IMPLICATIONS OF PENSION FUND ACCUMULATIONS

by

Vito Natrella

Securities and Exchange Commission

117th Annual Meeting

of the

AMERICAN STATISTICAL ASSOCIATION

Atlantic City, N. J.

September 10, 1957

In the years since the end of World War II the subject of pension funds, particularly private non-insured funds, has evoked a considerable amount of interest. It came to the attention of the public that many corporations established pension funds during the war as a means of increasing wages at little cost to the company. The use by labor unions of pension funds as a benefit subject to negotiation gave added publicity to the possibilities of future growth.

These developments gave rise to much speculation as to the possible impact of pension funds on the capital markets, saving and the economy in general. Estimates based on assumptions of full funding, even with modest benefits, gave fantastic pictures with private pension reserves ranging from $100 billion to $300 billion and the consequent implications of reserves of such magnitude overlying saving and the capital markets.

It was brought out that if half the persons in the labor force of 60 million expected retirement at age 65 on a pension of $100 per month in addition to Social Security, a total reserve of more than $200 billion would be necessary to fund such pensions full. 1/ To appreciate the significance of such a figure, it should be noted that the national wealth of the United States in 1946, including consumer goods, subsoil assets, and military assets was estimated at more than $700 billion. 2/ In other words, pension fund reserves under the above conditions would be equal to more than one-fourth the total wealth of the country.

NOTE: The Securities and Exchange Commission, as a matter of policy, disclaims responsibility for any private publication by any of its employees. The views expressed herein and the projections presented are those of the author and do not necessarily reflect the views of the Commission or of the author's colleagues upon the staff of the Commission.

Since the early fifties we have seen the development of much needed statistics in the field of pension fund finance. On the basis of various studies, using small samples, to name two, those by Fortune Magazine 3/ and Brookings, 4/, the early estimates and projections were toned down to more reasonable levels. These studies were followed by others which attempted more complete coverage of particular segments, such as the Treasury Department data on U. S. Government securities held by banks as trustees for pension funds. In 1955, the Securities and Exchange Commission initiated its series presenting estimates of the asset holdings of all privately administered corporate pension funds as well as estimates of income and disbursements. 5/

As a result of the Commission contribution, we can now put together from various sources a fairly reliable current indication of the relative magnitudes of the various types of pension reserves. (Table 1) The only segments still not covered adequately are the uninsured funds of non-profit institutions and unincorporated business and union administered funds.

At the end of 1956 public and private pension and retirement funds amounted to $74.2 billion, $28.9 billion in private funds and $45.3 billion in government funds. Private funds were made up of $16.6 billion in non-insured funds and $12.3 billion in the form of insurance company reserves. The two largest components of the government segment were the $22 1/2 billion representing Old Age and Survivors Insurance reserves and the $12.1 billion held by state and local government retirement funds.

As to the net flow of funds into these reserves in 1956, the growth in corporate non-insured funds was greater than for any other segment. These funds increased by approximately $2.4 billion during last year, more than one-third the $6.8 billion net rise for all public and private funds. State and local funds accounted for $1.5 billion of the increase, insured pension reserves $1.2 billion, and Old Age and Survivors Insurance $1.1 billion.

Growth of Private Pension Funds

In this paper, most of the discussion will be devoted to private pension funds, and in particular, to the non-insured type. Although in existence since the last century, this type is currently in a period of sharply rising expansion and is considered to have substantial potential growth left which might give rise to problems in the capital markets. (Table 2)

Since 1920, pension fund growth appears to have taken place in three different stages. Growth was very slow prior to the 20's and at the end of 1920, private fund assets are estimated at around $50 million. In the mid-twenties the rate of increase picked up momentum with fund assets rising about $60 million per year, on the average, through 1941. The enactment of Social Security legislation provided an additional stimulus to the establishment of supplementary plans in the late 30's.

World War II brought with it high corporate tax rates and wage controls. The granting of pension benefits became a method of giving additional compensation which could be deducted from income for tax purposes. In the period 1942 through 1950 assets of non-insured pension funds rose on the average about $450 million per year. At the end of 1950, it was estimated by the Securities and Exchange Commission that total assets of these funds amounted to $5.5 billion, almost five times what they were at the beginning of the decade.

The third and current stage of pension fund growth began in 1950 and in part was generated by the determination by the National Labor Relations Board that pension benefits were proper issues for collective bargaining between employers and employees. Since then the growth of these privately administered funds has been truly spectacular. The rise in assets during the period 1951-1956 averaged over $1.8 billion annually and amounted to $2.4 billion last year. Private pension funds ended last year with assets of $16.6 billion, a tripling in the six years since 1950. The market value of these assets at the end of 1956 was $17.6 billion.

Pension Funds in 1956

Before going into projections for the future, let us examine the financial characteristics of private pension funds in 1956, the latest available information. 6/ (Tables 3 and 4) At the end of last year, 52 percent of the assets of non-insured pension funds was invested in corporate bonds while another 26 percent was in the form of equity securities, common stock for the most part. Holdings of U. S. Government securities in 1956 accounted for about 14 percent of total assets.

The six years covered by the S.E.C. survey brought out significant changes in the composition of pension fund assets. In 1951, corporate bonds were already the most popular investment, constituting about 45 percent of assets. However, in contrast to last year, government bond holdings were the next most important with almost one-third of the assets. In 1951 holdings of common and preferred stock made up only 16 percent of pension fund investments.

It appears that during this period of sharp rise practically all of the increase went into corporate securities while holdings of Government securities remained relatively constant. This trend reflects the search of funds for greater earnings in order to cut costs as well as the desire for a hedge against inflation. In some cases, funds in the early stages of growth preferred to build up a reserve in government bonds before going into investments of greater risk.

There has been a steady increase in the proportion of net new pension fund money going into common stock. In 1951 a little more than one-fifth of the net receipts of pension funds was invested in common stocks compared with over one-third last year. The proportion of new funds going into corporate bonds has been rather steady, averaging about 57 percent. U. S. Government securities, which in 1951 took 17 percent of pension money up for investment, have shown no net additions since 1953.

In recent years there has been a new development in the search for higher yields. The funds have become more interested in other types of investments such as mortgages, rental real-estate, leasebacks, conditional sales contracts and instalment receivables. These assets, while still small in relation to total, have risen from about 3 percent of total in 1951 to 6 percent in 1956.

Additional impetus to the channelling of investments into mortgages is possible as a result of last month's announcement by the Federal Housing Administration permitting the purchase and pooling of insured mortgages by service companies. These companies are expected to service the mortgages and sell participation certificates to institutions. It is believed that pension funds will be leading purchasers of these certificates since it will permit them to enter the high yielding residential mortgage field on an insured basis. Up to now the difficulties of servicing residential mortgages and the restrictions placed on insured contracts have held pension funds back from this type of investment.

The comments just made refer to all funds taken together; there appear to be significant differences in investment preferences of pension funds according to type of fund. Among the smaller funds, U. S. Government bonds have been more popular while corporate bonds increased in popularity as the size of fund rose. In contrast, the proportion of assets invested in common stocks has been about the same for most sizes of funds.

Industry-wise there was a greater tendency in favor of corporate bonds by funds of public utilities than by funds of other employers. Manufacturing and transportation companies were slightly more in favor of common stock than were other firms.

Pension Fund Yields

Reflecting in large part the changing composition of assets, yields on investments of pension funds increased from 1951 to 1954. In 1951 pension fund investment income averaged 3.05 percent on total assets at book value. (Table 5) This rate rose to 3.65 percent in 1954, then declined slightly in 1955 and in 1956 amounted to 3.61 percent.

In 1956, the sample indicates that except for funds under $500,000 in size there was little difference in rate of return according to size of fund. The median yield for the smallest sized group was 3.28 percent compared with 3.59 percent for the whole sample. The low median rate of return for the smallest sized group is accounted for by the higher proportion of investment in government bonds and the early stage of development of these funds. Many of them were newly organized in 1956 and had not had much opportunity to collect any substantial earnings on their investment. (Table 6)

Relation of Pension Fund Accumulations to the Capital Markets

In the above presentation, I have tried to show what trends have been developing in recent years and to describe the financial characteristics of private pension funds as they exist today. It is pertinent at this time to relate pension fund holdings to the rest of the economy in general and to the securities markets in particular.

At the end of 1956 privately administered pension funds held equity securities with a market value of $6.2 billion. This was approximately half the holdings of investment companies and about one-fifth of the common and preferred stock held by all institutions. (Tables 7 and 8) In the six years 1951 through 1956, the period of rapid growth, pension funds added \$3.4 billion to their holdings of corporation equities compared with net acquisitions of \$2.8 billion by investment companies, the largest institutional holder. During the same period, U. S. corporations, in aggregate, issued \$17 billion of common and preferred stock in excess of retirements. While pension funds have in large part invested in higher-grade outstanding issues, it can be said that they are responsible for freeing for new investment, funds representing one-fifth of the equity capital requirements of all corporations during this period of record corporate expansion.

The S. E. C. survey indicated that corporate bonds constituted the most important component of pension fund assets. During the period 1951 through 1956 almost 60 percent of the net receipts of pension funds were invested in corporate bonds. This net investment for the six years amounted to \$6.4 billion and accounted for over one-fifth of net new money raised by corporations through bond financing. Private pension fund acquisitions of corporate bonds were second to the net purchases of life insurance companies. During the same six-year period, life insurance companies' holdings increased by \$14.5 billion, half the total net change in bonds outstanding. This, of course, reflects the high proportion of debt financing in the form of private placements.

According to estimates of the Securities and Exchange Commission, the market value of corporate bonds outstanding at the end of 1956 amounted to $85 billion. Of this total, life insurance companies held $39 billion, while privately administered pension funds' holdings were valued at just under $8 billion.

In contrast to their holdings of corporate securities, private pension funds hold only a small part of U. S. Government securities outstanding. At the end of last year, their holdings amounted to about one percent of the total institutional holdings of such securities. As previously mentioned, pension funds have not increased their holdings since 1951. During this period, there was an increase of about $20 billion in Government bonds outstanding.

Pension Funds and Saving

One of the aspects of pension funds that has been the subject of considerable discussion concerns the effect of pension plans on individuals' saving. It was contended at one time that the availability of social security pensions might discourage thrift and divert saving from media such as life insurance or savings accounts. It is now generally believed that the net effect of private pension fund accumulations will be to increase personal saving. Saving in the form of pension funds has not been found to be a deterrent to other types of saving since it is of an involuntary nature. It has been said that pension plans cannot destroy a capacity to save which never in fact existed. These conclusions have been brought out by Garvey, 7/ Dearing, 4/ Corson and McConnell 8/ and the Institute of Actuaries research group 9/ among others.

All of the increase in pension fund assets, however, does not represent additional saving. To some extent there are alternatives and offsets which would affect any measurement of net additions and should be considered. If these funds were not set aside as at present, they might be distributed as dividends, higher wages, or paid as taxes, might tend to lower consumer prices or to raise retained corporate earnings. Various combinations of these alternatives would have different effects on the distribution of income and in view of the different marginal propensities to consume, would have various effects on saving. As indicated in the National Bureau's report "Suggestions for Research in the Economics of Pensions", 10/ this particular aspect provides a wide field for research.

As an indication of the impact of saving in the form of pension funds on total saving, I would like to present a few figures for the period 1951-56. (Table 9) For the period as a whole, private non-insured pension funds accounted for 17 percent of individuals' saving as derived by the Securities and Exchange Commission. 11/ Including insured pension plans as well as non-insured, more than one-fourth of individuals' saving is accounted for by this form. Private and government retirement funds together make up more than half total saving during this six-year period. While these are substantial proportions it should be noted that this period has been one of record expansion for pension funds. As of the end of last year private pension reserves amounted to about $30 billion while government retirement funds totalled $45 billion compared with total financial assets of individuals of about $800 billion. (Table 10)

Future Pension Fund Accumulations

So far I have attempted to present some of the known facts about pension funds and the trends which they appear to be taking. One of the important areas for discussion has been the effect of future accumulations on saving, investment and the capital markets. Some attempts have been made to provide some indications for the future. As I mentioned before, there have been some fears that pension fund accumulations would soon amount to as much as $300 billion.

In Dearing's study 4/, estimates were presented that pension fund contributions, both insured and non-insured, would amount to $6.6 billion in 1960. This study assumed probable coverage in that year of 22 million employees compared with 11 million in 1950. The estimates were based on the relative contributions per employee for a sample of corporations and was extended from 1950 to 1960 on the basis of probable trends in each industry as to coverage and contribution.

It appears at this time, that Dearing's estimates were somewhat on the high side. Private pension fund coverage, insured and non-insured, in 1956 has been estimated at 14 million. This represents an increase of almost 5 million since 1951. Taking into account current trends and industry characteristics, it appears that pension fund coverage in 1960 will amount to approximately 17 million with 20 million being reached in 1965. These estimates imply that in 1960 30 percent of non-agricultural non-government employment would be covered by private pension plans, and that 33 percent would be covered by 1965 compared with 27 percent at the end of last year.

On the basis of the above estimates of coverage and the current trends I have attempted to develop the financial characteristics of pension funds for the years 1960 and 1965. The method was similar to Dearing's except that overall aggregates rather than data for separate industries was used. Insured and non-insured coverage were estimated separately since the trends and relative contributions per employee are considerably different. In preparing the projections, factors tending to higher benefits and vesting provisions were taken into consideration.

I have estimated that contributions to non-insured private pension funds will rise from $2.3 billion last year to $3.2 billion in 1960 and $4.4 billion in 1965. Contributions to all pension plans insured and non-insured are estimated to amount to $6.2 billion in 1965 compared with $3.8 billion last year. (Table 11)

From these projections of contributions in 1956 dollars it is possible to arrive at what total assets of pension funds will be. Making assumptions that benefit payments will more than double by 1965 and that interest rates will remain at current levels the projections imply estimates of $29.2 billion of assets for non-insured pension funds at the end of 1960 and $51.7 billion of such assets at the end of 1965. As mentioned earlier, non-insured funds amounted to $16.6 billion at the end of last year. The projections indicate that non-insured funds will more than triple in the nine years 1956 to 1965 while insured funds will more than double in size over the same period.

I realize the difficulty of attempting to estimate the distribution of assets for privately administered pension funds. However, some projections have been made, taking into consideration the trends over the past few years and possible changes in investment preference. I have assumed that U. S. Government securities are maintained at about the same absolute level as today. I have assumed that corporate bonds will stay at about the same proportionate level as today. Common and preferred stocks which in 1956 amounted to 26 percent of total assets I expect to rise to 30 percent by 1960 and stay at about that proportion to 1965. All other assets, for the main part mortgages and real estate, I expect to increase from 8 percent in 1956 to 12 percent in 1965; in line with recent developments. (Table 12)

Translating these assumptions into figures, I would say that holdings of U. S. Government bonds will remain at somewhat more than $2 billion over this period. Investments in corporate bonds might increase from $8.7 billion last year to $15 1/2 billion in 1960 and to over $27 billion in 1965. Common and preferred stock holdings, which in 1956 amounted to $4.4 billion I expect to double by 1960 and to almost double again by 1965 at which time my estimates would reach $16 billion. Other assets which amounted to only $1.3 billion in 1956 will rise sharply to $6.2 billion by 1965. Most of the latter increase I expect to be in the form of real estate and mortgages, particularly residential mortgages which should become considerably easier for institutions to service in the near future.

The projections indicated above can be examined in the context of models for the economy in 1960 and 1965. Models for these years were prepared for the National Planning Association by Gerhard Colm 12/ while the Joint Economic Committee a few years ago also prepared a series of projections for 1965. 13/

Converting the various projections into 1956 prices gives us a Gross National Product of $457 billion in 1960 according to Colm and $559 billion in 1965 according to the Joint Economic Committee. Colm's projections for 1965 in 1956 prices, using varying assumptions as to defense expenditures, ranged from $587 billion to $603 billion. Corresponding to the estimate for 1960, disposable income was estimated at $321 billion and personal saving at $17 billion. The Joint Economic Committee projections for 1965 envisage disposable income of $399 billion and saving of $24 billion.

The projections for the net increase in private pension fund accumulations, insured and non-insured, related to these models, imply that in 1960 and 1965 approximately 30 percent of personal saving will be in the form of private pension funds. This compares with an average of about 20 percent in the last three years. The increase in the proportion of current saving going into pensions may be too sharp even taking into account the trend towards institutionalization of saving. However, it is possible that the saving rate used in the projections may be too low.

Somewhat more reasonable relations are obtained with the disposable income projections. The estimates for 1960 put the pension fund share of disposable income at 1.6 percent while those for 1965 imply 1.75 percent. These rates compare with 1.05 percent in 1951 and 1.25 percent in 1956.

Pension Funds and New Investment

We have seen that pension funds have become a significant influence in the capital markets. In 1956 self-administered private pension funds provided almost one-fourth of the equity money and more than one-fourth of the debt financing required by corporations. They accounted for over one-third of the new capital provided by all financial intermediaries for corporate expansion. The share of pension funds in new financing has increased rapidly in recent years and it appears likely that they will become even more important in the future.

The models I have been discussing include projections for construction and producers equipment. On the basis of current relationships these imply capital outlays by corporations of $33 billion and $42 billion in 1960 and 1965 compared with $30 billion last year. The projections of Colm and the Joint Economic Committee also provide us with estimates of retained corporate profits so that on the basis of present trends, it is possible to indicate what the demands for external funds by corporations might be.

The above considerations lead us to estimates of the net change in corporate securities outstanding of over $11 billion in 1960 and almost $14 billion in 1965 compared with $9.5 billion last year. They imply that private self-administered funds which acquired corporate securities in 1956 equal to one-fourth the total net new flotations, might in 1960 account for almost 30 percent and in 1965 for over one-third.

In addition to corporate securities, other outlets would be available to absorb other saving being channelled through financial intermediaries. The models under discussion include estimates of $17 billion of residential construction in 1965, somewhat above the 1956 level while indications are that there will be a sustained demand for funds in the government sector.

In the study by Dearing an attempt was made to construct a statement of the sources and uses of saving for the year 1960 with the purpose of determining whether the additional saving through private pension fund accumulations would tend to create an investment problem. The results of the analysis under assumptions of a dynamic economy at high levels of employment indicated a variation from rough balance to an excess of saving over investment outlets of $5 billion. Such an excess would, of course, create a deflationary pressure on the economy. Dearing also indicated that the problem could be aggravated to the extent that demands were made for fuller funding and faster funding of past service liability.

While an analysis of the sources and uses of saving for future years is interesting, the magnitude of the discrepancy due to errors and omissions is such that an estimate of excess saving or excess investment may not have too much significance. However, it would be desirable to recompute such a statement in light of the projections I have been using and to compare them with Dearing's prepared some five years ago.

In making his projections Dearing made an allowance for a higher price level in 1960. Adjusting the figures back to 1956 dollars it appears that his estimate of saving in the form of pension funds for 1960 was about half a billion dollars higher than the estimate derived here. While I am not too sure of his definitions, I feel that his estimate of individuals' "money saving entering the investment market" 14/ is at least $8 billion too low. On the other side of the statement it appears that Dearing's estimates of investment outlets except for public works are also considerably too low. In large part the difference results from the assumptions for 1960 of residential construction at the 1950 level and corporate financing trends of the early fifties as opposed to current developments. In addition, no allowance was made for external corporate financing outside the securities markets.

In aggregate the current estimates and models for 1960 indicate a possible deficiency in saving of $4 billion. As an indication of the possible magnitude of the statistical discrepancy involved, a similar computation for 1956 indicated excess saving of $2 billion. For 1965, the projections previously presented imply saving roughly in balance with investment.

This discussion using later projections has not changed some of the conclusions arrived at by Dearing. In view of the possible discrepancies it does not appear from present indications that pension fund accumulations during the next nine years will present an investment problem under conditions of dynamic economic activity and a high level of employment. For particular years, however, some problem may exist.

It should be stressed that this paper has only attempted to indicate in a general way broad directions and implications assuming the trends in pension fund accumulations that have been developing in the past few years. More research is needed in this aspect of pension funds and it is hoped that some of the suggestions included in the National Bureau's report 10/ can be implemented in the near future.

FOOTNOTES

1/ Dorrance C. Bronson, "Pensions 1949" Transactions of the Society of Actuaries, Vol. I No. 1 1949.

2/ Raymond W. Goldsmith "Measuring National Wealth" Studies in Income and Wealth, Vol. 12 National Bureau of Economic Research, 1950.

3/ Irwin Friend, "New Influences in the Stock Market", Fortune Magazine, March 1953.

4/ Charles L. Dearing "Industrial Pensions" Brookings Institution, 1954.

5/ "Corporate Pension Funds, 1954", Statistical Series Release #1335, Securities and Exchange Commission, Oct. 12, 1955.
"Survey of Corporate Pension Funds, 1951-1954", Securities and Exchange Commission, 1956.

6/ "Corporate Pension Funds, 1956" Statistical Series Release #1474, Securities and Exchange Commission, August 16, 1957.

7/ George Garvy, "The Effect of Private Pension Plans on Personal Savings," Review of Economics and Statistics, August, 1950.

8/ John J. Corson and John W. McConnell, "Economic Needs of Older People", Twentieth Century Fund, 1956.

9/ F. W. Bacon "The Growth of Pension Rights and Their Impact on the National Economy" Institute of Actuaries and the Faculty of Actuaries in Scotland, 1952.

10/ "Suggestions for Research in the Economics of Pensions, "National Bureau of Economic Research, 1957.

11/ Defined as the change in net claims of individuals on non-individuals.

12/ Gerhard Colm, "The American Economy in 1960" National Planning Association, Planning Pamphlet #81. "Economic Implications of Disarmanent" Illinois Business Review, July 1957.

13/ "Potential Economic Growth of the United States During the Next Decade" Joint Economic Committee, 1954.

14/ Dearing defines money saving as personal saving exclusive of income and expenditure items "in kind." Money saving seeking investment in the capital markets is obtained by eliminating items of direct investment. Using SEC saving, I have defined this concept as equal to net financial saving or the change in net claims plus the increase in individuals' debts.

TABLE 1

Assets of Public and Private
Pension and Retirement Funds 1/
end of year

($ Billion)

	1950	1954	1955	1956	Increase 1956
Private	11.0	22.0	25.3	28.9	+3.6
Corporate non-insured funds	5.5	12.2	14.2	16.6	+2.4
Insured pension funds	5.4	9.8	11.1	12.3	+1.2
Government	25.5	39.0	42.0	45.3	+3.2
Railroad retirement	2.3	3.5	3.6	3.7	+ .1
Civil Service retirement	4.2	6.1	6.5	7.0	+ .5
State and local retirement	5.3	9.2	10.6	12.1	+1.5
Old Age and Survivors Insurance	13.7	20.2	21.4	22.5	+1.1
Total	36.5	61.0	67.3	74.2	+6.8

1/ Other than insured plans, excludes funds of following groups: religion, educational, non-profit, unincorporated business and union administered.

SOURCE: Securities and Exchange Commission
Institute of Life Insurance
Treasury Department

TABLE 2

Growth of Non-Insured Private Pension Funds

1920 - 1956

($ Millions)

	Total Assets	Increase in 5 year period		Total Assets	Increase during year
1920	50	----	1950	5,526	----
1925	150	+ 100	1951	6,876	+1,350
1930	550	+ 400	1952	8,505	+1,629
1935	800	+ 250	1953	10,222	+1,717
1940	1,100	+ 300	1954	12,153	+1,931
1945	2,700	+1,600	1955	14,230	+2,077
1950	5,200	+2,500	1956	16,639	+2,410

SOURCES: 1920 - 1940 — "Study of Savings in the U. S." R. W. Goldsmith

1945 - 1950 — "Fresh Look at Pension Funds" R. F. Murray "Trusts and Estates" November 1955

1950 - 1956 — Securities and Exchange Commission

TABLE 3

CORPORATE PENSION FUNDS

($ Million)

Distribution of Assets by Type

	Book Value, End of Year					
	1951	1952	1953	1954	1955	1956
Cash and deposits	291	271	313	296	343	332
U. S. Government securities	2,170	2,218	2,297	2,284	2,536	2,293
Corporate bonds	3,125	4,167	5,181	6,359	7,225	8,704
Own company	1/	1/	1/	1/	1/	776
Other companies	1/	1/	1/	1/	1/	7,928
Preferred stock	272	335	397	454	510	570
Common stock	812	1,228	1,649	2,286	2,958	3,774
Own company	246	301	342	382	434	505
Other companies	566	927	1,307	1,904	2,524	3,269
Mortgages	1/	1/	1/	1/	146	230
Other assets	206	286	384	473	511	736
Total assets	6,876	8,505	10,222	12,153	14,230	16,639

Assets Classified by Industry of Employer

	Book Value, End of Year					
	1951	1952	1953	1954	1955	1956
Manufacturing	3,750	4,761	6,036	7,329	8,731	10,391
Electric, gas and water	351	418	495	582	685	798
Transportation	213	265	339	438	549	695
Communication	1,449	1,633	1,852	2,074	2,294	2,530
Trade	693	930	912	1,050	1,205	1,355
Financial and real estate	331	388	450	516	577	648
Other 2/	89	111	138	165	190	221
All industries	6,876	8,505	10,222	12,153	14,230	16,639

1/ Not available separately.

2/ Extractive, construction and service.

SOURCE: Securities and Exchange Commission

TABLE 4

CORPORATE PENSION FUNDS

($ Millions)

Receipts and expenditures

	1951	1952	1953	1954	1955	1956
Employer contribution	1,257	1,392	1,681	1,648	1,803	2,053
Employee contribution	129	153	176	191	222	267
Income from interest and dividends....................	189	247	313	409	463	558
Net profit or loss on sale of assets......................	1/	1/	1/	1/	84	49
Other income	1/	1/	1/	1/	12	19
Total receipts.......	1,575	1,792	2,170	2,248	2,583	2,945
Benefits paid out...............	220	263	314	357	447	544
Expenses.......................	5	7	8	8	14	13
Total disbursements..	225	270	322	365	461	557
Net receipts....................	1,350	1,522	1,848	1,883	2,122	2,389

Market Value of Assets

	December 1956
Cash and deposits...............	332
U. S. Government securities...	2,192
Corporate bonds................	7,904
Own company..................	682
Other companies..............	7,222
Preferred stock.................	524
Common stock...................	5,648
Own company..................	864
Other companies..............	4,784
Mortgages.......................	229
Other assets....................	735
Total assets.....	17,565

1/ Not available separately.

SOURCE: Securities and Exchange Commission.

TABLE 5

Rate of Return of Corporate Pension Funds 1/

by Industry of Employer

1951 - 1956

(percent)

	1951	1952	1953	1954	1955	1956
Manufacturing................	2.78	3.04	3.24	3.63	3.49	3.57
Electric, gas & water........	2.99	3.15	3.35	3.47	3.58	3.68
Transportation...............	3.57	3.74	3.93	3.99	3.93	3.94
Communication................	2.63	2.66	2.94	3.04	2.95	3.02
Trade........................	4.93	4.73	4.23	4.93	4.60	4.32
Financial and Real Estate....	3.76	3.84	4.04	3.95	3.94	4.23
Other Non-manufacturing......	2.75	3.12	3.29	3.33	3.50	3.48
All Industries...............	3.05	3.21	3.34	3.65	3.51	3.61

1/ Income from dividends, interest and rent divided by average of assets at book value at beginning and end of year for universe data.

SOURCE: Securities and Exchange Commission.

TABLE 6

Rate of Return of Corporate Pension Funds by Size of Fund

1956

(Percent)

Size of Fund ($000)	Median Rate of Return
Less than 500	3.28
500 - 999	3.67
1,000 - 2,499	3.59
2,500 - 4,999	3.66
5,000 - 9,999	3.67
10,000 - 19,999	3.63
29,000 - 99,999	3.65
100,000 and over	3.67
Total	3.59

SOURCE: Securities and Exchange Commission.

TABLE 7

Net Purchase of Corporate Securities by Class of Investor 1/

1951 - 1956

(Billions of Dollars)

Common and Preferred Stocks	1951	1952	1953	1954	1955	1956
Corporate pension funds	.3	.5	.5	.6	.7	.8
Life insurance companies	.2	.1	.2	.3	.1	- .1
Investment companies	.2	.5	.3	.4	.6	.8
Banks	.1	.1	.1	.2	.1	.1
Other institutions	.2	.3	.3	.3	.3	.4
Total institutions	.9	1.4	1.4	1.7	1.7	2.0
Foreigners	.1	-	.1	.1	.1	.2
Domestic individuals 2/	1.7	1.6	.9	.7	1.0	1.2
Total	2.8	3.0	2.4	2.5	2.9	3.4
Bonds and Notes 2/						
Corporate pension funds	.7	1.0	1.0	1.2	.9	1.6
Life insurance companies	2.9	3.0	2.7	2.1	1.6	2.2
Banks	-	.2	.2	- .2	.1	- .4
State and local government trust funds	.4	.3	.4	.6	.8	.8
Other institutions	.3	.2	.1	.2	.3	.5
Total institutions	4.3	4.7	4.4	3.9	3.6	4.7
Foreigners	-	-	-	-	-	-
Domestic individuals 3/	- .1	.4	.4	- .1	1.8	1.3
Total	4.1	5.1	4.8	3.8	5.5	6.1

1/ Figures on net purchases of securities by individuals as given in this table differ from net saving in corporate and other securities presented in Table 9 in that the above estimates do not reflect borrowing on securities.

2/ Including quasi-government debt issues for which separate data on holdings are not available.

3/ Including personal trust funds and non-profit organizations.

SOURCE: Securities and Exchange Commission.

TABLE 8

Estimated Holdings of Corporate Securities by Class of Investor 1/

(Billions of dollars)

December 31, 1956

	Stocks	Bonds & Notes 2/	Total
Corporate pension funds	6.2	7.9	14.1
Life insurance companies..........	3.6	39.1	42.7
Investment companies.............	12.9	.4	13.4
Banks...........................	.9	5.8	6.6
State & local gov't trust funds..	.4	3.9	4.3
Other institutions	5.9	2.9	8.8
Total institutions..........	30.0	60.0	89.9
Foreigners	7.1	.2	7.3
Domestic individuals 3/	310.0	25.1	335.1
Total market value	347.0	85.3	432.3

1/ Estimated market values.

2/ Including quasi-government debt issues for which separate data on holdings are not available.

3/ Including personal trust funds and non-profit organizations.

SOURCE: Securities and Exchange Commission.

Table 9

Saving by Individuals in the United States

1951 - 1956

Type of Saving	1951	1952	1953	1954	1955	1956
1. Currency and deposits	6.0	7.1	4.8	5.8	4.6	4.7
a. Currency	.8	1.1	.6	- .3	.4	---
b. Demand deposits	3.1	1.5	- .4	1.4	.6	.4
c. Time and savings deposits	2.2	4.5	4.6	4.7	3.5	4.4
2. Saving and loan associations	2.1	3.1	3.6	4.4	4.8	5.1
3. Securities	.7	2.7	3.0	- .7	5.6	6.7
a. U. S. Saving bonds	- .5	.1	.2	.6	.3	- .1
b. Other U. S. Government	- .8	- .1	---	1.7	1.8	1.9
c. State and local Government	.4	1.0	1.7	.5	1.4	1.9
d. Corporate and other	1.5	1.8	1.1	- .1	2.1	3.0
(1) Bonds and notes	- .1	.4	.4	- .1	1.8	1.3
(2) Preferred and common stock	1.7	1.4	.7	---	.3	1.7
4. Liquid saving (1+2+3)	8.8	12.9	11.4	9.5	14.9	16.8
5. Private insurance and pension reserves	5.4	6.5	6.8	7.3	7.6	7.9
a. Insured reserves	3.1	3.8	3.9	4.2	4.2	4.3
b. Insured pension reserves	1.0	1.1	1.1	1.2	1.3	1.2
c. Non-insured pension funds	1.4	1.6	1.7	1.9	2.1	2.4
6. Government insurance and pension reserves	4.2	4.4	3.2	2.6	3.1	3.7
7. Increase in individuals' debts	7.6	10.9	10.9	10.2	18.0	13.7
a. Mortgage debt	6.6	6.5	7.3	9.2	11.9	10.6
b. Consumer indebtedness	1.0	4.4	3.6	1.0	6.1	3.1
8. Change in net claims (4+5+6-7)	10.9	12.9	10.4	9.3	7.6	14.5
9. Non-farm homes	10.2	10.3	10.9	12.5	15.3	14.1
10. Construction and equipment of non-profit institutions	1.5	1.4	1.5	1.9	2.0	2.1
11. Consumer durable goods	27.1	26.6	29.8	29.4	35.7	34.0
12. Total gross saving (8+9+10+11)	49.7	51.3	52.7	53.0	60.6	64.6
13. Change in net claims excluding Government insurance (8-6)	6.7	8.5	7.2	6.7	4.5	11.0
14. Total gross saving excluding Government insurance (12-6)	45.5	46.9	49.4	50.3	57.5	60.9

SOURCE: Securities and Exchange Commission.

TABLE 10

Financial Assets and Liabilities of Individuals in the United States

Market value end of 1956

	($ Billions)
Financial Assets	
1. Currency and deposits	163.5
a. Currency	25.8
b. Demand deposits	56.0
c. Time and savings deposits	81.7
2. Savings and loan associations	37.0
3. Securities	423.8
a. U.S. Savings bonds	50.1
b. Other U.S. Government	18.4
c. State and local Gov't	20.3
d. Corporate and other	335.0
4. Private insurance and pension reserves	111.1
a. Insurance reserves	81.2
b. Insured pension reserves	12.3
c. Non-insured pension funds	17.6
5. Government insurance and pension reserves	61.2
6. Total financial assets (1 through 5)	796.6
Liabilities	
7. Mortgage debt	89.7
8. Consumer debt	37.0
9. Total liabilities	126.7
10. Total individuals' net equity (financial assets less liabilities)	669.9

SOURCE: Securities and Exchange Commission.

TABLE 11

Coverage, Contributions and Total Assets of Pension Funds

Projections 1960-1965

	Coverage (millions)			Contributions ($ Billions)			Assets ($ Billions)		
	Total 1/	Insured 2/	Non-insured	Total	Insured	Non-insured	Total	Insured	Non-insured
1951	9.3	2.8	6.0	2.4	1.0	1.4	13.3	6.4	6.9
1952	10.3	3.0	6.5	2.7	1.2	1.5	16.0	7.5	8.5
1953	11.5	3.2	7.3	3.1	1.3	1.9	18.8	8.6	10.2
1954	12.5	3.3	8.2	3.2	1.3	1.8	22.0	9.8	12.2
1955	13.4	3.5	8.9	3.4	1.4	2.0	25.3	11.1	14.2
1956	14.0	3.6	9.4	3.8	1.4	2.3	28.9	12.3	16.6
1960	17.0	4.0	12.0	4.8	1.6	3.2	47.1	17.9	29.2
1965	20.0	4.5	14.5	6.2	1.8	4.4	77.6	25.9	51.7

1/ Includes pay as you go as well as insured and non-insured funded plans.

2/ Excludes beneficiaries.

SOURCES: Coverage - Social Security Board.
Contributions - 1951-1956 - Institute of Life Insurance, adjusted, Securities and Exchange Commission.
Assets - 1951-1956 - Institute of Life Insurance, Securities and Exchange Commission.

TABLE 12

Distribution of Assets of Private Pension Funds

Projections 1960 - 1965

($ Billions)

	1956	1960	1965
U. S. Gov't Securities.........	2.3	2.3	2.1
Corporate bonds................	8.7	15.5	27.4
Common and preferred stock....	4.4	8.8	16.0
Other assets..................	1.2	2.6	6.2
Total assets..........	16.6	29.2	51.7