TRANSACTIONS OF SOCIETY OF ACTUARIES
1962 VOL. 14 PT. 2

we would be wise to avoid seizing so deceptively simple a device as a steady rate of inflation to stimulate economic growth. The dangers and inequities that inflation ultimately brings in its wake are clearly too high a price to pay for this temporary stimulant to economic growth.

INTEREST RATES

DR. JAMES J. O'LEARY:

The behavior of interest rates since World War II, especially since 1951, has been of vital importance to the life insurance business. As a result of the rise of interest rates which has occurred, the average net rate of interest earned by United States life companies on invested funds rose from 2.88 per cent in 1947 to 4.22 per cent in 1961. Partly as the result of the improved rate of return, and partly growing out of the rise in total invested assets, the aggregate net investment income before federal income tax of the life insurance business has increased from $1.4 billion in 1947 to $5 billion in 1961.

As part of the broad discussion here today of the general economic outlook in this decade, the subject I shall consider is the outlook for interest rates. What is likely to be the course of interest rates in the balance of this decade?

My approach will be, first, to outline the movement of interest rates since World War II and to advance the main reasons for this movement. Then, against the background of the past, I shall present my thoughts about the probable behavior of interest rates in the remainder of this decade. By analyzing the behavior of rates since the war, and the circumstances which underlay this behavior, it is possible to arrive at some general views about how interest rates will perform in the remainder of the sixties.

The Behavior of Interest Rates since World War II

The period of "pegged" interest rates.—It will be recalled that during the war the structure of interest rates on United States government securities was pegged on a curve running from three-eighths of 1 per cent on ninety-day Treasury bills to 2½ per cent on long-term bonds. This was carried out primarily through the open-market purchases and sales of government securities by the Federal Reserve System. Through the pegging of yields on United States governments, the authorities to all intents and purposes pegged the entire structure of interest rates on privately issued obligations as well as on governments.

Charts I and II show the effect of the wartime pegging of rates. After the war had ended, as shown in these charts, the pegging of government

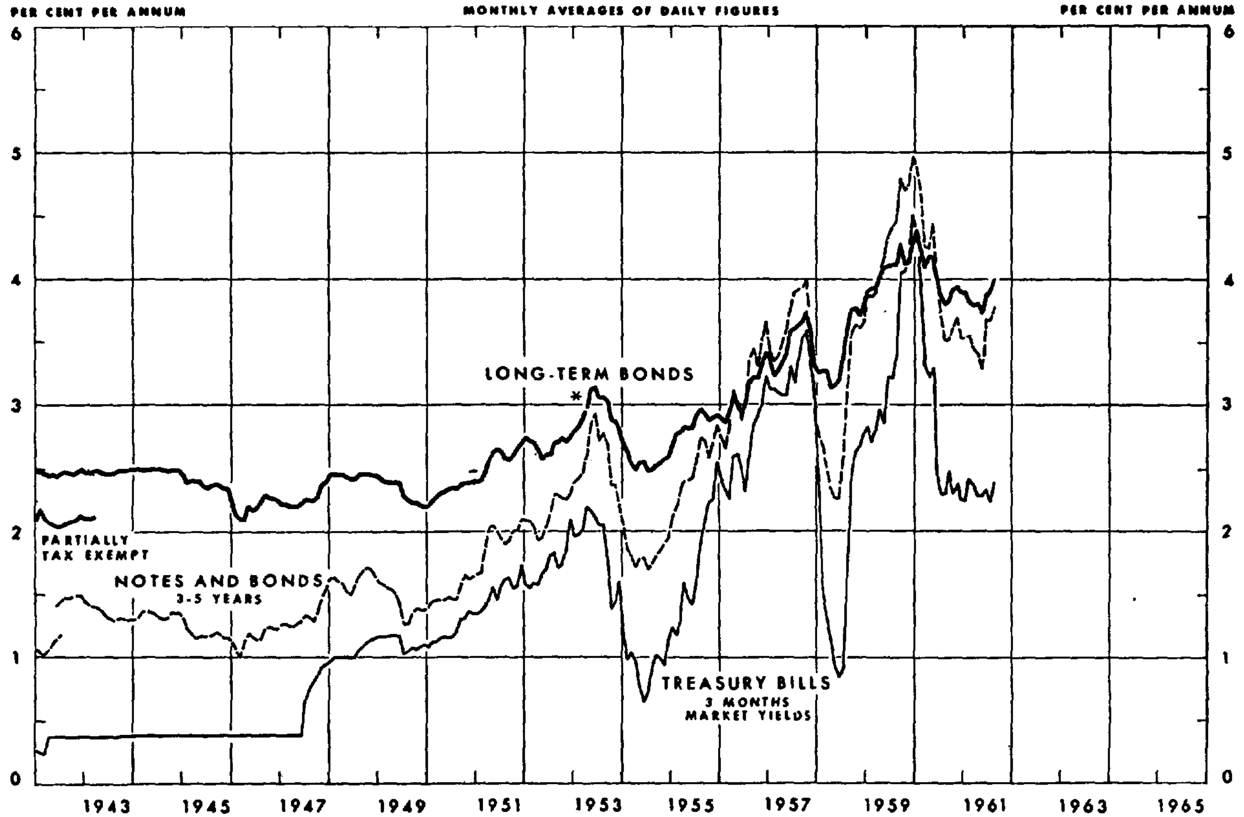
securities yields was continued, especially with respect to the intermediate and long-term issues. The prices at which governments were pegged were altered gradually, especially the Treasury bill rate; but, in general, the yields on government securities, and hence all interest rates, were controlled at not far from wartime levels by the Federal Reserve until early 1951.

As the private sectors of our national economy expanded after the war, there was a sharp rise in demand for loanable funds by business and industry, by state and local government units, and for residential construction. Lending institutions found that their regular flow of savings was inadequate to satisfy these rising demands, and thus they began to sell some of their large holdings of government securities to raise funds to meet the demands placed upon them. In supporting the prices of government securities, and thus acting to prevent a general rise of interest rates in the face of burgeoning capital demands, the Federal Reserve authorities were obliged as the months went by to purchase huge amounts of government securities. The effect of this was to supply the commercial banks with reserves on the basis of which the banks could greatly expand their own loans and investments and, hence, the money supply of the country. Because of this, the monetary authorities were stripped of their power to control the money supply, and, in the words of Marriner Eccles, then chairman of the Federal Reserve Board, the Federal Reserve became an "engine of inflation." During the several months prior to March, 1951, the purchases of governments by the Federal Reserve at pegged prices were enormous and posed a critical problem of inflation right in the midst of the Korean emergency. As a result, in early March, 1951, the famous "accord" was reached between the United States Treasury and the Federal Reserve under the terms of which the monetary authorities were permitted to abandon gradually their pegging of prices and yields of government securities. After an orderly transition period, the yields on government securities, and interest rates generally, were permitted to move in accordance with market forces. Ultimately, in order to give the freest possible play to market forces in the determination of long-term interest rates, the monetary authorities limited their open-market operations pretty much to Treasury bills.

The upward trend of interest rates in the fifties.—Charts I and II show the effect of the pegging operation on interest rates in the period up to early 1951. They also show the pronounced upward trend of interest rates in the fifties after the "accord." As will be noted, in spite of cyclical declines in the second half of 1953 and early 1954, as well as in the latter part of 1957 through mid-1958, there was a pronounced upward trend of

CHART I

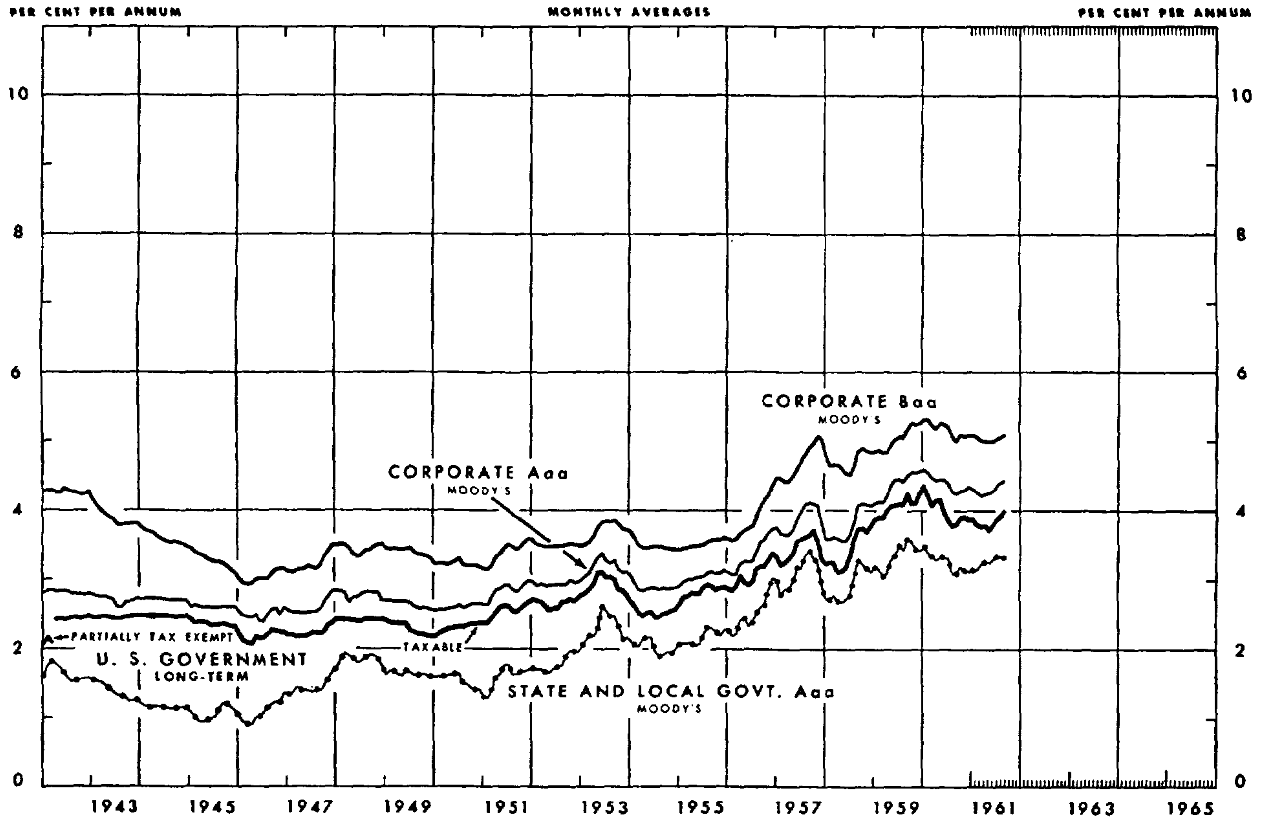
Yields on United States Government Securities



* NEW SERIES.

CHART II

Bond Yields



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interest rates through early 1960. For example, the average yield on long-term government bonds, shown in Chart I, increased from a little less than 2½ per cent in early 1951 to nearly 4½ per cent in early 1960. A similar pattern is apparent in the Moody's Aaa and Baa bond yield series in Chart II, as well as the yield series for Moody's state and local government Aaa bonds. The rise in yields during this period on *new offerings* of corporate bonds, both those publicly offered and those directly placed with investing institutions, was even more dramatic than in the case of the yields on outstanding bonds, shown in these charts, but the pattern was similar. Likewise, mortgage interest rates rose somewhat more sharply than the picture shown in these charts, but again the pattern was similar. At the peak of the upward trend by early 1960, FHA-insured mortgages were being acquired by investors at a gross yield of about 6 per cent, and yields on new offerings of high-grade bonds and conventional mortgages at rates high than 6 per cent.

What were the forces behind the rising trend of interest rates from early 1951 through early 1960? First, and most important, the rise can be explained largely in old-fashioned demand-and-supply terms. The simple fact is that in many years during the fifties the aggregate demand for loanable funds ran ahead of the supply available from savings and the increase in the money supply considered healthy for the national economy by the Federal Reserve authorities. Table 1 presents the various uses of loanable funds in the American economy, and the sources from which they were accommodated, during the period 1952–61. A word of explanation about the table will be helpful. In the lower portion, the figures measure the *net* increase in each classification. For example, in 1959 the figure $4.1 billion for corporate bonds measures the net increase in outstanding corporate bonds that year, and the figure $13.2 billion for one-to-four family home mortgages measures the net increase in such mortgages outstanding during the year. Similarly, in the upper part of the table, the various sources of funds indicate the *net* increase in available funds from each category. In 1959, for example, the $4.9 billion for life insurance companies measures the net increase in funds available for investment from this source, and similarly with the other classifications. It should also be noted that this table measures only the uses which *were accommodated*—that is, it does not give any indication of the volume of demand that went unsatisfied in some of the peak years.

Nevertheless, a glance at the table provides evidence of the rising tide of capital demands during the fifties. Note, in particular, the increasing demands placed on the market for both residential and nonresidential mortgage credit. Similarly, state and local government issues have ex-

panded. Moreover, in certain years, such as 1958 and 1959, the increase in federal debt has been a big factor in the market.

Thus it is accurate to say that the upward trend of interest rates in the fifties was due largely to the pressure of heavy loan demand against the available supply of funds.

A second important reason for the uptrend of interest rates during the fifties, not unrelated to the first, is that during that period the country experienced some inflation. A good part of the actual general price rise occurred during the Korean War, but all during the period the price level crept upward. But, perhaps more important, during the fifties the general public developed an inflation psychology which reached a peak in late

TABLE 1

SOURCES AND USES OF FUNDS IN THE CAPITAL MARKET, 1952–62
(In Billions of Dollars)

	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962*
	Sources of Funds										
Life insurance companies	4.4	4.7	5.0	5.3	5.0	4.7	4.9	4.9	5.1	5.3	5.4
Savings and loan associations	3.1	3.7	4.2	5.7	4.9	4.9	6.3	8.3	7.1	9.4	9.0
Mutual savings banks	1.7	1.8	2.0	2.1	2.0	1.7	2.4	1.5	1.5	2.1	2.2
Corporate pension funds	1.5	1.7	1.9	1.9	2.1	2.6	2.6	3.1	3.2	3.1	3.3
Commercial banks	9.1	4.1	10.2	4.8	4.4	5.1	15.2	4.2	9.2	16.1	15.2
Federal Reserve banks	0.9	1.2	− 1.0	− 0.1	0.1	− 0.7	2.1	0.3	0.7	1.5	1.0
State and local funds	2.1	2.5	2.9	1.9	2.3	2.7	1.5	2.9	1.0	2.1	2.4
United States investment accounts	3.6	2.4	1.3	2.1	2.3	1.2	− 0.9	− 0.7	1.4	− 0.5	0.5
Federal loan agencies	0.9	0.2	− 0.1	0.6	0.9	1.6	0.6	2.5	1.5	0.9	0.7
Corporations	2.5	2.4	0.3	11.2	− 1.1	2.1	2.9	9.9	2.6	4.0	10.2
Fire and casualty companies	1.2	1.3	1.2	0.9	0.5	0.8	0.9	1.5	1.2	1.2	1.2
Foreigners	1.0	0.6	0.6	1.3	0.5	†	†	4.5	1.0	0.6	1.6
Individuals and others	4.9	5.1	1.6	8.4	8.0	6.6	3.9	14.1	3.4	3.7	4.7
Total sources‡	36.9	31.9	30.0	46.1	32.1	33.3	42.4	57.1	38.9	49.5	57.4
	Uses of Funds										
Corporate bonds	4.9	4.8	3.8	4.2	4.7	7.1	5.9	4.1	5.0	5.1	4.8
Corporate stocks	2.4	1.9	1.8	1.9	2.5	2.7	2.1	2.4	1.8	2.6	1.8
State and local government issues	3.1	3.5	4.2	3.5	3.3	4.8	5.9	5.1	3.8	5.7	5.4
United States government issues	8.0	7.8	3.5	2.0	− 4.1	− 1.7	8.0	7.9	− 0.6	6.1	8.0
Federal agency issues	†	†	†	1.5	0.6	2.1	− 0.5	2.2	†	0.7	0.8
Mortgages:											
One-to-four family	6.8	7.6	9.6	12.6	10.8	8.6	10.1	13.2	10.4	12.2	12.8
Other	2.3	2.3	2.8	3.6	3.8	3.5	5.2	5.8	4.9	5.9	7.0
Business credit	2.9	− 1.8	1.4	9.5	7.4	3.1	3.0	8.2	6.9	6.1	8.0
Consumer credit	4.8	3.9	1.1	6.3	3.5	2.6	0.1	6.2	4.4	1.4	5.2
All other credit	1.6	1.9	1.9	0.9	− 0.4	0.5	2.7	2.1	2.2	3.7	3.6
Total uses‡	36.9	31.9	30.0	46.1	32.1	33.3	42.4	57.1	38.9	49.5	57.4

* Estimated.

† $50 million or less.

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

1959. The public began to think that inflation was a way of life. Inflation leads to rising interest rates in two ways. First, the actual rise of prices, especially for capital goods such as industrial plant and equipment, housing, and public improvements, inflates the aggregate demand for capital goods. At rising prices it takes more dollars to finance an unchanged physical volume of capital goods. More important, inflation and the fear of inflation reduce the investment appeal of interest-bearing obligations such as bonds and mortgages. A larger proportion of capital funds seeks out equity investments and a smaller proportion fixed-income obligations. Thus interest rates naturally tend to rise during a period in which the public fears inflation because the supply of loanable funds becomes smaller than would be the case in the absence of inflation psychology. The left-hand panel in Chart III shows how, in recent years, Standard and Poor's average yield on common stocks has dropped below the yield on bonds. This "reverse yield gap" is a measure of the inflation psychology of the fifties which still lingers, although in a much-weakened form.

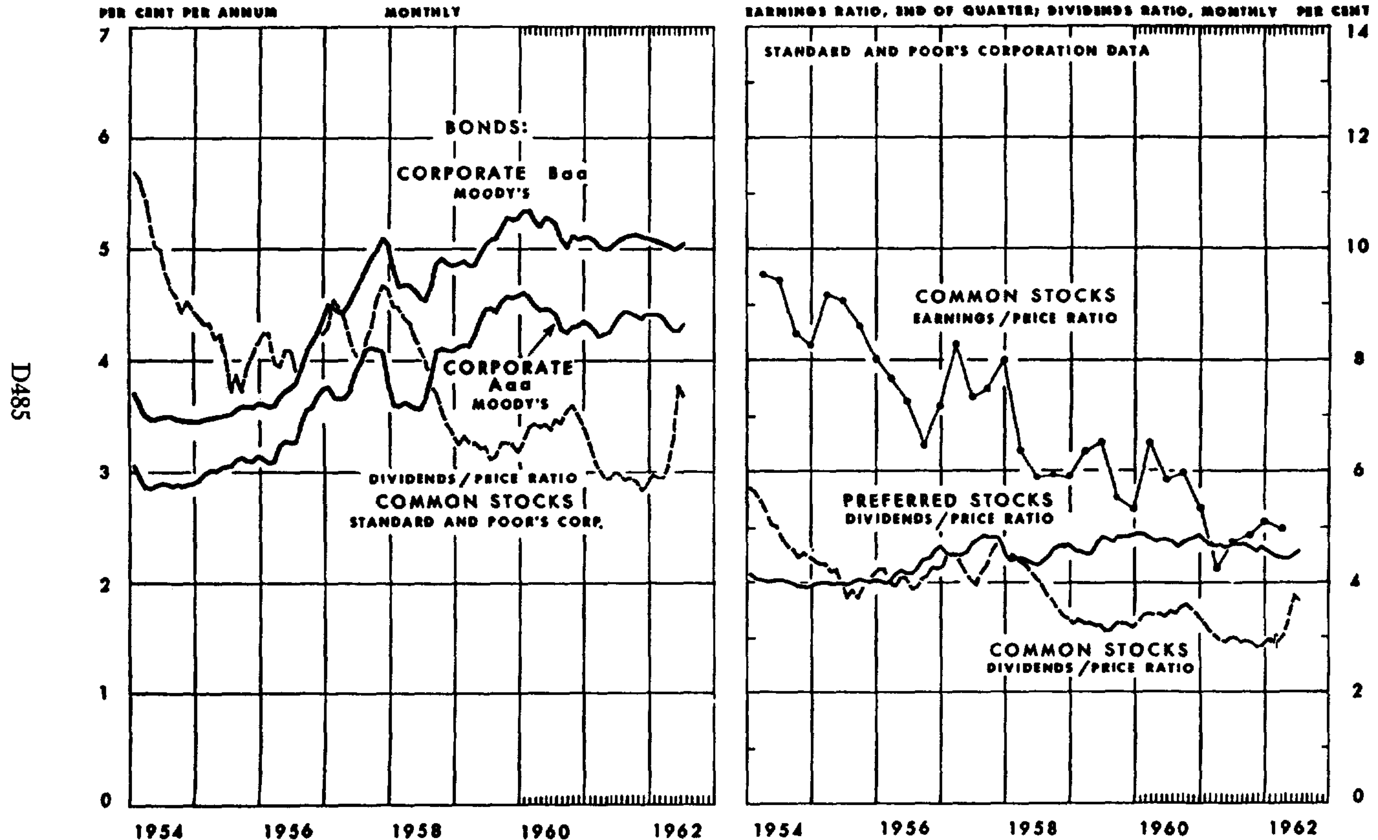
The third and final important reason for the upward trend of interest rates in the fifties was that throughout most of this period, with the exception of recession periods, the monetary authorities felt obliged to pursue a restrictive credit policy because of the inflation danger. Similarly, through most of the period the United States Treasury was deeply concerned about excess liquidity in the American economy, so that it sought in its new financing and debt-management operations to reduce its reliance on the issuance of short-term securities. Instead, through the new issues of long-term bonds which it made available and through the technique of "advance refunding," it sought to place a higher proportion of the federal debt in longer-term form and with savers and savings institutions rather than with the commercial banks. Governmental policies, therefore, had some influence toward rising interest rates, but I believe that such policies were not fundamental; the basic factors were the heavy capital demands and the inflationary forces which characterized the fifties.

Behavior of interest rates since early 1960.—As shown in Charts IV and V, the postwar rise of interest rates reached a peak in early 1960. Since that time interest rates have as a general thing receded somewhat and moved sidewise within a comparatively narrow range. Before asking the question of what the behavior of rates is likely to be in the remainder of this decade, it will be useful to analyze briefly the movement of rates since early 1960.

As is evident in Chart IV, the average yields on government securities declined markedly during the first half of 1960. Chart V shows a similar

CHART III

CORPORATE SECURITY YIELDS*

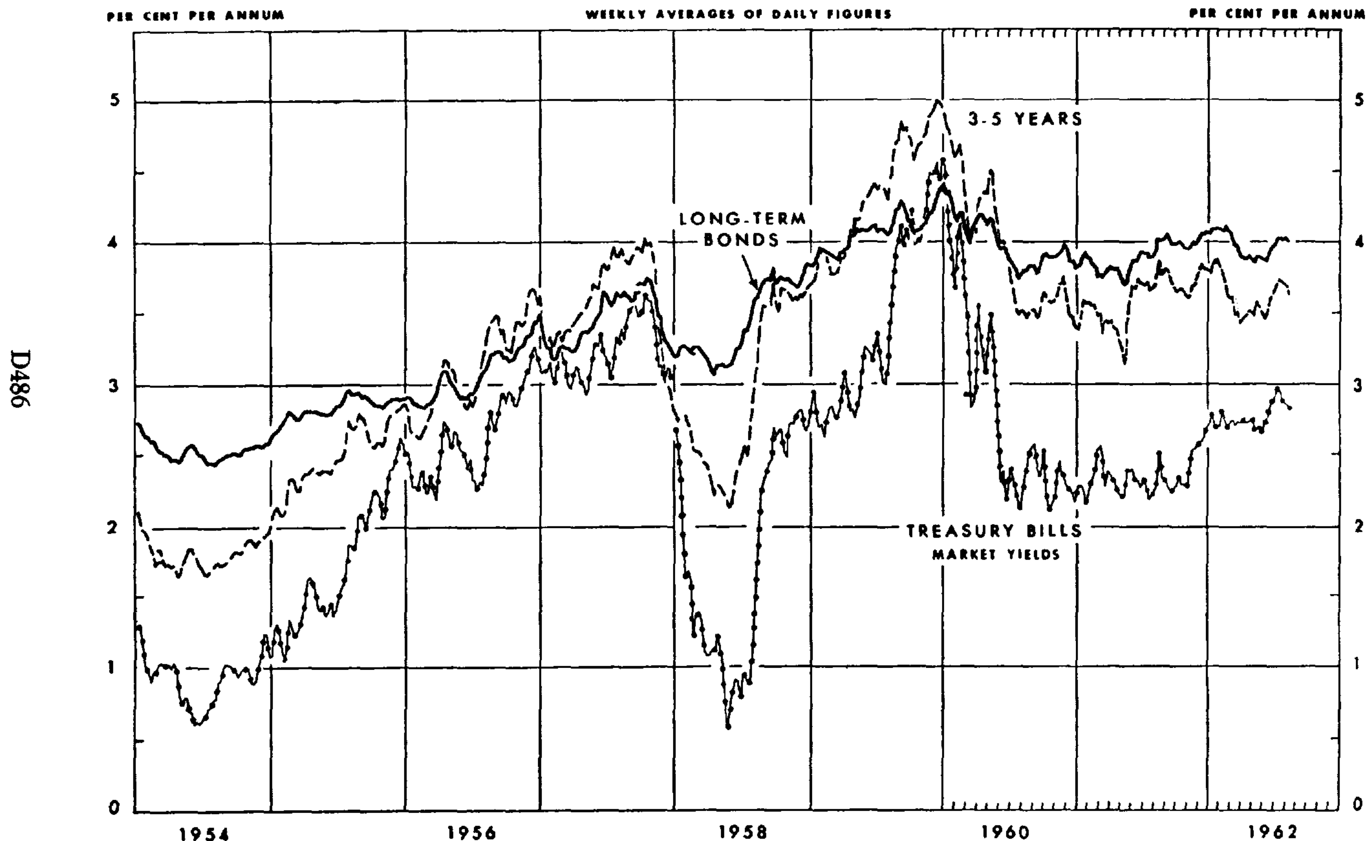


* Latest figures plotted: bond yields, July; common stocks, earnings/price ratio, first quarter; dividends/price ratio, July; preferred stocks, July.

CHART IV

YIELDS ON UNITED STATES GOVERNMENT SECURITIES*

(Fully Taxable Issues)



* Latest figures plotted August 10, 1962

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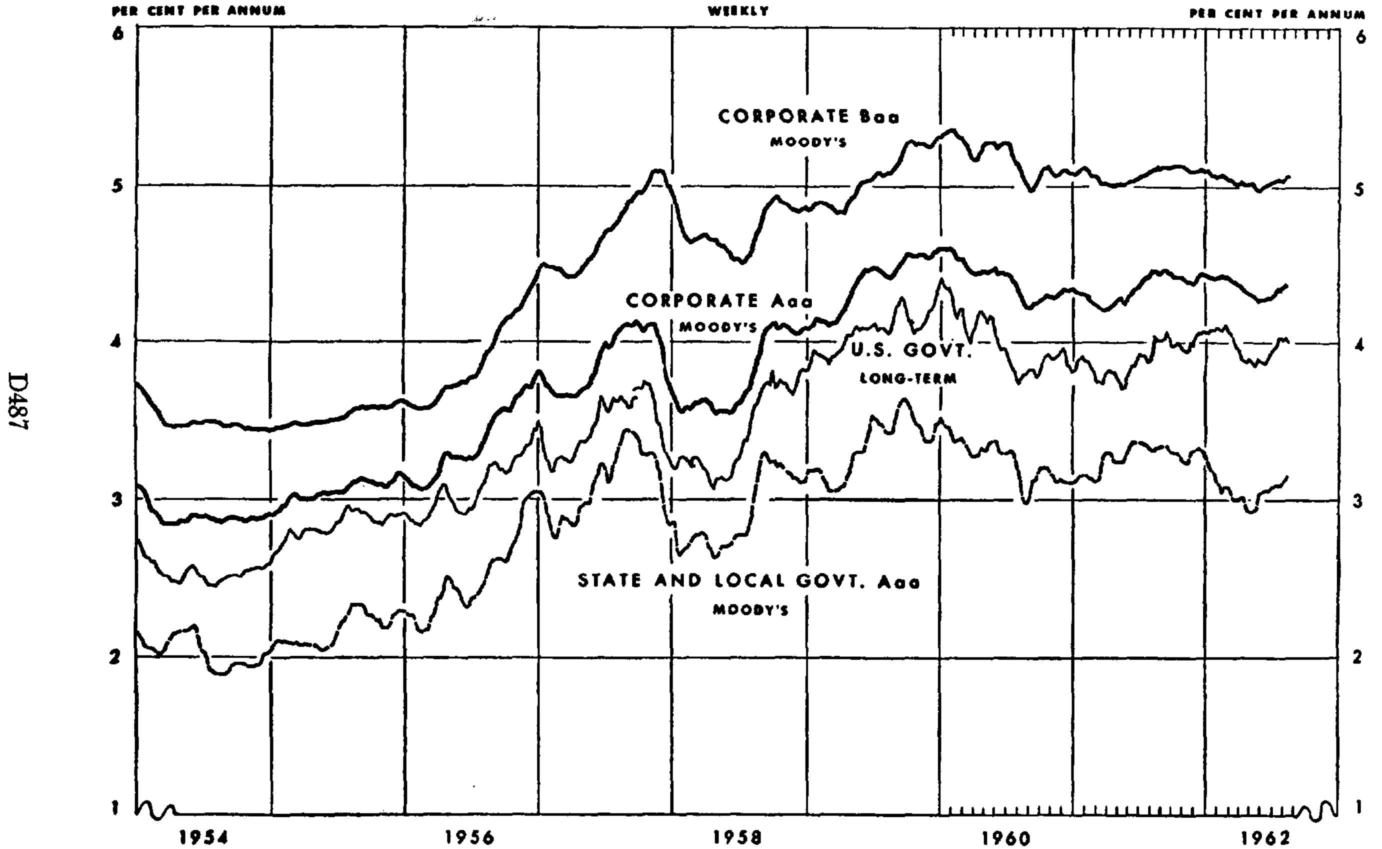
CHART V

BOND YIELDS*



* Latest figures plotted, August 10, 1962.

movement in corporate bond yields. The forces behind this decline were twofold. First, general business activity began to soften in early 1960, and, consequently, demands for loanable funds declined. Second, the monetary authorities shifted from a restrictive to an easy credit policy in order to cushion the general business decline. As the Federal Reserve moved to expand the free reserve position of the commercial banks, the average yield on Treasury bills fell in two stages from better than 4½ per cent at the end of 1959 to about 2¼ per cent in mid-1960. Similarly, the average yield on long-term government bonds declined nearly three-quarters of 1 per cent in the same period.

It should be noted, however, that the drop in the yield on Treasury bills in 1960 was not so deep as was the case in the two prior periods of easy credit policy by the Federal Reserve. In mid-1954, for example, the bill rate fell to scarcely more than one-half of 1 per cent, and the same thing occurred in mid-1958. The reason the bill rate did not go as low in 1960 as in the earlier recessions is highly significant. It was not because the authorities lacked the power to drive the bill rate to a much lower level. Rather, the monetary authorities and the Treasury began in mid-1960 to act in concert to prevent the bill rate from falling below a given target level. The authorities wanted credit as easy as possible and therefore wanted the Treasury bill rate and other interest rates to decline in order to encourage an expansion in general business activity. But at the same time they could not afford to have the bill rate and other short-term rates fall below the level which would precipitate an outflow of funds held by foreigners in the United States. As the result of deficits in our international balance of payments of $3.5 billion in 1958 and $3.7 billion in 1959, and smaller deficits in prior years, foreigners had built up huge holdings of liquid assets in the United States which, it was feared, would be transferred to other money centers if short-term rates in the United States moved down to a level not competitive with rates in other markets. The result would be, of course, an outflow of gold.

The means which were taken by the authorities to prevent the bill rate from falling below a target level deemed safe from an international balance-of-payments viewpoint were twofold. The Treasury, in both its new money financing and its refunding, fed a large supply of bills to the market. The Federal Reserve authorities, in their open-market operations, departed from their "bills usually" policy. Depending on their objective for the free reserve position of the commercial banks, the authorities became more active in the purchase of intermediate-term governments and reduced their holdings of bills. Thus the open-market operations not only had the goal of supplying the banks liberally with reserves but

also had the objective of preventing the Treasury bill rate from falling below a given target level and at the same time encouraging a decline in yields on intermediate and long-term investments. The joint efforts of the Treasury and Federal Reserve have been dubbed "operation nudge."

Referring again to Charts IV and V, it is apparent that since mid-1960 interest rates have moved within a comparatively narrow range. The Treasury bill rate fluctuated around the $2\frac{1}{4}$ per cent level until the latter part of 1961, at which time the target rate of the authorities, in view of international balance-of-payments considerations, was raised to the $2\frac{3}{4}$–3 per cent level. Long-term interest rates, although fluctuating, have shown notable steadiness. The explanation for this is largely in the fact that during the last two years there has been a good balance between the supply of loanable funds and the demand for financing. During the recovery in general business activity since early 1961 the over-all demand for both short-term and long-term credit has been high, but the available supply of funds has been adequate to meet the demand without upward pressure on rates. In addition, the comparatively high rate of return on Treasury bills and other short-term loans has served to make it less necessary for investors, particularly the commercial banks, to reach out for long-term investments. In a sense, therefore, the need to maintain a comparatively high short-term rate has made it difficult for the authorities to nudge long-term rates downward. This has been less true since early this year, when a revision of the Federal Reserve Regulation Q permitted the commercial banks to pay as high as 4 per cent on savings and time deposits held for one year or longer. As the commercial banks raised their rate to compete more effectively with the mutual savings banks and the savings and loan associations, they have experienced a huge increase of $8.4 billion in time deposits in the first eight months of this year. The need to earn 4 per cent or better on these deposits has brought the commercial banks much more actively into the long-term capital markets, and at the present time their appetite for mortgages and term loans to business and industry is an important force toward some easing of long-term interest rates.

Outlook for Interest Rates in the Remainder of This Decade

So much for the past behavior of interest rates. In the light of experience, what can be said about the outlook for interest rates in the remainder of this decade?

In approaching this question, it is essential that I be explicit about an assumption I shall make with regard to international political conditions. My assumption is that the cold war will persist throughout this decade

and that an atmosphere of tension between the East and West will continue. I am assuming, however, that, although there may be new localized fighting, such as in Viet Nam, there will not be an all-out nuclear war. This may prove to be too optimistic an assumption, but it must be made, or it is rather pointless to discuss the future of interest rates or anything else. Despite the assumption that all-out nuclear war will be avoided, it seems logical to expect a world of tension and fierce competition of ideologies. For the United States, this means that huge federal spending seems assured, with probably a rising level of government expenditures for foreign and domestic purposes combined. It also means, significantly, that, regardless of what political party is in power, great stress will be placed by the federal government upon the objectives of full employment of our labor force and accelerated economic growth of the country.

In considering the prospects for interest rates, it seems to me that there are likely to be some important differences in general economic conditions between the fifties and the sixties which will affect the course of interest rates. After reviewing these differences, it will be possible to make a more balanced judgment about the outlook for rates.

First, throughout most of the fifties there was still a large backlog of demand for durable consumer goods, automobiles, and housing which resulted from the lean years of the Great Depression and World War II. There is abundant evidence that this backlog of demand has now been pretty well satisfied and that in this decade the economy will be required to operate on currently generated demands. There is little doubt that as the result of the wartime austerity, plus the record high rate of an average of 1.5 million family formations in the period 1947–50, the fifties were favored with a huge backlog of demands. This was especially true in the single-family house field in which the GI Bill of Rights aided to encourage a solid core of demand. The great expansion of housing was, of course, facilitated by increasingly liberal financing terms in all sectors of the residential mortgage market, culminating in very little or nothing down and thirty-five to forty years to repay the loan.

Hand in hand with the great boom in homeownership in burgeoning suburbia came the lush market for automobiles, washing machines, television sets, and other durables. Hand in hand also came the rising expenditures by state and local government units for schools, roads, and other public improvements. Behind it all was the fact that this kind of an economy generated rising jobs and rising incomes, and, armed further with liquid assets accumulated during the war and very easy credit, the American people were able to make their large demands effective. As we move into the sixties, it is becoming more apparent that the backlog of

demand which characterized the fifties has been pretty well exhausted. The annual rate of family formations will average only 750,000–800,000 in the first five years of this decade, with not a great increase in the period 1965–70. The next burst of family formations is not likely to occur until the late sixties and early seventies. Even though credit is readily available, we hear more and more today about the difficulties builders are having in selling new houses. It seems apparent that the backlog element has been squeezed out of the single-family house field, although residential construction today is receiving a stimulus from an increase of activity in apartment building. Similarly, the market for automobiles and consumer durables is much more competitive today, an evidence of the exhaustion of backlogs of demand.

The importance of the change which has occurred, from the viewpoint of the outlook for interest rates, is that with the large backlog of demand in the fifties manufacturers were encouraged to think that their markets were virtually limitless. The result was that through most of the fifties there was a very favorable climate for expansion of productive capacity by industrial firms. Rising demands for capital funds, not only in housing but also in industry, were the natural outcome. Today, without the assurance of a sizable backlog of demand for housing, automobiles, and durables generally, business and industrial firms are more hesitant about expanding productive capacity.

A second important difference in general economic conditions as between the fifties and the sixties which has a bearing on the future course of interest rates is the fact that until the late fifties the United States government was able to formulate and carry out domestic economic policies with little regard for the implications such policies would have for our international balance of payments. Since 1958, however, the balance-of-payments position of the United States has exercised an important influence over domestic economic policies, and this influence is likely to continue for the foreseeable future.

There is not time here for an extended discussion of our balance-of-payments problem, but a few words will help to show its importance for the future of interest rates. In the early years after the war Europe and Japan had the task of rebuilding their war-torn economies. In those days the "dollar problem" meant the inability of friendly countries to earn the dollars needed for reconstruction and development. Thus the United States launched a program of foreign loans and grants to meet their needs and to facilitate the development of backward countries. During the past ten years this picture has changed dramatically. The economies of European nations and of Japan have been rebuilt with new, up-to-date plant

and equipment, and they have been experiencing a favorable growth rate. Operating at comparatively low costs, relative to the rising cost levels in the United States during the postwar period, foreign industry became increasingly competitive with American firms. Addings to these forces, the United States assumed the major part of the burden of paying for military establishments needed to meet the Communist threat. The result of all these forces was brought home to us in the latter part of the fifties. In 1958 the United States ran a deficit of $3.5 billion in its international balance of payments; in 1959, a deficit of $3.7 billion; in 1960, a deficit of $3.9 billion; and, in 1961, a deficit of $2.4 billion—an aggregate in these four years of $13.5 billion.

As a result of these deficits, during the past six years the United States has lost $7 billion of gold, and our gold reserves have been reduced to about $16 billion. In addition to withdrawing $7 billion in gold, foreigners and foreign central banks have built up their holdings of liquid assets in this country to $24 billion. Of our total gold reserves of $16 billion, about $11.5 billion must be held under statute against Federal Reserve notes and deposit liabilities. Thus the free gold available for foreign demands amounts to only $4.5 billion, as against the liquid assets of $24 billion held by foreigners and foreign central banks in the United States. With this situation facing us, it is readily apparent why the United States government has in recent years placed so much stress upon reducing and ultimately eliminating the deficit in our balance of payments. In view of the balance-of-payments problem, a paramount objective of the Administration has been to prevent any resurgence of inflation because a further rise of prices in the United States would injure the ability of American industry to export goods and services and would cause foreigners to fear devaluation of the dollar and thus lead them to remove their short-term assets from the United States. Accordingly, the balance-of-payments problem has forced the Administration to follow fiscal and monetary policies much less expansionary than they have desired in view of domestic economic conditions of the past year and a half.

As noted earlier, the government has been required to place a floor under the Treasury bill rate at about a $2\frac{3}{4}$ per cent level in order to avoid an outflow of short-term funds. The floor under short-term rates, in turn, tends to place a floor under long-term rates.

There is little doubt that the Administration has taken important steps toward closing the deficit in our balance of payments. The hope and firm objective is to close the gap completely in 1963. It remains to be seen whether this can be achieved. Even though we should prove able to bring our international accounts into balance, it seems clear that, with

the huge liquid assets held by foreigners and foreign central banks and our greatly reduced holdings of free gold, it will be necessary for our government to continue to keep a weather eye on our international accounts in the formulation of domestic monetary, fiscal, and debt-management policies. One of the prime considerations affecting interest rates will probably continue to be that they must be kept competitive with rates in foreign countries.

A third important difference in general economic conditions as between the fifties and the sixties which has a bearing on the future course of interest rates is the fact that in recent years a "squeeze on profits" has occurred which is tending to discourage capital expenditures by business and industrial corporations. The squeeze on profits has been developing for a number of years. It arises primarily out of the upward push of costs —primarily wage costs. Through much of the fifties business and industrial firms were able to offset cost increases with increases in the prices of their products—and thus the "cost-push" inflation of the fifties. However, in recent years it has been difficult to raise prices to offset cost increases. The reason is that greatly increased competition from both domestic firms and foreign concerns has militated against price increases. More recently, the steel crisis of March, 1962, demonstrated how the federal government feels compelled to hold the line on prices to avoid deterioration in our export of goods and services and thus in our international balance-of-payments position.

There has been a great deal of talk about a corporate tax cut to improve the corporate profits picture, and the Administration apparently will push for such a cut in the next session of Congress as part of a broad tax-reform program. However, even though tax reform may reduce the squeeze on profits, this is likely to be a continuing problem for some time. Here, again, the significance for interest rates is that poor profit expectations do not make for a high rate of capital spending.

A final important difference in economic conditions as between the fifties and the sixties having a bearing on the course of interest rates is that the fifties were characterized by "creeping inflation" and public fear of inflation, whereas there are good reasons for believing that inflation will not be a serious problem during most of the sixties. Among these reasons are (1) the persistence of slack in our economy in the form of unemployed labor and plant capacity, a condition which militates against rising prices; (2) the competition of foreign products and intensified competition in home markets; and (3) the absence of large backlogs of demand such as characterized much of the fifties. If it should be true that the general price level is much more stable in the sixties, then the strong

upward pressures which inflation and the fear of inflation put on interest rates will be absent in this decade. With greater price stability there will not be the inflated demands for capital funds. Also, without fear of inflation the public will be more willing to intrust their savings to institutions which invest the bulk of their funds in bonds and mortgages. Thus the flow of funds available for interest-bearing obligations may be enhanced.

Accordingly, some of the conditions which encouraged a pronounced rise of interest rates in the fifties may be absent, or much less strong, in the sixties. At the same time, some new conditions in the sixties, such as our changed international position, may act to maintain interest rates at high levels.

The moment of truth has now arrived. What can be said specifically about the outlook for interest rates in the remainder of this decade? First, it seems clear that the demands for all forms of credit will continue to show a marked rise in the next several years. My principal reasons for expecting this are: (1) Toward the end of achieving high employment and a faster rate of economic growth, appropriate steps will be taken by the federal government in the field of corporate taxation to encourage a much higher rate of capital expenditures. (2) The rising rate of spending for industrial research and development will continue, producing an increasing volume of investment expenditures by business and industry. (3) Exploitation of opportunities in the space age will call for strongly rising capital expenditures. (4) Capital spending in all forms will obtain some stimulus from a moderately rising rate of family formations, particularly in the latter years of the decade. For these reasons, and others, therefore, the total demands for credit should show a pronounced expansion in the next several years.

At the same time, however, I believe that the climate of the next several years should be conducive to a healthy growth in our aggregate national savings to meet the expansion of capital demand. This will be especially true if we experience a greater degree of stability in the general price level, which I expect will be the case.

My guess, therefore, is that we shall witness a better balance in the sixties between the total demand for loanable funds and the total supply.

As suggested earlier, I expect that in formulating domestic monetary, fiscal, and debt-management policies the administrations in power in the remainder of the decade will be required to pay careful attention most of the time to the implications of these policies with regard to our international accounts. Domestic policies affecting interest rates will have to be keyed to the desirability of keeping our rate level in line with rates abroad. In view of the likelihood that capital demands will continue to

press against the supply of funds available in most countries of Europe and Japan, not to mention countries in our own hemisphere, the competitive rate level abroad is likely to remain quite high.

My conclusions about interest rates are, therefore, as follows:

1. We are not likely to witness a renewed upward trend of interest rates in the remainder of this decade, such as characterized the fifties. If it should develop, it is not likely to occur until the latter part of the decade.

2. At the same time it seems highly improbable that we shall experience a serious and sustained decline of interest rates in the next several years. The prospects are for a much better balance between the demand for and the supply of loanable funds in the remainder of this decade at around the present level of rates. International balance-of-payments considerations will militate against any sustained decline in rates.

3. The most likely prospect is that during the remainder of this decade interest rates will continue to move within a comparatively narrow range around an average level somewhere between the high of early 1960 and the present lower level.

4. The future course of interest rates will depend very heavily upon how well we avoid a new round of inflation, how successful we are in eliminating the deficit in our international balance of payments, and how well we succeed in stimulating a much higher rate of capital spending by business and industry—to mention three main considerations. My expectations about interest rates in the remainder of this decade are based heavily on the assumption that we shall avoid a resurgence of inflation. If this assumption should prove to be wrong, and if the price level should begin to move upward and the general public should again be infected with an inflation psychology, then interest rates would certainly move to levels considerably higher than obtained in early 1960.

5. Obviously, as was true in the fifties, interest rates will experience some cyclical fluctuation in tune with cyclical fluctuation in general business activity, but our concern here has been in the main with the decade as a whole.

Finally, what are the implications for the life insurance business of my views about interest rates in the remainder of the decade? If it does turn out that interest rates move within a narrow range at around the comparatively high level of 1960–62, then it seems certain that the life insurance companies will continue to experience a significant rise in the average rate of return on their investments. In 1961 the average net rate of return for the industry as a whole was 4.22 per cent. During the next several years companies will continue to dispose of investments which yield lower

TRANSACTIONS OF SOCIETY OF ACTUARIES
1962 VOL. 14 PT. 2

than the average. At the same time, their new investments should produce a yield considerably higher than the average. During the past three years the rate of improvement in the average yield was about twelve basis points. Although the annual rate of improvement will decline if my views are anywhere nearly correct, it seems likely, nonetheless, that by 1970 the average net rate of return on life insurance company investments as a whole will exceed $4\frac{3}{4}$ per cent and may actually be closer to 5 per cent.

EQUITIES

HAROLD X. SCHREDER:

Under unprecedented conditions the stock market during the spring of 1962 experienced a shocking and historically severe decline, from which it has made a modest recovery. Moreover, it is now quite generally acknowledged that the leading indicators which most of us watch for clues to the economic outlook are not very encouraging. In fact, at best, they suggest that we may continue our "high-level–slow-growth" economy for some time ahead or, at worst, experience a fairly severe recession.

I was invited here today to "take it from here" for the rest of the decade of the 1960's. I hope I can be even half as good at carrying out this assignment today as our chairman has been in selecting it.

The basic thesis I will attempt to develop today is that, during the tortured early years of this decade, one of the most important stock-market bottoms—buy areas—for many years to come should develop and be taken advantage of by investors, because the long-term outlook for stock prices is extremely favorable, especially for the stocks of the long-depressed basic consumer durable and capital goods industries.

In this connection, while I do not intend to omit some comments on the current stock-market outlook, I understand that my assignment today calls more for the long-term outlook for stock prices—that is, 1970 expectations—because investors of your type, as opposed to speculators, are more interested in either the cyclical or the very long-term outlook for stock prices than in short-term stock-market movements.

Simple Projection of Stock Prices to 1970

What, then, is the outlook for the stock market in 1970? Obviously, there are many ways to make such a judgment, but let us start with the easiest and simplest of all methods of projecting long-term stock prices—projection of their own long-term price trend on a ratio-scale chart. In this connection, I call your attention to Chart I. Note that this chart shows the prices of the Dow-Jones Industrial Average from 1897 to the