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ECONOMIC AND INVESTMENT REPORT 1976

A Report to the Membership
of the
American Council of Life Insurance
by

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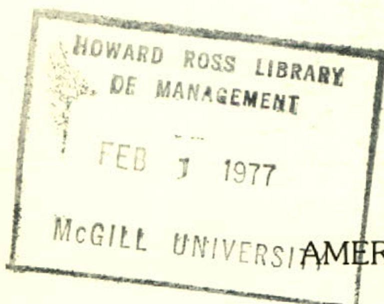

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1976 ECONOMIC AND INVESTMENT REPORT

Economic and Financial Outlook for 1977

Fiscal Stimulus to Spur the Economy

The faltering pace of economic growth in 1976 led to a growing consensus among businessmen, economists and political leaders that some form of government stimulus is needed in 1977 to boost the economy and reduce the unemployment rate to more satisfactory levels. At the same time, fears persist in many quarters that overly ambitious government programs may trigger a new wave of inflation and thereby prove to be self-defeating in the longer run. A delicate balance will be required if economic policymakers are to succeed in walking the narrow path between the pitfalls of inadequate growth and limited job opportunities on the one side, and the danger of accelerating inflation on the other.

The incoming Carter Administration has now outlined a package of fiscal stimulants on the order of $12 billion to $16 billion for fiscal year 1977, to be followed by ongoing stimulus of roughly similar magnitude for the 1978 fiscal year starting in October. The combined package of income tax rebates, permanent income tax cuts, and additional spending under various job programs is designed to bring down unemployment from the recent 8 percent rate to less than 7 percent by the end of 1977. President Carter's fiscal package will, of course, increase the size of the federal budget deficit in both the 1977 and 1978 fiscal years, in a conscious effort to raise the levels of both public and private spending. For fiscal 1977, the federal deficit is estimated to range somewhere above $70 billion, against a $66 billion deficit in the last full fiscal year ended in June. The outgoing Ford Administration, on the other hand, presented a fiscal 1977 budget that projected a $57 billion deficit, to which a proposed tax cut of $7 billion was an important contributor.

While the particulars of the new Administration's fiscal proposals are almost certain to undergo some modification before Congressional approval is obtained, it seems reasonable to assume, as the base line for a forecast of economic activity in 1977, that fiscal stimulus of about the proposed magnitude will be forthcoming. The full economic impact of the Carter proposals will be several months in coming because of the delay that is typical for consumer spending patterns to adjust to tax reductions and the lead time required to gear up federal spending programs. Not to be overlooked, however, are the effects on business and consumer psychology arising from the knowledge that an economic boost is on the way.

The most likely prospect for economic activity in 1977 is for year-over-year real growth of just over 5 percent, with rates in some quarters ranging above 6 percent. This would represent a considerable improvement over the sluggish advance of the final quarter of 1976, when the pace of real growth dipped to only 3 percent. Sectors expected to lead the growth in 1977 with above-average gains include autos and other consumer durables, plant and equipment outlays, residential construction, and federal nondefense spending.

The inflation rate in 1977, measured by the GNP price index, is expected to show a year-over-year increase close to 5-1/2 percent, with a rising trend in the latter part of the year to a rate above 6 percent by the final quarter. An important factor is likely to be the mounting pressure on capital goods prices, as business spends increasing amounts for new plant and equipment. The consumer price index is expected to rise in the neighborhood of 5 percent for the year, somewhat less than the GNP price index. Although the actual course of inflation can only be approximated at best, due to a number of doubtful factors such as crops and weather, it is significant that the preponderance of private forecasts for inflation in 1977 indicate a higher, rather than a lower, rate of general price advance.

There has been concern that the incoming Administration might demonstrate a greater willingness to intervene in the marketplace through direct controls over prices and wages as a means of holding back inflation. While there is a prospect that prices will rise somewhat faster in 1977 as the pace of economic activity quickens, there does not appear to be a visible threat of a runaway type of inflation that would make direct controls an active policy issue in the coming year. There remains a possibility, however, that some form of "guidelines" may come under consideration.

Prospects for Financial Markets

Financial market conditions in 1977 give every appearance of providing the support needed for an improving trend in real economic activity. In reviewing the prospective flows of money and capital from institutional lenders and other investor groups, the economics staff of the Council has been impressed by an apparent abundance of investible funds in relation to the expected demands from business firms, consumers, homebuyers, and the various levels of government.

A critical factor in the financial outlook, of course, is the role of the Federal Reserve. As described later, the slowdown in economic growth that developed last summer prompted the monetary authorities to adopt a more accommodative posture toward credit expansion through a series of easing actions. The present prospects are that this policy of accommodation will be continued only so long as economic growth remains laggard and until the effects of fiscal stimulus can have a decisive impact on business activity. As the year unfolds, the Federal

Reserve will be watchful of the economic impacts of tax changes and spending programs and ready to counter any inflationary developments that may emerge. If higher inflation rates appear, as many forecasters now believe, the Federal Reserve may be expected to tighten its monetary policy in order to dampen price trends that could damage business and consumer confidence and, indeed, threaten the durability of an economic expansion into 1978.

The Outlook for Interest Rates

Long-term interest rates as of mid-January have probably touched their lows for this phase of the current business cycle, with a sideways or firming rate trend in prospect during the first quarter of 1977. As the year opened, yields on corporate, municipal and Treasury bonds stood at their lowest levels in almost three years, fostering a rapid buildup in the corporate calendar of new issues. The resulting market congestion, accompanied by concern over the inflation outlook, led to a sudden reversal of the earlier downtrend in bond yields as well as cutbacks or postponements in some announced bond issues.

At the same time, institutional investment funds remain in ample supply, indicating an ability to absorb a fairly heavy volume of new corporate issues in the coming months. However, yield levels are likely to depend more on market psychology and unfolding economic events over the next few months than on simple demand-supply relationships. On balance, there is a greater likelihood for long-term rates to work higher than for a renewal of the downward slide that culminated in early January. Behind this expectation lies a belief that economic indicators in the months just ahead will show marked improvement, in contrast to the discouraging reports of late 1976.

By early spring, there is a strong possibility that financial market conditions will have changed in a number of fundamental ways. An improving trend in retail sales, bolstered by income tax cuts or rebates, would prompt a faster pace of inventory building and help to revive credit demands at the banks. A stronger trend in residential construction would generate further demand for mortgage funds at thrift institutions. An improvement in consumer and business confidence would encourage new orders for business plant and equipment. All these factors would represent substantial changes from the economic climate of late 1976, with obvious ramifications for market conditions and interest rate levels. If, in addition, the Federal Reserve moves toward a less accommodative credit position, market rates would clearly shift to higher ground, both in the short-term and long-term areas.

Later in the year, further upward pressures on long-term rates are expected to emerge. One new force is likely to be a higher pace of corporate borrowing to finance a stronger trend in plant and equipment spending. Although a strong

upsurge in price levels is not projected for 1977, financial markets are liable to react adversely to indications that the inflation rate is moving higher, since long-term investors must be concerned with the future direction of inflation and not merely the current level. A counter-inflation policy shift by the monetary authorities would be reflected first in higher short-term rates but would quickly spread to longer-term markets.

To quantify some of these expectations, it seems likely that 3-month Treasury bills could rise by next fall above 6-1/2 percent with the bank prime rate up as high as 8 percent. Yields on newly-issued Aa-rated utilities are expected to move up to 8-3/4 percent before the year-end. Mortgage interest rates may not rise by as much from current levels, since they have not declined by the magnitudes experienced by long-term bonds over the past year.

In summary, the gathering forces of faster economic growth, accompanied by an upturn in the inflation rate later this year, along with a progressive shift away from monetary accommodation by the Federal Reserve -- these basic forces are expected to bring a firming trend in market yields over the next few months and a more decisive move toward higher interest rates before the end of 1977.

Projected Financial Flows in 1977

The Council's economics department has drawn the financial market implications of expected economic developments and interest rate trends in 1977 in the form of estimates of the sources and uses of funds in the U.S. money and capital markets. Summary estimates for 1977 of projected flows are presented in Table 1, set against the experience of the preceding decade.

Total capital market flows are forecast to exceed $300 billion for the first time in 1977, reaching $320 billion. This total is about 16 percent above the previous year and compared with an advance of over 20 percent from 1975 to 1976. In addition to this slowdown in the growth of financial flows, shifts in the composition of demand and supply are foreseen. There is little in the projections to suggest, however, that any severe strains will be encountered in meeting the financial needs of the economy in 1977.

As Table 1 shows, projected budget deficits translate into net Treasury borrowings in 1977 of $75 billion, about $10 billion above the $65-1/2 billion in 1976, but well under the roughly $85 billion required in the recession year of 1975. Federal agency borrowing is estimated to rise to $20 billion in 1977, about $3 billion above the previous year. This increase in federal agency financing, coupled with the growth in financing required by the Treasury itself, will leave the combined claims on financial markets from these two sectors well above last year. The net issuance of tax-exempt securities is anticipated to reach $21-1/2 billion in 1977, up from $20 billion in 1976, reflecting a continuing demand for financing capital programs and some modest new short-term financing needs.

Table 1

Sources and Uses of Funds in the United States Money and Capital Markets, 1967-77
(In billions of dollars)

Sources of funds	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976e	1977e
Life insurance companies	8.4	8.6	8.7	9.2	12.0	13.3	15.9	15.6	19.0	24.0	26.0
Noninsured pension funds	5.5	5.9	6.2	6.8	7.4	6.5	7.8	8.1	13.8	15.5	16.5
State and local retirement funds	4.0	4.7	5.6	6.2	6.5	8.4	9.1	9.1	11.1	13.0	13.5
Savings and loan associations	9.1	9.7	9.6	12.1	27.0	34.4	26.1	19.0	36.6	50.0	55.0
Mutual savings banks	5.4	4.3	3.0	4.0	9.7	10.0	4.7	3.3	10.9	12.0	14.0
Commercial banking	37.4	40.1	17.6	36.6	51.3	75.4	83.4	62.2	29.4	44.0	70.0
Federal Reserve Banks	4.8	3.7	4.2	5.0	8.9	0.3	9.2	6.2	8.5	14.0	17.0
Federal loan agencies	5.5	5.4	6.5	10.5	9.5	8.8	13.3	25.3	30.8	26.5	28.5
Nonfinancial corporations	2.1	10.1	13.2	4.3	5.0	8.3	13.5	11.0	14.4	16.0	12.0
Fire and casualty companies	1.6	2.9	3.6	4.0	5.3	6.0	5.8	4.4	4.8	6.5	7.2
Real estate investment trusts	-	0.8	1.2	1.9	2.3	4.1	5.6	0.2	-4.9	-4.5	-3.0
Mutual funds	1.4	3.4	2.6	1.7	0.4	-1.8	-2.5	-0.2	0.3	-2.0	-0.7
Foreigners	2.7	2.4	1.3	11.0	27.3	10.7	5.1	12.4	10.4	16.0	19.5
Individuals and others	-3.3	3.6	30.4	0.9	-4.0	23.1	38.0	43.9	42.0	43.7	44.5
Total sources	84.6	105.6	113.5	114.2	168.6	207.6	235.0	220.7	227.1	275.0	320.0
Uses of funds											
Corporate and foreign bonds	17.2	15.1	14.5	23.8	24.8	20.1	13.6	27.2	38.1	37.0	32.0
Corporate stocks	2.4	-0.7	4.8	6.9	13.5	12.6	8.9	4.1	10.4	12.5	16.0
State and local gov't issues	8.0	9.8	10.6	11.3	17.9	15.7	16.6	20.2	17.5	20.0	21.5
Federal Government issues	8.2	9.8	-2.2	12.9	26.0	14.3	7.8	11.3	85.8	65.5	75.0
Federal agency issues	4.3	6.9	7.4	8.8	4.7	9.4	20.4	22.4	12.1	17.0	20.0
Mortgages: Residential	17.8	20.9	23.0	21.9	40.3	56.4	55.3	40.2	42.7	61.0	75.0
Nonresidential	6.7	8.9	7.6	8.0	12.3	20.4	24.6	20.3	16.3	17.0	20.0
Consumer credit	4.5	10.0	10.4	5.9	11.6	18.6	21.7	9.8	8.5	20.0	22.0
Commercial paper	3.4	4.1	11.4	0.5	-0.9	2.6	6.4	8.1	-1.5	4.0	2.0
Business loans	6.1	15.1	21.6	7.9	9.8	23.2	47.1	49.6	-13.3	6.0	20.5
All other loans	6.0	5.7	4.3	6.4	8.6	14.4	12.4	7.8	10.6	15.0	15.8
Total uses	84.6	105.6	113.5	114.2	168.6	207.6	235.0	220.7	227.1	275.0	320.0

e - Estimated.

The uses of funds measure the net changes in outstanding loans and securities; the sources of funds measure the net changes in ownership.

Because of rounding, components may not add to totals shown.

These developments in the government sectors are projected to occur at a time when business borrowings are increasing. The internal cash flow of the business sector is not expected to grow as rapidly in 1977 as in 1976, while dividend payouts and capital spending should accelerate. In this environment, the short-term financing needs of the business sector are likely to rise sharply, but substantial reliance on long-term debt and equity financing should persist.

The net issuance of corporate and foreign bonds is expected to continue high in 1977 at $32 billion, down about $5 billion from the near-record $37 billion in 1976. Virtually all of the decline in net bond flotations is projected to be for domestic corporations, with foreign bond issuance about the same as last year at $9 billion. Net issuance of corporate stocks is likely to increase to a new record of $16 billion in 1977, compared with the near-record $12-1/2 billion last year.

In the mortgage market, the net increase in outstanding debt is estimated to reach $95 billion in 1977, an all-time record. The residential market is expected to claim some $75 billion of this sum and the nonresidential market about $20 billion.

On the supply side, large inflows of funds into major financial institutions are projected to continue, and with some pickup in commercial bank lending, there should be sufficient funds to meet the credit needs of the economy without undue strain. Although interest rates are expected to move higher, it does not appear that rates will rise enough to trigger disintermediation either from deposit-type thrift institutions or from life companies.

The traditional long-term lenders are expected to show significant increases in net flows of funds to financial markets. Life insurance companies are estimated to provide $26 billion in 1977, compared with $24 billion in the previous year. Noninsured pension funds will supply an estimated $16-1/2 billion in 1977, a further gain from the $15-1/2 billion in the previous year. State and local retirement funds are likely to supply $13-1/2 billion in 1977, up slightly from 1976. The depositary thrift institutions--savings and loan associations and mutual savings banks--should provide $69 billion in 1977, a further growth over the $62 billion amount in 1976.

Commercial bank credit outstanding will rise an estimated $70 billion in 1977, up from a $44 billion increase in the previous year. This increase represents an 8-3/4 percent growth, against a 6 percent rise in bank credit during 1976. The most important source of bank credit growth expected in 1977 is business loans, which will expand by over $10 billion compared with declines of almost $2-1/2 billion in 1976 and nearly $15 billion in 1975.

Among other lender groups, federal loan agencies, fire and casualty companies, foreigners, and individuals and others (which includes state and local government operating funds, households and personal trusts) are anticipated to increase their supply of funds to money and capital markets in 1977. Nonfinancial corporations will supply what is estimated to be a still-sizable amount of funds, although less than in 1976. Declines in asset holdings are expected to persist for real estate investment trusts and mutual funds in 1977.

Life Companies in the Capital Markets

Life insurance companies are projected to supply an estimated $26 billion in net new money to financial markets in 1977, an increase of $2 billion over last year. This forecast reflects the expectation that the strong growth in life company assets since 1974 will continue into 1977.

Table 2 shows the Council's forecast for 1977 of the distribution of investible funds among various financial outlets against the background of the investment pattern of life companies over the preceding ten years. The format of Table 2 is designed to conform to the classification system for securities, mortgages, and loans and credit used in Table 1. The only changes are that "corporate and foreign bonds" are divided between domestic and foreign issues, and policy loans are identified as such, rather than as "all other loans" of which they are a component in Table 1. Foreign bonds in this flow-of-funds format include issues of Canadian corporate and governmental units and of the World Bank, as well as those of others classified as foreigners.

It is estimated that life companies will add $12.5 billion, or almost half of all their net new money, to their holdings of domestic corporate bonds in 1977. This projected amount will be a new high, though only slightly above last year when almost $12 billion were supplied to this market. The increase in net lending on corporate bonds by life companies will occur at a time when demands for funds by domestic corporations in the taxable bond market are projected to be decreasing. The continued emphasis by life companies on bond investments will reflect what are expected to be still-strong demands for funds in the private placement area and comparatively little demand from the mortgage market. There almost certainly remains a substantial amount of funding to be done by corporations in 1977, especially by lesser-rated corporations which account for much of the borrowing through direct placements. And as the demand for funding purposes subsides, borrowing to finance a projected pickup in capital spending is expected to become increasingly important.

An addition of $3 billion in foreign bonds to life companies' portfolios is expected in 1977, about the same as last year. Life companies have been increasing their net flow of funds to this market since 1974, particularly for Canadian issues which often carry a higher yield than can be obtained in U.S. markets with little, if any, difference in risk. In 1977, however, the availability of

Table 2

Life Insurance Companies as a Source of Funds in the Capital Markets
(In billions of dollars)

	Securities						Mortgages		Loans and Credit		
	Corp. & foreign bonds										
Year	U.S.	Foreign	Corp. stocks	State & local	Fed. Gov't	Fed. agency	Residential	Nonresidential	Comm. paper	Policy loans	Yearly total
1967	3.6	0.2	1.1	-0.1	-0.2	*	0.9	1.9	0.1	0.9	8.4
1968	3.7	0.2	1.4	*	-0.2	*	0.3	2.0	*	1.2	8.6
1969	1.9	0.2	1.7	*	-0.3	0.1	0.2	1.7	0.8	2.5	8.7
1970	1.6	0.3	2.0	0.1	-0.1	0.1	0.5	1.7	0.8	2.2	9.2
1971	5.5	0.1	3.8	0.1	-0.2	0.1	-1.3	2.4	0.6	1.0	12.0
1972	6.4	0.6	3.7	*	*	0.1	-1.7	3.1	0.2	0.9	13.3
1973	5.8	0.4	3.6	*	-0.4	0.1	-0.7	5.0	*	2.2	15.9
1974	4.2	0.4	2.2	0.3	-0.1	0.2	-0.3	4.9	1.1	2.7	15.6
1975	8.1	1.1	2.1	0.8	1.4	0.4	-1.5	4.2	0.7	1.6	19.0
1976e	11.9	3.2	2.8	1.1	0.5	0.8	-2.0	3.6	0.8	1.4	24.0
1977e	12.5	3.0	3.7	1.0	0.4	0.5	-1.5	4.5	0.5	1.3	26.0

*Less than $50 million.

e - Estimated.

Because of rounding, components may not add to totals shown.

Canadian issues to the U.S. market is not expected to increase beyond the already high amounts for 1976. Many Canadian borrowers that might tap foreign markets for funds often choose between the U.S. and Euro-markets, and it has been suggested that some of the borrowers that will enter these markets in 1977 have a preference for the Euro-markets.

The better performance of the stock market is expected to encourage a greater investment in equities in 1977. Net acquisitions of corporate stocks should reach an estimated $3.7 billion, close to the dollar amounts purchased in the buoyant market environment of 1971-72, but a much smaller share of available investment funds than in the earlier period. Common stock holdings are expected to increase markedly in 1977, with good advances in common stock prices. Net acquisitions of preferred stocks by life companies are likely to slow in 1977 after reaching a three-year high of $850 million in 1976.

Life companies' net investment in mortgages is expected to rise to $3 billion in 1977, up from $1.6 billion in 1976. This would be the largest amount in three years, but still far below the $4.3 billion and $4.6 billion taken in 1973 and 1974, respectively. Life companies are expected to continue to run down their portfolios of home mortgages, and with only a modest recovery in demands for multifamily mortgage financing in sight, the declines in holdings of residential mortgages by life companies should persist in 1977, although by less than in 1976.

By contrast, the net increase in nonresidential mortgages should advance to $4.5 billion from the recent low of $3.6 billion in 1976. This advance will not, however, bring net lending in these mortgages back to the amounts reached in 1973 and 1974. Nevertheless, it is likely that even this modest revival of demands for financing nonresidential properties portends a more active market for commercial and industrial mortgages in 1978.

Net investment by life companies in state and local government securities is expected to be $1 billion in 1977, about the same as last year. As can be seen from Table 2, however, net acquisitions of municipals by life companies have been relatively large since 1974, after showing little change for some years before. What is notable about the recent trend is that the higher level of net purchases has persisted, even aside from the special factors which swelled these amounts in 1975.

Life companies are also expected to continue to find long-term Treasury issues attractive, although net acquisitions should diminish somewhat as fewer coupon issues are offered in 1977 than in the previous year. The holdings of federal government securities, including short-term and long-term, are projected to advance $400 million in 1977, only a bit less than in 1976.

Federal agency issues are likely to continue to offer good yields, and life companies will again increase their holdings of these securities in 1977, although at a slower rate than in the previous year. Apparently in 1976 some life companies

found GNMA pass-throughs a useful addition to their portfolios. While the sums involved were quite small, it will be interesting to watch whether Ginnie Mae's grow in importance to life companies in the future.

Finally, the net increase in policy loans is expected to be only $1.3 billion in 1977, slightly below the reduced outflows of the previous two years. There is little in the economic and financial outlook to suggest the view that policy loans will emerge in 1977 as the problem they were in 1973-74 or in 1969-70 when an upsurge in market interest rates spurred this type of borrowing to record highs.

Economic and Financial Developments in 1976

A Faltering Pace of Economic Advance

The post-recession expansion of the American economy slipped into low gear during 1976, disappointing earlier expectations of a more satisfactory growth trend. After a strong first-quarter surge in business activity, retail sales flattened out, business capital spending failed to measure up to anticipated levels, and the rate of real growth moved lower in each of the next three quarters. This loss of forward momentum was dramatized by a rising trend in the unemployment rate to 8 percent in November. Indeed, concern for the general health of the economic recovery became an important issue in the national election campaign and led to calls for government stimulus of the economy by a large number of economists and business leaders.

In real terms, after adjusting for price changes, gross national product rose about 6.2 percent in 1976, following a decline of nearly 2 percent in 1975. As Table 3 shows, however, the real growth rate in 1976 was buoyed by an exceptionally strong first-quarter advance in excess of 9 percent. In that quarter, production gains were rapid, as consumer spending accelerated and businessmen, with memories of actual shortages in 1974, shifted their inventory policies from liquidation to accumulation. In the second quarter, however, a growing sense of uncertainty about the long-term strength of the economy began to pervade the business community as it became apparent that the previous growth in sales was not sustainable in light of the slow increases in real disposable incomes. Businesses began to curb the pace of inventory investment, production decelerated, and income growth was further dampened. Moreover, rising interest rates in the spring sparked fears among builders of a renewal of tight money, and housing activity gave little push to overall economic activity. As a result of these factors, the GNP measure of real growth showed a pronounced slowdown in the second quarter to 4-1/2 percent.

Many analysts had been expecting that consumer expenditures would settle back in the late spring or early summer, but business capital spending was then expected to provide an offsetting source of strength that would push the economy upward and assure a continued rapid expansion in total activity into 1977. But the growing sense of caution, aggravated by a number of significant strikes, caused businesses to hold back. The hoped-for pickup in capital spending did not materialize. The real growth rate slipped to 3.9 percent in the third quarter and still further to 3 percent in the final quarter.

On the inflation front, the GNP price deflator rose about 5 percent in 1976, a marked improvement over the alarming pace of 9.3 percent in 1975 and 10 percent in 1974 (see Table 3). The slowdown in the inflation rate was evident in the

Table 3

Gross National Product, 1974-1976

(Seasonally adjusted annual rates)

Year and Quarter	GNP (current dollars) Level	Change	Annual Growth Rates: Current dollars	Real growth	Price factor
	(In billions of dollars)		(In percent)		
1974 I	$1,372.7	$ 17.6	5.3%	-3.9%	9.5%
II	1,399.4	26.7	8.0	-3.1	11.5
III	1,431.6	32.2	9.5	-2.6	12.4
IV	1,449.2	17.6	5.0	-6.8	12.7
1975 I	1,446.2	-3.0	-0.8	-9.9	10.1
II	1,482.3	36.1	10.4	5.6	4.5
III	1,548.7	66.4	19.1	11.4	7.0
IV	1,588.2	39.5	10.6	3.3	7.1
1976 I	1,636.2	48.0	12.6	9.2	3.2
II	1,675.2	39.0	9.9	4.5	5.2
III	1,709.8	34.6	8.5	3.9	4.4
IVp	1,748.5	38.7	9.4	3.0	6.2
Calendar 1974	1,413.2	106.6	8.2	-1.7	10.0
1975	1,516.3	103.1	7.3	-1.8	9.3
1976p	1,692.4	176.1	11.6	6.2	5.1

p - Preliminary.

Source: U.S. Department of Commerce.

first quarter when the deflator rose only 3.2 percent, less than half the rate for the last half of 1975, as actual declines in food and energy prices partly offset increases in other items. When food and energy prices stopped declining, the overall inflation rate moved up to 5.2 percent in the second quarter. The rise in the GNP price index eased to 4.4 percent in the third quarter but rose above 6 percent in the closing quarter of 1976.

The consumer price index (CPI) increased almost 6 percent, compared with 9 percent in 1975. The rate of change in the CPI slowed dramatically in the first quarter, quickened in the second and third quarters, and moderated in the fourth. The overall wholesale price index rose about 4-1/2 percent in 1976, somewhat restrained by declines in farm prices, but industrial commodity prices, generally taken to be indicative of future trends in consumer prices, increased at a rate faster than 6 percent. This rapid advance is particularly distressing in an environment of sluggish economic activity and excess capacity of manpower and productive facilities.

Supportive Financial Markets

In general, conditions in financial markets in 1976 were supportive of continued economic expansion; funds were available in ample quantities to meet the moderate credit demands for capital and credit. Indeed, interest rates, rather than advancing as is typical of an expansion period, declined by significant amounts over the course of the year.

As depicted in Charts A and B, yields on long-term debt securities declined in all sectors of the bond market, reaching their lowest levels in nearly three years. These declines contrasted with an essentially sideways pattern of bond yields in 1975. Among the yields shown in Chart A, the largest declines in 1976 were for municipal issues, as rates on Treasuries and prime corporates fell by only about half as much. But the most dramatic drops were in yields on lower-rated corporates (Chart B). In the public market, new issue yields on Baa corporates fell by more than 300 basis points from their all-time highs of December 1975. Commitment rates on fourth-quality credits in the private placement market fell by much less, but nevertheless were down by significant amounts.

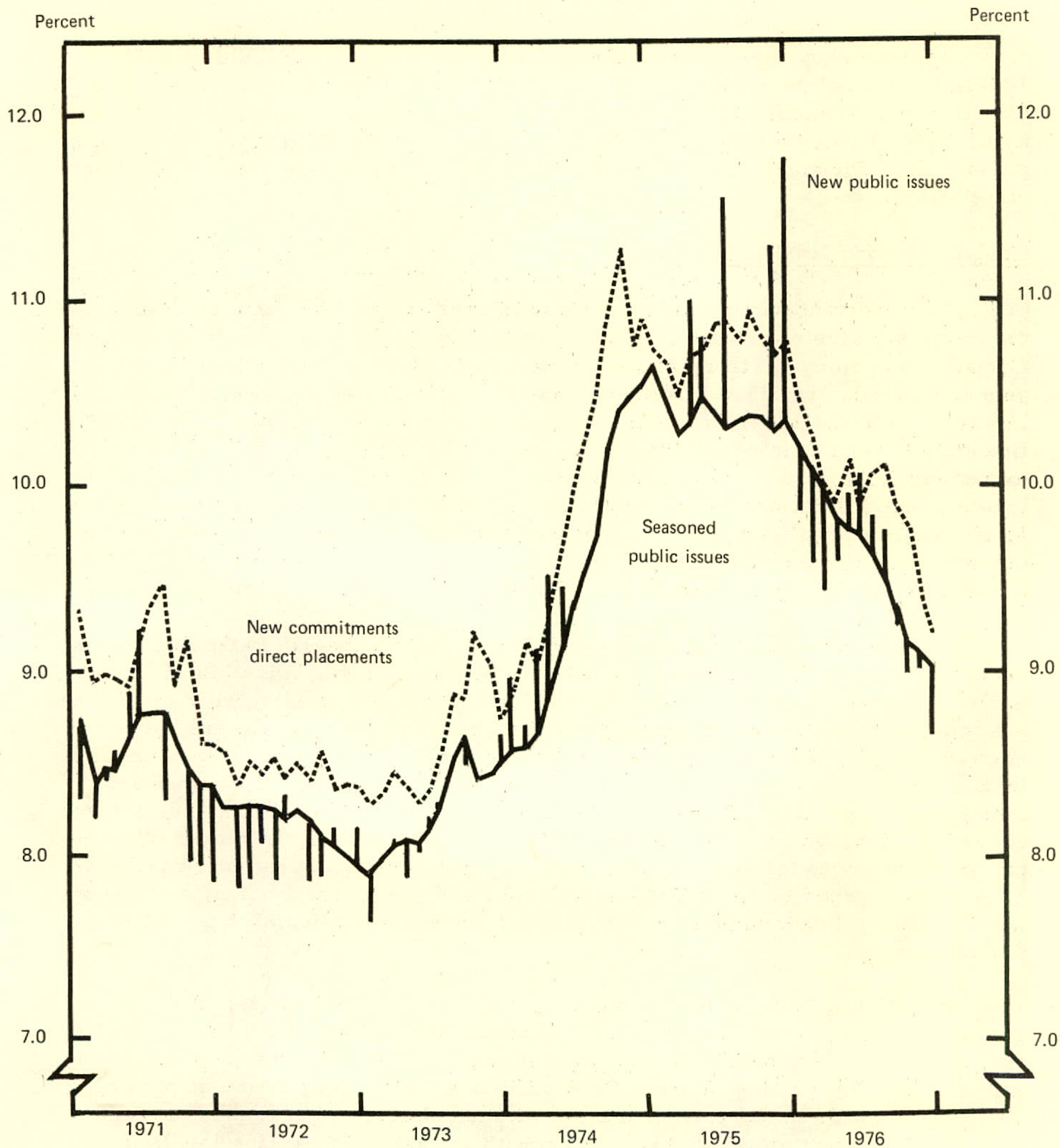
Short-term rates also fell on balance in 1976, reaching their lowest levels since 1972. Continuing the trend begun after the summer of 1975, rates dropped further in early January and then levelled off until late April. At that time, in response to a series of Federal Reserve tightening moves to counteract temporarily large increases in the monetary aggregates, short-term rates backed up sharply, touching highs for the year in early June. After June, however, as the aggregates slowed, the Federal Reserve eased and short-term rates drifted downward. These declines became more pronounced later in the year when the Federal Reserve, apparently impressed with the evidence of a still sluggish economy, clearly demonstrated its intent to ease further. The discount rate was reduced to 5-1/4 percent in November, and the federal funds rate was allowed to fall in

Chart A

Yields on Prime Bonds

Chart B

Yields on Baa Corporate Bonds



stages to the 4-5/8 percent range by late December. Finally, reserve requirements on net demand deposits of member banks were reduced in December for the first time since February 1975.

By year-end, the prime rate was 6 to 6-1/4 percent at leading banks, some 100-125 basis points below the 7-1/4 percent rate prevailing in early January. Three-month Treasury bill rates closed the year at about 4-1/4 percent, nearly a full percent below early January levels, and prime 4- to 6-month commercial paper traded for about 4-5/8 percent, well below the nearly 6 percent level at the start of 1976.

Corporate Bond Market Trends

An important factor helping to ease interest rates downward in 1976 was the moderate size of private credit demands, especially in the business sector. Corporations enjoyed strong profits growth in 1976 which buoyed internally-generated funds and aided in keeping external financing needs well below the levels of 1973 and 1974. For corporations as a group, the composition of external financing served to improve liquidity. Demands for short-term funds were extremely light, and many corporations used the proceeds from the still-high levels of bond flotations to pay down bank loans and build up liquid asset positions. Moreover, an improved stock market encouraged corporations to issue a large volume of equities which, along with the rise in profits, strengthened capital structures and improved financing flexibility.

Many lesser-rated corporations did much better in 1976 in finding a more receptive market for their debt issues. Some concern was voiced in 1975 and early 1976 that the liquidity rebuilding efforts of the corporate sector were being accomplished by prime borrowers, but that lower-rated corporations were encountering difficulties in approaching the corporate bond market because of lender insistence on superior credit quality. Baa-rated credits claimed less than 4 percent of all funds raised in public offerings in Moody's top four rating grades in 1975, but in 1976 they accounted for 14 percent of the total. The improved receptivity for these credits was also reflected in a dramatic narrowing of the yield spread between Baa-rated issues and prime corporates, as lenders were attracted to the higher yields on lower-rated issues during a period of declining rates.

In addition to the public market's growing acceptance of less-than-prime quality credits, the private placement market, where many lenders have had long experience in this type of lending, enjoyed a record year. After registering an average monthly volume of about $990 million in 1975, the placement of corporate and foreign bonds in the private market increased about 50 percent to around $1,500 million per month in 1976. Even with the record financing levels in the private placement market, only a small decline in volume occurred in the public market, where the average monthly volume of corporate and foreign debt issues was nearly $2.7 billion in 1976, only slightly below the $3.2 billion volume of 1975.

Another significant development in the bond market in 1976 was the record high volume of flotations by Canadian and other foreign borrowers in U.S. capital markets, continuing the strong growth in these issues begun in 1975. In the public market alone, about 19 percent of gross issues in 1976 were foreign, up slightly from 14 percent in 1975, and significantly above the 6 percent and 5 percent proportions in 1974 and 1973, respectively. In the private market, it was estimated that between a fifth and a quarter of all gross new issues were foreign, compared with only 10 percent in 1975. Part of the explanation for the heavy volume was that U.S. bond rates were below the rates in all major international financial centers except Switzerland and West Germany.

A large number of the foreign issuers tapping the U.S. market were Canadian, as yield spreads significantly favored borrowing in the United States, In fact, the largest private placement ever arranged in the United States by a foreign borrower was the $1 billion financing by Hydro-Quebec with 10-1/4 percent 20-year debentures. New issue activity, however, was not confined to Canadian borrowers; other foreigners also found receptive markets in the United States.

Mortgage Market Developments

A significant development in 1976 that had a bearing on the corporate bond market was the comparatively weak demand for funds in the market for income-property mortgages. The response of life companies was to channel a larger proportion of their funds into corporate bonds in 1976 than in the previous year. The multi-unit housing market in 1976 recovered little of the ground lost in the 1974-75 recession, with starts still running about 50 percent below the peak rates of 1971-73 by late in the year. A revival in this market was inhibited by the sharp rises from 1972 to 1976 in average operating expenses for rental buildings at a pace nearly twice as fast as average rent levels. Rents were held down by rent controls in some areas and by an over-supply of rental units in some regions. This combination of factors served to squeeze profit margins on existing structures and offered limited opportunities for developers to undertake new construction.

In 1976, the value of commercial construction put-in-place was virtually flat, and the value of industrial construction showed a further small decline, In some regions, an oversupply of many types of industrial properties as well as commercial structures, such as office buildings, remained an important influence depressing the market. Moreover, from 1973 until the last half of 1976, construction costs on commercial and industrial buildings were rising at rapid rates, and other costs associated with delays in meeting the requirements of zoning, environmental, and building codes were also critical.

Money and Capital Market Flows in 1976

The declines in interest rates registered in 1976 partly reflected the fact that increases in the demand for funds were met by abundant supplies of credit, with especially strong flows through financial institutions. According to preliminary estimates prepared by the Council's economics department, total finance flows in 1976 increased to $275 billion, about $50 billion above the levels of the two previous years.

A systematic analysis of the credit flows through financial markets in 1976, based on partial and incomplete data, is shown in Table 5. To facilitate comparison with the previous year, data for 1975 are shown in Table 4. The amounts referred to in the tables are net increases in outstanding debt of borrowers (rather than gross flotations of new issues) and net changes in holdings of specified assets by investors.

This year, for the first time, the Council is incorporating into its estimates the net new issues by foreigners of bonds in the U.S. financial markets, in recognition of the growing importance of these issues to life companies and to other institutional lenders. In line with standard practice in flow-of-funds accounting, bond issues by foreigners include bonds issued not only by foreign corporations but also by foreign governments and international organizations, such as the World Bank and the various Canadian provinces and municipalities. Reflecting this change, a new classification of "corporate and foreign bonds" is introduced in the tables on sources and uses of funds.

Major savings institutions. One of the most significant developments in the money and capital markets in 1976 was the continuation of extraordinarily large inflows to the major savings institutions, which, in turn, were able to meet a sustained high demand for long-term funds by businesses, governments, and households. All of these institutions--life insurance companies, noninsured pension funds, state and local retirement funds, savings and loan associations, and mutual savings banks--posted record lending levels.

Life insurance companies supplied $24 billion to U.S. money and capital markets in 1976, as industry cash flow reached new highs. By far the largest part of these funds, an impressive $15.1 billion, went to the corporate and foreign bond markets. Life companies reduced their net investment flows into nonresidential mortgages to only $3.6 billion, well below the previous peak in 1973 when $5 billion in funds were supplied. Holdings of residential mortgages were reduced by $2.0 billion in 1976, compared with $1.5 billion in 1975. The runoff in home mortgages was about the same in 1976 as in 1975, but for the second year, life companies actually reduced their holdings of multifamily mortgages.

Table 4

Sources and Uses of Funds in the United States Money and Capital Markets in 1975
(In billions of dollars)

Sources of funds	Securities					Mortgages		Loans and Credit				Total sources of funds
	Corp. & foreign bonds	Corp. stocks	State & local	Fed. Gov't	Fed. agency	Residential	Nonresidential	Consumer credit	Commercial paper	Business loans	All other loans	
Life insurance companies	9.3	2.1	0.8	1.4	0.4	-1.5	4.2	-	0.7	-	1.6	19.0
Noninsured pension funds	2.8	5.8	-	4.8	0.4	-0.1	0.1	-	-	-	-	13.8
State-local retir. funds	5.0	2.4	1.9	0.6	0.7	0.2	0.4	-	-	-	-	11.1
Savings and loan assns.	-	-	0.6	2.3	4.1	25.1	4.5	*	*	-	-	36.6
Mutual savings banks	3.5	0.2	0.6	2.2	1.7	1.7	0.7	0.2	0.1	-	-	10.9
Commercial banking	1.8	*	1.7	28.8	1.4	0.8	3.5	2.9	-2.6	-14.9	6.0	29.4
Federal Reserve Banks	-	-	-	7.4	1.0	-	-	-	-	0.1	-	8.5
Federal loan agencies	-	-	0.2	1.5	4.5	16.6	2.6	-	-	2.3	3.1	30.8
Nonfinancial corporations	-	-	-0.2	9.0	-0.7	-	-	1.3	2.8	2.2	-	14.4
Fire and casualty cos.	2.2	-0.7	1.8	1.9	-0.4	-	0.1	-	-	-	-	4.8
Real estate inv't trusts	-	-	-	-	-	-3.1	-1.8	-	-	-	-	-4.9
Mutual funds	1.0	-1.1	-	0.8	-	-	-	-	-0.4	-	-	0.3
Foreigners	0.6	4.7	-	8.1	-	-	-	-	-	-3.0	-	10.4
Individuals and others	11.9	-3.0	10.1	17.0	-1.0	3.0	2.0	4.1	-2.1	-	-	41.9
Total uses of funds	38.1	10.4	17.5	85.8	12.1	42.7	16.3	8.5	-1.5	-13.3	10.6	227.1

*$50 million or less.

The uses of funds measure the net changes in outstanding loans and securities; the sources of funds measure the net changes in ownership.

Because of rounding, components may not add to totals shown.

Table 5

Estimated Sources and Uses of Funds in the United States Money and Capital Markets in 1976
(In billions of dollars)

Sources of funds	Securities					Mortgages		Loans and Credit				Total sources of funds
	Corp. & foreign bonds	Corp. stocks	State & local	Fed. Gov't	Fed. agency	Residential	Nonresidential	Consumer credit	Commercial paper	Business loans	All other loans	
Life insurance companies	15.1	2.8	1.1	0.5	0.8	-2.0	3.6	-	0.8	-	1.4	24.0
Noninsured pension funds	2.1	8.0	-	4.0	1.5	*	*	-	-	-	-	15.5
State-local retir. funds	5.0	3.0	2.5	1.5	0.4	0.3	0.2	-	-	-	-	13.0
Savings and loan assns.	-	-	*	2.0	1.4	41.0	5.3	0.1	0.2	-	-	50.0
Mutual savings banks	2.5	0.1	1.2	1.2	3.0	3.2	0.5	0.3	*	-	-	12.0
Commercial banking	1.0	*	2.5	17.0	-0.5	5.0	5.5	6.5	0.3	-2.3	9.0	44.0
Federal Reserve Banks	-	-	-	13.1	1.0	-	-	-	-	-0.1	-	14.0
Federal loan agencies	-	-	0.5	2.0	2.3	12.7	2.9	-	-	1.6	4.5	26.5
Nonfinancial corporations	-	-	-1.5	5.0	-0.5	-	-	5.3	2.7	5.0	-	16.0
Fire and casualty cos.	1.0	0.5	4.0	1.0	*	-	*	-	-	-	-	6.5
Real estate inv't trusts	-	-	-	-	-	-2.5	-2.0	-	-	-	-	-4.5
Mutual funds	1.0	-1.7	-	0.4	-	-	-	-	-1.7	-	-	-2.0
Foreigners	1.0	4.0	-	9.3	-	-	-	-	-	1.7	-	16.0
Individuals and others	8.3	-4.2	9.7	8.5	7.6	3.3	1.0	7.8	1.7	-	-	43.7
Total uses of funds	37.0	12.5	20.0	65.5	17.0	61.0	17.0	20.0	4.0	6.0	15.0	275.0

*$50 million or less.

The uses of funds measure the net changes in outstanding loans and securities; the sources of funds measure the net changes in ownership.

Because of rounding, components may not add to totals shown.

The generally improved tone of the corporate stock market encouraged life companies to step up their net acquisitions of common and preferred stocks to $2.8 billion in 1976, well above the $2.1 billion in 1975 but still below the peak of $3.8 billion in 1971. The holdings of federal government securities by life companies increased by $500 million in 1976, as against $1.4 billion in the previous year. Life companies further expanded their holdings of municipals by $1.1 billion in 1976, following the unusually large purchases of $800 million of state and local government securities in 1975. A more extensive discussion of life company investment operations is presented in the next section of this report.

Noninsured pension funds again posted a healthy gain in lending volume to an estimated $15.5 billion in 1976 from $13.8 billion in the previous year. With the better performance of the stock market in the last two years, these funds have once again found equities attractive, with net acquisitions reaching $8 billion in 1976, well above the $2.3 billion purchased in the weak market of 1974. The return to a larger volume of stock purchases was accompanied by a slackening of interest in corporate and foreign bonds. Net purchases of corporate bonds were only about $2.1 billion in 1976, almost $1 billion less than in 1975 and $3 billion below the high in 1974. Noninsured pension funds acquired $4 billion of Treasury securities in 1976, only slightly less than the $4.8 billion in 1975.

State and local retirement funds experienced a sizable jump in their available funds and as a consequence again increased their lending in financial markets appreciably to $13 billion in 1976, compared with $11 billion in the previous year and $9 billion in 1974. Their net acquisitions of virtually all types of securities increased in 1976. Perhaps most interesting, however, was the continued heavy support of the municipal bond market by the state and local retirement funds. Their net purchases of state and local government securities reached $2-1/2 billion in 1976, up $600 million from 1975, the first year in some time that they had had more than negligible activity in this market.

Savings and loan associations, the largest institutional lender group after the commercial banks, experienced record savings inflows which enabled these institutions to invest some $50 billion in money and capital markets, up from $36-1/2 billion in 1975 and well ahead of the depressed $19 billion investment flow in 1974. In fact, savings and loans placed nearly $46-1/2 billion in the mortgage market in 1976, more than they invested in all markets in 1975. Most of their mortgage lending was on single-family properties, reflecting the renewed strength of new home construction as well as the high turnover rates on existing properties. Mutual savings banks were also beneficiaries of a large inflow into savings deposits, and they too stepped up their lending significantly from nearly $11 billion in 1975 to $12 billion in 1976. As is typically the case, the savings banks were more diversified in their investments than savings and loans, placing about equal amounts of funds into residential mortgages, corporate bonds, and federal agency securities, a large part of which were GNMA pass-throughs.

Commercial bank loans and investments. Reflecting a continuing weakness of business loan demand, commercial bank credit increased by a relatively modest $44 billion in 1976, about $15 billion more than in 1975. The increases in bank credit in 1975 and 1976 were particularly low for a period which embraced the beginning of an economic recovery and the movement into an expansion phase of the business cycle. Bank credit advanced only 4 percent in 1975 and a bit less than 6 percent in 1976, compared with over 14 percent in both 1972 and 1973. As Table 5 shows, business loans declined by over $2 billion in 1976, reflecting in part the continuing efforts by corporations to restructure their balance sheets by paying down bank loans with the proceeds from long-term financings. Moreover, many commercial banks did not aggressively seek new business loans as they continued to be concerned about their capital positions.

In another segment of the loan account, commercial banks sharply stepped up their net extensions of consumer credit to $6-1/2 billion in 1976 from about $3 billion in the previous year (Tables 4 and 5). Mortgage holdings were increased about $11 billion in 1976, some 2-1/2 times the growth in 1975. A large part of this increase was in home mortgages, but growth in commercial mortgage lending was also important.

Net acquisitions of securities by commercial banks declined to $20 billion in 1976 from nearly $34 billion in 1975, mainly reflecting reduced takings of Treasury securities to $17 billion in 1976 from about $29 billion in the previous year. Commercial banks increased their net purchases of state and local securities slightly to $2.5 billion in 1976, following $1.7 billion of additions to bank portfolios in 1975.

Other investor groups. Fire and casualty companies, with the upward adjustments in rates that were allowed in many lines, enjoyed a record growth in premiums in 1976, and underwriting results were generally improved. As a result, there was a large increase in available funds from this source in 1976 to $6.5 billion from $4.8 billion in the previous year and $4.4 billion in 1974. With underwriting losses and loss carry-forwards still a factor in the investment decisions of many companies, continued additions to corporate bond portfolios were recorded in 1976. Even so, improved underwriting results and the longer-run advantages of investment in tax-exempts induced net purchases of $4 billion of municipals in 1976, more than double the $1.8 billion of the previous year. Fire and casualty companies also renewed their interest in corporate stocks in 1976. The memory of the effects on surplus of falling equity prices in 1974, however, remained a dampening influence on new equity purchases. Net acquisitions of corporate stocks were about $500 million, well below the $2.4 billion level of 1973.

Foreigners were also major suppliers of funds in 1976, increasing their flow of funds to U.S. money and capital markets to $16 billion from $10-1/2 billion in 1975. Foreign central banks as well as private foreign investors continued to purchase huge amounts of government securities, and the renewed growth in world

trade encouraged lending in the bankers' acceptances market (classified as business loans in the tables). Most interesting, however, was the continued strong investments in the corporate stock market, with over $4 billion flowing to this market from both private and official sources abroad.

The residual category, "individuals and others," includes along with households, personal trusts and nonprofit organizations, the operating funds of state and local governments, credit unions, and mortgage companies. Lenders included in this category supplied over $43 billion to money and capital markets in 1976. Of this amount, over one half was supplied by households and personal trusts which concentrated their investments in federal government and agency securities. The operating funds of the states and localities accounted for another third of the $43 billion provided by "individuals and others." The general funds of these entities invested heavily in federal government and agency issues.

Demand for capital and credit. On the demand side, the Treasury was the largest user of funds for the second straight year, raising $65-1/2 billion in net new money in 1976. In line with recent debt management objectives, the Treasury also managed a modest lenghtening of the average maturity of the government debt with a heavy use of note issues. As a consequence, the long-term decline in the average length of that portion of the debt held by private investors was reversed. Federal agency financing, a large part of which was GNMA pass-through securities, increased in 1976 to $17 billion, up from about $12 billion in the previous year.

State and local governments increased their outstanding debt in 1976 by $20 billion, compared with the $17-1/2 billion increase of 1975 and the record-breaking $20-1/4 billion rise of 1974. The increase in state and local government borrowing activity centered in the long-term bond area, as the states and localities continued to reduce their short-term indebtedness in 1976. Net issuance of long-term debt, including pollution control bonds, rose $23 billion in 1976, compared with about $19-1/2 billion in 1975.

Taken together, borrowings by the U.S. Treasury, federal agencies, and state and local governments accounted for nearly 40 percent of all funds raised in the money and capital markets. Although this was a very high proportion in the postwar context, it was well below the 50 percent of all credit market funds claimed by these sectors in 1975.

Net issuance of corporate and foreign bonds was an estimated $37 billion in 1976, down only slightly from the $38 billion record of the previous year. The high volume in 1976 was again largely due, as in the previous year, to the massive efforts by business corporations to restructure their balance sheets to correct the imbalances which had developed in 1973-74. Utilities and manufacturing firms continued to be the major issuers, but finance companies were also important borrowers in the bond market in 1976. A more receptive stock market made it

possible for net new stock issues to reach $12-1/2 billion in 1976, only $1 billion less than the record increase of 1971, providing a much-needed addition to the equity base of many sizable business corporations. Business had less need to borrow at short-term in 1976 than in comparable phases of earlier business cycles. Business loans expanded by only about $6 billion in 1976, and the net increase in commercial paper outstanding was about $4 billion.

Benefiting from the huge influx of funds into the traditional mortgage lending institutions, residential mortgages outstanding rose by $61 billion in 1976, substantially above the increase of $42-1/2 billion in 1975 and $40-1/4 billion in 1974. The jump in residential mortgage lending reflected a rise in housing starts to about 1.5 million units in 1976, up from 1.2 million units in the previous year, as well as a sizable rollover and refinancing of existing housing inventory. The largest part of total residential mortgage lending was for home mortgages where the net increase in outstandings soared to a record $59 billion. Net borrowing on multifamily properties was only about $2 billion, following an actual decline in this form of debt in 1975. The net increase in nonresidential mortgages outstanding was about $17 billion in 1976, up less than $1 billion from 1975, with all of the growth in farm mortgage loans.

Net extensions of consumer credit rose to about $20 billion in 1976, more than double the recession-year increase of only $8-1/2 billion in 1975 and almost equal to the $21-3/4 billion record set in 1973. A large proportion of the growth in consumer credit went to finance consumer durables purchases, particularly of automobiles. Sales of domestic and foreign automobiles exceeded 10 million units in 1976, compared with 8-1/2 million units in 1975.

Investment Operations of U.S. Life Insurance Companies in 1976

Investment funds of life insurers reached unparalleled heights in 1976. In finding outlets for the growing amount of funds, the companies channeled the major part into corporate bonds and unusually large amounts into foreign government and international agency bonds as well as bonds and notes of the U.S. Treasury, federal agencies, and state and local governments. Bond investments were stepped up not only because of the increased inflow of investment funds but also because of the prolonged weakness in the market demands for the mortgage financing of income-producing properties. A significant amount of funds that otherwise would have been allocated to mortgages was instead diverted to bond investments, particularly corporate bonds, where demands continued strong. Investments in common stocks were the largest in three years, not only for the separate accounts but for the general accounts as well, and the net investment in preferred stocks was maintained in good volume. Throughout the year, the net demand for policy loans was stable at a low level, even below the reduced amount of 1975.

Major Investment Outlets

In the following sections covering the major investment outlets of life companies in 1976, the focus is on net long-term investments, which were estimated at $24-1/2 billion in 1976, an increase of 25 percent from 1975. This total excludes short-term debt instruments and includes real property, in contrast to the amount entered for life insurers in the sources and uses tables presented earlier. Estimates of year-end 1976 assets and changes in assets, together with the actual figures for 1974-75, are provided in Tables A-1 and A-2 of the Appendix to this report.

Corporate bonds. Corporate bonds accounted for over half of the net long-term investments made by life insurance companies during 1976. Holdings of domestic and foreign corporate bonds increased by $13 billion, or nearly 13 percent, to total $114 billion at the end of the year. The 1976 increase compared with the previous high of $8.6 billion in 1975 and $4.4 billion in 1974-- both figures reflect adjustments for valuation changes.

The predominant part of life company investments in corporate bonds is accounted for by direct placements, but the magnitude of the 1976 figures indicates sizable purchases in the public market as well, not only by the companies that normally deal in public offerings but also by larger companies that ordinarily prefer private placements. While total corporate bond offerings declined in 1976 from the record 1975 amount, private placement offerings increased sharply, as they also had in 1975. The resurgence in private placement financing largely reflected the increased availability of funds from life insurers, who are still the largest lenders in this market, although other institutional lenders, principally noninsured pension funds, state and local retirement funds, and savings banks, have increasingly participated in private placement financing in recent years.

Privately placed corporate bond offerings during 1976 were estimated to come close to $15 billion, nearly 50 percent above the $10.2 billion sold in 1975. These totals include foreign corporates placed in the U.S. but exclude the private offerings of foreign governments. The offerings figures reflect amounts paid for in a year, excluding takedowns deferred to subsequent years.

In 1976 there were numerous private placements of the smaller issues that are typically found in this market as well as a good number of large issues, though none so large as the record $1.75 billion Sohio/BP Trans Alaska Pipeline financing arranged in 1975. In 1976, however, Sohio/BP tapped the private placement market for another $500 million, of which about 65 percent was scheduled for takedown by U.S. life insurance companies during 1976-77, and even larger borrowings of up to $1 billion were arranged by Canadian provincial utility authorities.

Foreign government and international. The increased pace of investment by life insurers was particularly noticeable in the issues of foreign governments and international agencies.[1/] Holdings of these bonds increased by 46 percent, or $2.1 billion, to total $6.6 billion at the end of 1976. The 1976 net investment was over three times the 1975 amount and ten times the 1974 figure. There were numerous public offerings in the U.S. capital market by foreign governmental entities and international agencies during 1976. In addition, a number of private placement offerings fell in this category, most notably three sizable utility issues of Canadian provincial governments--a $1 billion issue by Hydro-Quebec, a $650 million issue by Ontario Hydro, and a $500 million issue by British Columbia Hydro and Power--all heavily subscribed by life insurers.

Corporate stocks. The net investment in common stocks for both the separate and general accounts of the companies came to an estimated $2 billion, about 8 percent of 1976 long-term net investments. In addition to these net acquisitions, a further recovery in stock market prices added an estimated $3.35 billion, or about 16.5 percent, to the carrying values of common stock holdings, and the total portfolio increased by about 26 percent, reaching an estimated $25.65 billion at year-end. Net acquisitions of $2 billion in 1976 compared with $1.3 billion in 1975 and the record high of $3.45 billion in 1971.

Separate account net investments in common stocks amounted to about $1.35 billion in 1976, the highest in five years, and compared with $1.1 billion in 1975 and the peak amount of $1.8 billion in 1971. Common stocks held in separate accounts were valued at an estimated $12.2 billion at the end of 1976 and accounted for about 77 percent of total separate account assets, up from 72 percent at the end of 1975 but below the 87 percent share in the mid-1960s when these accounts were just getting underway.

1/ Note that these are included with corporate and foreign bonds in Tables 1, 4, and 5 presented earlier.

General account net investments in common stocks were estimated at $650 million in 1976, sharply above the small 1975 total of $205 million but well below such investments in 1971-73 (nearly $1.7 billion in 1971). At the end of 1976, the market value of common stocks held in the general accounts of the companies amounted to about $13.5 billion, 22 percent above the year-end 1975 amount of $11 billion.

Net investments in preferred stocks, which are almost entirely made for the general accounts of the companies, amounted to an estimated $850 million in 1976, little different from the $804 million of 1975. Net acquisitions of preferreds have been relatively sizable in the last five years, although the 1976 amount fell short of the $1.2-1.3 billion in 1972-73 when private placement offerings were exceptionally heavy. Including a nominal amount of valuation gain, holdings of preferred stocks increased by 11.5 percent, or nearly $900 million, to total $8.65 billion at the end of 1976.

U.S. Treasuries and federal agency issues. Life insurers again in 1976 added to their holdings of the longer-term notes and bonds of the U.S. Treasury, but less so than in 1975. The increases of the last two years were in sharp contrast with the long series of decreases since 1946 in holdings of Treasury notes and bonds. The extraordinary Treasury financing requirements of the last two years, together with the perennial need to lengthen the average maturity of the public debt, brought numerous coupon issues to market at relatively attractive rates. A number of life insurers found these high-quality issues an appropriate outlet for part of their growing investment funds, and some were attracted also by the ready marketability of Treasuries as opposed to much of the corporate bond portfolio. In 1976, the increase in holdings of Treasury bonds and notes came to about $350 million on top of the $572 million increase in 1975. The longer-term Treasuries held by life insurers increased about 9 percent during 1976 to total $4 billion at the end of the year and holdings of under one-year maturities amounted to an estimated $1.2 billion.

Net investments in longer-term federal agency issues came to about $675 million in 1976, more than twice the 1975 amount of just over $300 million. Holdings of these issues increased by 50 percent to total just under $2 billion, and another $200 million was held in the under one-year maturity issues of the federal agencies.

State and local securities. The securities of U.S. state and local governments have attracted considerably larger amounts from life insurers in the last two years than in earlier periods. In 1976, holdings of tax-exempts (of over one year to maturity) increased by $1.2 billion, or 27 percent, to total $5.6 billion at the end of the year. The 1976 increase followed a sizable $840 million rise in 1975, sharply above the $255 million net investment of 1974. Revenue bonds carrying more attractive yields than general obligation issues tend to be favored by many life insurers. Another consideration underlying some investments is the support of offerings of the political jurisdictions in which the life insurer conducts its business, particularly its state of domicile.

Private placements also figure in the acquisitions by life companies of the issues of state and local governments and their authorities, and this method of offering was utilized frequently in recent years when the success of a public offering was in doubt.

Mortgages. Mortgage markets provided only a limited outlet for the sizable flow of life insurers' investment funds in 1976, essentially because of the depressed state of construction activity in the past three years. The net increase in mortgage holdings accounted for about 7 percent of total net long-term investments, down from an already low 15 percent share in 1975 and sharply below the shares of over 25 percent in 1973-74 that were typical of the postwar period. As a proportion of total assets, mortgage holdings decreased to 28.5 percent of the total at year-end 1976 from the postwar peak of 38.6 percent of total assets ten years earlier.

During 1976, mortgage holdings increased by an estimated $1.75 billion, or about 2 percent, one of the smallest increases in the past thirty years--only the increases of 1971-72 were smaller. Nearly $1.6 billion of the $1.75 billion net mortgage investment in 1976 represented loans on properties in the United States with the balance representing Canadian mortgages. The net investments made in U.S. mortgages on nonresidential properties (farm and nonfarm) were offset in significant part by the continuing net disinvestment in residential mortgages (1-4 family and multifamily).

Nonfarm nonresidential mortgages. Loans secured by nonresidential properties were the only part of the nonfarm mortgage portfolios of life insurers to increase during 1976. The net investment in these commercial, industrial, and institutional mortgages (on U.S. properties) accounted for an estimated 12 percent of the long-term net investments made by the companies, down from 19 percent in 1975 and 29 percent in 1974.

Holdings of nonfarm nonresidential mortgages increased by an estimated $3 billion during 1976, or about 7 percent, to total $46.8 billion. The dollar increase, which was the smallest since 1972, compared with $3.7 billion in 1975 and the peak of $4.7 billion in 1973, while the percentage increase was the smallest in the 27 years for which this property-type information is available.

The slow growth in 1976 of the nonfarm nonresidential mortgage portfolios of life insurers reflected the sharp reduction in the new commitments made in this market in the recession years of 1974-75. The volume of commitments made in 1975 fell 45 percent below the pace in 1973 (see Table A-3 at the end of this report), and by the start of 1976 the backlog of outstanding commitments had been drawndown one third below the level of two years earlier. In addition, the drastically changed economic setting brought about some serious loan delinquencies, leading to unusually large amounts of foreclosures. Since foreclosures tend to be dominated by relatively new loans, the amounts involved loom large, and foreclosures of nonresidential mortgage loans reduced the mortgage account by an estimated $200 million in 1976, only slightly less than the 1975 amount of over $250 million.

During 1976, new commitments made for nonresidential property mortgage financing picked up about 50 percent from the depressed amounts in 1975. The backlog of outstanding commitments began to rise early in the year, for the first sustained upward movement in 2-1/2 years, but the buildup was small relative to the hefty increases in 1972-73.

Multifamily mortgages. Life insurers' portfolios of multifamily mortgages decreased by an estimated $500 million during 1976, or 3 percent, to total $18.4 billion at the end of the year. These holdings had also decreased in 1975, although only nominally, having peaked at $19.1 billion early in that year, the culmination of sixteen years of growth.

Apartment loans made by life insurers in 1976 were little more than half the reduced amount made in 1975, reflecting the prolonged and precipitous drop in forward commitments made for apartment financing that got underway in late 1973. At the beginning of 1976, the backlog of outstanding commitments for multifamily mortgages had been worked down to a level 85 percent below the peak in mid-1973.

Portfolio holdings were also reduced in 1976 by foreclosures of multifamily loans, but less so than in 1975. Based on preliminary indications, foreclosures were estimated at about $175 million in 1976, roughly 1 percent of holdings, as compared with about $300 million or 1.6 percent of the portfolio in 1975. The amount of delinquent apartment loans continued high in 1976, but the rate at mid-year showed no further deterioration from the end of 1975. Apartment loan delinquencies had climbed very rapidly, beginning in late 1973, and by the end of 1975 the delinquency rate, based on dollar amounts, was four times the rate three years earlier (see Table A-4).

New commitments made during 1976 for multifamily housing projects continued low, although the volume was 2-1/2 times the minimal amount committed in 1975. In the spring, the backlog of outstanding apartment commitments began a gradual, small rise, reversing the monthly decreases that persisted for nearly three years, but the backlog toward the end of 1976 of about $900 million fell far below the level, upwards of $4 billion, that prevailed in 1973.

One-to-four family mortgages. The holdings by life companies of 1-4 family mortgages decreased by an estimated $1.45 billion, or about 9 percent, during 1976 to total $15.5 billion. The decrease, which was the tenth in as many years, differed little from the 1975 amount of $1.43 billion. Prepaid loans accounted for over 60 percent of the 1976 net decrease, somewhat more than in 1975, and nearly all of the balance represented the excess of regular amortization payments over new loan extensions. Foreclosures have been a very minor element in the decline of home mortgage portfolios, and the delinquency rates on these loans held by life insurers showed relatively little deterioration during the recession period, in contrast to the experience with income-property loans.

In 1976 there was a pickup in commitments made for 1-4 family mortgages from the reduced amount in 1975, and the backlog of outstanding commitments ran higher than in the previous year. Since relatively few life insurers, however, make any commitments for home loans, the totals are small and run far below the amounts needed to offset the return flow from amortization payments and prepayments in full.

The net disinvestment in 1-4 family mortgages is nearly universal among life insurers and stems from yield considerations and the economies involved in making larger loans. Both the gross yields and, more important, the net yields from home mortgages, after servicing and other costs of operation, have long been below those available from income-property mortgages and corporate bonds. Faced with the recent weak demand for the financing of multifamily and nonresidential properties, life insurers allocated increasing amounts to bond investments rather than to lower yielding 1-4 family mortgages.

Farm mortgages. Farm mortgages held by life insurers increased by 8 percent, or about $550 million, during 1976 to total $7.3 billion at the end of the year. Since farm lending is carried on by a limited number of companies, the net investment in these loans accounted for a relatively small share of the net long-term investments of all life insurers--2 percent in 1976, the same as in other recent years. Unlike other types of mortgages, the net investment in farm mortgages accelerated in the latest two years, a reflection of a sizable volume of new commitments made in 1974-75. Moreover, in 1976, new commitments for farm mortgages were made in record volume, about 20 percent above the previous high annual total in 1973.

Real estate. Holdings by life insurers of directly owned real estate increased by 10 percent or about $975 million during 1976, compared with an extraordinary increase of 15 percent or $1.3 billion in 1975. Real estate acquired for investment purposes accounted for well over half of the growth in the latest two years, as some companies sought a direct ownership position for real estate investing in lieu of the creditor position involved in mortgage lending. Investment real estate amounted to an estimated $7.2 billion, or 68 percent of the total real estate holdings at the end of 1976. Properties held for the companies' own use also increased since the growth of business inevitably leads at various times to the need for a new home office building or additional branch office space by one company or another.

Real estate acquired in satisfaction of mortgage indebtedness had accounted for about $475 million or 37 percent of the 1975 net increase in real estate holdings, but was expected to be of smaller dimensions in 1976. A reduced amount of foreclosures, together with sales of some of the properties earlier acquired by foreclosure, should limit the 1976 net increase to less than half the 1975 figure.

Policy loans. Outstanding policy loans of life companies increased by $1.4 billion in 1976, or about 5.6 percent. The percentage rise was among the smallest since the 1940s, far below the double-digit percentage increases of 1973 and 1974 and of the five years 1966-70. The dollar increase was the lowest since 1972 and compared with the record high of $2.66 billion in 1974. Policy loans outstanding, estimated at $25.8 billion, represented 8.1 percent of total assets at the end of 1976, the lowest since 1973.

Although extensions of policy loans were slightly larger than 1975, up by 2 percent, repayments and other terminations of these loans reached record amounts in 1976. The drop in market interest rates, particularly the rates on short-term money market instruments, provided the impetus for many policyholders to repay their policy loans in order to restore the loan values of policies.

Most outstanding policies provide for a policy loan interest rate of 5 or 6 percent. Under recently enacted legislation, however, over two thirds of the states now permit a contract rate of 8 percent or higher on new policies. A number of companies have adopted the 8 percent rate on new policies in the states where permitted, moving away from the earlier practice of a uniform policy loan interest rate for all policies wherever issued (5 percent if doing business in New York State and 6 percent otherwise). But the move to the 8 percent maximum contract rate is proceeding slowly, varying company to company. Mutual companies adopting the higher maximum have generally adopted separate higher dividend scales for these policies in recognition of the different effect on net investment yields of different policy loan rates.

Measures of Investment Performance

The most widely used indicator of investment performance of life insurance companies is the rate of net investment income on the invested assets held in the general accounts, a statistic long required in the annual statements filed with the state regulatory authorities. In 1976, the net rate of income on the investments held in the general accounts of the companies reached an estimated 6.70 percent, and the corresponding rate for total invested assets, including separate account assets, was estimated at 6.55 percent. The 1976 estimates shown in Table 6 indicate an increase from 1975 of 26 basis points in the net income rate of the general accounts and 19 basis points in the net rate for total invested assets.

The 1976 improvement of 26 basis points in the general accounts rate was noticeably above the 1975 increase of 13 basis points and was more in line with the rises of 1970-74 that averaged 23 basis points a year and ranged from 17 to 31 basis points. In 1976, long-term yields on new investments were at high levels, and the volume of new funds available for investment was unusually large. Portfolio yields continued to benefit from the replacement of older investments made at lower rates with new loans at higher rates, and in 1976 investment income also benefited from the resumption of interest payments on some of the

Table 6

Ratio of Net Investment Income to Invested Assets
U.S. Life Insurance Companies

Year	Net Investment Income (Including separate accounts) Millions	Rate	General Accounts Rate
1972	$12,127	5.56%	5.69%
1973	13,670	5.88	6.00
1974	15,144	6.25	6.31
1975	16,488	6.36	6.44
1976	18,600e	6.55e	6.70e

e - Estimated.

Note: Rates are derived from dollar aggregates. Investment income is after investment expenses and depreciation chargeable to investment income but before federal income taxes. Investment income includes interest, dividend, rental, and other income but excludes capital gains or losses.

investments that were in arrears in 1975. As shown in the table, net investment income was estimated to total $18.6 billion in 1976, an increase of about 13 percent over the 1975 total, compared with a 9 percent increase in 1975 over 1974.

Another measure of investment results is the "new money" rate on long-term investments added to portfolios in a given year, as distinct from the rate of income on the total holdings of invested assets. New money rates, which are not required in annual statement reporting, are usually quoted as gross rates, before deduction of investment or other expenses. The Council's staff has worked with a number of companies in attempting to arrive at a system of uniform reporting of new money rates, taking into account an appropriate measure of yield and the definition of "new money," specifically in cases of refinancing. Despite some difficulties with the initial surveys in this area, it is clear that the yields on new investments added to the portfolios of the general accounts in 1975 ran upwards of 9-3/4 percent for a large sample of life insurance companies, and the 1976 results are expected to be fairly close to this mark. New money rates reflect investment decisions made over a time period longer than a single year, since they include takedowns of bonds and mortgages for which commitments were made in earlier years, as well as long-term investments which came to market in the current year. Thus, new money rates do not provide an accurate gauge of market conditions in a single year, but are instead a measure of yields on those investments taken into life companies' portfolios during the year in question.

A more direct measure of current market trends is provided by the rates at which new commitments are made on bonds and mortgages. Average commitment rates on directly placed corporate bonds generally declined in the early months of 1976 and were fairly stable during the spring and summer before turning sharply lower in the closing months of the year. On balance, direct placement yields decreased by roughly 150 basis points during 1976 from the high levels prevailing at the end of 1975. At the same time, yields on lower grade (Baa) seasoned public issues decreased in every month of 1976 and ended the year about 135 basis points below the year-earlier December. Average commitment rates on income-property mortgage loans declined more slowly than bond rates in the early months of 1976, in part because mortgage rates, in contrast with usual relationships, had fallen below corporate bond rates in 1974 and 1975. Summary data from the Council's surveys of income-property mortgage commitments are shown in Tables A-5 and A-6. The weighted average interest rate of 9.71 percent for income-property mortgage commitments made in the third quarter of 1976 was about 50 basis points below the 1975 fourth-quarter average. Over the same period, the quarterly average rate on directly placed corporate bond commitments decreased about 75 basis points, with a resulting narrowing of the spread of direct placement yields over mortgage rates.

An additional measure of portfolio performance of life insurers is provided by the Council's annual surveys of the income and costs of the mortgage account. A summary of the results for 1975 and other recent years is given in Table A-7. The data of the sample group are essentially the mortgage results that enter into the net income rate on total invested assets discussed above. The net income rate of the mortgage portfolios held by the reporting companies averaged 7.06 percent in 1975, a level that indicates the above-average contribution of mortgages to the 6.44 percent overall portfolio income rate for all life insurers in 1975. The annual increase in the mortgage net income rate, however, slowed noticeably in 1975, amounting to 16 basis points, compared with an average increase of over 25 basis points in the preceding four years. The slowdown was traceable to the high delinquency and foreclosure rates mentioned earlier. The more detailed reports of the survey results provide income and cost ratios for companies grouped as to type of organization for servicing mortgages and by size of mortgage portfolios. In addition to portfolio results, the surveys have long provided averages of the contract interest rates on mortgage loans closed each year, a rough measure of new money rates on mortgages. As shown in Table A-7, loans disbursed in 1975 carried contract rates averaging nearly 9.30 percent. The average was more than usually affected by the rates on farm loans, which were very high in 1975. Contract interest rates for new loans secured by nonfarm properties (1-4 family, multifamily, and nonresidential) averaged 9.20 percent in 1975, up from 8.93 percent in 1974.

Cash Flow for Investment

Cash flow for investment of life insurance companies stepped up sharply in 1976, as mentioned in earlier sections of this report. On a preliminary basis, the cash flow total was estimated at $44 billion, 32 percent above the 1975 total of $33.5 billion. The estimates of cash flow of U.S. life insurance companies, given in Table 7, are expanded from the quarterly reporting of a sample group of companies, and the 1976 figure reflects their projections of a record cash flow total in the final quarter of the year.

The sources of cash flow of the reporting group during the first three quarters of 1976 and the four quarters of 1975 are set forth in Table A-8. As may be seen, in addition to the large part of asset growth that represents new funds available for investment, cash flow includes sizable amounts for reinvestment stemming from the repayments, calls, and sales of existing investments.

Cash flow of the sample group was sizable in each of the first three quarters of 1976, continuing a rapid growth that emerged in 1975, particularly in the final quarter. For the first three quarters combined, cash flow ran 40 percent above the comparable period of 1975, but for the full year, cash flow of the sample group is expected to be 33 percent above 1975, reflecting a slower growth in the final quarter as measured against the earlier fourth-quarter record.

Ledger asset increases in the first three quarters of 1976 accounted for well over half of the growth in cash flow of the reporting group from the comparable total in 1975, and the return flow from securities (maturities, calls, and sales) accounted for another 25 percent. The return flow from mortgages, particularly from amortization payments, increased only modestly from the 1975 nine-months total, reflecting the slow growth of mortgage portfolios, the relatively small

Table 7

Estimated Cash Flow for Market Investments
U.S. Life Insurance Companies
(In billions of dollars)

Year	Amount	Year	Amount
1969	$14.9	1973	$31.0
1970	16.6	1974	26.0
1971	25.3	1975	33.5
1972	30.8	1976	44.1p

p - Preliminary.

amounts of principal repayments from high interest rate loans recently added to the portfolios, and continuing high rates of mortgage loan delinquencies. Although the buildup of cash positions was sizable in the early quarters of 1976, this diversion of funds from longer-term investments was considerably less than in the first three quarters of 1975. Moreover, the net increase in policy loans diverted a lesser amount from other investments than in 1975, about 3 percent in 1976 as against 4.5 percent in 1975.

Asset Growth Trends

Assets of U.S. life insurance companies increased in 1976 at the highest rate since the 1920s. The total reached an estimated $319.4 billion, an increase of 10.4 percent during the year, following an increase of 9.9 percent during 1975. The percentage increases compared with an annual average of 6 percent for the first five years of the 1970s.

Underlying the accelerated pace of asset growth has been the rapid expansion of the pension business, in both the group and individual annuity fields. Annuity considerations increased by some 20 percent in 1976 on top of a 31 percent increase in 1975, an acceleration not seen for two successive years since the early 1930s when the amounts were under $500 million. This source of income increased to 19 percent of total premium income of the companies from 17 percent in 1975, noticeably above the 10 percent share as recently as 1970. The Employee Retirement Income Security Act of 1974 gave strong impetus to the funding of various types of group plans with life insurers, and the individual annuity business benefited from the liberalization under the Act of the provisions for the self-employed and their employees (Keogh plans) and the authorization of individual retirement accounts (IRAs) for employees not covered by pension plans on their jobs.

Another factor in the 1976 asset growth was a greater improvement in investment income than in 1975, as mentioned in an earlier section of this report. In addition, the asset increases of the latest two years benefited from the inclusion of net capital gains, which mainly reflected the recovery in stock market prices and were largely unrealized. When adjusted to exclude these valuation changes, assets increased by an estimated 9.3 percent in 1976 as compared with 8.4 percent in 1975 and an annual average of 6.6 percent earlier in the decade.

In dollar terms, the 1976 asset increase amounted to an estimated $30.1 billion, compared with $26 billion in 1975. Both figures were sharply above the $10.9 billion asset increase of 1974 when unusually sizable net capital losses, largely unrealized, limited asset growth. Adjusted for valuation changes, the asset increases amounted to $27 billion in 1976 and $22.25 billion in 1975, well above the $17.6 billion rise of 1974.

Despite the faster pace in recent years, the rate of asset growth for life insurance companies continued to lag behind that for a number of other financial intermediaries. All of the institutional groups set out in Table 8 showed an acceleration in asset growth in the last two years, and the growth of savings and loan associations was especially impressive. Savings and loans have long been effective in the competition for the savings deposits of consumers and, more recently, have been permitted, along with other depositary institutions, to accept the savings deposits of partnerships and corporations. Also, the savings and loans attracted the single largest share, 37 percent, of the total dollar volume of IRA accounts--$1.9 billion--set up in the first year or so of operations. For noninsured pension funds, the recent growth showed a reversal of a declining rate of growth that emerged in the last half of the 1960s.

Table 8

Average Annual Rates of Asset Growth

	Five-year period			Two-year period
	1960-64	1965-69	1970-74	1975-76e
Life insurance companies	5.5%	5.7%	6.6%	8.9%
Noninsured pension funds	11.9	9.9	7.7	9.7
State and local gov't retirement funds	10.7	11.6	12.3	12.9
Savings and loan associations	13.4	6.3	12.8	15.0
Mutual savings banks	6.8	6.6	8.0	11.6

e - Estimated for 1976.

Asset growth of life insurance companies, noninsured pension funds, and state local retirement funds was measured by the increase in assets adjusted for net capital gains or losses. The unadjusted increase in assets was used for savings and loan associations and mutual savings banks.

The Economic and Investment Research Program

For three decades the life insurance business has demonstrated its interest in fundamental economic research to improve knowledge about the U.S. financial system. Through a continuing program of economic and investment research which began in 1946, the life insurance business has financed a long series of major research studies by scholars at leading universities and research organizations and has also engaged in extensive research and analysis by staff professionals in the Council's own economics department. The main objectives of this two-part program have been not only to assist the investment side of the life insurance business but also to contribute to the fund of basic economic knowledge and understanding of financial markets.

During these thirty years, grants approaching $4 million have been made for economic and investment research in such areas as savings, capital markets, pensions, housing, and interest rates. These studies are widely regarded by scholars and public officials as having been among the most important works published in these vital areas of financial research. A complete list is provided below of the research studies published to date through the sponsorship of the research program funded by the life insurance business.

Outside Research Financed by the Council

Several of the sponsored outside research projects are now in final stages of completion or were published in the past year. One such project, "Demand and Supply Conditions in the U.S. Capital Markets, 1975-1985," undertaken through the Salomon Brothers Center for the Study of Financial Institutions of the Graduate School of Business Administration of New York University, is now in the publication process by D. C. Heath and Company. The results of this research will be published in three volumes. The first, by Professor Patric H. Hendershott of Purdue University, will be titled Understanding the Capital Markets and deals with the structuring of a financial flow-of-funds model to forecast the flows of money and credit between major borrower and lender groups in the U.S. economy. A second volume, edited by Professors Arnold W. Sametz and Paul Wachtel of New York University, will be titled The Financial Environment and the Flow of Funds in the Next Decade and is comprised of twelve chapters by various authors who focus on key aspects of the capital market outlook, including the financing of the business sector and the prospects for a capital shortage. Because of the rather technical nature of the two foregoing volumes, a capstone volume summarizing and integrating the findings of the many contributors to the study is being prepared by Professor Sametz, who served as director of the overall project. Publication of all three volumes is planned for the spring of 1977.[2]

2/ Some early findings of this project were contained in a paper by Paul Wachtel, Arnold Sametz, and Harry Shuford, "Capital Shortages: Myth or Reality," Journal of Finance, May 1976.

An early product of the New York University study of the capital market outlook was a separate volume on Financial Innovations, edited by Professor William L. Silber and distributed to member companies early in 1976. The subject matter of this book is divided into three parts. Part I provides a historical and analytical framework for discussions of financial innovations and focuses upon a blend of long-run trends and details of institutional evolution that have shaped the American capital markets between 1860 and 1940. After a brief description of forces affecting the whole financial structure, a theory of innovation in financial instruments at the microeconomic level is presented. Part II provides a detailed analysis of selected financial sector developments: innovations in the mortgage market and the impact of inflation on the term structure of corporate financial instruments between 1900 and 1972. Part III is devoted to an evaluation of the impact of recent innovations, and the possible effects of future innovation, on the conduct of monetary policy.

Another study completed in 1976 and distributed to member companies was The Future of Private Pension Plans by Norman B. Ture, published by the American Enterprise Institute under a grant from the life insurance business. One of the major conclusions of this study is that the growth of private retirement plans has depended principally on the "efficiency gains" such plans have afforded their participants in their role as savers; the future of the private pension system will depend on its success in continuing to extend these gains. The study analyzes future prospects for the private pension system in relation to the expanding role of social security, the effects of high inflation rates, and the impact of recent pension reform legislation.

Dr. Hendrik Houthakker of Harvard University has completed his research on the "Economic Consequences of Rapid Inflation" and is now in the final stages of preparing his manuscript, with a view toward publication in 1977. The content of this analysis was outlined in the 1975 Economic and Investment Report.

A major new research project under Council auspices was undertaken in 1976 to investigate the critical problem of "Capital Investment and Savings Requirements." The study will explore three interrelated aspects of capital formation: (1) the determinants of private saving, including the role of households and corporations as sources of saving; (2) the role of government in saving and investment through the effects of government spending programs, taxation, and regulatory activities; and (3) the role of business in capital formation, including the problems of obtaining investment funds and making capital spending decisions.

Dr. George M. von Furstenburg of Indiana University has been selected as the project director of this study, which is expected to require three years for completion. The planning and development of the project is being greatly aided by a distinguished advisory committee which consists of three representatives of the life insurance business together with the following nationally known economists:

James S. Duesenberry (Harvard), Solomon Fabricant (National Bureau of Economic Research), Paul W. McCracken (University of Michigan), Ezra Solomon (Stanford), Albert T. Sommers (The Conference Board), and Murray L. Weidenbaum (Washington University).

Staff Activities of the Economics Department

Collection and analysis of data on the investment operations of the life insurance business represent a major continuing function of the economics department of the Council. The industry data gathered and distributed to life companies in periodic statistical surveys serve not only as a management tool for company operations but also as a valuable source of current financial information for the Federal Reserve and other government bodies concerned with economic and financial policy. The continuing staff studies include monthly statistics on forward investment commitments of life insurance companies, quarterly data on the volume and sources of cash flow for investment, semiannual data on mortgage loan delinquencies and foreclosures, and annual data on mortgage lending income and costs of life insurance companies. In addition, monthly data on yields of directly placed corporate bonds and quarterly data on interest rates and other characteristics of income-property mortgage loans are tabulated by the economic research staff. Some of the information developed in these studies is presented in other sections of this report.

A major function of the economics department is its work with various policy-making committees of the American Council of Life Insurance. For example, the economics department provides staff support to the Economic Policy Committee and its Subcommittee on Fiscal and Monetary Policy which, on behalf of the life insurance business, prepare testimony each year for submission to the Joint Economic Committee of the Congress in its hearings on the Economic Report of the President. In addition, the Economic Policy Committee conveys the viewpoints of the life insurance business to officials in Washington through periodic meetings with the U.S. Treasury Department, the Federal Reserve Board, and various Administration officials involved in planning economic policy.

Activities of the Financial Section of the Council and the operation of the annual Life Officers Investment Seminar also receive staff support from the economics department. The Life Officers Investment Seminar is held at Rockford College in Illinois for two weeks each June. The Financial Section holds an annual meeting each fall, and in April three regional meetings of the Council provide a forum for discussion of financial topics by investment officers.

As a guide to investment strategy and the future course of interest rates, the economics staff also prepares analyses of the demand and supply of funds in the money and capital markets, setting forth estimates of future trends against the background of historical data. The current staff analysis of the sources and uses of capital funds, including forecasts for 1977, is presented in preceding sections of this report.

Still another function of the economics department is its liaison role with the academic community, especially in matters concerning the investment activities of life insurance companies. This role involves responding to inquiries for investment data, describing current investment attitudes and policies, and reviewing research manuscripts by academic authors working in the investment field. In a broad sense, the economics staff serves as a spokesman on the investment aspects of the business in an effort to improve public understanding of the investment policies and practices of life insurance companies.

Another staff function is to conduct special research projects of timely interest to the investment side of the life insurance business, as well as to those outside the life insurance industry. A staff project by Dr. George A. Bishop, director of economic research, was published this year in book form by Richard D. Irwin, Inc. under the title Capital Formation Through Life Insurance: A Study in the Growth of Life Insurance Services and Investment Activities. The objective of the book is to explain the role of life insurance in facilitating and stimulating public saving and making possible a more efficient allocation of investment funds. The study suggests that despite a slowdown in the rate of growth of saving through life insurance in the 1950s and 1960s, this growth is likely to continue at approximately its historic rate. Provided inflation remains moderate, life insurance companies will remain a major institution for pooling the savings of the public and allocating these funds to real capital formation to meet the priorities of an expanding economy.

In the course of working with the ACLI Subcommittee on Investment Aspects of Valuation Problems, the economics department has done extensive background research on the history of the Mandatory Securities Valuation Reserve (MSVR) and the principles of the valuation of securities in life company portfolios. As a by-product of this work, Dr. Bishop summarized the evolution of the present system in an article titled "Perspectives on the Valuation of Securities Held by Life Insurance Companies" which was published in the October 1976 issue of the CLU Journal. This article is the most recent published statement of the principles of valuation of securities and the reserve for securities held by life companies, and it includes an analysis of the changes made in 1975.

In the first half of the 1970s, the MSVR proved inadequate for the losses experienced by life insurance companies. These losses included those resulting from actual defaults and sales of securities but consisted primarily of unrealized losses from writedowns of the values of bonds and preferred stocks of deteriorating quality and declines in the market values of common stock holdings. Resulting incursions of surplus were unusually large in 1973 and 1974. In 1975, changes in MSVR rules provided for a doubling of the annual formula additions to the bond and preferred stock component of the MSVR and allowed companies to apply capital gains in the years 1975 through 1977 to the restoration of surplus incursions brought about by common stock losses in 1973 and 1974. The rapid recovery of the stock market by the end of 1975 enabled nearly half of the companies which had exhausted their common stock reserve in 1974 to completely restore the previous incursions of surplus.

Research Studies Supported by the Life Insurance Business

I. A Study of Saving in the United States, Raymond W. Goldsmith (published in three volumes by the Princeton University Press, 1955 and 1956)

II. The Study of Capital Formation and Financing (conducted by the National Bureau of Economic Research under Simon Kuznets)

A. Monographs (Princeton University Press)

1. Capital Formation in Residential Real Estate: Trends and Prospects, Leo Grebler, David M. Blank, and Louis Winnick, 1956.

2. Capital in Agriculture: Its Formation and Financing Since 1870, Alvin S. Tostlebe, 1957.

3. Financial Intermediaries in the American Economy Since 1900, Raymond W. Goldsmith, 1958.

4. Capital in Transportation, Communications, and Public Utilities: Its Formation and Financing, Melville J. Ulmer, 1960.

5. Capital in Manufacturing and Mining: Its Formation and Financing, Daniel Creamer, Sergei Dobrovolsky, and Israel Borenstein, 1960.

6. Trends in Government Financing, Morris A. Copeland, 1961.

7. Capital in the American Economy: Its Formation and Financing, Simon Kuznets, 1961.

B. Papers

1. The Role of Federal Credit Aids in Residential Construction, Leo Grebler, Occasional Paper 39, 1953.

2. Capital and Output Trends in Manufacturing Industries, 1880-1948, Daniel Creamer, Occasional Paper 41, 1954.

3. The Share of Financial Intermediaries in National Wealth and National Assets, 1900-1949, Raymond W. Goldsmith, Occasional Paper 42, 1954.

4. Trends and Cycles in Capital Formation by United States Railroads, 1870-1950, Melville J. Ulmer, Occasional Paper 43, 1954.

5. The Growth of Physical Capital in Agriculture 1870-1950, Alvin S. Tostlebe, Occasional Paper 44, 1954.

6. Capital and Output Trends in Mining Industries, 1870-1948, Israel Borenstein, Occasional Paper 45, 1954.

7. The Volume of Residential Construction, 1889-1950, David M. Blank, Technical Paper 9, 1954.

III. The Study of the Postwar Capital Markets (conducted by the National Bureau of Economic Research)

A. Monographs (Princeton University Press except as noted)

1. Postwar Market for State and Local Government Securities, Roland I. Robinson, 1960.

2. The Postwar Residential Mortgage Market, Saul B. Klaman, 1961.

3. The National Wealth of the United States in the Postwar Period, Raymond W. Goldsmith, 1962.

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Appendix Tables

Table A-1

Assets of U.S. Life Insurance Companies, 1974-1976

(Dollar amounts in millions)

Asset Class	December 31, 1974		December 31, 1975		Estimated December 31, 1976	
	Amount	%	Amount	%	Amount	%
Bonds, notes and debentures						
U.S. Treasury	$ 3,372	1.3	$ 4,736	1.6	$ 5,200	1.6
U.S. federal agency	1,065	0.4	1,419	0.5	2,200	0.7
U.S. state and local	3,667	1.4	4,508	1.6	5,600	1.8
Foreign government and international	3,861	1.5	4,514	1.6	6,600	2.1
Total government	11,965	4.5	15,177	5.2	19,600	6.1
Corporate--1 year or less	4,070	1.5	4,813	1.7	5,700	1.8
U.S. corporate--over 1 year	87,575	33.3	95,519	33.0	107,400	33.6
Foreign corporate--over 1 year	5,007	1.9	5,505	1.9	6,650	2.1
Total corporate	96,652	36.7	105,837	36.6	119,750	37.5
Stocks						
Preferred	6,974	2.6	7,757	2.7	8,650	2.7
Common	14,946	5.7	20,304	7.0	25,650	8.0
Total stocks	21,920	8.3	28,061	9.7	34,300	10.7
Mortgages						
Farm	6,327	2.4	6,753	2.3	7,300	2.3
Nonfarm	79,907	30.3	82,414	28.5	83,625	26.2
Total mortgages	86,234	32.7	89,167	30.8	90,925	28.5
Real estate	8,331	3.2	9,621	3.3	10,600	3.3
Policy loans	22,862	8.7	24,467	8.5	25,825	8.1
Cash	1,999	0.8	1,925	0.7	2,000	0.6
Other	13,386	5.1	15,049	5.2	16,400	5.1
Total assets	$263,349	100.0	$289,304	100.0	$319,400	100.0

The valuation basis for each classification is admitted asset (statement) value.

Separate account assets included in the data above totaled $9.3 billion, $13.0 billion, and an estimated $15.8 billion at the end of the years 1974-76.

Table A-2

Net Changes in Assets, 1974-1976

(In millions of dollars)

Asset Class	1974	1975	Estimated 1976
Bonds, notes, and debentures - over 1 year			
U.S. Treasury and federal agency	$ 60	$ 878	$ 1,007
U.S. state and local	255	841	1,183
Foreign government and international	199	651	2,092
Corporate - U.S. and foreign	3,790	8,442	13,026
Total - Over 1 year	4,304	10,812	17,308
Stocks	-3,999	6,141	6,239
Mortgages	4,865	2,933	1,758
Real estate	638	1,290	979
Policy loans	2,663	1,605	1,358
Short-term debt issues	1,114	1,585	1,028
Cash and other assets	1,328	1,589	1,426
Increase in assets	$10,913	$25,955	$30,096
Memorandum:			
Increase in assets excluding net capital gain or loss	$17,643	$22,250	$27,000
Net long-term investments*	$15,560	$19,600	$24,500

*Defined as the net increase in assets, adjusted to exclude changes in cash, short-term investments, and non-invested assets as well as net capital gain or loss.

Table A-3

New Commitments Made for Mortgages on U.S. Properties
U.S. Life Insurance Companies

(In millions of dollars)

Year or Quarter		Farm	Nonfarm		Total
			Residential	Nonresidential	
1970		$ 285	$1,979	$3,381	$ 5,645
1971		590	2,912	6,122	9,624
1972		817	4,052	8,260	13,129
1973		1,128	3,129	9,768	14,025
1974		1,112	1,298	6,077	8,487
1975		981	561	5,342	6,884
1975	I	261	89	934	1,284
	II	172	133	1,567	1,872
	III	245	138	1,453	1,836
	IV	303	201	1,388	1,892
1976	I	345	150	1,400	1,895
	II	378	281	2,204	2,863
	III	331	350	2,363	3,044

Note: Data are estimates based on the reporting of a sample group and represent commitments for future lending, exclusive of any amounts committed and disbursed within the same month.

Table A-4

Delinquency Rates of Reporting
Life Insurance Companies

End of Period	Nonfarm Mortgages by Type of Financing						
	FHA	VA	Canadian NHA	Conven-tional	Total Nonfarm	Total Farm	Total Mortgages
1970	1.34%	.95%	.84%	.74%	.85%	1.51%	.91%
1971	1.65	1.00	.94	.74	.90	1.59	.96
1972	1.85	1.08	.41	1.02	1.13	1.38	1.15
1973	1.99	.96	.79	1.56	1.57	.63	1.49
1974	1.69	1.12	.26	2.79	2.57	.71	2.41
1975 June	1.82	1.10	.46	3.75	3.42	1.99	3.29
December	1.90	1.29	1.11	4.02	3.68	1.27	3.47
1976 June	1.76	1.13	1.83	4.38	4.00	3.15	3.92

	Nonfarm Mortgages by Property Type		
	1-4 family	Multifamily	Nonresidential
1970	.89%	1.05%	.70%
1971	.93	1.01	.83
1972	1.05	1.46	.98
1973	1.01	2.66	1.23
1974	1.09	4.23	2.33
1975 June	1.04	5.54	3.31
December	1.22	5.87	3.56
1976 June	1.14	5.88	4.13

Note· Rates are based on dollar amounts and represent the ratio of delinquent loans to total loans held in the specified category. Delinquent loans include loans in process of foreclosure as well as those with two or more monthly interest payments past due in the case of nonfarm mortgages and, for farm mortgages, those with interest in arrears more than 90 days. Reporting companies have accounted for 80-85 percent of the mortgages held by U.S. life insurance companies.

Table A-5

Commitments of $100,000 and Over on Multifamily and Nonresidential Mortgages Made by Reporting Life Insurance Companies, 1966-1976

Year or Quarter		No. of Loans	Total Amount Committed ($000,000)	Average Loan Amount ($000)	Average Interest Rate (by #)	Weighted Average Interest Rate	Average Loan-to-Value Ratio	Average Term (Years/ Months)
				Annual Totals and Averages				
1966		2,796	$2,516	$ 900	6.42%	6.35%	70.0%	20/5
1967		2,726	3,027	1,111	6.97	6.92	71.0	21/2
1968		2,569	3,244	1,263	7.66	7.65	73.6	22/11
1969		1,788	2,921	1,633	8.69	8.62	73.3	21/8
1970		912	2,341	2,567	9.93	9.86	74.7	22/8
1971		1,664	3,983	2,393	9.07	8.99	74.9	22/10
1972		2,132	4,987	2,339	8.57	8.50	75.2	23/3
1973		2,140	4,833	2,259	8.76	8.70	74.3	23/3
1974		1,166	2,603	2,232	9.47	9.47	74.3	21/3
1975		599	1,717	2,866	10.22	10.14	73.8	21/9
				Quarterly Totals and Averages				
1975	I	123	248	2,016	10.28	10.29	73.6	21/10
	II	166	503	3,032	10.15	9.98	74.2	21/7
	III	154	409	2,655	10.23	10.16	73.7	21/6
	IV	156	557	3,569	10.23	10.22	73.6	22/2
1976	I	143	534	3,734	10.10	10.08	74.0	21/4
	II	286	884	3,091	9.86	9.82	73.8	21/6
	III	325	1,159	3,567	9.81	9.71	73.6	21/11

Averages are based on number of loans except for the weighted interest rate which is derived by weighting each rate by the amount of the commitment.

Reporting companies have accounted for about 55 percent of nonfarm mortgages held by U.S. life insurance companies over the years shown.

Table A-6

Average Contract Interest Rates by Major Property Type
on Commitments of $100,000 and Over Made by
Reporting Life Insurance Companies

Property Type	1972	1973	1974	1975	1975 III	1975 IV	1976 I	1976 II	1976 III
Conventional apartments	8.53%	8.67%	9.18%	10.17%	10.15%	10.27%	9.92%	9.83%	9.70%
Office buildings	8.46	8.61	9.44	10.12	10.02	10.32	9.95	9.79	9.61
Commercial retail	8.40	8.58	9.54	10.03	10.13	10.02	10.04	9.73	9.58
Commercial services	8.65	8.82	9.55	9.99	10.13	10.02	10.00	10.03	9.95
Institutional and recreational	8.73	8.90	9.55	10.82	10.69	10.71	9.90	9.95	10.15
Industrial	8.54	8.77	9.54	10.22	10.24	10.25	10.03	9.82	9.65
FHA apartments	7.21	-	-	-	-	-	-	-	-
NHA apartments	9.04	9.02	*	11.18	11.06	*	11.84	-	-
Hotels and motels	8.75	9.11	9.60	10.31	10.25	10.28	10.14	10.18	10.04
Total*	8.50	8.70	9.47	10.14	10.16	10.22	10.08	9.82	9.71

*Data not shown where there are fewer than three loans. The total may include a few commitments for property types not shown separately. Averages are derived by weighting each rate by the amount of the commitments.

Reporting companies have accounted for about 55 percent of nonfarm mortgages held by U.S. life insurance companies over the years shown.

Table A-7

Income and Costs of Mortgage Portfolios and
Contract Interest Rates on New Loans
Reporting Life Insurance Companies

	1965	1970	1973	1974	1975
			(In percent)		
Gross accrual income	5.54%	6.14%	6.97%	7.21%	7.35%
Operating costs - total	.44	.34	.31	.31	.29
Originating fees and premiums	.03	.01	*	*	*
Servicing fees	.18	.14	.12	.11	.10
Home and branch office costs	.22	.19	.19	.20	.19
Net accrual income	5.11	5.80	6.66	6.90	7.06
Contract interest rate on new loans	5.68	8.23	8.59	8.94	9.28

*Less than .005 percent.

Note: Because of rounding, components may not add to totals shown. The averages are derived from aggregates of dollar figures and reflect the weight of large portfolios, particularly in cost ratios; the average rate for total operating costs based on number of companies was 0.43 percent in 1975. For the years shown, reporting companies accounted for about 85 percent of mortgage loans held by U.S. life insurance companies. Comparable annual data are available since 1955; prior to 1955, separate data are available for farm and nonfarm portfolios.

Table A-8

Inflow of Investment Funds of Reporting Life Insurance Companies, Quarterly

(In millions of dollars)

Sources of Investment Funds	1975 I	1975 II	1975 III	1975 IV	1976 I	1976 II	1976 III
Net change in:							
Ledger assets, adj.	$3,579	$2,915	$3,908	$4,395	$5,052	$4,129	$5,043
Cash position*	-76	-272	-1,380	168	-524	-310	-93
Mortgages - total	1,038	1,031	1,170	1,106	1,138	1,128	1,145
Amortization and partial prepayments	711	643	654	675	747	674	658
Prepayments in full	319	371	485	414	369	446	480
Sales	8	17	31	17	22	8	7
Securities - total	1,754	1,982	1,825	2,270	2,458	2,498	2,291
Maturities	783	872	839	1,048	980	957	816
Calls	152	180	164	256	189	218	247
Outright sales	818	929	823	966	1,289	1,323	1,228
(bonds)	(287)	(377)	(351)	(468)	(659)	(677)	(688)
(stocks)	(531)	(552)	(472)	(499)	(629)	(646)	(540)
Sales of real estate	14	18	28	61	30	29	68
Sales and repayments of other assets	6	12	6	12	8	30	11
Net change in liability for borrowed money	121	-52	-91	-26	24	12	-9
All other sources	1	**	**	1	**	**	**
Total investment funds	6,438	5,634	5,467	7,985	8,183	7,517	8,457
Net increase (-) in policy loans	-346	-265	-268	-269	-227	-271	-263
Total cash flow	$6,092	$5,369	$5,199	$7,716	$7,957	$7,247	$8,195

*An increase in cash position is shown as a negative and a decrease is shown as a positive figure. Cash position is comprised of holdings of short-term securities as well as cash and bank deposits.

**Less than $500,000.

The change in ledger assets reflects premium payments and investment income, net of benefit payments, expenses, and taxes.

Reporting companies represent 76 percent of the total assets of U.S. life insurance companies.