as to long-term tendencies would be inappropriate.

We shall find evidence of what was to be expected, that the financing policies of large corporations are greatly influenced by cyclical business conditions. Differences are also to be found in the behavior of corporations as to the degree of resort to the capital market for financing and as to the timing of such financing.

Two general statements can be made regarding the capital market as a source of new funds for large-scale corporate business over the two decades. First, since security sales decrease with slackening business activity and since the last half of the period included more years of business contraction than the first half, security sales declined over the period. However, in years of business expansion during the thirties security sales were as important (if not more) relative to asset expansion, sales, profits, and alternative sources of funds as they were during the expansion years of the twenties.

The evidence is clearest for our largest sample, manufacturing. While securities sales of manufacturing concerns declined over the period, a sharp rise occurred in 1937 and 1938. In 1938 new funds from the market offset the highest proportion of fixed capital expenditures of any year in the two decades (48 percent in 1938, 33 percent in 1929). While new funds declined in the thirties undistributed earnings declined even more as a source of funds for corporate expansion; in the twenties new funds from the securities market amounted only to 52 percent of undistributed earnings but in the thirties new funds were 187 percent of undistributed earnings.

SECURITY TRANSACTIONS OF LARGE CORPORATIONS

A relatively small number of large, profitable, long-lived corporations sell the lion's share of publicly offered securities. For the year 1929 and for the period 1935–38, George Eddy has estimated the volume of total security issues of domestic corporations which resulted in "real investment." By this he means security issues whose proceeds are used directly in the expansion of business and the creation of employment, excluding all issues whose proceeds are used to acquire existing securities.[4]

Our samples of large manufacturing and trade corporations accounted for a considerable part of the estimated total security issues: [5]

Year	*Eddy Estimate Total Issues* (billions)	*Issues of Manufacturing and Trade Samples* (billions)	*Issues of Two Samples as a % of Total Issues*
1929	$2.0	$.7	35%
1935	.3	.1	33
1936	.9	.3	33
1937	1.1	.6	55
1938	.8	.4	50

The character of the capital market makes it most serviceable to big business, so it is not surprising that our manufacturing and trade samples accounted for a high percentage of all issues, from 33 to 55 percent.

As illustrated in Chart 10, the security sales of the manufacturing sample and of the Bell Telephone System were consistently sizable during the twenties, culminating in the peak sales of 1929 [6] for manufacturing, 1930 for Bell. The two samples sold a considerable volume of securities in the expansion years of 1936 and 1937 and the contraction year of 1938.

Manufacturing

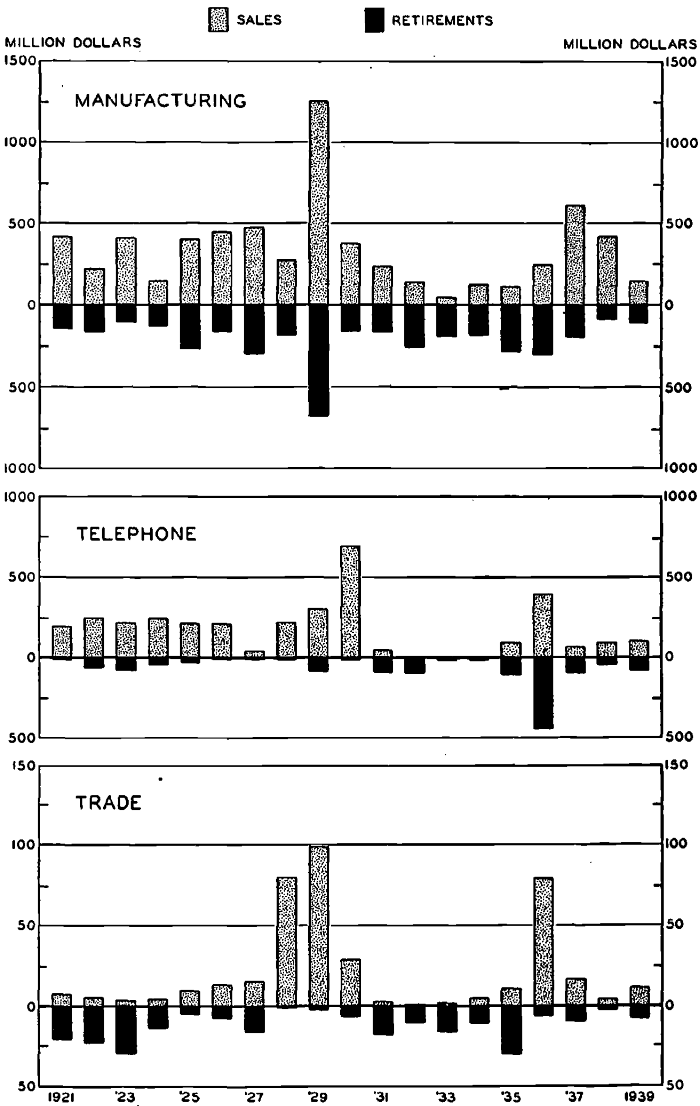
Over the entire period, the 84 large manufacturing corporations made the following use of the capital market:

obtained $6.5 billion from security sales
paid out 4.0 billion in security retirements
derived 2.5 billion of new funds to finance expansion

If we exclude the highly exceptional year of 1929, in which the volume of securities sold was more than twice that of any other year in the two decades, and also exclude the depression years of the thirties, we have grounds for a comparison. In the twenties (excluding 1929) the average annual volume of securities sold exceeded the volume of the 1934–39 period. Retirements were slightly greater in the second period, with the result that these manufacturing companies secured a lower volume of new funds

CHART 10

SECURITY SALES AND RETIREMENTS OF LARGE CORPORATIONS, BY INDUSTRY, 1921-39[a]



[a]Based on special tabulations of the National Bureau of Economic Research.

from the capital market. However, it is worthy of note that toward the end of the thirties a considerable volume of securities was again sold. Issues of 1937 were larger than in any other year of the two decades, with the exception of 1929, while the volume of issues in 1938 was topped in the twenties by only two years, 1929 and 1927.

The year 1929 was exceptional also in the volume of security retirements. This was dominated by United States Steel's retirements of bonds of $394 million, partly with the proceeds of $150 million common stock sales and partly by the liquidation of a substantial volume of marketable securities previously retained as assets behind depreciation and pension reserves. In 1932–36, security retirements exceeded sales. Many large corporations took advantage of the prevailing low, long-term money rates to repay or refund indebtedness acquired in earlier years.

Reliance upon the securities market varies among the different enterprises as the result of complex influences, including the growth, production technique, profitability, size and business policy of the different concerns. This is shown in Table 11 where the manufacturing and trade samples are stratified industrially.

We see that the petroleum and the iron and steel industries sold the largest volume of securities, reflecting the industrial growth, size and financial expansion of concerns in these two groups.[7] The two industries also lead in the volume of new funds obtained from the securities market.

In five of the eleven manufacturing groups, security sales of some companies were more than offset by retirements of other companies, resulting in an excess of retirements for the industry as a whole. This was notably the case for the automobile, meat packing, and other food industries.

Tobacco, with 245 percent, and rubber, with 88 percent, had the highest ratios of security sales to fixed property expenditures. These high percentages reflect the modest importance of fixed capital and the high importance of current assets (particularly inventory) in the operations of the tobacco and rubber industries.

Tobacco also obtained the highest percentage of new funds relative to fixed property expenditures, 76 percent, while the chemical industry, which sustained a marked expansion over the period, was second, with a ratio of 47 percent.

Finally, the effect of industry and financial expansion on the volume of security sales and new funds is illustrated in the last two

Table 11—Security Sales and New Funds Obtained from the Securities Market by a Sample of Large Manufacturing and Trade Corporations in Selected Industries, 1921–39, as a Percentage of Fixed Property Expenditures and of Total Assets in 1923[a] (*dollar figures in millions*)

Industry	Dollar Volume				Percent of Fixed Property Expenditures		Percent of Total Assets in 1923	
	Total Security Sales	*New Funds from Security Sales*	*Fixed Property Expenditures*	*Total Assets in 1923*	*Total Security Sales*	*New Funds from Security Sales*	*Total Security Sales*	*New Funds from Security Sales*
Manufacturing								
Petroleum	$3,065	$1,755	$6,993[b]	$3,993	37%[b]	19%[b]	77%	44%
Iron and steel	1,362	355	2,109	3,786	65	17	36	9
Rubber	407	119	460	630	88	26	65	19
Chemicals	407	273	686[b]	738	59[b]	47[b]	55	37
Automobiles and trucks	293	−129	1,035	845	28	−12	35	−15
Machinery	265	−20	496	1,184	53	−4	22	−2
Tobacco	206	49	58[b]	541	245[b]	76[b]	38	9
Building materials and equipment	204	131	431	370	47	30	55	35
Meat packing	161	−76	325	1,040	50	−23	15	−7
Food other than meat packing	63	−25	154	292	41	−16	22	−9
Textiles	38	−5	64	352	59	−8	11	−1
Trade								
Mail-order houses	195	117	201	200	97	58	98	59
Chain variety stores	115	15	222[c]	187	46[c]	7[c]	61	8
Chain grocery stores	59	37	166	90	36	22	66	41
Department stores	20	0	40	55	50	0	36	0
Miscellaneous chain stores	9	6	14	12	64	43	75	50

[a] See Appendix A for coverage of the sample. Data for some corporations were not available in the earlier years.
[b] Excludes companies for which depreciation was not available.
[c] Excludes one company for which depreciation was not available.

Table 12—Total Security Transactions of a Sample of Large Manufacturing and Trade Corporations, 1921–39[a] (*in millions*)

Year[b]	Sale of Own Securities		Retirement of Own Securities		New Funds		Purchase of Securities of Subsidiaries and Affiliates		Purchase or Sale of Marketable Securities[c]		Sales Less Purchases and Retirements of Securities[d]	
	Mfg.	Trade	Mfg.	Trade	Mfg.	Trade	Mfg.	Trade	Mfg.	Trade	Mfg.	Trade
1921 (T)	$415	$7	$142	$21	$273	$−14	$192	$14	$107	$12	$−26	$−40
1922	222	5	170	23	52	−18	69	1	25	−9	−42	−10
1923 (P)	407	3	109	29	298	−26	290	5	29	−5	−21	−26
1924 (T)	146	4	130	13	16	−9	61	1	47	1	−92	−11
1925	392	9	274	4	118	5	189	1	49	2	−120	2
1926 (P)	446	13	163	6	283	7	192	3	180	12	−89	−8
1927 (T)	474	16	306	16	168	0	113	3	46	11	9	−14
1928	273	80	185	1	88	79	224	34	151	−12	−287	57
1929 (P)	1,256	100	680	2	576	98	586	25	−19	−2	9	75
1930	375	29	159	6	216	23	291	29	−204	−8	129	−8
1931	234	3	169	17	65	−14	183	−10	139	43	−257	−53
1932 (T)	140	1	255	9	−115	−8	54	9	−225	−26	56	12
1933	46	2	188	16	−142	−14	98	[e]	118	−4	−358	−10
1934	127	5	179	10	−52	−5	53	9	−184	−16	79	2
1935	114	10	278	29	−164	−19	39	−3	−106	−3	−97	−13
1936	245	79	307	6	−62	73	36	3	−84	1	−14	69
1937 (P)	601	18	180	8	421	10	47	2	−26	−1	400	9
1938 (T)	424	4	76	2	348	2	50	2	−38	−5	336	5
1939	143	12	105	7	38	5	95	6	123	4	−180	−5
AVERAGE ANNUAL VOLUME												
1921–39	341	21	213	12	128	9	151	7	7	[e]	−30	2
1921–29	448	26	240	13	208	13	213	10	68	1	−73	3
1930–39	245	16	190	11	55	5	95	5	−49	[e]	9	1
'30–33	199	9	193	12	6	−3	157	7	−43	1	−108	−15
'34–39	276	21	188	10	88	11	53	3	−52	−3	87	11

[a] See Appendix A for coverage of the sample. Data for some corporations were not available in the earlier years.
[b] For peaks and troughs, see Table 5, footnote b.
[c] Positive figures indicate purchases; negative figures, sales.
[d] Positive figures indicate sales; negative figures, purchases.
[e] Less than $500,000.

columns of the table. Fast-growing industries (like petroleum, building materials, and chemicals) had high percentages of security sales and new funds in comparison with their 1923 asset size while slow-growing industries (like textiles, meat packing, other foods, and machinery) sold the smallest volume of securities relative to their 1923 asset size, and had negative percentages of new funds from the market. The automobile industry, which occupied a position of notable independence of the capital market, was an exception among the fast-growing industries.

Trade

The security sales of our sample of large trade concerns were insignificant except in three years, 1928, 1929, and 1936. Over the two decades these concerns made the following use of the capital market:

obtained	$400 million from security sales
paid out	225 million in security retirements
derived	175 million of new funds to finance expansion

The two mail-order houses in the sample were responsible for a large part of trade security sales. Most security retirements occurred in the early twenties and early thirties. The considerable retirements in the early twenties were largely repayments of long-term debt by one mail-order house.

In trade also the relative importance of security sales and new funds varied greatly among major groups (see Table 11). Industrial differences in the dollar volume of security sales are not as marked, however, for trade as for manufacturing. It should be remembered that the coverage of the trade sample is less complete.

Mail-order houses had the highest ratio of security sales to fixed property expenditures and also the highest ratio of new funds, reflecting a need for a substantial volume of funds during the late twenties to finance the acquisition of retail store outlets. The rapid growth of the two miscellaneous chain store companies—one dealing in shoes, the other in furniture—is clearly indicated by the ratios of security sales and new funds to total assets. Over the period, these two concerns sold securities of $75 and obtained $50 of new funds for each $100 of their assets in 1923. Department stores retired approximately the same amount of securities as they issued. In none of the trade groups did security retirements exceed security sales for the period under consideration.

Summary of Manufacturing and Trade Security Transactions

The significance of the securities market in the financing of large business enterprises is not to be assessed solely in terms of the sale and retirements of their own securities. Such enterprises also use the capital market to buy and sell the securities of other corporations, either for purposes of temporary investment or permanent control. Since from one-third to one-half (and possibly more) of all cash dividends paid out by American corporations in 1934–37 were received by other corporations, it can be said that a substantial part of corporate America is owned by the rest of corporate America.[8]

When we take into consideration all the security transactions of the manufacturing sample we find that over the period between the two World Wars $6½ billion of securities were sold while $7 billion were purchased. Over $4 billion (57 percent) of these security transactions involved retirements of the companies' own securities; almost $3 billion (41 percent) were purchases of the securities of affiliates and subsidiaries; and only a little more than $100 million (2 percent) were purchases of readily marketable securities.

These summary figures for the entire period are derived from Table 12, which gives the data annually. The manufacturing sample put back more funds than it took out of the market over the entire period and in twelve of the nineteen years as well. Caution is necessary in evaluating this finding, for it is the composite result of subtracting from new funds all investments in subsidiaries and purchases of marketable securities while adding sales of marketable securities. Investment in subsidiaries is one method of expanding individual enterprises, while transactions in marketable securities represent adjustments in corporate liquidity positions in accordance with the needs of changing conditions. Further, it is short-sighted to assume that funds which flow back to the capital market from large corporations become idle money. Such resources are made available for other possible investments in the economy.

In contrast to manufacturing, the trade sample took out more funds than it put into the capital market over the entire period.

However, this was not the case in every year. The large flotations in three years have already been noted.

Bell Telephone System

The Bell Telephone System continuously required additional funds during the twenties to keep pace with the increasing demand for telephone service. These funds were provided principally through the sale of equity securities and bonds by the American Telephone and Telegraph Company. The major part of the financial requirements of Associated Bell companies was met by advances from the parent company, most of which were subsequently converted into the capital stock of these companies. The large volume of telephone issues in 1930 has already been mentioned. During that year, telephone companies practically maintained the level of property expenditures of 1929 and built up cash and marketable securities by nearly $350 million. This building up of liquid resources was exceptional compared to previous and subsequent years. In this industry security retirements were insignificant for every year in the period except 1936, when they approached half a billion dollars.

Electric Light and Power Companies

An estimate of the volume of "new capital" issues of electric light and power companies from 1925 to 1940 has been made by the statistical department of the trade journal, *Electrical World*. The estimated volume varied as follows: [9]

(millions)

1925	$260	1930	$894	1935	$27
1926	410	1931	424	1936	60
1927	830	1932	166	1937	82
1928	600	1933	7	1938	123
1929	624	1934	2	1939	16
				1940	92

The volume of issues in 1930, as in the case of telephone companies, was large in view of the decline in business activity.[10] Also like most other public utility securities, these issues were sold in surprisingly small amounts during the thirties, even during the latter half of the decade. This is in decided contrast to our manufacturing sample.

Railroads

The only readily available data on the security sales of railroads are for all classes of steam railways as a group less all security retirements and repayments.[11] From these data, however, it can be seen that the importance of new funds obtained from the securities market has decreased consistently over the period of study. All steam railroads obtained more new funds from the capital markets in the five-year period 1921–25 than during the succeeding five years. The large volume of new funds obtained during the early twenties was probably due to large property expenditures, replacing the property used up during World War I. The decline in security market financing by railroads over the two decades was not only absolute but also relative to alternative sources of funds available to railroads.

After 1930, the unprofitable position of many railroads was an obstacle to public security sales. Substantial funds were provided by the Reconstruction Finance Corporation to assist the industry. From February 2, 1932 to March 31, 1941 the RFC disbursed $807 million to 89 railroads. Sixty percent of this sum was still outstanding at the end of the period cited.[12]

This decline in the amount of funds obtained by railroads from the capital market has been of great significance to institutional investors; in earlier days railroad bonds were regarded as among the prime investment securities for institutions. It is estimated that even in the early thirties more than 40 percent of the outstanding railroad bonds were held by insurance companies, savings banks, educational and charitable institutions, and philanthropic foundations.[13] In addition, railroad bonds made up an important part of the investment portfolios of commercial banks.

EXTERNAL AND INTERNAL FINANCING OF CORPORATE EXPANSION

The several sources of funds to finance business expansion may be classified as external and internal. Executives of large corporations exercise a degree of choice in making use of these sources, depending upon their evaluation of current conditions and their expectations as to the future. Generalizations as to long-run changes in corporate financing preferences need to be made with great care. Over the short period between the two World Wars we find the behavior of large corporations strongly influenced by cyclical conditions.

Financing of Fixed Capital Expenditures

Tables 13 and 14 show the fluctuation in fixed capital expenditures (outlays on fixed property and investment in subsidiaries and affiliates) over the period studied. In the first decade, such expenditures for the manufacturing sample amounted to more than a billion dollars in four of the years; in the second decade, this figure was reached only in 1930, when expansions undertaken during the boom years were completed, and in the expansion year of 1937. For the trade sample, fixed capital expenditures varied from a low of $9 million in 1921 to a high of $110 million in 1929. The average annual volume for manufacturing was $888 million in the twenties, $736 million in the thirties; for trade it was $45 million in the twenties and $33 million in the thirties.

Along with this decreased use of funds for fixed capital expenditures we find a decrease in total security sales. Only in 1929 did total security sales of manufacturing amount to more than a billion dollars; in the thirties a low of $45 million occurred in 1933 and a high of more than half a billion in 1937. In this expansion year of 1937 the ratio of security sales to fixed capital expenditures was notably high, 43 percent (equal to the ratio in 1927). In 1938 the ratio was still higher, 58 percent, a figure topped by only two years of the two decades, in 1929 with 72 percent and in 1921 with 61 percent.

For trade, 1929 was the year in which greatest resort was made to the securities market, when $99 million were obtained from this source. In the thirties the year 1936 had security sales of $79 million, close to the sales of 1928 and vastly greater than the sales of any of the earlier years of the twenties. The influence of business cycles is clear for both samples, regarding both the level of capital expenditures and the resort to the securities market.

While total security sales indicate the extent of the use of the capital market by business, the amount of new funds secured through such sales is a more important indication of the extent of security financing. Ratios of security sales and of new funds to total funds retained from operations varied greatly over the period for the manufacturing groups:

Table 13—Security Financing and Internal Financing of Fixed Capital Expenditures of a Sample of Large Manufacturing Corporations, 1921–39[a] *(dollar figures in millions)*

Year[b]	Dollar Volume: Total Security Sales	Dollar Volume: New Funds from Security Sales	Dollar Volume: Total Funds Retained from Operations	Dollar Volume: Undistributed Earnings	Dollar Volume: Fixed Capital Expenditures	Percent of Fixed Capital Expenditures: Total Security Sales	Percent of Fixed Capital Expenditures: New Funds from Security Sales	Percent of Fixed Capital Expenditures: Total Funds Retained from Operations	Percent of Fixed Capital Expenditures: Undistributed Earnings
1921 (T)	$344	$224	$142	$−179	$566	61%	40%	25%	−32 %
1922	222	60	488	200	431	52	14	113	46
1923 (P)	402	297	745	347	865	46	34	86	40
1924 (T)	136	35	772	332	558	24	6	138	59
1925	314	42	1,053	546	806	39	5	131	68
1926 (P)	335	188	1,107	506	1,015	33	19	109	50
1927 (T)	447	148	912	245	1,034	43	14	88	24
1928	265	83	1,246	532	1,001	26	8	124	53
1929 (P)	1,239	564	1,459	599	1,717	72	33	85	35
1930	340	183	717	−13	1,291	26	14	56	−1
1931	110	−44	220	−484	589	19	−7	37	−82
1932 (T)	139	−97	35	−480	416	33	−23	8	−115
1933	45	−119	524	−79	395	11	−30	133	−20
1934	100	−77	610	19	509	20	−15	120	4
1935	112	−151	862	258	626	18	−24	138	41
1936	244	−17	984	313	835	29	−2	118	37
1937 (P)	541	363	1,115	364	1,249	43	29	89	29
1938 (T)	423	352	688	61	735	58	48	94	8
1939	143	41	974	275	716	20	6	136	38
Average Annual Volume									
1921–39	311	109	771	177	808	38	13	95	22
1921–29	412	182	880	348	888	46	20	99	39
1930–39	220	43	673	23	736	30	6	91	3
'30–33	159	−19	374	−264	673	24	−3	56	−39
'34–39	261	85	872	275	778	34	11	112	35

[a] See Appendix A for coverage of the sample. Data for some corporations were not available in the earlier years. The security sales and new funds in this table differ from those in Table 12, because of the omission of 4 corporations for which complete data on fixed property expenditures and total funds from operations were not available.

[b] For peaks and troughs, see Table 5, footnote b.

Table 14—SECURITY FINANCING AND INTERNAL FINANCING OF FIXED CAPITAL EXPENDITURES OF A SAMPLE OF LARGE TRADE CORPORATIONS, 1921–39[a] (*dollar figures in millions*)

Year[b]	DOLLAR VOLUME					PERCENT OF FIXED CAPITAL EXPENDITURES			
	Total Security Sales	*New Funds from Security Sales*	*Total Funds Retained from Operations*	*Undistributed Earnings*	*Fixed Capital Expenditures*	*Total Security Sales*	*New Funds from Security Sales*	*Total Funds Retained from Operations*	*Undistributed Earnings*
1921 (T)	$7	$−14	$−4	$−16	$9	78%	−156%	−44%	−178%
1922	4	−18	36	30	18	22	−100	200	167
1923 (P)	3	−15	52	46	24	13	−63	217	192
1924 (T)	3	−10	56	47	24	13	−42	233	196
1925	9	5	64	55	43	21	12	149	128
1926 (P)	13	7	63	53	33	39	21	191	161
1927 (T)	16	−1	71	59	41	39	−2	173	144
1928	80	79	91	74	107	75	74	85	69
1929 (P)	99	98	89	66	110	90	89	81	60
1930	29	23	43	15	64	45	36	67	23
1931	3	−14	51	15	35	9	−40	146	43
1932 (T)	1	−8	22	−9	25	4	−32	88	−36
1933	1	−15	72	45	12	8	−125	600	375
1934	5	−3	67	41	25	20	−12	268	164
1935	11	−19	73	43	26	42	−73	281	165
1936	79	73	42	12	31	255	235	135	39
1937 (P)	7	−1	48	15	41	17	−2	117	37
1938 (T)	3	2	51	22	31	10	6	165	71
1939	12	5	80	47	44	27	11	182	107
				AVERAGE ANNUAL VOLUME					
1921–39	20	9	56	35	39	51	23	144	90
1921–29	26	15	58	46	45	58	33	129	102
1930–39	15	4	55	25	33	45	12	167	76
'30–33	9	−4	47	17	34	26	−12	138	50
'34–39	20	9	60	30	33	60	27	182	91

[a] See Appendix A for coverage of the sample. Data for some corporations were not available in the earlier years. The security sales and new funds in this table differ from those in Table 12, because of the omission of 1 corporation for which complete data on fixed property expenditures and total funds from operations were not available.
[b] For peaks and troughs, see Table 5, footnote b.

	Security Sales as a % of Total Funds from Operations [a]	*New Funds as a % of Total Funds from Operations* [a]
Tobacco	100%	31%
Textiles	68	−9
Rubber	65	19
Iron and steel	64	17
Meat packing	59	−28
Chemicals	57	45
Building materials and equipment	41	26
Petroleum	36	19
Machinery	32	−2
Food other than meat packing	22	−9
Automobiles and trucks	16	−7

[a] In computing these ratios it was necessary to exclude some corporations for which data on total funds retained from operations were missing. Negative percentages indicate net security retirements as a percent of total funds from operations.

The high ratios of security sales to funds retained from operations for the industries on the top of the list are due more to the low level of undistributed earnings than to the high level of security sales. As profits declined, there was naturally a decline in the volume of internal financing available. In the twenties, the fixed capital expenditures of the manufacturing sample were practically matched by total funds retained from operations. In the thirties, such funds fell short of financing expenditures by half a billion dollars.

In spite of the decline in security sales in the second decade, 1938 was notable as providing the highest percentage of new funds to fixed capital expenditures of any year in the two decades (48 percent) while the ratio for 1937 (29 percent) was exceeded only by three years in the first decade.

It has been pointed out that for trade the security sales and new funds were concentrated in three years. In trade as in manufacturing a year in the late thirties brought renewed importance to new funds as a source of corporate expansion. In 1936 new funds from security sales amounted to the highest percentage of fixed capital expenditures (235 percent) for any year in the two decades. In the next highest year, 1929, new funds amounted only to 89 percent of fixed capital expenditures.

Compared with undistributed earnings, one component of total funds from operations, new funds from security sales declined much less drastically as a source of funds during the two decades studied. Although in manufacturing new funds amounted to almost

62 percent of undistributed earnings over the 19 years as a whole, the average annual volume of new funds fell from $182 million in the twenties to $43 million in the thirties while the volume of undistributed earnings fell from $348 million to $23 million. In the twenties new funds amounted only to 52 percent of undistributed earnings while in the thirties new funds were 187 percent of undistributed earnings. Thus while the use of the capital market declined in the thirties, large manufacturing corporations found new funds from the capital market much more important in the thirties than in the twenties.

Data covering the trade sample present a somewhat different picture of the relative importance of new funds from security sales and total funds from operations. Over the entire period new funds were but 26 percent of undistributed earnings. In contrast to manufacturing, new funds were a more important source of funds relative to undistributed earnings in the twenties (33 percent) than in the thirties (16 percent).

Alternative Types of External Financing

Decisions of corporation executives to utilize one or another type of external financing appear to be determined by a variety of factors. The cyclical influence has already been mentioned. Others include expectations of future profits and future dividend payments, interest rates on loans, investor preference, reluctance to incur fixed indebtedness, and costs of floating different types of securities.

At a given time corporations may prefer equity capital financing (sale of stocks), long-term debt (bonds through the capital market and term loans from commercial banks, insurance companies and government agencies) or short-term debt. That is to say, several choices may be exercised in securing funds from investors and other choices in securing funds from lending agencies.

For a short period in the twenties it looked as though large manufacturing corporations were tending to substitute equity for debt financing. From Table 15 it can be seen that the manufacturing sample utilized part of the funds from the security market to reduce the volume of debt in the first decade. Nearly $2 billion of new funds were obtained from stock sales while bond outstandings were reduced by more than $82 million and short-term debt by $625 million. However, this tendency to shift from debt to equity did not persist over the two decades. Only in the late twenties, a period of extremely favorable stock prices and great ease in selling securities, did the volume of stock sales increase substantially relative to bond sales, and only in 1929 were stock sales notably greater than bond sales. From 1922 to 1927, although stock prices were rising faster than bond prices, the annual volume of bond sales increased more than the annual volume of stock sales. In 1925–29 the manufacturing sample sold bonds of $722 million and common stock of $659 million.

Table 15—LONG-TERM DEBT, EQUITY, AND CURRENT FINANCING OF A SAMPLE OF LARGE MANUFACTURING AND TRADE CORPORATIONS, 1921–39[a] (*in millions*)

Year[b]	MANUFACTURING			TRADE		
	New Funds from Sale of		*Increases in Short-Term Debt*	*New Funds from Sale of*		*Increases in Short-Term Debt*
	Stocks	Bonds[c]		Stocks	Bonds	
1921 (T)	$126.7	$146.0	$−645.6	$1.8	$−15.8	$−28.8
1922	159.9	−107.7	−110.1	.4	−18.7	−15.0
1923 (P)	265.8	32.2	124.0	−9.4	−16.1	7.3
1924 (T)	60.6	−45.1	−99.4	−10.9	1.7	2.8
1925	115.2	2.7	148.3	3.2	1.7	18.0
1926 (P)	196.1	87.1	6.2	2.9	3.7	.2
1927 (T)	−34.7	202.8	−220.6	−1.9	1.6	14.6
1928	107.1	−19.6	159.8	76.4	2.8	24.3
1929 (P)	957.0	−380.8	11.9	88.5	9.1	16.1
1930	136.1	79.4	−350.2	16.8	6.4	−27.3
1931	105.3	−40.6	−384.2	−13.8	.2	−13.6
1932 (T)	−106.2	−8.3	−101.4	−6.2	−1.6	−5.2
1933	13.4	−155.7	138.8	−11.8	−2.6	23.7
1934	66.1	−118.0	166.4	1.1	−6.1	−9.2
1935	−41.6	−122.4	253.6	−1.6	−16.9	13.5
1936	.8	−62.7	270.5	74.0	−1.3	24.7
1937 (P)	247.6	173.9	123.2	2.4	7.7	−4.2
1938 (T)	11.4	337.0	−325.9	2.0	.2	6.7
1939	14.2	24.0	220.3	7.4	−2.6	38.7
Period			TOTAL			
1921–39	2,400.8	24.2	−614.4	221.3	−46.6	87.3
1921–29	1,953.7	−82.4	−625.5	151.0	−30.0	39.5
1930–39	447.1	106.6	11.1	70.3	−16.6	47.8
'30–33	148.6	−125.2	−697.0	−15.0	2.4	−22.4
'34–39	298.5	231.8	708.1	85.3	−19.0	70.2

[a] See Appendix A for coverage of the sample. Data for some corporations were not available in the earlier years.
[b] For peaks and troughs, see Table 5, footnote b.
[c] Mainly bonds.

In the early thirties few securities of any kind were sold but a considerable volume of long-term debt was retired. After 1933 short-term debt increased relative to long-term debt and equity capital while long-term debt was increasing relative to common and preferred stock and to total assets. Only in 1936, when stock prices shot up 40 percent, were stock sales again large relative to bond sales.

Absolutely, over the five years prior to the outbreak of World War II, short-term debt for the manufacturing corporations rose by over $700 million while bond sales increased by about $230 million and stock sales by about $300 million.

The increase in manufacturing debt in the last years of the thirties was in part due to the rise of term loans.[14] At the end of 1939, the 84 manufacturing corporations had outstanding term loans of about $200 million. Petroleum companies accounted for a large part of the dollar volume of term loans due both to commercial banks and insurance companies.

The National Bureau's estimate of all term loans outstanding shows a consistent rise in volume from 1933 to 1939. The manufacturing sample, however, took advantage of the favorable markets of 1937 to sell securities and to retire a considerable amount of term loan indebtedness.

In contrast to manufacturing, large trade corporations showed a tendency to rely more on common stock than on debt and preferred stock financing. Table 15 shows that funds from the sale of stock were nearly four times as great as the increase in short-term debt in the twenties. Part of these funds was used to decrease outstanding long-term debt by $30 million. In the thirties, trade concerns had only a modest increase in short-term debt while long-term debt continued to be retired. For the two decades as a whole, however, trade showed a slight decrease in common stock and a considerable decrease in long-term debt and preferred stock relative to total assets because of the large increase in surplus.

Telephone companies rely much more heavily on the sale of capital stock than on bonds to finance expansions. In 1921–39, the Bell Telephone System sold bonds totalling $1.7 billion while retiring bonds to the amount of $1.2 billion. During the same years, Bell sold capital stock of $1.6 billion.

Over the period studied all steam railroad companies obtained $1.8 billion of new funds from the securities market, $1.5 billion from bond sales and the remainder, only $.3 billion, from issues of capital stock. Thus it is clear that railroads have not been shifting from debt to equity financing.

Estimates of the breakdown of security sales of electric light and power companies, by type of security, are available only for the period 1933–37: [15]

	Long-Term Debt	*Capital Stock*
	(millions)	
1933	$5	$0
1934	11	0
1935	11	0
1936	52	3
1937	105	1
TOTAL	$184	$4

There is some evidence that bond sales were more important than capital stock sales also in earlier years. The long-term debt of electric light and power operating companies increased about $500 million a year in 1922–27. Smaller increases occurred in 1928–32.[16]

The Securities and Exchange Commission has made a study of changes in relative costs of selling bonds and preferred stock issues of less than $5 million in two periods, 1925–29 and 1935–38. In the first period the cost of floating bonds was 6 percent for every hundred dollars secured while in the second period the cost had declined to 4.8 percent. For preferred stock, the cost increased from 7.8 percent to more than 10 percent.[17]

In the first period, 1925–29, our manufacturing sample retired more bonds and preferred stock than they sold, while in the second period, although they retired more preferred stock than they sold, they sold more bonds than they retired.

The Commission has also compiled data on the relative costs of floating bonds, preferred stock and common stock for three years, 1938, 1939, and 1940. Cost relationships were found to be generally similar in the three years. In 1940, the cost of bond sales was 2.4 percent, of preferred stock 5.7 percent and of common stock 9.2 percent, for each hundred dollars secured from investors.[18]

APPENDICES AND FOOTNOTES