

*Annual Report  
Issue*

# Business Review

The Federal Reserve in the "New Economy"  
Is the Money Supply All That Matters?  
1965: A Sea-Change

January 1966



Federal Reserve Bank of Philadelphia

## **The Federal Reserve in the “New Economy”**

An economist would be hard put to find anything really new about the “new economics.” And since no economic environment is ever exactly like any that has gone before, it is, strictly speaking, belaboring the obvious to say we have a “new economy.” Yet there is something—or a combination of things—that seems to be enough different about the current economy to justify the word “new,” and therefore has important implications for all economic institutions, including the Federal Reserve.

At the risk of gross over-simplification, the following six points are suggested as basic elements in this economy:

1. A new emphasis on sustaining economic expansion.
2. Growing confidence that built-in devices protect against economic catastrophe.
3. Wider public acceptance of compensatory fiscal policy.
4. Development of new techniques of management control in business.
5. An experimental approach to control of wages and prices.
6. Intimate involvement in a rapidly changing world economy.

From all these in combination arises an *attitude* toward the economy. At its best this attitude is characterized by confident pragmatism, at its worst by complacency reminiscent of the “new era.”

For the Federal Reserve, these elements have implications which can be seen only dimly now

*(Continued on Page 19)*

*The money supply is all that matters. The money supply matters. The money supply doesn't matter at all.<sup>1</sup> These statements—a succinct summary of the current status of monetary theory—raise the question for monetary policy . . .*

# IS THE MONEY SUPPLY ALL THAT MATTERS?

There is widespread agreement on the general objectives of monetary policy: maintaining a reasonably full use of productive resources, price stability, sustained economic growth, and protecting the external value of the dollar. But in formulating policy to achieve these objectives the central banker confronts widespread disagreement, even among specialists in the field, on two basic problems: how monetary measures influence the economy, and what guides to use in formulating policy.

## LINKAGES BETWEEN MONETARY ACTIONS AND ECONOMIC ACTIVITY

How monetary measures influence the level of prices and the volume of business activity has long been a subject of controversy among monetary theorists. Current thinking falls into three general classes:

1. Many contend that the money supply is the primary cause of changes in the price level and the volume of business activity.
2. Others disagree. The money supply may matter, but it isn't all that matters; monetary measures alter the cost and availability of credit, which in turn influence total demand and thereby business activity and prices.

---

<sup>1</sup> Paraphrase of statements by James Tobin, "The Monetary Interpretation of History," *The American Economic Review*, June, 1965.

3. Still others believe that the money supply hardly matters at all. The general liquidity of the economy—the ease with which spenders may obtain additional funds by borrowing and selling some of their assets—is the primary determinant of total demand.

There are divergent views within each class, but in this article the goal is a greatly simplified analysis confined to the principal characteristics of the three general doctrines.

## 1. MONEY SUPPLY THEORIES

The oldest and probably the most widely accepted over the years is the doctrine that the total supply of money is the major determinant of changes in the price level and business activity. A brief summary of the evolution of this doctrine enables one to view current quantity theory in better perspective.

### Quantity of money and prices

According to some scholars, a crude form of the quantity theory can be found at least as far back as the writings of the Romans. In its early form, the theory was simple and mechanistic. Money is a medium of exchange; its value to the holder is how much it will buy, and how much it will buy depends on the total quantity of money in relation to the supply of goods and services available for purchase. An increase in the supply of money stimulates spending, bids up

prices, and reduces the buying power of money; a decrease in the supply has the opposite effects.

Economists recognized long ago that this simple form of quantity theory was unrealistic. To be sure, the quantity of money at the disposal of the public was important, but there were other factors that should not be overlooked. The velocity of circulation of money also influenced total demand and spending. For example, in a given period of time \$5 spent twice would have the same effect on total spending as \$10 used only once. The total quantity of goods and services available for purchase also influenced the price level and value of money. A 25 per cent increase in the money supply would not raise prices if accompanied by a 25 per cent increase in the physical quantity of goods and services available for people to buy.

Three factors came to be recognized as determinants of the price level and purchasing power of money: the money supply, its velocity of circulation, and the total physical quantity of goods offered in exchange. In the United States these factors were put in equation form:  $MV = PT$ ; the money supply times its velocity of circulation is equal to the price times the quantity of goods sold. Even though velocity and total output were recognized as possible influences, proponents of this form of quantity theory believed both were stable, except during short periods of transition, so that changes in the quantity of money remained as the primary determinant of the price level. An increase in the money supply meant higher prices; a decrease, lower prices.<sup>2</sup>

<sup>2</sup> Another version of the quantity theory, especially prominent among English economists, was the cash-balances approach. This approach stressed that people wanted to hold a certain proportion of their real income in the form of money. If, for example, an increase in the money supply lifted balances above the amounts people wanted to hold, they would increase their spending to bring money balances down to the desired level.

Gradual recognition that it was unrealistic to assume that productive resources were fully employed and that “other things remain the same” was another major step in the evolution of the quantity theory. The Great Depression in the early thirties brought a marked shift in emphasis from the effects of monetary actions on prices to their effects on total demand and the volume of business activity. The sharp decline in production and rise in unemployment, followed by a prolonged period of stagnation with output running far below capacity, dramatized the unreality of assuming that other things remain the same. In recent years, money-supply theories have dealt not only with the effects of the quantity of money on prices but also on total spending, production, and employment.<sup>3</sup>

### Current money-supply theory

Despite vigorous criticism of the quantity theory over the years, this category still seems to be the most widely accepted among economists. Within the group, however, there are divergent views as to how the money supply affects total demand and as to the prescription for monetary policy.

<sup>3</sup> That an increase in the money supply would tend to stimulate business activity was recognized long ago. In 1723, for example, Pennsylvania's colonial legislature passed an act providing for the issue of 15,000 pounds sterling of paper currency to remedy the “extreme scarcity of money” because of which the trade of “this Province is greatly lessened and obstructed.” In the early part of this century, public works expenditures were recognized as a method of injecting funds into the economy and stimulating business activity. In 1911, A. L. Bowley, a noted English statistician, stated with reference to the beneficial effects of public works the effect is “like throwing a stone into a pond, which makes the ripples spread all over it.” In 1916, William Hard, an American journalist, who thought public works expenditures could be used to move a depressed economy off dead center, wrote: “When the waters of business are stagnant, gentlemen, it becomes necessary, if I may say so, to prime the pump.” In 1930, an American economist, V. A. Mund, developed the concept of the multiplier in connection with the effects of public works expenditures.

Some believe that an increase in the money supply puts additional purchasing power at the disposal of the public, and more money means more spending. Other money-supply theorists put more emphasis on subjective factors such as the demand for money. The public's demand for money is directly related to the level of real income; e.g., rising as income increases. If the money supply rises above the amount people want to hold at current income levels, they will spend the excess and total expenditures will rise; if supply falls below the amount people want to hold, they will attempt to build up their money balances and spending will decline.

Theoretical analysis as to the role of the money supply has been supplemented by attempts at statistical verification. The most noteworthy, perhaps, is the comprehensive study by Friedman and Schwartz, embracing the behavior of money in the United States for almost a century.<sup>4</sup> Their study of the money supply, extending back to 1867, led them to the following conclusions. First, changes in the money supply have been closely associated with changes in money income, economic activity, and prices. Second, the interrelation between the money supply and economic change has been highly stable. Third, changes in the money supply have often had an independent origin; they did not occur simply in response to changes in economic activity. The authors recognized that close association between changes in the money supply and changes in money income provides no evidence of which is cause and which is effect. They concluded, however, that the money supply is “. . . rather clearly the senior partner in longer-run movements and in major cyclical movements. . . .”

<sup>4</sup> A Monetary History of the United States, 1867–1960, *A Study by the National Bureau of Economic Research* (Princeton: Princeton University Press, 1963).

The implications for monetary policy are clear—regulation of the money supply is the primary road to business and price stability. Moreover, they proposed a constant rate of growth in the money supply; e.g., from 3 to 5 per cent annually, depending on how money is defined.<sup>5</sup>

There are two main reasons for the proposal. First, of course, is the belief that changes in the money supply are the primary determinant of cyclical and longer-run fluctuations in money income, prices, and business activity. Consequently, maintaining a constant rate of growth in the money supply would tend to smooth out these fluctuations. A second reason is the practical difficulty involved in implementing a flexible monetary policy. A time lag of varying length between changes in the money supply and the final effects on the economy makes it extremely difficult to time countercyclical actions properly. Attempts to do so may intensify instead of mitigate business fluctuations. Hence a constant rate of growth, although not ideal, is considered the most practical method of implementing monetary policy with our present knowledge and institutional structure.<sup>6</sup>

<sup>5</sup> *Definition of the money supply has varied over the years. In the earlier formulations of the quantity theory, money was usually defined as currency and coin. For an extended period, commercial bank demand deposits were not included as money; they were considered as affecting the velocity of circulation of currency and coin. Now all definitions of money include demand deposits, but opinions differ as to whether commercial bank time deposits and other near monies should be considered as a part of the money supply or as influencing velocity.*

<sup>6</sup> *In a sense, F. A. von Hayek's theory of "neutral money" in the early thirties was a forerunner of current proposals for a stable rate of growth in the money supply. He contended that a constant "effective money supply" (money supply times exchange velocity) was a prerequisite for economic stability; however, the money supply should be adjusted to compensate for a change in the proportion of trade effected with money and, of course, for changes in transactions velocity.*

*Carl Snyder, of the Federal Reserve Bank of New York, suggested in the twenties that the stabilization of business was largely a matter of maintaining a rate of credit growth corresponding roughly to the physical growth of trade.*

Some who believe the money supply should be the central aim of monetary policy favor a flexible instead of a constant rate of growth. They believe, despite the problem of timing monetary actions properly, that a rate of monetary expansion adapted to changing economic conditions will yield better results.

## 2. SUPPLY, COST, AND AVAILABILITY OF CREDIT

Environmental change was a significant influence leading some economists to question the validity not only of some of the assumptions of the money-supply doctrine but the validity of the doctrine itself. In an economy in which currency and coin are the principal means of payment, the supply in the hands of the public is a major influence on spending. But in a modern economy in which credit is widely used as a means of spending tomorrow's income for today's purchases, the supply of money already in existence is a less significant determinant of total spending. Total net debt outstanding in the United States, public and private, is well above one trillion dollars, and the yearly increase recently has been about \$75 billion. The view that the money supply matters but that supply, cost, and availability of credit are additional influences has gained adherents as credit has come to play a more pervasive role in the economy.

### Interest rates

The interest cost of borrowing probably influences the demand for credit just as price is a factor influencing demand for a commodity. But the importance of the cost effects of interest rates has long been a controversial issue.

For many years, interest rates were regarded by some economists as the principal means of maintaining balance between saving and invest-

ment. According to this view, the "natural" rate of interest is the rate at which saving and investment are in balance. If the market rate falls below the natural rate, the tendency is to stimulate overexpansion and an investment boom; if it rises above, borrowing for investment becomes unprofitable and an excess of saving over investment tends to reduce total demand and business activity. The Keynesian school of economists stressed that the relation of the long-term rate to the "marginal efficiency" (profitability) of investment usually had an important influence on the volume of investment expenditures. Changes in the level of investment, in turn, were the principal cause of fluctuations in income and the volume of business activity. They recognized, however, that in depression, profit prospects might well be so poor that a low, or even zero, rate of interest would not stimulate investment.

Since the Great Depression many economists have tended to downgrade the cost effect of interest rates. Prolonged stagnation in the thirties demonstrated that unusually low rates will not stimulate borrowing when there is no prospect that the funds can be used profitably. In addition, several surveys of business firms revealed that interest cost was not a significant influence in investment decisions except for a small percentage of firms. The rate is more likely to be influential when interest cost is a substantial part of total cost; for example, when borrowing is for a long term, such as in housing and business fixed investment.

A currently popular view seems to be that interest cost has little influence on willingness to borrow. Neither does the rate have much effect on willingness to save, although it may influence the form in which savings are held.

Following World War II there was a pronounced shift in emphasis from the cost effect

of interest rates to the influence of rates on willingness to lend. Large holdings of Government securities, a much broader Government securities market, and a widespread belief that large fluctuations in interest rates were not suitable to the postwar environment encouraged development of the availability theory. Moreover, with securities widely held, the impact of a rate change is more pervasive so that small changes in interest rates may be effective.

Commercial banks, in response to pressure on their reserve positions, sell Government securities in order to obtain funds to meet loan demand. Bank sales reinforce the trend toward higher market rates and falling securities prices. But as securities prices decline, lending institutions were presumed to become more reluctant to sell, especially if a loss is incurred, in order to make loans. As a result of greater reluctance to lend, some institutions may refuse loans to new borrowers and marginal credit risks, and tighten the terms on which credit is extended. Thus higher interest rates, by diminishing somewhat its availability, may reduce the flow of credit. But the fact that lending institutions do sell Governments in periods of strong credit demand in order to make loans has tended to discredit this particular aspect of the availability thesis.

### 3. LIQUIDITY THE "CENTERPIECE"

Widespread use of credit and the large volume outstanding helped inspire the view that the money supply hardly matters at all, that the thing that really matters is the general liquidity position of lenders and spenders. The central thesis of this liquidity doctrine is that spenders' decisions are influenced mainly by the ease of obtaining additional funds instead of by the amount of money already in hand. The doctrine was cogently stated in the Radcliffe Committee

Report a few years ago. The Report concluded it is "the liquidity of the economy, rather than the 'supply of money' that the authorities should seek to affect by their use of monetary measures."

According to the Committee Report, monetary actions operate on total demand primarily by altering spenders' access to more funds. To be sure, decisions to spend are influenced some by the amount of cash in the till and the size of the balance in the bank, but much more important is the availability of additional money—the additional amounts consumers and businessmen can get hold of by receipts, borrowing, and the disposal of assets.

Interest rates exert an influence, but primarily by altering the liquidity position of lenders and spenders. Higher rates, by reducing capital values, diminish liquidity and tend to discourage lending and the disposal of assets. The terms on which additional funds may be obtained is the crucial factor. The Report states, ". . . if the money for financing the project cannot be got on any tolerable terms at all, that is the end of the matter."

A somewhat different version of the liquidity thesis has developed in the United States in recent years. Here the emphasis has been on near money or liquid assets created by the growth of financial intermediaries. Spendable funds supplied by nonbank financial intermediaries, such as savings banks, savings and loan associations, and insurance companies, have grown rapidly. Commercial banks, even though they alone have the power to create money, are not considered unique. They are only one of several institutions supplying lendable funds. And it is the supply of spendable funds instead of the money supply that is the primary determinant of total spending. Nonbank financial intermediaries are not under

the direct control of the Federal Reserve with the result, according to this view, that the effectiveness of monetary policy has been reduced.

## POLICY FORMULATION AND IMPLEMENTATION

The central banker continually confronts the question of what action he should take, if any, in order to achieve the objectives of monetary policy. With economic conditions constantly changing, diagnosis of the state of the economy is a prerequisite for policy formulation.

Federal Reserve officials, ever since the decision was made in the early twenties to direct policy primarily toward domestic economic objectives, have attempted to develop the kinds of information needed in making policy decisions. They now have comprehensive data and analyses of financial and business developments. But there are still significant information gaps that need to be bridged.

### SHORTCOMINGS OF THEORY

Policy formulation necessarily involves consideration of how monetary measures influence the economy: are the effects transmitted primarily through the money supply, the cost and availability of credit, the liquidity position of lenders and spenders, or a combination of channels? In its present state, monetary theory falls short of providing the guidance needed.

Unfortunately, at present we do not have conclusive evidence as to which monetary theory is correct or as to the relative effectiveness of each as a means of achieving monetary objectives. The policymaker is thus compelled to make a judgment on the basis of inadequate information.

Another shortcoming of monetary theory for policy formulation is that most theories are stated in terms of hypothetical conditions—

“other conditions remaining the same,” price determination under conditions of free competition, long-run effects after all adjustments have been completed, etc. Monetary policy, however, must be formulated for an economy in which conditions never remain the same. The task is further complicated by the fact that the central bank operates in a complex institutional structure in which wage rates are substantially influenced by the relative bargaining power of large corporations and large labor unions, in which some product prices are “administered” by a few major producers, and in which it is difficult to determine when the economy is operating so close to capacity that continued expansion of credit will generate strong inflationary pressures instead of more output. Instead of a single interest rate there is a whole structure of rates—rates varying for different maturities as well as the kind of market in which they are determined. Monetary theories, to be useful to the policymaker, must be translated to apply to economic conditions as they exist.

Theory falls short also in that it usually deals mainly with the long-run effects after adjustments have been completed. But the effects of monetary actions in a given period of time are of the essence for policy formulation. Both the total magnitude and the distribution of effects over time are needed in order that policy actions may be timed most effectively. Policy formulation would be much easier, for example, if it were possible to estimate with reasonable accuracy the total effect on final demand of an injection of \$1 billion of additional bank reserves and the magnitude of the effects during a given period of time.

One factor complicating the problem of estimating the effects of monetary actions is inability to distinguish monetary and nonmonetary

forces. Changes initiated by nonmonetary factors are transmitted through the money mechanism. Moreover, a central bank action is likely to be only one of several changes—monetary and nonmonetary—occurring at the same time. The effects following a monetary action may reflect the impact of that action, response of the monetary mechanism to some nonmonetary factors, or a combination of both.

### PROBLEM OF GUIDES

Monetary theory, as we have seen, emphasizes certain channels through which the effects of central bank actions are transmitted to the economy. Whatever the channel, there are several links in the chain of transmission, and leakages along the way may diminish the final impact.

For the money-supply theorist, the quantity of money is the main channel of transmission. But there are several links between central bank action and the impact on total demand. The direct impact is on bank reserves; a change in reserves alters the capacity of the commercial banking system to extend credit and create deposits; newly created currency and deposits make possible an increase in spending.

There are also a number of links in the cost and credit availability, and liquidity transmission chains. The initial impact on bank reserves tends to alter short-term market rates and spread with some time lag to intermediate- and longer-term rates; interest-rate changes may affect willingness to borrow and lend, which in turn may alter consumer and businessmen's decisions to spend and invest.

Because of leakages and the time lag between action and effects, the policymaker needs some guides that will indicate response in different stages of the transmission process. Indicators in the initial or early stages are often referred to

as immediate or short-term guides.<sup>7</sup> But there is also need for "intermediate" guides to reflect what is happening further along toward the impact on final demand.

### Money supply

For those who believe stabilization and sustained growth are to be achieved primarily by regulation of the money supply, the quantity of money is the principal guide for policy. A money-supply advocate recently stated, for example, "The immediate aim of monetary policy should be control of the stock of money." But achieving a certain behavior of the money supply is not so simple as it may at first appear. The effect of a given injection of reserves on the money supply may vary widely for several reasons.

First, volatile market factors over which the Federal Reserve has no direct control frequently have a large impact on bank reserve positions. Currency inflows and outflows, Treasury operations, and Federal Reserve float may add or absorb several hundred million dollars of reserves in a single day. Despite System efforts to counteract the impact of such market factors on reserves, daily fluctuations are sometimes large.

Second, the distribution of reserves among classes of banks with different reserve requirements affects the potential expansion of credit and deposits.

Third, willingness to use reserves made avail-

<sup>7</sup> For defensive actions to offset temporary strains and stresses, the Manager of the System Open Market Account needs short-term guides to indicate the availability of funds in the money market. Factors influencing the reserve positions of banks in the leading financial centers—currency flows, Treasury operations, purchases and sales of federal funds, sensitive short-term money rates—are types of information that are useful in determining when defensive open market operations are desirable. In this article, however, we are concerned primarily with the more positive, longer-run policy needed to achieve the general objectives of price and business stability, and sustained growth.

able may vary among banks as well as over time. Country banks typically have a stronger preference for excess reserves than city banks, and banks are likely to put reserves to use more promptly in periods of active credit demand than in a recession.

Fourth, public preference between demand and time deposits and between deposits and currency may change. A withdrawal of currency from the banking system reduces reserves by an equal amount. One dollar of reserves would support only a corresponding increase in currency. Demand deposits could expand several times the increase in reserves. Time deposits, because of a lower reserve requirement, could expand several times more than demand deposits; however, many do not consider time deposits a part of the money supply. Thus there are several slippages that influence the effect of reserve changes on the quantity of money.

The money supply, in turn, has shortcomings as a guide to the probable effect on total spending. In the first place, the demand for money may change. If an increase in the money supply merely satisfies a demand for larger money balances, there is no stimulating effect on total expenditures. The increase in the money supply tends to be offset by a reduction in velocity.

A second difficulty is that a change in the money supply may be cause or effect. An increase may stimulate spending and an enlarged volume of business activity. On the other hand, an increase in the money supply may reflect only a response to a rising volume of business in which case there is no stimulating effect.

### **Bank reserve measures**

Federal Reserve actions impinge directly on bank reserves. Reserves are the first link in the chain of effects between Federal Reserve action and

total demand, and are thus a useful immediate guide in implementing policy based on almost any theory.

One of the more commonly used reserve indicators is net free or net borrowed reserves. Net free reserves, the excess of total reserves over required reserves plus borrowings from the Reserve Banks, indicates the cushion of excess reserves member banks already have available to support additional deposits. A net free reserve figure reflects an easy reserve position.

Net borrowed reserves is the amount by which total borrowings from the Reserve Banks is greater than excess reserves. Such a net reserve figure indicates member banks are operating on a margin of borrowed reserves—reserves which have to be repaid shortly. Net borrowed reserves reflects a tighter reserve position.

Net free or borrowed reserves are a rough but far from accurate indicator of monetary ease or restraint. The volume of excess reserves tends to be reasonably stable because most banks like to keep nonearning assets at a minimum. Member bank borrowing is thus the principal determinant of changes in net reserve figures.

In a period of recession, a very low level of borrowing from the Reserve Banks is one indicator of an easy-money policy. With total borrowing at a minimum level, however, additional ease would be reflected in free reserves only to the extent banks were willing to hold a larger volume of excess reserves.

In periods of business expansion the volume of member bank borrowing usually rises substantially because the Federal Reserve does not supply enough reserves through open market operations to support the growing level of deposits. But a rising volume of member bank borrowing from the Reserve Banks enlarges the reserve base. Borrowing *per se* is not restrictive.

It exerts restraint only to the extent banks are reluctant to borrow. In that case, banks would tend to adopt more restrictive loan policies. The degree of restraint associated with a given volume of net borrowed reserves varies according to the banks doing the borrowing, as well as over time. Many of the larger, more aggressive banks do not seem to be very reluctant borrowers.

The degree of ease or tightness associated with a given level of net free or borrowed reserves is also influenced by the distribution of excess reserves. Excess reserves are usually concentrated in the smaller country banks because the larger ones try to keep all available funds utilized. A redistribution of excess reserves toward the financial centers usually results in easier conditions in the money market; a flow from the financial centers tends to result in temporary tightening.

A serious shortcoming of a net reserve measure is that it affords no evidence of whether easy or tight reserve positions are having any effect on the volume of bank credit. A stable level of free or borrowed reserves means only that the System is supplying sufficient reserves to offset changes resulting from market factors and changes in required reserves. For example, a stable volume of free reserves could be accompanied by either an expansion or contraction of credit and deposits.

Total reserves is a better indicator of whether bank capacity to expand credit is growing at an appropriate rate. Because of the reluctance of member banks to borrow, some watch the trend in total nonborrowed reserves. A rise in this total is believed more likely to stimulate credit expansion than a corresponding increase in total reserves arising from an increase in borrowing from the Reserve Banks.

Total reserve measures are also inadequate.

Reserve guides need to be supplemented by other data such as bank loans, investments, and deposits to show whether and to what extent reserves are being utilized.

### **Credit market conditions**

Reserve measures are also a useful immediate guide for those who believe the supply, cost, and availability of credit are the principal channels through which the effects of System actions are transmitted. But for these channels, additional guides are needed.

Data on loans and investments of commercial bank and nonbank lenders serve as an indicator of trends in the supply of credit being put at the disposal of borrowers and sellers of securities. Interest rates are the best indicators of trends in the cost of credit. Market rates also have the advantage of reflecting the interrelationship between supply and demand. Scarcity or plentifulness of credit is determined by supply in relation to demand—not by the supply of credit alone.

Using interest rates as a guide to credit cost is complicated not only by the fact that stated rates often differ from effective rates but also because there is a whole complex of rates in highly developed money and capital markets such as exist in the United States. Each rate should be considered in relation to the market in which it is established. The federal funds rate reflects the availability of reserves among a few hundred of the larger banks active in the federal funds market. The Treasury bill rate is one indicator of the money position of institutions such as commercial banks, corporations, and others which hold bills as a liquid reserve that can readily be converted into cash. If on balance these institutions have temporary surplus funds seeking investment, a strong demand for bills

tends to put the rate down; if most of them are selling bills to raise cash, the rate would tend to rise. Long-term rates, such as on real-estate mortgage loans and market yields on corporate bonds, reflect largely the supply of savings seeking investment relative to the demand arising from home buyers and from corporations seeking funds for capital expenditures.

The character of the market in which interest rates are determined varies widely. The money market is impersonal, brings together many buyers and sellers, and rates are sensitive to changes in supply and demand. On the other hand, customer loan rates charged by commercial banks and other lending institutions are relatively insensitive to short-run changes in supply-demand relationships. For the most part, lending institutions use methods other than interest-rate changes to stimulate or retard their extensions of credit.

Availability of credit embraces more than mere capacity to extend credit; it depends also on willingness of lenders to lend. Inasmuch as customer loan rates charged by lending institutions are not a sensitive indicator of willingness to lend, additional information is needed to indicate changes in the availability of credit. In periods of credit restraint, lenders may refuse loans to new borrowers and marginal credit risks. They may scale down the amounts some borrowers request and may require borrowers to maintain larger compensating balances. In the case of amortized loans, larger down payments and shorter maturities increase the size of monthly payments and may be far more effective than a higher interest rate in discouraging demand for this type of credit.

### **RULES VS. DISCRETION**

Economists and central bankers have long sought some single rule or guide that would automati-

cally keep monetary policy on target. The international gold standard was presumed by many to provide such a device. Price-level stability and international balance could be maintained by permitting money and credit to respond to changes in a country's gold reserve. Advocates of the real-bills doctrine thought confining credit to short-term productive uses would automatically result in the appropriate quantity of credit. For a short time in 1920, four Reserve Banks established progressive discount rates as a substitute for discretion in preventing excessive member bank borrowing. As we have seen, some economists favor a fixed rate of growth in the money supply instead of a flexible monetary policy.

Such simple, automatic devices have never been a satisfactory substitute for informed judgment in the formulation and implementation of monetary policy. They are especially ill-adapted to a modern complex and ever-changing economy in which the problems facing monetary authorities are never twice alike. Under these conditions, wise policy formulation requires flexibility and adaptation, not rigidity.

Moreover, adoption of some simple rule or guide does not avoid discretionary action. Instead, it substitutes a single discretionary action presumed to be appropriate for an unknown future for a series of discretionary actions which can be based on relevant information about the particular condition existing at the time.

### **SHORT-RUN VS. LONG-RUN STABILITY**

Thus far, central banks have concerned themselves primarily with actions to smooth out cyclical fluctuations, aside from actions to relieve seasonal and other short-term stringencies in the money market. In recent years, however, some economists have suggested that the focus of

policy should be shifted from cyclical swings to long-run stability and growth. Two principal reasons have been advanced in support of the proposed shift in emphasis toward a goal of longer-run stability.

First, it is difficult to implement an anticyclical monetary policy, for reasons already mentioned. As a result, monetary policy may tend to aggravate instead of smooth out cyclical fluctuations.

Second, some have pointed out that recent institutional changes have tended to limit the effectiveness of monetary policy. Public expenditures, which have become a large proportion of Gross National Product, are not sensitive to monetary measures. Growth of financial intermediaries has increased the supply of lendable funds not under direct control of the central bank. Interest-rate changes according to this group, apparently have little influence on either the total volume of saving or the total supply of lendable funds. Pressures arising from such factors as excessive market power of business and labor organizations, and shifts in the composition of aggregate demand, even though total demand is stable, cannot be constrained by general monetary controls, except at the price of recession and unemployment.

Developments such as these which have tended to reduce the effectiveness of monetary actions is a major part of the reasoning behind the suggestion that discretionary monetary policy should be used for two main purposes: smoothing out seasonal and other temporary disturbances, and achieving a rate of growth in the money supply appropriate for the estimated growth rate in total real output.

### CONCLUDING COMMENTS

Central banking continues to be very much an art, despite many years of study devoted to

monetary theory by economists and the knowledge acquired by policymakers in trying to implement theory. Central bankers still must grope with the age-old question of which theory or combination of theories is likely to yield the best results in the current economic and financial environment. The answer to this question largely determines the types of guides needed in the formulation and implementation of monetary policy.

There is no conclusive evidence as yet, either in theory or practice, as to which monetary theory is more accurate. It seems most unlikely that the money supply is all that matters. More convincing evidence than a long-term statistical association between changes in the money supply and changes in the total volume of business activity and prices is required to uphold this doctrine. The crucial question is whether changes in the money supply are the cause or the effect of business fluctuations. The money supply is all that matters only if it is the sole cause of changes in total demand and output. To take this position is tantamount to saying that inadequate growth in the money supply is the only way to bring on a recession; that an increase in the money supply is the only way to stimulate recovery; and consequently fiscal, debt management, and other governmental policies are useless as stabilization measures except as they may indirectly contribute to desired changes in the money supply.

It seems more logical that the money supply matters; but that the cost and availability of credit also matter. Interest cost, although in most cases not a substantial part of total costs, surely has some marginal influence on the demand for credit, especially in areas such as housing and fixed investments. Interest rates, through their effects on prices of securities and other assets, probably have a marginal influence

on willingness to lend and willingness of spenders to obtain additional funds by the disposal of assets. In short, it seems reasonable that cost and availability of credit have at least a marginal influence on decisions to spend—and a small marginal influence is all that is necessary in order that monetary policy may be effective.

At the other side of the spectrum is the doctrine that the general liquidity of the economy is all that matters—that the money supply is of little significance. Liquidity in the sense of the ease or difficulty of obtaining additional funds surely influences spending decisions. But the fact that in every major war severe inflations were fueled by money creation leaves little doubt that the money supply does matter, even though it is not all that matters.

There are good reasons to believe that the effects of monetary actions are transmitted through several channels: the money supply, the cost and availability of credit, and perhaps liquidity positions. This view, if accepted, has important implications as to guides that are useful in policy formulation. Instead of relying on the money supply as the sole or even the primary intermediate guide, policymakers should watch a number of indicators which may reflect responses to monetary actions, e.g., reserve positions, market rates, the money supply, bank loans and investments, nonbank lending, the terms on which credit is being made available, the volume of new securities flotations, and the general tone of the money and capital markets. Judgment based on all relevant information available is still the best formula for policy formulation.

A brief survey of significant problems encountered in policy formulation clearly reveals the need for better information about how Federal Reserve actions affect total demand and busi-

ness activity—the channels through which the effects are transmitted, the relative magnitude of the total effects, and the effects during a certain time period. The Federal Reserve is presently engaged in a coordinated research program designed to fill some of the gaps in our knowledge.

One part of this research program is directed toward the linkages between open market operations, the money market, and reserve utilization by the banking system. Another deals with the relationships between bank reserves and other financial factors such as the money supply. A third segment is devoted to studies of the linkages between monetary policy and the final targets the Fed tries to influence, such as prices, costs, and capacity. A fourth group of studies is in the area of international financial transactions. Some academic economists have been enlisted to make studies in their special fields, e.g., the influence of monetary policy on major categories of expenditures, including business investment in plant and equipment. This is one of the most intensive research efforts in the history of the System.

This research program is a significant step forward, but it would be too much to expect that in a complex and changing economy the magnitude of the effects of monetary actions during a given period of time can be pinpointed precisely. It is not too much to expect, however, that studies such as those planned and under way will add to our knowledge and narrow the range of uncertainties with which policymakers must grapple. Improved knowledge of the effects of monetary actions would materially contribute to the implementation of monetary policy, and might make possible a better use of Federal Reserve tools to achieve selective as well as general effects.

# 1965: A SEA-CHANGE

As 1966 begins, employment, international payments, defense spending, the length of the current business expansion are matters of concern in the U. S. economy. This sounds like last year, when the same items were in question. But it is not. Although the labels read similarly, they identify quite different problems.

We began 1965 wondering about persistent deficits in international payments and how long an unwontedly long period of domestic prosperity could last, about sticky unemployment and sticky little wars. We ended the year still concerned with naggingly persistent international deficits. But now skills are scarce, not jobs. Industry seeks more capacity because existing capacity is almost fully occupied. Meanwhile, we must support and pay for an enlarged war. Demand for productive resources no longer poses the major domestic problem.

The economy's metamorphosis occurred in various ways and over varying periods of time in the different sectors. The event that most influenced the millions of private and public decisions that determine spending, jobs and incomes in the U. S. undoubtedly was the President's dramatic announcement, in July, of a large build-up of strength in Viet Nam. After that, with a good-sized war to worry about, it gradually became clear that business activity might be in danger of overheating. Unemployment became more a problem of matching people to jobs than one of generating the jobs. In Shakespeare's words, we have undergone

“ . . . a sea-change

Into something rich and strange.”

Pressures on the nation's labor force are evident in disappearing day-labor lines, in long

help-wanted columns and in expanding military calls. They are equally clear in people's participation in economic activity. Unemployment at the year's end was down approximately to the long-sought interim goal of 4 per cent of the labor force. A few groups of workers were, if anything, over-employed. There were not enough of them between jobs to ensure optimum mobility and availability.

Groups in the work force having very low unemployment—less than 2 per cent—in late 1965 included managers, officials, professional and technical workers. Married men with families had unemployment of about 2 per cent. For all men 20 years of age and over, unemployment was about 3 per cent, as it was among craftsmen, foremen, and all people having work experience in durable goods manufacturing.

There are other evidences of pressure in industries making durable goods. Factories are on long working weeks, and consequently are paying heavily for overtime. Recruiting of skilled and even semi-skilled workers is intense; help-wanted advertising in the U. S. is at a record peak.

Total needs, however, are not yet so pressing as to have penetrated fully to every group in the labor force. Over 11 per cent of the teenagers working or seeking work are without jobs. The unemployment rate for non-whites is greater than 6 per cent. For laborers it is over 7 per cent (but this is 2 points under the lows of the mid and late 'fifties). The really intense pressures are just beginning to spill over to affect the less skilled and educated workers.

The need for more, and more efficient, productive capacity led to constantly rising capital

spending and increased plans for future spending as 1965 unfolded. The increased productivity and increased capacity thus generated have helped and will continue to help offset the pressure of rising demand for goods and services. But the offset occurs as new facilities come into use. That takes time. Current spending to build future facilities competes with other demands for productive resources. It adds to present pressures although it eventually will serve to relieve pressure.

Increased productivity has helped hold down the cost of the labor required to make each unit of product, even though productivity gains were somewhat less in 1965 than in 1964. Labor costs per unit of output were remarkably stable throughout 1965. One of the large questions now open is how long they can keep from rising in the face of high overtime hours and payments, and other factors making for lowered productivity and increased costs.

Another large question concerns, of course, the demand for both output and manpower, and the effect on the Federal budget, of the war in Viet Nam. It is clear already that these demands will rise, that Federal expenditures therefore will rise, and that this will press further on resources.

The U. S. balance-of-payments deficit decreased a bit during 1965, but at year's end it still was large and troublesome. Meanwhile, near the end of the year prices inched up a little more than usual in recent years. Certain price rises were deterred only after confrontations between the evident wishes of the Federal Government and the desires of the industries concerned.

Burgeoning demands were reflected in financial markets. Result: demands for funds outran available supplies of funds sufficiently so that

market interest rates rose substantially during the fall of 1965. The discount rates of the Federal Reserve Banks, which had not changed since the end of 1964, were below usually comparable rates. Recognizing this, and recognizing explicitly also the inflationary threat inherent in the economy's approach near to full utilization of capacity, the Federal Reserve System in December increased the discount rate one-half point, to 4½ per cent, and simultaneously raised the ceiling on permissible payments by member banks for time deposits.

All this is not to say that every part of the U. S. economy is pressed. There are people, industries and regions that have not yet felt the full impact of the extraordinarily long business expansion that now has taken up half of the nineteen sixties.

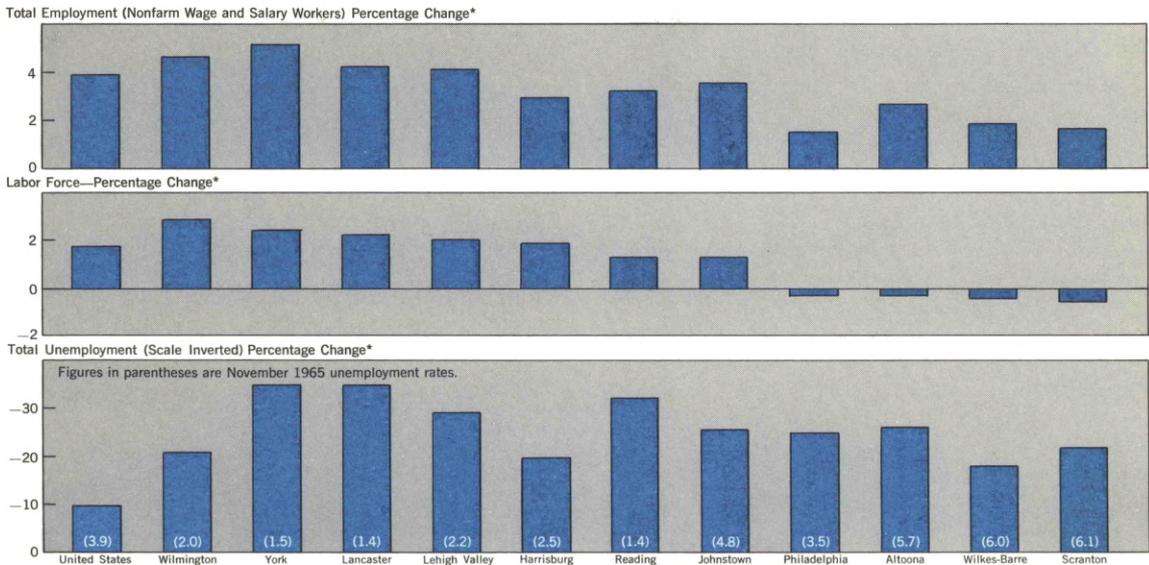
Nevertheless, last year economic growth reached more people and regions than usual. The Third Federal Reserve District admirably illustrates this fact.

### **THE THIRD DISTRICT IN 1965**

Every metropolitan area in the Third Federal Reserve District experienced an excellent year in 1965. Some enjoyed better business conditions than at any time since the Korean War period and before. One group of areas performed exceptionally well. Employment in this group of regions rose as fast or faster than in the nation as a whole. The new jobs had to be filled either by employing persons previously unemployed or by inducing more people to offer their services on the labor market. Wilmington, York, Lancaster and the Lehigh Valley (Allentown-Bethlehem-Easton Metropolitan Area) are in the first group. They staffed their greater-than-national job gains by both means.

In the Wilmington area, for example, unem-

## STAFFING A BUSINESS EXPANSION

*How employment and unemployment changed in 1965.*

\* First 11 months 1965 vs. first 11 months 1964.

employment is usually rather low. Mainly because of this, migration into the area is substantial and therefore its population is rapidly increasing. Wilmington's employment gains in 1965 were accompanied by the largest percentage expansion of any labor force in the Third District, combined with one of the smallest percentage reductions in unemployment.

Lancaster County, by contrast, normally has even less unemployment than Wilmington but gains population at about the national average rate rather than the much higher Wilmington rate. Lancaster's employment gains this year were accompanied by the largest percentage reduction in unemployment in the Third District and by a labor force increase about two-thirds as large as Wilmington's.

Obviously, in the Lancaster area growing demand was met by pressing very hard upon a labor force that already was rather fully employed. In the Wilmington area, larger popula-

tion gains made possible a larger expansion in the labor force without quite so much drawing down of unemployment.

In the second set of areas employment rose less rapidly than in the nation. But their labor forces expanded and unemployment declined. The group includes Harrisburg, Reading and Johnstown. Both this group and the first include areas that enjoyed unusually strong expansions in business activity last year.

In the third group, like the second, employment rose less rapidly than in the nation. Unemployment declined to levels extremely low compared with those prevailing during the past dozen years. But in none of them did the labor force expand. This is not too surprising in Altoona, Wilkes-Barre and Scranton, where considerable out-migration and consequent shrinkage in labor forces have been the rule. It is more surprising in the case of the Philadelphia Metropolitan Area, where there is in-migration.

The answer, of course, is that in 1965 in the United States very large cities such as Philadelphia contained concentrations of people who had never entered or who had left the labor force because of lack of training and the frustrations that accompany both lack of training and its causes. During periods of extreme pressure on resources these people can be brought into the labor force. In 1965 many of them obviously were not.

The experience in these three groups of regions illustrates two main points about economic

activity in 1965. In the first place, it was a good year. In all three sets of areas, employment gains were unusually large, and unemployment dropped to exceptionally low levels. Secondly, not all the economic slack was taken in. In several regions unemployment rates, though unusually low for those regions, were high by reasonable standards. And in the third group, and particularly in Philadelphia, the lack of expansion in labor forces indicates the presence of resources that could be productively employed if the economy were under forced draft.

---

(Continued from Page 2)

and may take years to reveal themselves completely. What follows is an attempt to sketch in some of these implications roughly.

1. The objective of sustained economic expansion, of course, is far from new to the Federal Reserve. But it has appeared in various guises over the years: prevention of financial panics; mitigation of swings from boom to recession; furtherance of "maximum employment, production, and purchasing power." As it has evolved over the years, the Fed's objective has broadened.

What seems to have happened in the past few years is a further step in this evolution. The remarkable performance of the economy since 1961 has raised hopes everywhere that the economy in future years need not experience the kind of booms and recessions of the past. One needn't go so far as to conclude that the business cycle is dead to accept the possibility that intelligent private and public policy can give us longer sustained expansions than we have ever had before.

In short, emphasis has shifted from mitigating the business cycle to eliminating it. Under the first objective, there is always the idea that what goes up must come down, and policy is shaped accordingly. Under the second, there is the new possibility that *perhaps* what goes up can keep going up. Policy then is adapted to the developing situation rather than simply following past modes.

This difference is clearly apparent in innovations in Federal Reserve policy over the past five years. Monetary expansion has been more vigorous and sustained than during any earlier peacetime period—in the face of risks of inflation and deterioration of the balance of payments. The more restrictive action recently has been taken because the first of these risks has in-

creased and because dealing with it now will enhance the possibility of sustaining the expansion, not diminish it.

2. Innovation entails risks. Some economies, like some people, can ill afford major reverses and hence can take few risks. Others have a larger cushion. Today there is greater recognition than before that the strength of the United States economy permits innovation, can afford some calculated risks to achieve lasting economic expansion.

This confidence builds not only on the performance of the economy in the past five years but, more basically, on reforms instituted in the 1930's—deposit insurance, social security, unemployment compensation, built-in fiscal stabilizers, and the like. While no one can be absolutely sure of it, these devices offer promise that the kind of devastating collapse of the 1930's will never recur. This does not justify reckless experimentation, of course. It does suggest that the Federal Reserve and other agencies of public policy can undertake calculated risks inherent in innovation with greater assurance that the economy can absorb some reverses if they occur.

3. The greatest innovation of recent years was the tax cut of 1964. The success of this one experiment probably has opened more eyes to the potentialities of compensatory fiscal policy than economists have been able to do in thirty years. The "new economics" propounded by Keynes goes back that far, but never was really accepted by the general public. Whether it was because of the "Puritan Ethic," or analogies with personal finance, or whatever, most non-economists refused to buy the idea of using taxing and spending as flexible devices to influence the level of economic activity.

Now, wider acceptance of compensatory fiscal

policy promises more flexible use of monetary policy as well. It may be possible to vary the mix of fiscal and monetary policies to produce more effective results in terms of the domestic economy and the balance of payments.

But all the evidence on fiscal policy is not yet in. The tax cut of 1964 converted many to the idea that deliberately running a deficit may stimulate the economy. Whether as many are equally persuaded of the efficacy of flexible fiscal policy to *restrain* the economy remains to be seen.

4. Public authorities have no monopoly on innovation. One of the most significant aspects of the “new economy” is the new *business* economics. Private enterprise is developing sophisticated techniques of control, enabling it to achieve its own objectives more effectively.

All the implications of this development are not clear, but it does seem, in some respects at least, that the objectives of Federal Reserve policy will be furthered rather than hindered. Control of inventories by computer, for example, apparently has reduced the extent to which inventory fluctuations aggravate the business cycle.

Even more important than new techniques at their disposal will be the attitude of business managers. In the past, the business cycle has so dominated the economy that businessmen necessarily have thought in terms of cyclical swings. During booms their interests apparently were served best by raising prices; during recessions by laying off workers. Businessmen are not in business out of altruism and, if only in self protection, must adjust to ups and downs of the business cycle.

But if the expansion can be kept going month after month, businessmen may see more clearly their own great self-interest in sustaining the momentum. And, in turn, chances of sustaining

the momentum will be increased if they can play the long game rather than the short-run business cycle game.

5. To the extent business—and labor—take the long view, cost-price pressures should be reduced. This will help assure the success of the current experimental approach of influencing wages and prices through guideposts.

In turn, success of this approach would simplify monetary policy. One of the problems confronting the Federal Reserve in the 1950’s was dealing with cost-push inflation by restraining demand. The guideposts offer one possible solution to this problem.

But it is unlikely that the guidepost approach can succeed if demand gets out of hand. As liquidity piled up during World War II, price controls merely suppressed inflation, which then spilled over into black markets. If monetary policy permitted excessive liquidity today, price and wage guideposts would collapse. The Federal Reserve’s recent action of restraint on the demand side should improve chances that the guideposts will continue effective on the cost-price side.

6. Rapid and exciting as developments in the “new” domestic economy may be, they are surpassed by developments in the “new” international economy. Relationships between domestic and international aspects of the U. S. economy as well as among economies of the world have become much closer and interactions more complex. This poses new problems for policymakers, including those in the Federal Reserve. Monetary policy designed to affect the domestic economy has implications for the balance of payments and vice versa. Policy measures taken here have an increasingly direct effect on the economies of other nations, and what they do has a greater effect on us.

These new relationships will require more understanding in a number of respects: understanding of the relationships themselves; understanding of the trade-offs sometimes necessary between domestic and international objectives; and understanding of the needs and aspirations of other nations. International cooperation will be essential, but cooperation may mean that sometimes everything cannot go just the way we might like.

\* \* \*

Out of all this emerges a hazy picture of the “new economy”—a picture that offers much promise for the future, but in which there are still many unanswered questions. Will businessmen act with restraint in inventory policy if prices keep rising and if shortages appear? Will labor and business take the long view in setting wages and prices? Will fiscal policy be used if restraint is necessary? Will nations cooperate to make the international financial mechanism work better? Whether the new economy turns out to be really new will depend on how these and other important questions are answered.

But even assuming some unfavorable answers,

it does seem likely that something will have been gained. We have had a taste of what could be. This has broken down old patterns of thought and imparted a sense of experiment and adventure that should not wear off easily. Perhaps the most lasting characteristic of the new economy will be the attitude that what we now have is not good enough. No matter how well the economy performs, our aims are still higher.

In doing its part to meet these ever-rising goals, the Federal Reserve may continue to depart from past patterns, developing new techniques and approaches to new situations. In some respects, the Fed’s job may be easier in the new economy. Hopefully, monetary policy will get help from fiscal policy and the wage-price guideposts. In many respects, as in the relationship between domestic and international aspects, the Fed’s job will be more difficult. The various public and private policies that enter into the new economy will require careful coordination if they are to achieve maximum effectiveness. But at the same time, the promise of the future will not be fulfilled unless these policies can be pursued imaginatively, with maximum freedom of thought and initiative.

## DIRECTORS AND OFFICERS

---

At the election held in the fall of 1965, Mr. Ralph K. Gottshall, Chairman of the Board and President, Atlas Chemical Industries, Inc., Wilmington, Delaware, was reelected by member banks in Electoral Group 2 as a Class B Director for a three-year term beginning January 1, 1966. Mr. Howard C. Petersen, President, Fidelity-Philadelphia Trust Company, Philadelphia, Pennsylvania, was elected for a like term by member banks in Electoral Group 1 as a Class A Director. He succeeds Mr. Benjamin F. Sawin.

The Board of Governors of the Federal Reserve System redesignated Mr. Walter E. Hoadley as Chairman of the Board of Directors of this Bank and Federal Reserve Agent for the year 1966. Dr. Willis J. Winn was reappointed as Deputy Chairman of the Board of Directors for 1966. Mr. D. Robert Yarnall, Jr., President, Yarway Corporation, Philadelphia, Pennsylvania, was reappointed as a Class C Director for an additional term of three years beginning January 1, 1966.

The Board of Directors of this Bank appointed Mr. William L. Day, Chairman, The First Pennsylvania Banking and Trust Company, Philadelphia, Pennsylvania, to serve as the member of the Federal Advisory Council to represent the Third Federal Reserve District during 1966. Mr. Day has served in this capacity since January 1964.

Four changes in the officer staff occurred during the past year. Effective February 1, 1965, Mr. Murdoch K. Goodwin, Vice President, General Counsel and Assistant Secretary, resigned his position with this Bank to resume private practice of law. Effective that same date, Mr. James V. Vergari (Vice President and Cashier) became Vice President and General Counsel. In addition to his former duties, Mr. Vergari now directs the Bank's legal affairs. Also on February 1, 1965, Mr. Walter J. Brobyn (Bank Examiner-Trust) was appointed to the official position of Assistant Counsel.

Mr. G. William Metz, formerly General Auditor, was promoted to the position of Vice President and General Auditor, effective January 1, 1966.

## DIRECTORS AS OF JANUARY 1, 1966

Group		Term expires December 31
	CLASS A	
1	HOWARD C. PETERSEN President, Fidelity-Philadelphia Trust Co. Philadelphia, Pennsylvania	1968
2	CHARLES R. SHARBAUGH Senior Vice President United States National Bank in Johnstown Ebensburg, Pennsylvania	1966
3	LLOYD W. KUHN President, The Bendersville National Bank Bendersville, Pennsylvania	1967
	CLASS B	
1	BAYARD L. ENGLAND Chairman, Atlantic City Electric Company Atlantic City, New Jersey	1967
2	RALPH K. GOTTSBALL Chairman of Board and President Atlas Chemical Industries, Inc. Wilmington, Delaware	1968
3	LEONARD P. POOL President, Air Products and Chemicals, Inc. Allentown, Pennsylvania	1966
	CLASS C	
	WALTER E. HOADLEY, Chairman Vice President and Treasurer Armstrong Cork Company Lancaster, Pennsylvania	1966
	WILLIS J. WINN, Deputy Chairman Dean, Wharton School of Finance and Commerce University of Pennsylvania Philadelphia, Pennsylvania	1967
	D. ROBERT YARNALL, JR. President, Yarway Corporation Philadelphia, Pennsylvania	1968

## OFFICERS AS OF JANUARY 1, 1966

---

KARL R. BOPP  
President

ROBERT N. HILKERT  
First Vice President

HUGH BARRIE  
Vice President

JOSEPH R. CAMPBELL  
Vice President

NORMAN G. DASH  
Vice President

DAVID P. EASTBURN  
Vice President

DAVID C. MELNICOFF  
Vice President

G. WILLIAM METZ  
Vice President and  
General Auditor

HARRY W. ROEDER  
Vice President

JAMES V. VERGARI  
Vice President and  
General Counsel

RICHARD G. WILGUS  
Vice President and Secretary

EVAN B. ALDERFER  
Economic Adviser

CLAY J. ANDERSON  
Economic Adviser

EDWARD A. AFF  
Assistant Vice President

JACK P. BESSE  
Assistant Vice President

JOSEPH M. CASE  
Assistant Vice President

RALPH E. HAAS  
Assistant Vice President

WILLIAM A. JAMES  
Assistant Vice President

WARREN R. MOLL  
Assistant Vice President

LAWRENCE C. MURDOCH, JR.  
Assistant Vice President  
and Assistant Secretary

HENRY J. NELSON  
Assistant Vice President

KENNETH M. SNADER  
Assistant Vice President

RUSSELL P. SUDDERS  
Assistant Vice President

J. C. ROTHWELL, JR.  
Economist

BERTRAM W. ZUMETA  
Economist

WALTER J. BROBYN  
Assistant Counsel

JAMES P. GIACOBELLO  
Chief Examining Officer

THOMAS K. DESCH  
Examining Officer

WILLIAM L. ENSOR  
Examining Officer

JACK H. JAMES  
Examining Officer

LEONARD E. MARKFORD  
Examining Officer

JAMES A. AGNEW, JR.  
Assistant Cashier

FRED A. MURRAY  
Director of Plant

A. LAMONT MAGEE  
Assistant General Auditor

# STATEMENT OF CONDITION

## Federal Reserve Bank of Philadelphia

(000's omitted in dollar figures)	End of year	
	1965	1964
<b>ASSETS</b>		
Gold certificate reserves:		
Gold certificate account . . . . .	\$ 787,149	\$ 759,801
Redemption fund—Federal Reserve notes . . . . .	93,751	85,890
Total gold certificate reserves . . . . .	\$ 880,900	\$ 845,691
Federal Reserve notes of other Federal Reserve Banks . . .	65,516	51,395
Other cash . . . . .	6,473	4,523
Loans and securities:		
Discounts and advances . . . . .	3,826	2,135
United States Government securities . . . . .	2,114,399	2,002,859
Total loans and securities . . . . .	\$2,118,225	\$2,004,994
Uncollected cash items . . . . .	483,808	492,199
Bank premises . . . . .	2,587	2,741
All other assets . . . . .	51,052	30,267
Total assets . . . . .	<u>\$3,608,561</u>	<u>\$3,431,810</u>
<b>LIABILITIES</b>		
Federal Reserve notes . . . . .	\$2,241,279	\$2,077,102
Deposits:		
Member bank reserve accounts . . . . .	858,408	783,819
United States Government . . . . .	38,326	74,653
Foreign . . . . .	8,400	12,320
Other deposits . . . . .	6,307	6,586
Total deposits . . . . .	\$ 911,441	\$ 877,378
Deferred availability cash items . . . . .	387,172	384,021
All other liabilities . . . . .	9,577	35,081
Total liabilities . . . . .	\$3,549,469	\$3,373,582
<b>CAPITAL ACCOUNTS</b>		
Capital paid in . . . . .	\$ 29,546	\$ 29,114
Surplus . . . . .	29,546	29,114
Total liabilities and capital accounts . . . . .	<u>\$3,608,561</u>	<u>\$3,431,810</u>
Ratio of gold certificate reserves to Federal Reserve note liability . . . . .	39.3%	40.7%

## EARNINGS AND EXPENSES

### Federal Reserve Bank of Philadelphia

(000's omitted)	1965	1964
Earnings from:		
United States Government securities .....	\$79,596	\$71,095
Other sources .....	1,318	600
Total current earnings .....	\$80,914	\$71,695
Net expenses:		
Operating expenses* .....	8,571	8,577
Cost of Federal Reserve currency .....	1,348	891
Assessment for expenses of Board of Governors .....	473	483
Total net expenses .....	\$10,392	\$ 9,951
Current net earnings .....	70,522	61,744
Additions to current net earnings:		
Profit on sales of U.S. Government securities (net) .....	—	33
All other .....	59	32
Total additions .....	\$ 59	\$ 65
Deductions from current net earnings:		
Loss on sales of U.S. Government securities (net) .....	(a)	—
Miscellaneous non-operating expenses .....	5	1
Total deductions .....	\$ 5	\$ 1
Net additions .....	54	64
Net earnings before payments to U.S. Treasury .....	\$70,576	\$61,808
Dividends paid .....	\$ 1,753	\$ 1,716
Paid to U.S. Treasury (interest on Federal Reserve notes) .....	68,392	86,224
Transferred to or deducted from (—) Surplus .....	\$ 431	\$—26,132

\*After deducting reimbursable or recoverable expenses.  
(a) Less than \$1 thousand, rounded.

## VOLUME OF OPERATIONS

### Federal Reserve Bank of Philadelphia

Number of pieces (000's omitted)	1965	1964	1963
<b>Collections:</b>			
Ordinary checks*	262,900	244,500	215,700
Government checks (paper and card)	29,500	28,700	28,800
Postal money orders (card)	17,800	17,200	15,200
Non-cash items	836	863	835
Food stamp coupons	3,685	3,572	3,699
Clearing operations in connection with direct sendings and wire and group clearing plans**	679	702	704
Transfers of funds	208	193	178
Currency counted	268,400	269,600	274,100
Coins counted	159,400	136,800	346,700
Discounts and advances to member banks	1	1	1
Depository receipts for withheld taxes	609	606	586
Postal receipts (remittances)	286	309	308
<b>Fiscal agency activities:</b>			
Marketable securities delivered or redeemed	538	539	421
Savings bond transactions— (Federal Reserve Bank and agents)			
Issues (including reissues)	8,867	8,759	8,436
Redemptions	6,745	6,334	6,311
Coupons redeemed (Government and agencies)	1,074	1,141	1,163
<b>Dollar amounts (000,000's omitted)</b>			
<b>Collections:</b>			
Ordinary checks	\$ 79,445	\$ 72,735	\$ 68,600
Government checks (paper and card)	6,004	6,097	6,259
Postal money orders (card)	246	247	261
Non-cash items	563	239	185
Food stamp coupons	5	5	5
Clearing operations in connection with direct sendings and wire and group clearing plans**	47,649	44,770	41,031
Transfers of funds	167,181	134,480	123,253
Currency counted	2,003	1,987	1,935
Coins counted	12	21	44
Discounts and advances to member banks	2,086	863	1,192
Depository receipts for withheld taxes	2,593	2,522	2,605
Postal receipts (remittances)	891	931	888
<b>Fiscal agency activities:</b>			
Marketable securities delivered or redeemed	13,845	14,486	13,745
Savings bond transactions— (Federal Reserve Bank and agents)			
Issues (including reissues)	431	444	444
Redemptions	362	346	344
Coupons redeemed (Government and agencies)	225	146	175

\* Checks handled in sealed packages counted as units.

\*\* Debit and credit items.