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# Forward Investment Commitments of Life Insurance Companies

# JAMES J. O'LEARY

# LIFE INSURANCE ASSOCIATION OF AMERICA

The purpose of my paper is to consider whether data on the forward investment commitments of life insurance companies and other investing institutions can be of aid in anticipating general business developments. Therefore, the bulk of my comment will be devoted to the coverage of life insurance commitment figures and their behavior during 1951-56. A necessary preliminary is the definition of a forward commitment.

# What Are Forward Investment Commitments?

A "forward investment commitment" is a binding agreement on the part of a lending institution to make available a given amount of funds, upon given credit terms, at specified dates or over an agreed-on period of time varying from just over a month to two or three years. The agreement gives the interest rate, maturity, redemption privileges, and so forth, and sets forth a schedule of disbursement or "takedown" of the funds. Whether it is written or oral, the lender regards it as morally binding, and the borrower, too, is obligated. To an increasing extent in recent years, particularly as the bargaining power of the lender has become stronger, the agreement has involved a commitment fee to provide some assurance that the borrower will abide by the agreement.

A large percentage of commitments are made in connection with the direct placement of corporate securities. For example, the Prudential Insurance Company of America may agree to purchase \$50 million of the bonds of International Business Machines at given credit terms and on a prearranged takedown schedule. Over 90 per cent of the industrial bonds purchased by life insurance companies today are direct placements and involve the forward commitment process. Business and industrial mortgage loans are also arranged this way. Thus, a mortgage loan to a real estate developer to build an office building would involve a forward commitment. In residential mortgage loans, too, the lending institution may bind itself to advance funds to a builder or a prospective owneroccupant on prearranged terms. This commitment is in turn the basis for construction credit by a bank. Other major types of financing involving the forward commitment are purchase-lease deals and state and local government financing. Many toll roads were financed by life insurance companies with the funds committed for two to three years in advance of the final takedown.

Our data include some commitments to bond houses to purchase a given amount of a public issue. Normally however, public issues of corporate securities do not give rise to a forward commitment partly because, to appear in our data, the commitment must have a life of over one month.

Life insurance companies are not the only type of financial institution making forward commitments. Commercial banks have made forward commitments regularly for many years, and their term loans involve a procedure practically identical with that employed by life insurance companies in direct placements of corporate securities. Uninsured pension funds, to the extent that they acquire direct placements of corporate securities, also make forward commitments. Similarly, mutual savings banks and savings and loan associations are active in the mortgage field in arranging their financing on this basis. But to the best of my knowledge only the life insurance business has obtained regular reports on commitments for any length of time. Recently the savings and loan associations have begun to collect these data, and I hope that other lender groups will soon follow suit.

# What Do the Commitment Data of the Life Insurance Association of America Cover?

The collection of forward commitment data by the LIAA began in April 1951 under the Voluntary Credit Restraint Program. As participants in the program the life insurance companies submitted monthly commitment data to the Federal Reserve Board as an evidence of whether their current lending activities were in keeping with the VCRP. The monthly data, with suitable modifications, have been obtained regularly ever since. Originally, the canvass included companies holding about 85 per cent of total life insurance assets, but after the VCRP was terminated in March 1952 the ratio was reduced to about two-thirds. This coverage is very satisfactory for blowing up the total forward commitments of the life insurance business but less so for estimating the component parts of the series.

Our monthly reports show two major types of forward commitments, those involving securities and those involving real property and mortgages. Under securities are classified business and industrial bonds, public utility bonds, railroad bonds, state, municipal, and local securities, and all other securities. Business and industrial commitments in turn are broken down according to the Standard Industrial Classification. Real property and mortgage loans include business and industrial mortgages, real property for lease or rental, home office buildings, farm mortgages, and nonfarm

residential mortgages. The latter are in turn broken down into Federal Housing Administration-insured, Veterans Administration-guaranteed, and conventional.

The tables show new commitments made during the month and the total amount outstanding at the end of the month in each category. The reports further indicate how large an amount within each category of outstanding commitments is expected to be taken down within one month, two months, and six months. Until recently the breakdown was simply within six months and over six months. The tables also reveal takedowns during the month, and cancellations.

# Behavior of Forward Commitment Data, 1951-1956

Chart 1 shows, in index number form, the changes which have taken place in total outstanding commitments, and in outstanding commitments to purchase securities and real property and mortgage loans from April 1951 through December 1956. To make the series consistent over time I included only those companies which reported throughout the entire period.

Commitments immediately before the base month, April 1951, were at a very high level because there had been a sharp build-up in the second half of 1950 and early in 1951 before the Federal Reserve-Treasury "accord." Anticipation of Regulation X, instituted in October 1950, was a great inducement to builders and mortgage bankers to obtain immediate mortgage commitments. The ability of investing institutions to dispose of federal government securities at pegged prices above par also encouraged the build-up.

By April 1951 total commitments outstanding had begun a decline which carried the index to 80 in August 1951. It fluctuated about this level until February 1954 when a steady rise began which carried it to 125 in November. After a decline to 116 in December 1954, the index displayed considerable stability during 1955 but 1956 saw a steady rise from 117 in January to 139 in October and November, with a falling back to 133 in December.

During the same period, the two major component series showed widely divergent movements. Commitments to purchase real property and mortgages of all types declined steadily from an index of 100 in April 1951 to 59 in July 1952. Commitments to purchase securities declined from the April base to 88 in August 1951, but rose spectacularly to 142 in September 1952. This build-up gave some clue to the pronounced rise in business and industrial expenditures which occurred in the first several months of 1953 on a seasonally adjusted basis.

The index of commitments for real property and mortgage loans, having reached a low in July 1952, remained stationary through December. It

# CHART I

Outstanding Commitments, Total and for Securities and Real Property and Mortgage Loans, Monthly Index, April 1951–December 1956

Source: The data were compiled by the Life Insurance Association of America. Commitments of only those life insurance companies which reported throughout the entire period are included. These companies represented more than 60 per cent of the total assets of all United States life insurance companies.



drifted upward to 76 in February 1954 and then rose more rapidly to 125 in May 1955. It held this position for the remainder of 1955 and then rose to 132 by May 1956, then fell back to 110 by December 1956. In connection with these movements, it is important to note that within the general category of real property and mortgage commitments there are important divergent movements between commercial and industrial mortgage loans (which behave more like securities commitments) and residential mortgage loan commitments.

Returning to commitments to purchase securities, the index fell off in October 1952 through January 1953, and then rose from 106 in January to

133 in April 1953. After a decline to 118 in June, the commitments moved within a somewhat narrower range the rest of 1953 and 1954. The index declined in December 1954 through April 1955, but August 1955 saw the beginning of an upswing which was particularly pronounced between March and November 1956 when the index jumped from 114 to 180. This rise may have anticipated the boom in business and industrial plant and equipment expenditures which got under way in 1956 and continued in 1957.

Chart 2 shows the percentage of total outstanding commitments for securities compared with those for real property and mortgages from September 1952 through 1956. The relationship between the two sets of figures remained fairly stable from October 1952 through May 1953, whereupon the securities percentage showed a steady decline through May 1955 and the real property and mortgage percentage a corresponding rise. The shift from Federal Reserve credit restraint to ease beginning in



CHART 2

the spring of 1953 contributed to this shift in commitments. Beginning in June 1955 the securities proportion of the commitments rose steadily through 1956 and the real property and mortgage proportion declined.

Chart 3 presents index numbers showing changes from April 1951 through 1956 in commitments to purchase business and industrial bonds, business and industrial mortgages, and nonfarm residential mortgages. The index of commitments to purchase business and industrial bonds declined from 100 in April 1951 to 84 in August, and then rose more or less steadily to

# CHART 3

Outstanding Commitments for Business and Industrial Bonds and Mortgages and Nonfarm Residential Mortgages, Monthly Index, April 1951–December 1956



150 in July and August 1952. Here again may be an indication of the business plant and equipment boom which occurred in the latter part of 1952 and during 1953. Beginning in September 1952 a decline occurred which placed the index at 108 in January 1953. After a rise to 134 in April 1953, the index dropped suddenly to 108 in June and 97 in July and hovered around these points through January 1954. In February the index jumped to 133, where it stabilized until it began to rise again in September. It reached 153 in November 1954 but suddenly shifted to 124 in December and remained at about that level through May 1955. The index then rose, at first moderately then spectacularly, to 251 in November 1956, a rise which may have suggested that the boom in capital spending by business and industry would be sustained throughout 1957.

The sudden changes from one level of commitments to another, particularly characteristic of this index, are probably explained by one or a few large new commitments or takedowns in a given month. Also, it is worth noting that it seems to be a regular pattern for commitments to decline in December of each year, a pattern probably due to peculiarities in the operation of life insurance company investment departments.

Turning to the index of business and industrial mortgage commitments, the prolonged and great rise from 106 in January 1953 to 312 in August and September 1956 reflects the tendency for life insurance companies in recent years to concentrate more of their mortgage investments in the business and industrial field for portfolio balance. It also reflects the boom in industrial and business financing of the past few years. The mortgage loan has especially been used to finance small business enterprises and particular types of construction such as shopping centers.

The index of commitments to purchase nonfarm residential mortgages is particularly interesting. This index declined steadily from 100 in April 1951 to 37 in July 1953. Just before July 1953, the Federal Reserve moved to a policy of credit ease and the VA mortgage interest rate was raised from 4 to  $4\frac{1}{2}$  per cent. The shift to residential mortgages followed like night the day. From July 1953 to November 1954 the index rose from 37 to 102—an indication of the resurgence of the residential construction boom in 1955. Commitments stayed at close to peak levels until March 1955 and then declined to 60 in December 1956, anticipating the decline in residential construction in 1956 and 1957.

Chart 4 shows the percentage of total outstanding commitments in the form of business and industrial bonds, business and industrial mortgages, and nonfarm residential mortgages from September 1952 through 1956. A familiar picture emerges. The percentage of total outstanding commitments in the form of business and industrial bonds declined slightly from 39 per cent in September 1952 to 33 per cent in January 1953. There followed at first a moderate rise, then a decline, to below the 30 per cent level, and then relative stability. After a jump to 33 per cent in February

#### CHART 4

Outstanding Commitments for Business and Industrial Bonds and Mortgages and Nonfarm Residential Mortgages as Percentages of Total Commitments Outstanding, Monthly, September 1952–December 1956



1954, the percentage declined to 25 by year-end. There was little change until August 1955 when the percentage began a climb which took it to 42 in November 1956.

The percentage represented by business and industrial mortgages rose more or less steadily from September 1952 through September 1953, whereupon it was stable for over a year. It rose gradually from 20 per cent in November 1954 to 29 per cent in July 1956, and then declined to 23 per cent in December.

The percentage of total outstanding commitments in the form of nonfarm residential mortgages rose slightly in the last quarter of 1952 and then flattened out at a lower level during most of 1953. Beginning in the last quarter of 1953 the percentage rose from 21 to 39 in January 1955. At that point a decline set in which persisted during the remainder of 1955 and throughout 1956.

Chart 5 shows a breakdown of the component parts of nonfarm residential mortgages: FHA-insured, VA-guaranteed, and conventional. The

### CHART 5

Outstanding Commitments for FHA-Insured, VA-Guaranteed, and Conventional Residential Mortgages, Monthly Index, April 1951–December 1956



highly volatile series are commitments to purchase VA mortgages, which declined sharply from April 1951 through December, as a result of two forces. After their big build-up in 1950 there was a natural tendency to let them decline for portfolio balance. Also as demand for corporate funds increased, and corporate bond yields rose, funds were attracted away from the VA mortgage field where the gross rate was pegged at 4 per cent. The index displayed unusual stability at a low level until September 1952 but then sagged to a low of 14 in June 1953. In late April and early May two events of great importance to the capital market occurred. The Federal Reserve shifted rather abruptly from a policy of credit restraint

to one of ease and then later in the year "active ease", and the VA interest rate was raised to  $4\frac{1}{2}$  per cent. The Federal Reserve's action accentuated the force of a reduced demand for corporate funds which occurred at that time. The combination of a rise in the VA rate (belatedly and just when it was not needed) and the decline in corporate yields produced a rise in VA commitments beginning in July 1953. The index rose from 14 in June 1953 to 42 in February 1954, and then gathered momentum to reach a peak of 147 in November. Despite the accelerating flow of funds, the yield on VA mortgages was not driven downward. During the second half of 1953 and throughout 1954 discounts were readily available on  $4\frac{1}{2}$  per cent VA mortgages. Apparently, as the supply schedule of VA funds shifted to the right, it induced a counterbalancing shift in the demand schedule. What happened was that lending institutions eased other terms in VA loans. In early 1954 the no-downpayment thirty-year VA loan became common and by the late spring builders were offering all kinds of special inducements to prospective owners. Since homes are purchased today with a downpayment and monthly carrying charges, in which the interest rate is not a major factor, the no-downpayment and long amortization terms actually created a demand for housing which accommodated the expanded flow of funds into VA mortgages at relatively attractive net yields.

Turning to Chart 5 again, one can see that at the end of 1954 the VA commitment index started a steady decline which carried it from 147 in November to 83 in December 1955 and to 50 in December 1956. The decline occurred because of a shift in commitments primarily to industrial securities, industrial and business mortgages, and conventional residential mortgages. The shift took place because of a resurgence in business and industrial demand for capital funds and a change in Federal Reserve policy to one of credit restraint. Yields on business and industrial securities rose to the point where the VA mortgage at a gross rate of 4<sup>1</sup>/<sub>4</sub> per cent (net of 3<sup>3</sup> per cent) was no longer attractive, especially on overly liberal downpayment and amortization terms. Increasing discounts on these mortgages were largely ineffective in holding the flow of funds from life insurance companies because the latter were reluctant on public relations grounds to purchase VA mortgages at other than rather moderate discounts. The flow of funds into conventional mortgages was maintained because rates were flexible and thus competitive. Just as the sharp build-up in VA commitments in the latter part of 1953 and in 1954 anticipated the boom in residential construction which took place in the latter part of 1954 and in 1955, so the decline in these commitments beginning in early 1955 signaled the decline which occurred in late 1955 and throughout 1956 and 1957 in houses financed with VA mortgages.

Throughout most of the period life insurance companies generally preferred VA to FHA mortgages, probably because of more favorable redemption terms on the former in case of default. Although the two indexes tended to fall and rise together, after September 1953 FHA commitments were consistently much lower in dollar amounts than VA commitments and also were lower than their own level in 1951 and the first half of 1952. From April 1951 the index declined steadily to 23 in August 1953. It rose to 36 in January and February 1955, exhibited considerable stability through December, and then declined to 19 in December 1956.

The index of conventional mortgage commitments moved to a lower level in early 1951 and then fluctuated generally within a narrow range until early 1953. The index rose from 85 in January 1953 to 115 in June, and then declined to 101 in July where it held through December. January 1954 saw the start of a build-up which, with minor setbacks, continued until the index reached 183 in May 1956. By the end of 1956 it had fallen back to 154.

One would expect to find the greatest stability in conventional mortgage commitments because (1) the contract rates of interest are flexible and remain in line with competing rates in other sectors of the capital market; and (2) institutional investors such as life insurance companies desire to regularize their flow of funds into residential mortgages because of the need of their home office and field organizations to do a mortgage business. The latter fact means that conventional residential mortgages naturally get a large and increasing share of funds such as was apparent, generally speaking, from 1954 through 1956. The build-up of conventional commitments in 1954, 1955, and 1956 perhaps gives a clue to the changing type of residential construction of 1956 and 1957, and the fairly well maintained volume. The build-up in conventional residential commitments came later than did the VA build-up, and so did the takedowns.

Chart 6 shows the variations which have taken place in the structure of nonfarm residential commitments. Of particular interest is the movement of VA commitments as a percentage of total nonfarm mortgage commitments. These commitments declined from 21 per cent in September 1952 to 14 per cent in June 1953, rose to 54 per cent in September and October 1954, and then gradually declined to 32 per cent in December 1956.

Also shown is the sharp rise in conventional commitments from 43 per cent of total residential commitments in September 1952 to 62 per cent in June 1953. This was to be expected in view of the rise in interest rates in the bond market in that period and the ability of conventional mortgage rates to move upward flexibly at the expense of administered rates in the government-insured and guaranteed mortgage field. Conventional commitments declined steadily beginning in July 1953 to reach 32 per cent in January and February 1955. This likewise was to be expected in view of the softening in corporate bond and conventional mortgage rates which occurred beginning in the spring of 1953 and the relative attractiveness of VA mortgages at  $4\frac{1}{2}$  per cent. Again, beginning in March 1955 the

CHART 6

Outstanding Commitments for FHA-Insured, VA-Guaranteed, and Conventional Residential Mortgages as Percentages of Total Nonfarm Residential Mortgage Commitments, Monthly, September 1952–December 1956



percentage of conventional commitments rose from 35 to 54 in December 1956 because of a rise in corporate bond yields and a concomitant increase in conventional mortgage rates.

The percentages for FHA mortgages show the somewhat more stable but lower level of these commitments. Starting from a high level of 37 per cent in September 1952, FHA commitments showed little change through January 1953 and then underwent a prolonged decline to 14 per cent in August-November 1954. They then began to reflect the push toward higher-yielding government-insured and guaranteed mortgages and rose moderately from 15 per cent in December 1954 to 19 per cent in November and December 1955. During 1956 they declined gradually.

Chart 7 shows, in index numbers, changes in total new commitments made each quarter, and changes in the two major components, securities





and real property and mortgages, from IV 1951 through 1956. New commitments are perhaps more useful than *outstanding* commitments in connection with business anticipations because they are a better measure of current investment policy.

As before, it is most instructive to analyze these data in terms of movements in the constituent series. Chart 8 provides quarterly data on new commitments to purchase business and industrial bonds, business and industrial mortgages, and nonfarm residential mortgages. For business and industrial bonds, the new commitment index declined in each quarter of 1952. Although it rose in I and II 1953, it fell back again in III and IV. In 1954 new commitments fluctuated at a higher level and in 1955 fluctuated around a somewhat lower level. Perhaps most interesting is the sharp rise in 1956, possibly anticipating the 1957 boom in plant and equipment expenditures.

New commitments to purchase business and industrial mortgages showed a strong tendency to rise in II 1952 through I 1953, and then declined the rest of 1953. In 1954-56 they rose and held at very high levels

# CHART 8

New Commitments for Business and Industrial Bonds and Mortgages and Nonfarm Residential Mortgages, Quarterly Index, Fourth Quarter 1951–Fourth Quarter 1956



until a sharp decline occurred in the second half of 1956. New commitments to make residential mortgage loans were higher in 1953 than in 1952. They rose sharply in 1954 but fell back in 1955 and 1956. Here again, the broad categories make generalization difficult.

Chart 9 shows, in index numbers, a breakdown of the changes in new commitments to make residential mortgage loans. New commitments to purchase VA mortgages have undergone spectacular changes. After a steady decline from 165 in I 1952 to 56 in I 1953 they rose in II 1953 to 74 and then climbed dramatically to 948 in III 1954. Beginning in IV 1954 a decline began which carried the index to 230 in IV 1956. Both the rise and

CHART 9 New Commitments for FHA-Insured, VA-Guaranteed, and Conventional Residential Mortgages, Quarterly Index, Fourth Quarter 1951–Fourth Quarter 1956



fall anticipated subsequent developments in residential construction. New commitments to make conventional residential mortgage loans displayed an upward trend over the period and in 1955 and 1956 foreshadowed the nature of residential construction. As expected, new FHA commitments showed a great deal of stability, although they declined considerably in 1956.

Charts 10-12 complete my review of the behavior of commitments. They show the percentage of outstanding commitments within the various categories expected to be taken down within six months. The figures highlight the time lag between the date of the new commitments and their subsequent takedown and use in economic activities such as home building or plant and equipment construction. According to Chart 10 over 60 per cent of outstanding mortgage commitments are generally taken down during the following half year while securities commitments tend to remain outstanding for much longer.

# CHART IO

Percentages of Outstanding Commitments Expected to Be Taken Down within Six Months, Total and for Securities and Real Property and Mortgage Loans, Monthly, September 1952–December 1956



Percentages of Outstanding Commitments Expected to Be Taken Down within Six Months for Business and Industrial Bonds and Mortgages and Nonfarm Residential Mortgages, Monthly, September 1952–December 1956



CHART 12

Percentages of Outstanding Nonfarm Residential Mortgage Commitments, by Type, Expected to Be Taken Down within Six Months, Monthly, September 1952–December 1956



The data on expected takedowns also help explain trends in the commitment figures. For example, Chart 10 shows that the percentage of all outstanding commitments expected to be taken down within six months declined from some 60 per cent in 1955 to 54 per cent in December 1956. The decline was tied to the shift from mortgage commitments to commitments for securities, but it also apparently reflected a tightening cash flow position of the life insurance companies. Interpreted in conjunction with cash flow data, it apparently foreshadowed the decline in outstanding commitments during 1957.

# Some Factors Affecting Commitment Policy

Prior to the "accord" between the Federal Reserve and the Treasury in March 1951, life insurance companies and other institutional investors were largely free to make forward commitments without regard to their cash flow because of the availability of federal government securities which could be readily sold at predictable prices above par supported by Federal Reserve purchases. With the unpegging of the prices of governments, however, this situation changed. Uncertainty about the prices at which government securities could be sold at some future time when commitments would be taken down required life insurance companies to pay stricter attention to cash flow when making commitments. As time has

gone on, not only have the bulk of government securities held by life insurance companies gradually been liquidated, but also heavy losses have been involved, which serve as a strong deterrent to sales unless new investments can be obtained at high enough rates to amortize the losses over relatively short periods of time.

Much time and effort have been devoted by companies in the last few years to obtaining detailed and reliable information about projected cash flow. Since I 1957 many of the companies which report commitment data to the LIAA have also been reporting total cash flow for the quarter just ended and expected cash flow for the ensuing two quarters. This information enables us to relate outstanding investment commitments scheduled to be taken down within six months to total cash flow expected in the same six-month period. At the end of both the first and second quarters of 1957 this relationship was fairly steady at about 75 per cent. Thus, the cash flow figures, in conjunction with the commitment figures, are helpful in providing a clue to future developments in the capital markets.

Investment expectations also influence commitment policy. Generally speaking, when interest rates are declining or are expected to decline, companies will probably strive to build up their commitment accounts, thereby tending to offset a decline in commitments which one might expect from a reduced demand for capital funds. On the other hand, when interest rates are rising or are expected to rise, some companies undoubtedly avoid becoming heavily committed in order to reserve funds for even better investment opportunities. Their reluctance tends to retard the natural build-up of commitment positions in a period of heavy capital demand. Thus not only cash flow but also forces based on investment psychology lend stability to the volume of investment commitments at any given time. Of course the commitment position of most institutional investors probably reflects expectations in only a marginal way.

The commitment and cash flow data of the life insurance business are available regularly to the Treasury, the Federal Reserve, and government agencies in the housing field. The commitment position of the life insurance companies, and the trends in these commitments, have played a part in Treasury decisions on how successfully a long-term bond issue could be sold at any given time.

# Forward Commitments as an Aid in Anticipating Business Developments

Much more thought and careful study need to be given to the forward commitment data, but it seems that they are of possible aid in forecasting (1) the outlook for the capital market and interest rates, (2) developments in residential construction, and (3) business plant and equipment expenditures.

First, the degree to which life insurance companies and other investors have built up a backlog of commitments relative to cash flow provides a clue to probable developments in the capital market and accordingly in interest rates. For example, if commitments are at a very high level relative to cash flow, this situation, of itself, would seem to rule out any sharp decline in long-term interest rates. However, these data are useful only in conjunction with other information. Data on investment expectations, such as those provided by the McGraw-Hill and Commerce Department-Securities and Exchange Commission surveys of capital expenditure plans, the National Industrial Conference Board survey of capital appropriations, and information on sources and uses of capital funds, are essential elements in a forward looking analysis of capital markets.

Secondly, data on forward commitments to make residential mortgage loans seem to have special predictive value. Although many of these commitments have been on existing homes, a large part have been to finance new construction, particularly in the government-insured and guaranteed category. It seems quite clear that the sharp rise in residential mortgage commitments in the second half of 1953 and in 1954 anticipated the rising tide of residential construction in the second half of 1954 and the well-sustained high level in 1955. Likewise, the decline in residential mortgage commitments in 1955 and 1956 seems to have anticipated the drop in residential construction of the past two years. As noted earlier, the causal force leading to the shift of commitments to and then away from residential mortgages is the rigidity of government-insured and guaranteed mortgage interest rates in the face of changing capital market conditions.

One reservation about the predictive value of commitment data in this area is that we must assume that the commitments actually lead to construction. In the period under consideration the rate of attrition on residential mortgage commitments has generally been stable at about 10 per cent. Economic conditions (of which the rate of residential construction is a highly important part) have been such as to encourage builders and individuals to go through with construction plans after having received financing commitments. Possibly we shall encounter conditions which will bring a sharp increase in the rate of attrition on residential mortgage commitments.

Thirdly, forward investment commitment data are helpful in anticipating changes in business and industrial plant and equipment expenditures. Here data are much less conclusive than for residential construction, probably because of the greater complexity of the industrial and business financing market, but they suggest that forward commitment build-ups anticipated the plant and equipment boom of late 1952 and first half of 1953, as well as the boom of 1956 and 1957. However, the same reservation needs to be

made about the assumption of a continued low level in the rate of attrition on outstanding commitments.

In conclusion, commitment data can probably be useful in forecasting general business conditions. Their value can easily be exaggerated, but the possibilities are great enough to justify careful study of the forward commitment process about which we still know too little. In this connection there is a special aspect of the process which merits consideration. Those who have studied the direct placement of corporate securities on a forward commitment basis with life insurance companies, uninsured pension funds, and other investors are firmly convinced that this procedure lends encouragement to long-run planning of investment expenditures by business concerns, such as programs for pipeline expansions or large scale housing developments. There is, of course, no assurance that the rate of attrition on these programmed investments will not increase in the event of a recession. But the greater tendency toward long-range planning should contribute to the predictability and, perhaps, the stability of general business conditions.

# СОММЕNТ

### SAUL B. KLAMAN, National Association of Mutual Savings Banks

As one who has previously had the privilege and responsibility of access to the data on investment commitments of life insurance companies, I am delighted that James O'Leary and the Life Insurance Association of America have decided to release the data publicly. This will enable users with varying interests to exchange views on the meaning and value of commitments figures in economic and financial analysis. And perhaps interest in the data will lead to improvements in reporting and coverage and stimulate other types of financial institutions to make similar information available.

As the first available analysis of investment commitments of life insurance companies, O'Leary's paper substantially advances our knowledge and understanding of the commitment technique and its use in various investment sectors. It tells us much about the behavior of the various types of new and outstanding commitments during a period of important changes in capital market conditions and in Federal Reserve and Treasury policies. It does not, however, provide much analysis of the relationship of commitments to investment flows and to capital formation, nor does it deal with the problems inherent in the commitment process itself, problems which bear directly on the usefulness of the figures in anticipating business developments. It is with such matters that my comments are mainly concerned.

INVESTMENT COMMITMENTS AS A FORECASTING TOOL

Given the complex behavior of most economic variables, one cannot establish simple standards for judging the predictive value of any particular time series. Certain kinds of data, such as construction contract awards, are inherently endowed with predictive qualities. Other kinds have been found empirically to lead business activity more or less regularly.

The series on new and outstanding commitments of life insurance companies clearly belong in the former category in that they represent agreements to undertake certain kinds of investment just as contract awards represent future construction expenditures. In this framework, a fundamental question is whether the commitments data can indicate anything about the timing, volume, or direction of related investment and business activity, or whether they are useful chiefly as general guides to our understanding of a developing situation. The answer depends on analysis, within each of the various investment sectors, of relationships between new and outstanding commitments, flows of investment funds, and underlying capital formation and expenditures.

For a few areas where the commitment process generally plays an integral role and life insurance companies are an important source of funds—the nonfarm mortgage sector, VA and FHA loan markets, and the manufacturing component of the business securities sector—I have compared, on a quarterly basis, new and outstanding commitments with investment acquisitions of life insurance companies and with broader variables in related financial and product markets. The findings suggest that it is extremely hazardous to try to forecast quarterly or even annual movements in the flow of investment funds, expenditures, or physical volume, solely on the basis of movements in related commitments data in preceding periods.

There is no clear relationship, for example, either in timing or percentage change in volume, between life insurance company commitments to acquire VA loans, their actual acquisition of these loans, the total of all VA loans closed, or total housing starts under VA loans. If someone had used commitments data to predict the direction of change in various types of VA activity, he would have been right in more quarters than he would have been wrong, but he would seldom have been right in all types of activity in the same quarter. Timing patterns are unclear, but a time relationship seems to be more discernible in the comparison of outstanding VA commitments with VA starts than in the other mortgage loan categories tested or in the business finance category.

These comparisons are only a small sample of the kind of investigation which needs to be made on a continuing basis before firm conclusions can be drawn about the predictive value of data on life insurance company investment commitments. Many more relationships need to be examined, various lead and lag patterns tested, and the usefulness of commitment

takedown ratios appraised. In some sectors the data may be useful for anticipating investment flows but not capital expenditures, in others for anticipating new work to be undertaken rather than dollar volume of investment. The determination of seasonal behavior, if any, in both new and outstanding commitments series would advance our knowledge and ability to use the data.

O'Leary noted one seasonal trend, an apparently "regular pattern for outstanding commitments to decline in December of each year, a pattern probably due to peculiarities in the operation of life insurance company investment departments." This is interesting in view of my findings about the operation of mortgage companies in a study recently published by the National Bureau.<sup>1</sup> I found a definite complementary relationship between changes in mortgage company inventories and changes in mortgage holdings of life insurance companies, which predominate as purchasers of loans from mortgage companies. The greatest increase in life insurance company mortgage holdings occurred consistently in the fourth quarter of each year, coincident with a regular decline, absolute or in rate of growth, in fourth-quarter holdings of mortgage companies. The implication is that life insurance companies draw down their outstanding commitments at the end of each year as they acquire mortgages from originators in accordance with commitments made earlier in the year.

#### UNCERTAINTIES INHERENT IN THE COMMITMENT PROCESS

One can hardly expect relationships between commitments of life insurance companies and investment flows and business expenditures to be precise, either in timing or in changes in activity. Variation in the number of life insurance companies included in the commitments series compared with the number in the investment acquisitions series accounts for some of the difference in movements between the two. However, the commitment process itself is subject to uncertainty and change in the lag between outstandings and takedowns, the rate of attrition, techniques employed, and relationship to cash flows. Consequently a given level of commitments in any one period may give rise to a varying pattern of capital investment and expenditures.

Improved data on expected takedowns and cancellations, available since 1957, may help to solve part of the problem. Comparison of expected and actual takedowns from commitments, however, shows considerable divergence, particularly in the mortgage loan categories. In the business securities sector, expected and actual takedowns are in much closer agreement, reflecting the greater certainty of the whole commitments-investment process in this area. In any event we need longer

<sup>1</sup> Saul B. Klaman, *The Postwar Rise of Mortgage Companies*, National Bureau of Economic Research, Occasional Paper 60, 1959.

experience with the new data on expected takedowns before we can fully evaluate their usefulness.

The uncertain meaning of commitments to acquire mortgages reflects the uncertainties of the mortgage and construction markets. For example:

1. Planned construction is sometimes deferred, or not undertaken, or frequently not completed on schedule.

2. The completed mortgage loan may be for a different amount than the commitment.

3. Commitments may not be taken up by borrowers either because they have obtained funds elsewhere on more favorable terms or because of otherwise changed plans.

Because of these and other uncertainties the life insurance companies themselves have difficulty calculating expected cash flows into mortgages.

The uncertainty which attaches to mortgage commitments is illustrated by the situation which developed in 1954 and 1955 when some companies found themselves overcommitted relative to anticipated cash flows. The resort to warehousing at commercial banks during 1955 while funds were accumulated changed the 1955 pattern of mortgage investment substantially from what might have been anticipated on the basis of 1954 and early 1955 commitments.

Translating commitments for corporate securities into cash flows is apparently simpler for insurance companies because arrangements for direct placements are generally more specific about date of payment than mortgage commitments. Also corporations usually carry through their scheduled plans for issuing securities. In contrast to the mortgage market, the use of commitments in the corporate securities area is often more an accommodation to the life insurance company than to the borrower.

The broader problem of anticipating developments in the corporate securities market and in plant and equipment expenditures is complicated by other factors. For one, much corporate financing, especially by public utilities, is done through public offerings, with commitments playing a minor role. When changes in corporate financing and expenditures reflect chiefly that type of offering, rather than direct placement, movements in the commitments figures may have little predictive value and even may be misleading. Secondly, even in the area of direct placement, lack of information on purpose of borrowing restricts the usefulness of the commitments data in anticipating capital expenditures. For example, a changing proportion of outstanding commitments may be associated with corporate borrowing to repay bank debt rather than to finance new expenditures.

The lack of commitments data from other financial institutions is another limiting factor. Shifts in anticipated investment flows from life insurance companies do not necessarily reflect the shifts of other investors. Indeed, when the entire investment community is considered, shifts in

various areas may be offsetting. For example, when life insurance companies were pulling out of the VA market after the Federal Reserve-Treasury accord, savings banks were expanding their activities in it chiefly because VA yields were competitive with those on limited alternative investments in Eastern areas where most savings banks are located.

#### GENERAL USEFULNESS OF COMMITMENTS DATA

While commitments data are apparently of limited usefulness in forecasting changes in timing, volume, and even direction of related investment and business activity, they contribute to our understanding of a developing economic and financial situation. Most important is the direct insight given into the liquidity position and investment policies of life insurance companies and other financial intermediaries.

The volume of commitments outstanding for securities and mortgages relative to cash flows tells a good deal about the liquidity of an institutional investor and its maneuverability in capital markets. The relationship between outstanding commitments in the various investment sectors compared with past periods, and in the light of cash flows, may be indicative of the ability and willingness of companies to shift their investment programs in response to changing market developments. New commitments are more sensitive than outstandings, however, in reflecting current investment programs of life insurance companies, their reactions to changes in monetary and fiscal policies, and to economic developments generally. The timing of changes in new commitment volume, both in total and within investment sectors, may be a useful indicator of lags in the impact of monetary policy changes on capital markets.

Data on new and outstanding commitments are most useful when related to each other. The implication of changes in new commitments in the various investment sectors can be evaluated best only in relation to levels of outstanding commitments. An unusually large build-up of outstandings relative to past levels and to cash flows, for example, may foretell a decline or shift in new commitments and in investment flows almost irrespective of external market influences. We need to know more about the basic relationships to assess the significance of changes in them. Here internal company investment policies play a vital role and vary widely. Some companies like to maintain a certain portfolio balance. Others invest entirely according to yield and ignore any resulting "imbalances."

Because commitments have become such an integral part of the investment process, and because they often precede related investment flows by a year or more, such data have become almost essential for appraising current developments, apart from their usefulness as anticipations data. Whether changes in commitments reflect changes in the available supply of funds or in demands for funds by corporations, governments, and con-

sumers can never be established by statistics alone. The various series must be continually appraised in the light of all available knowledge relating to each sector and to financial and commodity markets generally. Regardless of the basic influences, however, clearly the availability of commitments data enhances our understanding of unfolding economic events. .