THE BUSINESS REVIEW

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The Availability of Equity Capital

The major factors influencing the trends in debt and equity sources of capital funds

Summary:

1. An adequate supply of capital funds is essential for economic progress.
2. The total volume of saving is far above the pre-war level and the major part is still being supplied by the higher income groups.
3. There has been no significant shift in the proportion of corporate funds derived from equity and debt sources in the post-war as compared to the pre-war period.
4. Taxation is only one of several factors which affect the proportion of capital funds obtained from debt and equity sources. The type of industry making the investment, the relative yields on stocks and bonds, the amount of savings going into investment *via* savings institutions, and the temper of the security market are important also.

The Availability of Equity Capital

In a modern economy such as that of the United States an adequate and reasonably regular flow of capital funds is of vital importance both for economic progress and for economic stability. The productive power of the American economy and the standard of living of its people are the highest in the world largely because of the tools, machinery, and other modern equipment employed in production. If production and the standard of living are to continue to rise, more and better machinery and equipment will be required. If a stable level of general business activity is to be attained, the sharp fluctuations in the production of capital goods will have to be smoothed out.

The high level of capital expenditures in the post-war period has focused considerable attention on the supply of capital funds. Current discussion, which relates primarily to the adequacy of risk or equity capital supplied by owners, raises a number of questions. This article, however, is limited to an analysis of three of the most basic ones:

1. What is the relation between saving and investment?

2. Has there been any significant shift in the proportion of capital funds derived from debt and equity sources?

3. What are the important factors influencing the use of debt and equity methods of financing?

Saving and Investment

Production generates two flows: one of goods and services and another of money income to those who supply the labor, capital, raw materials, and management used in their production. The total money value of all goods and services produced in a given period is equal to the combined money incomes received by all who participate in producing these goods and services. In general, income received flows back into the market in two major streams. The largest is that part spent for consumers' goods and services — consumption expenditures. The remainder, which is withheld from the purchase of consumers' goods, is referred to as saving.

Saving performs two important functions — it frees labor, raw materials, and plant for the production of capital goods, and it makes available funds for their purchase. But saving does not increase the supply of capital goods automatically. It adds to the total supply only when used to purchase capital goods, that is, when invested.

Individuals invest directly only a small part of their total savings. A large majority of the savers have no personal or direct use for new tools, plant, machinery, and equipment. For this group, saving is primarily a means of providing some security against a variety of future contingencies. These savings can be tapped for the purchase of capital goods only by offering in exchange something the savers are willing to buy. Business firms desiring these funds for investment must either borrow them or induce the savers to become part owners in the business. In other words, they must offer them in exchange for their savings either bonds and other debt instruments or shares of stock. To the extent that those who save purchase stocks and bonds, there is a direct flow of funds from the savers to the business firms buying the capital goods. However, many do not choose to put their funds into stocks and bonds. For various reasons they prefer to put them into savings institutions, such as savings banks, savings and loan associations, and life insurance companies. In this case the flow of savings into investment is indirect, and the investment policy of these institutions plays an important part in the allocation of capital funds and in the proportion going into debt and equity instruments.

The rate of flow of savings into investment is important in two respects. Viewed in terms of its long-run effects, it has an important influ-

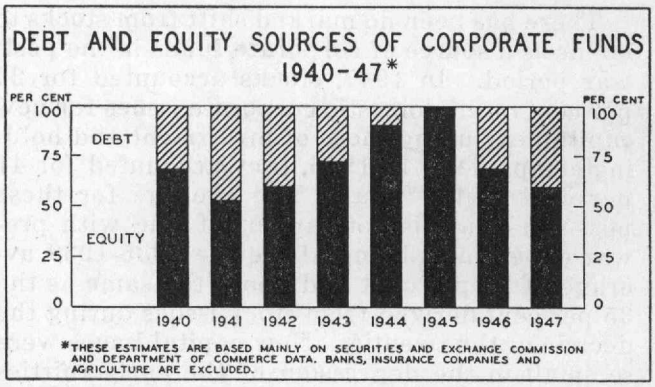
ence on the increase in the nation's supply of capital equipment and on the rate of economic growth and development. In terms of its short-run effects, changes in the rate of investment relative to the rate of saving play an important part in business fluctuations. If a part of money saving is hoarded and does not flow into investment, the demand for capital goods decreases, which in turn results in a decrease in the demand for consumption goods and a general decline in production, income, and employment. If, on the other hand, the flow of savings into investment is augmented by idle balances and new credit, current investment exceeds current money saving and the total demand for goods and services increases. If production cannot be increased, the result is a rise in prices and inflation. It is the latter condition which has prevailed in the post-war period.

Trends in Debt and Equity Sources of Capital

Business firms making investments in new plant, tools, and equipment may obtain funds by borrowing or from owners. Equity funds supplied by owners may come from internal or external sources. Internal sources consist largely of retained earnings and depreciation allowances, although for short periods such as in 1946 and 1947, the liquidation of Government securities and other investments may contribute substantial sums. Depreciation reserves, of course, are intended for replacement of fixed assets rather than for capital expansion. However, they do represent an internal source which may be drawn upon to help finance capital expenditures, which include those made for replacement as well as expansion. An external source of equity funds is the sale of stock to those with savings to invest. Individual savings may be tapped directly by selling stock to those who do the saving, or indirectly by selling to institutions which accumulate the savings of a large number of individuals.

The real distinction between equity and debt sources is between the funds supplied by owners and the funds supplied by creditors. Funds supplied by owners include not only the proceeds from the sale of new stock but also retained earnings, depreciation charges, and other internal sources. However, the term "equity capital" is often used in a much narrower sense —that of funds derived from the sale of new stock. The proportion of funds derived from equity sources in the post-war period does not seem to be far out of line with pre-war experience, regardless of whether a broad or a narrow concept of the term is employed.

Complete data on the sources and uses of corporate funds are not available over a period of years. However, sufficient data are available since 1940 to make possible fairly reliable estimates of the proportion of corporate funds obtained from equity and debt sources. In arriving at the estimates shown in the chart, sources include new capital stock issues, net increases in long-term corporate debt, undistributed profits, depreciation allowances, decreases in cash and Government security holdings, decreases in other current assets, and increases in current liabilities. Equity sources include undistributed corporate profits, depreciation allowances, decreases in cash and Government securities, other internal sources, and the proceeds of new capital stock issues. Estimated uses of corporate funds include plant and equipment expenditures, increases in inventories and receivables, increases in other current assets, and decreases in current liabilities.



Business investment expenditures have been running at a record level in the post-war period. Corporate investments in plant and equipment, inventories, and for other purposes in 1946 and 1947, averaged about three times those of 1940. However, the proportion of corporate funds derived from equity sources in the post-war years was as large on the average as in 1940 and 1941.

During the war years there were temporary factors resulting from the war and war financing which had a substantial influence on equity and debt sources of corporate funds. In 1941,

1942, and 1943, a substantial increase in accrued taxes, a current liability, was a temporary source of funds. There was also a large increase in notes and accounts payable in 1941. As a result, there was a decline in the proportion of equity funds during these years. In 1944 and 1945, there was a net decrease in long-term debt and undistributed profits, depreciation allowances, and other internal sources were adequate to meet nearly all corporate needs. Hence, equity sources supplied all or nearly all of the corporate funds used during these two years. The sharp post-war rise in the use of corporate funds in 1946 and 1947 was met largely by the liquidation of Government securities, an increase in undistributed profits, an expansion of notes and accounts payable, and a rise in new security issues. In 1946, the liquidation of Government securities amounted to about $6 billion, and undistributed profits rose sharply from $3.5 billion in 1945 to $10.5 billion in 1947. However, the need for funds was so large that there was a substantial expansion in debt financing—bond issues, notes, and accounts payable—and as a result there was a sharp drop in the proportion of funds supplied from equity sources.

There has been no marked shift from stocks to bonds as a source of corporate funds in the post-war period. In 1947, stocks accounted for 26 per cent of all domestic corporate issues for new capital, excluding those of investment and holding companies. In 1946, they accounted for 41 per cent of the total. The average for these post-war years is not far out of line with pre-war experience, being above the 1935-1939 average of 24 per cent and about the same as the 35 per cent derived from stock issues during the decade of the twenties. New capital issues were so small in the depression of the early thirties and during the war that ratios for these periods have little significance. The proportion of stock to total new capital issues is about the same if investment and holding companies are included, except for 1928 and 1929, when a large volume of investment and holding company securities, mostly stock, was issued.

In terms of the broader, more realistic concept of funds supplied by owners, the supply of equity capital is far above the pre-war level. In 1947, retained earnings amounted to $10.5 billion, depreciation to $4.6 billion, stock issues for new capital to $1.2 billion, excluding investment and holding company issues, and all equity sources to nearly $18 billion. In the narrower sense, the $1.2 billion of new capital from stock issues in 1947 was far below the pre-war peak of $3.8 billion in 1929.

Factors Influencing Proportion of Capital Funds Obtained from Equity Sources

The tax structure has been widely proclaimed as the primary cause of a "shortage of equity capital" and of a shift from ownership to debt sources of capital funds. Certainly, taxation is a factor but there are others which have an important influence on the amount of capital funds raised from debt and equity sources such as the nature of the industry making the investment, the relative cost of debt and equity methods of financing, the growing institutionalization of savings, and the state of the security market.

Taxation and the Supply of Equity Capital

The tax structure may affect the flow of savings into equity capital through its influence on the total supply of savings, on the distribution of savings among income groups, on the corporation's choice as between debt and equity sources, and on the investor's preference as between stocks and bonds.

Reasons frequently given for a shortage of equity capital are that tax rates are so high that people cannot save; that progressive income tax rates "dry up" the savings of those in the high income brackets who usually purchase stocks; and that taxes reduce the net yield on stocks so that they are no longer attractive to investors. There is no doubt that if other factors remain the same, high taxes reduce disposable income and cause saving to be less than it would be otherwise. However, other factors have not remained the same, and the current volume of saving is far above pre-war levels despite the substantially higher tax rates which now prevail.

The most important factor influencing the current volume of saving is disposable income; that is, money income after taxes have been paid. The total volume of saving tends to be largest when disposable income is highest, and lowest or even negative when disposable income is lowest. During periods of significant

change, prices are important also because they influence the amount which can be saved out of a given disposable income.

The close relation between the volume of saving and disposable income is revealed by the chart. Personal disposable income is currently at a record level. It was at an annual rate of $194 billion during the third quarter of 1948, in contrast to $70 billion in 1939 and the peak prior to 1941—$82 billion in 1929. Despite the sharp rise in prices, the purchasing power of per capita income after taxes is still nearly 40 per cent above 1939. Total saving of individuals was at an annual rate of about $15 billion during the third quarter of this year. This is substantially below the wartime peak of $34 billion in 1944, but it is nearly six times the annual average during the period 1935-1939, and also far in excess of the $3.7 billion in 1929.

The proportion of income saved since 1929 has tended to vary directly with changes in personal disposable income, except for the drop in the post-war period when consumers were trying to satisfy wartime accumulated demands. However, the proportion saved has recently turned upward and is substantially above the pre-war years. On the average, individuals were saving 7.8 per cent of their incomes after taxes during the third quarter of 1948, in contrast to 5.1 per cent in 1947, about 3.9 per cent during the period 1935-1939, and 4.5 per cent in the boom year 1929.

A continuing large volume of personal saving does not necessarily prove that taxation is not choking off a substantial amount of equity capital. It may be, as has been frequently stated, that the high surtax rates have choked off the saving of the higher income groups—those who probably purchase most of the new stock issues and supply the major part of this source of equity capital. Unfortunately an adequate series on the distribution of savings by income classes, especially in the higher income brackets, is not available. Fairly comparable data are available for selected years on the proportion of savings supplied by those with annual incomes of $5,000 and above, but this classification is inadequate because many in the lower part of this income bracket are not in the habit of using their savings to purchase stocks and because the volume of savings in this group is due in part to a substantial increase in the number of income receivers. However, pre-war estimates of the Department of Labor and post-war estimates published by the Board of Governors of the Federal Reserve System indicate there has been an increase in the proportion of personal savings supplied by those in this income group. Those receiving incomes of $5,000 a year and above supplied about 84 per cent of personal savings in 1947, as compared to 62 per cent in 1941 and about 70 per cent in 1935-1936. The increase in the incomes received by those already in the $5,000 and above bracket plus the additions to the number in this group have more than made up for the increase in surtax rates. Since the total volume of saving in the post-war period has been far above pre-war levels, the dollar amount supplied by this group is substantially above that of the pre-war years.

As indicated above, a further breakdown of the group with incomes of $5,000 and above is desirable, but only a limited amount of data of this type is available. The National Resources Planning Board published estimates for 1935-1936 of the distribution of savings among each tenth of the income receivers ranked according to the amount of their income, and the Board of Governors of the Federal Reserve System made similar estimates for 1947. These estimates indicate the 10 per cent with the largest incomes supplied a smaller proportion of net savings in 1947 than in 1935-1936. One reason for the larger proportion in 1935-1936 is that the six lowest groups — the lower 60 per cent of income receivers — dissaved; that is, spent more than their income. In 1947 there was no dissaving except by the three lowest tenths of income receivers and the amount was significant only in the lowest 10 per cent. It is significant here that last year the top 10 per cent bracket was still supplying over three-fourths of total personal savings. In dollar amount this was far above the amount supplied by this income bracket in 1935-1936.

The tax structure may also affect the flow of capital funds from debt and equity sources by influencing the choice both of the business firms obtaining the funds and the investor. From the point of view of the business firms, debt instruments have a tax advantage over stocks because interest on bonds or other debt is deductible as an expense but dividends are not.

From the point of view of the investor, the tax structure results in conflicting effects on willingness to take risk. Of course, it may be true as is sometimes claimed that high surtax rates so reduce net income that some decide the reward for productive effort is not worthwhile. They may retire and live off their savings. However, practically all are compelled to engage in some kind of economic activity and the problem here is to what extent taxation influences the choice between the higher return usually associated with the risks of ownership and the lower return from the safer position of the creditor or lender.

In some respects the tax structure does tend to discriminate against the risk of ownership because the higher the income the larger the proportion which is taken in taxes. Thus, the incentive for the assumption of risk or for greater effort is diminished but it is never eliminated. The risk-taker always retains a portion of his reward. High surtax rates encourage those in the higher income brackets to put more of their funds into tax-exempt bonds and less into ownership equities. Since appreciation is usually a more important objective in the purchase of stocks than bonds, the tax on capital gains is likely to be more of a deterrent to the prospective purchaser of stocks than bonds. The double taxation of dividends — on its net earnings paid by the corporation and on dividends received by the stockholder — discriminates against stocks by reducing the net return which otherwise would be available to stockholders. However, as far as the current yield on stocks and bonds is concerned, the tax should not affect the investor's choice because the tax would be the same whether a given income is from dividends on stock or interest from taxable bonds.

There are other provisions, however, which tend to offset these discriminatory effects of taxation. Capital losses may be deducted from capital gains in determining taxable income. Thus the dampening effect of high surtax rates on willingness to take risk is greatly diminished. Moreover, the high income tax rate plus the ability to deduct capital losses from capital gains, if losses should be incurred, may encourage some to take greater risks in order to get a higher return on their investments.

Other Factors Affecting Supply of Equity Capital

The type of industry raising the new capital has an important influence on the proportion of stocks to total new capital issues. It has long been a generally accepted principle of finance that bonds or other fixed interest obligations should be issued only when prospective earnings appear both adequate in amount and stable in their flow. Industrial companies typically secure a large part of their external funds by stock issues because their earnings are not stable. On the other hand, railroads and public utilities usually raise a large part of their capital funds by bond issues. Industrial and miscellaneous corporations accounted for 61 per cent of all new capital issues in 1929, 73 per cent in 1946, and only 53 per cent in 1947. The relative decline in industrial company issues in 1947 was one reason for the smaller proportion of funds raised through stock issues in 1947 than in 1946 or in 1929.

The interest or dividend cost is another important factor influencing the ratio of debt and equity financing. In general, the cost factor is much more favorable to bond or debt financing now than in the pre-war period because of the sharp drop in interest rates. The average yield on corporate bonds (Moody's) in 1947 was 2.9 per cent, as compared to 3.8 per cent in 1939 and 5.2 per cent in 1929. On the other hand, the average dividend yield on common stocks was 5.2 per cent in 1947 as compared to 4.6 per cent in 1939 and 3.5 per cent in 1929. The current spread between the average yields on stocks and bonds is very favorable to debt financing — just the reverse of the situation which prevailed during the period of heavy stock financing in the late twenties. In 1947 the yield on bonds was 2.3 percentage points below that on stocks, while in 1929 the average yield on stocks was 1.7 percentage points below that on corporate bonds. The development of the term loan and the lower interest rates on commercial loans also favor debt over equity sources.

The growing institutionalization of savings is another important factor favoring debt financing. Although complete and entirely comparable data are not available over a long period of years, it appears that an increasing amount and perhaps an increasing proportion of savings

is flowing into investment by way of institutions such as insurance companies, savings banks, savings and loan associations, and Government pension and trust funds. The flow of savings into these institutions was about $10 billion in 1947, as compared to the war-time peak of $18 billion in 1945 and an annual average of less than $3 billion during the decade of the twenties.

Space does not here permit going into the various factors tending to channel more individual savings into the hands of institutional investors. Certainly two of the most important are the unfamiliarity of the average individual with stocks and bonds as investments, and the greater security which he thinks the institution provides for his savings. The significant fact here is that both legal restrictions and the traditional policy of institutional investment officers channel practically all of these funds into debt instruments. Institutional purchases have been an important force in the strong demand for bonds and the long-term decline in bond relative to stock yields.

The state of the securities market also has an important influence on the choice of raising capital funds by stocks or bonds. The price of securities, of course, reflects the effects of the factors discussed above along with general economic conditions and various other forces. A "bull" market in stocks, such as that of the late twenties, tends to lower the yield and encourage the issue of new stock. The ratio of stocks to total new capital issues is especially high when there is an active stock market, such as in 1919-1920 and 1928-1929. In 1929 the ratio was 62 per cent and it was 63 per cent in 1919. Both were substantially above the average of 35 per cent for the decade of the twenties. On the other hand, a stagnant market is unable to absorb many new stock issues, and the proportion of funds raised by stocks tends to be low in depression periods. During most of the post-war period, investor confidence in stocks seems to have been at a relatively low ebb. The widespread expectation of a depression is undoubtedly a major cause and it has led investors to discount the high current earnings and dividend yields on stocks.

The general apathy of the public toward stocks also retards the flow of personal savings into equity capital. The 1948 Survey of Consumer Finances, conducted by the Survey Research Center, University of Michigan, for the Board of Governors of the Federal Reserve System revealed a widespread preference for assets with fixed value to those with changing value. Even two-thirds of those with incomes of $7,500 and above expressed a preference for assets of fixed value. Common stocks were rated least attractive of four types of assets, the others being savings bonds, bank deposits, and real estate. Unfamiliarity and lack of safety were given by the majority as the reasons they did not want to purchase common stocks.

Conclusions

The primary sources of capital funds, business and personal savings, are far above prewar levels. The rise in money incomes has been more than sufficient to offset higher prices and taxes, so that ability to save is still considerably above what it was before the war. There has been no noticeable decline in the proportion of corporate funds derived from both internal and external equity sources. However, the sharp post-war rise in retained earnings has been an important factor maintaining the proportion of new capital funds derived from equity sources at near the pre-war level.

Taxation is only one of several important factors influencing the proportion of corporate funds derived from equity and debt sources. Progressive surtax rates drain off a larger proportion of income in the higher than in the lower income brackets, but the limited data available indicate no decrease in the proportion of personal savings supplied by those with incomes of $5,000 and above. There is some evidence that the top 10 per cent of income receivers is supplying a somewhat smaller proportion of personal savings than in 1935-1936, but they are still providing over 75 per cent of the total. In dollar amount, this income group has far more savings available for investment than in pre-war years.

It appears there are other factors which may be more important than taxation tending to favor debt over equity sources of corporate funds. One is a growing desire for safety on the part of those investing their savings. Available evidence indicates a widespread disinclination to buy stocks—an attitude which is probably en-

hanced by lack of familiarity with this type of investment. The desire for safety not only retards the purchase of stocks directly but apparently has led to the placing of an increasing proportion of savings in the hands of institutions. Savings institutions, in turn, channel practically all of these savings into debt rather than equity types of investments. A closely related trend is the marked decline in interest rates relative to the dividend yield on stocks, thus making the interest cost of debt financing substantially less than the dividend cost of new stock issues. Another important factor is the temper of the stock market. The volume of funds obtained from new stock issues tends to be large during bull markets and small during bear markets.

Whether or in what sense there is a shortage of risk or equity capital depends on the standards one uses for appraisal. There is no shortage in the total supply of equity funds in an historical sense. Retained earnings are at an all-time peak and the ratio of stock to total new capital is not far out of line with pre-war experience. In the sense of the terms on which external equity funds are available, however, the spread between the average yield on stocks and bonds shows that investors are unwilling to put their funds into stocks except at a substantially higher yield. This form of equity capital issues is not available on as favorable terms relative to bonds as in the twenties and thirties. The high yield on stocks relative to bonds may indicate either that investors consider the risk involved in stocks is increasing, e. g., doubt over prosperity continuing, or that they are demanding a greater reward for risk taking. Corporations may be deriving a large part of their capital funds from retained earnings because of their inability to sell new stock issues at "reasonable" yields or because management considers this a very desirable source as long as net earnings continue at the present high level. New small firms unable to sell stock and with no accumulated earnings to draw on are likely to experience considerable difficulty in getting capital funds on suitable terms.

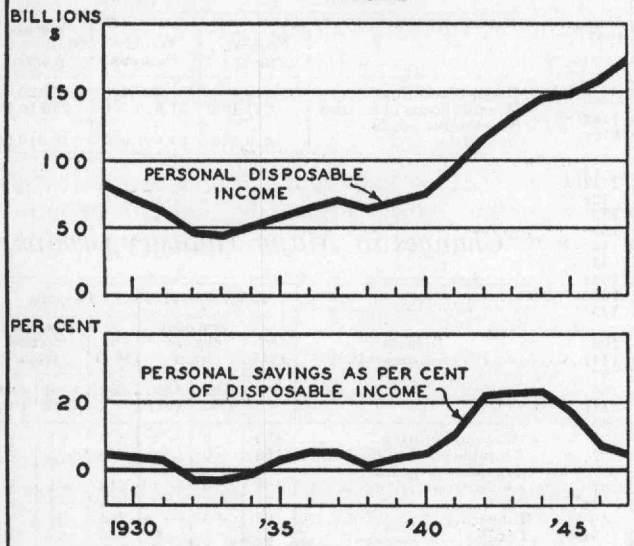
There is another aspect to the apparent capital shortage. It is one of the paradoxes of inflation. The basic cause of inflation is too much money. Yet to the individual and business firm it seems there is always too little money. The apparent "deficiency" in the post-war supply of capital funds does not reflect primarily a "drying up" of savings but a tremendous increase in the volume of investment. This is a typical condition in inflation. The appropriate remedy is not in increasing the supply of capital funds, from whatever source, beyond the ability of the capital goods industries to increase production to meet the demand. It is to hold down demand to industry's ability to meet it at current prices.

The more serious aspect of a possible decrease in the "availability" of external equity capital seems to be that it is only one of several manifestations of an underlying trend — a growing desire for security which may conflict with the requirements of economic progress. The desire for security has led to a vast increase in the volume and in the types of insurance. Entrepreneurs, organized labor, and investors appear to be resorting to a variety of practices to insulate themselves against the ill effects of change. There seems to be an increasing tendency to maintain the *status quo* — to prop up the old rather than to shift to the new.

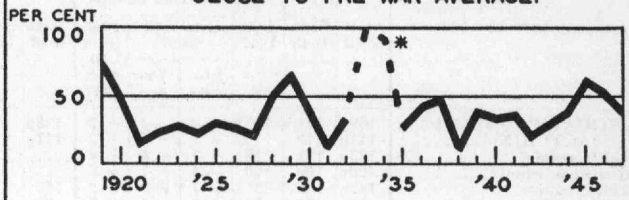
The methods by which people seek security individually frequently generate resistance to change. An inevitable consequence of economic progress and rising real income is a shift in the pattern of demand. Progress cannot be achieved unless labor, capital, and management are willing to shift production to conform to the new wants. This requires a willingness to take the risk involved in the development of new industries and new enterprises. It means that some capital funds must flow into the new industries — all cannot go into "safe investments" in the old-established industries. A few investors may obtain greater safety by putting their funds in bonds and other preferred debt instruments, but it is obviously not a means of safety which all can enjoy. Likewise, too much emphasis on security may imperil not only the security but also the stability and progress which we are seeking.

FACTORS INFLUENCING THE SUPPLY OF EQUITY CAPITAL

SAVINGS TEND TO VARY WITH DISPOSABLE INCOME.

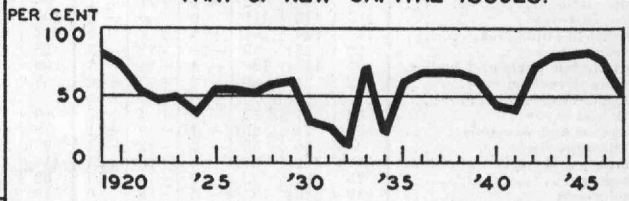


RATIO OF STOCKS TO NEW CAPITAL ISSUES CLOSE TO PRE-WAR AVERAGE.

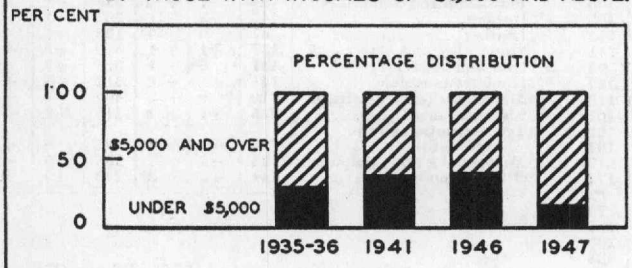


PROPORTION OF STOCKS TO TOTAL NEW CAPITAL ISSUES TENDS TO BE LOW WHEN:

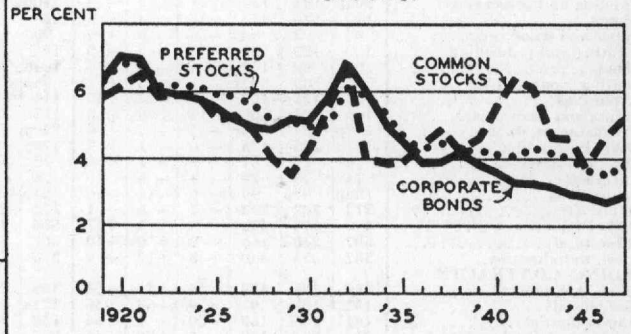
INDUSTRIAL COMPANY ISSUES ARE SMALL PART OF NEW CAPITAL ISSUES.



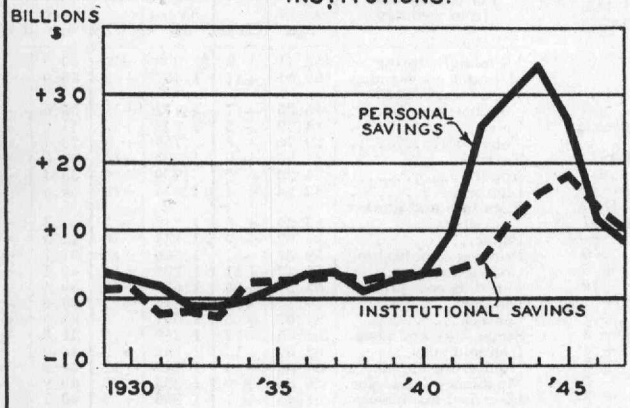
MOST OF PERSONAL SAVINGS STILL SUPPLIED BY THOSE WITH INCOMES OF $5,000 AND ABOVE.



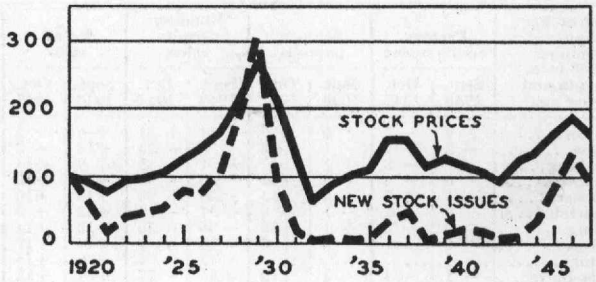
YIELD ON BONDS IS LOW RELATIVE TO STOCKS.



MORE SAVINGS ARE GOING INTO SAVINGS INSTITUTIONS.



STOCK MARKET IS BEARISH.
(INDEX 1919=100)



* TOTAL NEW CAPITAL ISSUES VERY SMALL-1932-35

BUSINESS STATISTICS

Production

Philadelphia Federal Reserve District

Indexes: 1923-25 = 100	Adjusted for seasonal variation: Oct. 1948	Sept. 1948	Oct. 1947	Per cent change: Oct. 1948 from Mo. ago	Oct. 1948 from Year ago	1948 from 10 mos. 1947	Not adjusted: Oct. 1948	Sept. 1948	Oct. 1947
INDUSTRIAL PRODUCTION	109p	111	109r	− 2	0	+ 2	115p	114	114r
MANUFACTURING	111p	113	110	− 2	+ 1	+ 2	117p	116	115r
Durable goods	123p	121	118r	+ 2	+ 4	+ 4	.....	.....	.....
Consumers goods	100p	104	100	− 4	+ 1	+ 3	.....	.....	.....
Metal products	142	141r	136r	+ 1	+ 5	+ 2	148	143r	141r
Textile products	71p	73	69r	− 3	+ 3	+ 8	75p	75	72r
Transportation equipment	129p	127	144	+ 2	−11	− 3	123p	120	137
Food products	124p	125	125	− 1	0	− 2	140p	141	139
Tobacco and products	109	129	114	−15	− 5	+ 3	134	149	140
Building materials	52p	50	50	+ 4	+ 4	+ 8	56p	54	53
Chemicals and products	170p	182	161r	− 7	+ 5	+ 7	172p	181	164r
Leather and products	89p	87	100	+ 3	−11	+ 2	94p	95	106
Paper and printing	114	118	122	− 3	− 6	− 2	116	117	123
Individual lines									
Pig iron	103	112r	107	− 8	− 3	+ 1	102	105r	105
Steel	122	125r	114r	− 2	+ 7	+ 4	122	118r	114r
Iron castings	91	92	82	− 1	+11	− 1	96	93	87
Steel castings	115	115	115	0	0	− 4	109	104	109
Electrical apparatus	199	189	194	+ 5	+ 2	0	217	208	211r
Motor vehicles	28	35r	48	−20	−42	−33	26	30r	44
Automobile parts and bodies	105	110r	139	− 4	−24	−13	100	105	132
Locomotives and cars	72	71r	60	+ 2	+20	+10	69	68r	57
Shipbuilding	.....	.....	.....	+10	+ 3	+12	.....	.....	.....
Silk and rayon	89	89	85	0	+ 4	+ 7	90	89	87
Woolens and worsteds	71p	74	66r	− 4	+ 9	+11	79p	82	72r
Cotton products	34p	36	38	− 6	−12	−14	35p	34	40
Carpets and rugs	103p	108	87r	− 4	+18	+23	114p	115	95r
Hosiery	75	81	72	− 8	+ 4	+14	83	81	79
Underwear	110	117r	134	− 6	−18	0	119	117r	146
Cement	85p	81	77	+ 5	+10	+15	95p	94	86
Brick	61	58	60	+ 4	+ 2	+ 1	61	59	60
Lumber and products	28	27	29	+ 3	− 5	+ 4	29	28	30
Bread and bakery products	.....	.....	.....	− 1*	0*	− 1*	114	116	114
Slaughtering, meat packing	105	101	104	+ 4	+ 1	+ 4	110	104	108
Sugar refining	75	172r	124	−56	−40	−12	63	148	105
Canning and preserving	205p	184	191	+11	+ 7	− 3	270p	248	252
Cigars	110	130	115	−15	− 4	+ 4	136	151	141
Paper and wood pulp	88	93	94	− 6	− 6	+ 4	90	93	96
Printing and publishing	120	123	128	− 3	− 6	− 3	121	122r	129
Shoes	96p	90	102	+ 6	− 6	+ 3	104p	103	110
Leather, goat and kid	82p	83	97r	− 1	−15	+ 1	86p	87	101r
Explosives	113	118r	100r	− 4	+14	+15	114	118r	101r
Paints and varnishes	106	125r	100	−15	+ 6	+ 8	113	118r	107
Petroleum products	227p	239	216r	− 5	+ 5	+ 6	229p	242	218r
Coke, by-product	174p	185	176	− 6	− 1	+ 2	170p	177	173
COAL MINING	76	77	81	− 2	− 7	− 1	76	78	82
Anthracite	74	75	79	− 1	− 6	0	74	75	79
Bituminous	88p	97p	99	− 9	−11	−10	94p	99p	106
CRUDE OIL	273	282	298	− 3	− 8	− 1	273	282	298
ELEC. POWER—OUTPUT	490	503	470	− 3	+ 4	+ 7	505	493	484
Sales, total	507	518	466	− 2	+ 9	+10	507	513	466
Sales, to industries	382	353	340	+ 8	+12	+ 9	370	374	330
BUILDING CONTRACTS									
TOTAL AWARDS†	180	209	128	−14	+41	+56	186	203	132
Residential†	152	161	93	− 6	+63	+46	175	191	107
Nonresidential†	164	206	162	−20	+ 1	+64	158	194	156
Public works and utilities†	263	278	138	− 5	+90	+46	277	253	145

* Unadjusted for seasonal variation.
† 3-month moving daily average centered at 3rd month.
p—Preliminary.
r—Revised.

Local Business Conditions*

Percentage change—October 1948 from month and year ago	Factory employment: Sept. 1948	Oct. 1947	Factory payrolls: Sept. 1948	Oct. 1947	Building permits value: Sept. 1948	Oct. 1947	Retail sales: Sept. 1948	Oct. 1947	Debits: Sept. 1948	Oct. 1947
Allentown	0	− 2	0	+ 6	+ 44	+ 81	+ 6	+35	− 4	+ 6
Altoona	− 2	+ 1	− 1	+ 5	− 9	− 25	+18	− 2	+ 7	+ 5
Harrisburg	0	− 2	+ 1	+11	+ 57	+ 45	+ 9	+14	+10	+10
Johnstown	0	− 3	+ 3	+17	− 64	− 48	+12	+15	+ 4	+ 7
Lancaster	+ 1	+ 7	+ 4	+13	+646	+ 58	+14	+10	+13	− 1
Philadelphia	0	− 1	+ 1	+ 6	+ 37	− 39	+12	+ 7	0	− 3
Reading	0	+ 2	+ 1	+12	− 36	− 30	+18	+14	+ 8	+ 1
Scranton	0	− 1	0	+ 8	− 16	− 7	+17	+17	+ 3	+ 5
Trenton	.....	.....	.....	.....	− 43	− 76	+ 6	+15	− 7	0
Wilkes-Barre	− 1	+ 4	− 1	+15	− 63	− 77	+ 9	+12	+13	+ 8
Williamsport	+ 2	+ 3	+ 4	+12	− 23	0	.....	.....	+ 2	+ 3
Wilmington	− 2	+ 3	+ 1	+12	+229	+336	+19	+ 6	−23	+10
York	0	− 3	+ 4	+ 4	+ 46	+122	+19	+21	+ 6	+ 7

* Area not restricted to the corporate limits of cities given here.

Production Workers in Pennsylvania Factories

Summary Estimates—October 1948

	Employment	Weekly Payrolls	Weekly Man-Hours Worked
All manufacturing	1,110,400	$59,307,000	44,320,000
Durable goods industries	631,100	37,616,000	25,810,000
Nondurable goods industries	479,400	21,691,000	18,510,000

Changes in Major Industry Groups

Indexes (1939 average = 100)	Employment: Oct. 1948 Index	Per cent change from Sept. 1948	Oct. 1947	Payrolls: Oct. 1948 Index	Per cent change from Sept. 1948	Oct. 1947
All manufacturing	129	0	− 1	308	+1	+ 9
Durable goods industries	156	0	0	358	+3	+11
Nondurable goods industries	106	0	− 1	248	−1	+ 5
Food	132	−2	− 1	265	−4	+ 5
Tobacco	103	+3	− 1	234	+4	+ 2
Textiles	84	−1	0	222	+2	+ 9
Apparel	92	0	− 4	223	−5	− 5
Lumber	95	0	+ 2	215	+4	+ 6
Furniture and lumber prods.	97	+1	− 4	236	+4	+ 1
Paper	120	+2	0	273	+1	+ 9
Printing and publishing	137	+1	− 3	286	−1	+ 4
Chemicals	125	0	+ 2	274	0	+14
Petroleum and coal prods.	154	−1	+ 4	328	−1	+23
Rubber	142	−3	−11	282	−1	−19
Leather	87	0	− 9	188	+1	− 7
Stone, clay and glass	137	+1	+ 1	316	+3	+11
Iron and steel	141	0	+ 1	327	+3	+14
Nonferrous metals	141	+1	− 8	312	+5	+ 4
Machinery (excl. electrical)	210	0	+ 2	469	+1	+11
Electrical machinery	235	+1	+ 1	516	+2	+ 8
Transportation equip. (excl. auto)	238	+1	+14	492	+6	+28
Automobiles and equipment	135	−2	−27	285	−6	−25
Other manufacturing	141	+3	+ 3	282	+5	+ 8

Average Earnings and Working Time

October 1948 Per cent change from year ago	Weekly Earnings: Average	Ch'ge	Hourly Earnings: Average	Ch'ge	Weekly Hours: Average	Ch'ge
All manufacturing	$53.41	+ 9	$1.338	+10	39.9	0
Durable goods indus.	59.61	+11	1.457	+ 9	40.9	+ 2
Nondurable goods industries	45.25	+ 7	1.172	+10	38.6	− 3
Food	44.79	+ 5	1.093	+ 7	41.0	− 2
Tobacco	29.76	+ 3	.769	+ 3	38.7	− 1
Textiles	47.07	+ 9	1.207	+11	39.0	− 2
Apparel	34.28	− 2	.970	+ 9	35.4	− 9
Lumber	42.54	+ 4	1.076	+12	39.5	− 7
Furniture and lumber products	45.09	+ 6	1.042	+ 7	43.3	− 1
Paper	49.02	+ 9	1.133	+10	43.3	− 1
Printing & publishing	59.07	+ 7	1.566	+11	37.7	− 3
Chemicals	52.12	+11	1.281	+13	40.7	− 1
Petrol. & coal prods.	64.53	+18	1.637	+15	39.4	+ 3
Rubber	49.46	− 8	1.374	+ 2	36.0	−10
Leather	37.07	+ 3	1.031	+ 7	35.9	− 4
Stone, clay and glass	52.65	+10	1.260	+ 8	41.8	+ 2
Iron and steel	62.65	+13	1.532	+ 9	40.9	+ 4
Nonferrous metals	57.86	+14	1.440	+12	40.2	+ 2
Machinery (excl. elec.)	56.66	+ 9	1.385	+ 8	40.9	0
Electrical machinery	61.43	+ 7	1.508	+ 5	40.7	+ 1
Transportation equip. (excl. auto)	62.98	+12	1.570	+11	40.1	+ 1
Automobiles & equip.	57.86	+ 3	1.473	+10	39.3	− 6
Other manufacturing	42.00	+ 5	1.134	+ 7	37.0	− 2

Distribution and Prices

Wholesale trade Unadjusted for seasonal variation	Per cent change October 1948 from Month ago	Year ago	1948 from 10 mos. 1947
Sales			
Total of all lines	− 2	− 3	+ 2
Dry goods	− 7	− 8	− 7
Electrical supplies	+14	+14	+ 4
Groceries	− 4	−13	+ 4
Hardware	+ 5	− 8	− 2
Jewelry	+20	+18	+ 8
Paper	− 6	+10	+ 1
Inventories			
Total of all lines	0	+ 7	.....
Dry goods	− 2	+18	.....
Electrical supplies	− 5	− 8	.....
Groceries	+ 5	−12	.....
Hardware	− 4	+15	.....
Jewelry	+ 2	+14	.....
Paper	+ 3	+22	.....

Source U.S. Department of Commerce.

Prices	Oct. 1948	Per cent change from Month ago	Year ago	Aug. 1939
Basic commodities (Aug. 1939 = 100)	305	− 2	−10	+205
Wholesale (1926 = 100)	165	− 2	+ 4	+120
Farm	182	− 4	− 4	+199
Food	177	− 5	0	+164
Other	153	0	+ 9	+ 91
Living costs (1935-1939 = 100)				
United States	174	− 1	+ 6	+ 76
Philadelphia	174	0	+ 7	+ 78
Food	208	− 2	+ 6	+124
Clothing	196	0	+ 6	+ 97
Fuels	143	0	+10	+ 48
Housefurnishings	205	0	+10	+104
Other	152	+ 1	+ 9	+ 51

Source: U. S. Bureau of Labor Statistics.

Indexes: 1935-1939 = 100	Adjusted for seasonal variation: Oct. 1948	Sept. 1948	Oct. 1947	Per cent change October 1948 from Month ago	Year ago	1948 from 10 mos. 1947	Not adjusted: Oct. 1948	Sept. 1948	Oct. 1947
RETAIL TRADE									
Sales									
Department stores—District	307	295	264r	+ 4	+16	+10	322	295	280
Philadelphia	267	269	239	− 1	+12	+ 8	296	269	267
Women's apparel —District	277	277r	238	0	+16	+ 4	307	293	264
Philadelphia	268	274	237	− 2	+13	+ 4	308	294r	273
Furniture	.....	.....	.....	− 7*	−10*	.....	.....	.....	.....
Inventories									
Department stores—District	244p	238	231	+ 3	+ 6	.....	279p	262	263
Philadelphia	217	209	216	+ 4	+ 1	.....	250	234	249
Women's apparel —District	224	216	226	+ 4	− 1	.....	262	246	264
Philadelphia	248	240	255	+ 4	− 3	.....	290	278	299
Furniture	.....	.....	.....	+ 6*	0*	.....	.....	.....	.....
FREIGHT-CAR LOADINGS									
Total	132	130	140	+ 2	− 6	− 5	143	145	151
Merchandise and miscellaneous	124	122	133	+ 1	− 7	− 6	132	133	141
Merchandise—l.c.l.	75	75	88	+ 1	−15	−16	80	78	93
Coal	136	141	147	− 4	− 8	− 6	149	155	162
Ore	176	171	170	+ 3	+ 4	+ 2	254	275	245
Coke	172	183	172	− 6	0	+ 1	196	193	196
Forest products	75	82	95	− 9	−21	−10	88	102	111
Grain and products	160	118	144	+ 36	+11	−12	160	117	144
Livestock	65	64	79	+ 3	−17	−23	76	76	92
MISCELLANEOUS									
Life insurance sales	189	205	204r	− 7	− 7	0	191	170	206
Business liquidations									
Number	.....	.....	.....	+ 50*	+20*	+40*	36	24	30
Amount of liabilities	.....	.....	.....	+403*	+ 3*	+34*	172	34	168
Check payments	261	272	253r	− 4	+ 3	+13	250	253	243

* Computed from unadjusted data. p—Preliminary. r—Revised.

BANKING STATISTICS

Reporting member banks (Millions $)	Nov. 24, 1948	Changes in— Four weeks	One year
Assets			
Commercial loans	535	− 4	+33
Loans to brokers, etc.	17	− 1	−10
Other loans to carry secur.	10	− 2	−11
Loans on real estate	91	+ 1	+14
Loans to banks	5	.....	+ 4
Other loans	275	+ 4	+45
Total gross	933	− 2	+75
Total net	926	− 2	+71
Government securities	1373	+ 8	−64
Other securities	273	− 4	+ 4
Total investments	1646	+ 4	−60
Total loans & investments	2572	+ 2	+11
Reserve with F. R. Bank	555	+ 1	+68
Cash in vault	45	− 1	+ 2
Balances with other banks	100	− 8	+ 3
Other assets—net	51	+ 1	− 3
Liabilities			
Demand deposits, adjusted	2105	+12	+ 8
Time deposits	448	− 3	+40
U. S. Government deposits	78	−12	+43
Interbank deposits	338	−14	−13
Borrowings	22	+11	− 2
Other liabilities	26	− 1	+ 1
Capital account	306	+ 2	+ 4

MEMBER BANK RESERVES AND RELATED FACTORS

Third Federal Reserve District (Millions of dollars)	Changes in weeks ended— Nov. 3	Nov. 10	Nov. 17	Nov. 24	Changes in four weeks
Sources of funds:					
Reserve Bank credit extended in district	−25	+22	+11	+ 6	+ 14
Commercial transfers (chiefly interdistrict)	+49	+26	−19	+47	+103
Treasury operations	−35	− 8	−14	−36	− 93
Total	−11	+40	−22	+17	+ 24
Uses of funds:					
Currency demand	+ 8	+ 9	− 8	+20	+ 29
Member bank reserve deposits	−19	+31	−14	− 4	− 6
"Other deposits" at Reserve Bank	.....	.....	.....	+ 1	+ 1
Other Federal Reserve accounts	.....	.....	.....	.....	.....
Total	−11	+40	−22	+17	+ 24

Federal Reserve Bank of Phila. (Dollar figures in millions)	Nov. 24, 1948	Changes in— Four weeks	One year
Discounts and advances	$ 37.3	$+12.2	$+ 8.8
Industrial loans	1.0	+ .1	− .5
U. S. securities	1642.4	−17.8	+ 87.7
Total	$1680.7	$− 5.5	$+ 96.0
Fed. Res. notes	$1661.3	$+24.5	$− 10.4
Member bank deposits	946.7	− 6.3	+122.2
U. S. general account	139.0	− 5.6	− 3.1
Foreign deposits	36.5	+ 7.2	+ 6.6
Other deposits	2.7	+ 1.6	+ .7
Gold certificate reserves	1106.9	+25.4	+ 15.2
Reserve ratio	39.7%	+0.6%	−1.1%

Member bank reserves (Daily averages; dollar figures in millions)	Held	Required	Excess	Ratio of excess to required
Phila. banks				
1947 Nov 1–15	$433	$428	$ 5	1%
1948 Oct. 1–15	448	438	10	2
Oct. 16–31	453	444	9	2
Nov. 1–15	455	450	5	1
Country banks				
1947 Nov. 1–15	$398	$348	$50	14%
1948 Oct. 1–15	491	446	45	10
Oct. 16–31	487	443	44	10
Nov. 1–15	491	443	48	11

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