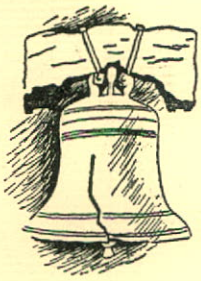


CREDIT, PRODUCTION AND INFLATION

The Thirty-third Annual Report of the

FEDERAL RESERVE BANK OF PHILADELPHIA

1947

CREDIT, PRODUCTION AND INFLATION

CONTENTS

FEDERAL RESERVE BANK OF PHILADELPHIA

April 30, 1948

To Member Banks in the
Third Federal Reserve District:

The dominant economic problems of 1947 were those of credit, production, and inflation. Recent developments, particularly in the international scene, suggest that they will continue to be problems in 1948. The Thirty-third Annual Report of the Federal Reserve Bank of Philadelphia deals with those questions as they were raised by banking and business developments and by monetary policy during 1947.

ALFRED H. WILLIAMS,
President.

CREDIT, PRODUCTION, AND INFLATION

The key economic problem in 1947 was an increase in spending power in relation to a flow of goods limited by shortages of productive resources. This posed the problem of restricting credit expansion and provoked considerable discussion as to the "productivity" of credit.

Many disagreements have arisen because participants have not been aware that they were using the same term—"productive credit" —to mean different things. We have permitted ourslves to be confused by an appealing phrase because we have not taken the time to define it or to seek out the major sources of disagreement.

Differences in the meaning of the term "productive credit" arise mainly from the fact that we view it from different positions within the economy. If visualized from the standpoint of the lender or borrower, productivity of a loan is measured largely in terms of its impact upon the individual or business firm. If viewed in terms of the economy as a whole, it is the impact on total output that is important. Each of us is apt to relate his definition to his own experience and the problems with which he is directly concerned.

To the individual lender who is interested primarily in his own immediate profit, credit is apt to be considered productive as long as the borrower fulfills his contract—that is, so long as the loan and interest are repaid when due. For example, the lending officer of a commercial bank necessarily focuses his attention on particular loans. He may be influenced in his decisions by broad experience including extensive knowledge of the effects of general and specific business conditions on the success of his customers. But all of this is background qualifying him to do his immediate job better. His job is to decide whether a particular application for a new loan or renewal should be granted and, if so, upon what terms and conditions.

The individual borrower is likely to consider a loan productive only if he is better off than he would have been had the credit not been granted. Obviously, certain loans that might qualify as productive

if visualized from the viewpoint of the lender would not necessarily qualify from that of the borrower, and this would be true even if there is no disagreement at all as to the facts with respect to the loans. A disagreement would arise exclusively from the different positions from which the question is viewed.

Most bankers recognize the broader aspect of responsibility involved in granting credit—that borrower and lender are not the only parties affected by loans. A grant or denial of credit affects the entire economy. And general economic conditions affect the soundness of particular loans. It is common to draw a sharp distinction between productive and unproductive or speculative loans. Usually, this distinction is based upon what the prospective borrower intends to do with the funds. For example, if he uses the proceeds to increase his output, the loan is usually considered "productive." On the other hand, if he uses the funds to accumulate large inventories in anticipation of price increases, and thus take goods out of the productive process, the loan is usually considered "speculative." Bankers usually object to speculative loans primarily because they feel that too many loans of this type, especially if granted by banks, create an unhealthy condition in the economy as a whole. As a consequence, sooner or later the whole economy, including the banking system, will suffer.

Thus, as attention is shifted from the individual transaction to that of the economic system it becomes necessary to adjust standards by which productivity is judged. The new standards must be related not to the effects of the loan transaction on the individual lender and borrower, but to its effects on the operation of the economic system. As previously indicated, if a borrower uses the proceeds of a loan in ways to increase the efficiency of his business and to increase its output, the loan is usually regarded as "productive," when measured by individual standards. But what if the machinery, the materials, or the labor required are taken from some other businesses? Then, clearly, the borrower increases his output only at the expense of someone else and each through his competitive bidding for scarce resources drives prices higher. This is necessarily the chief result of loans made when the economy is fully employed. The output of one business has been increased, but that of other businesses which were bidding for scarce materials they did not get is decreased. The total output

of the economy has not changed. What has happened is that new spending power has been created which enables the borrower to increase his proportion of the total output without, however, increasing total production. Thus, what started out as, and on the basis of individual standards was, a productive loan turns out to be unproductive and inflationary from the standpoint of the economy as a whole. Under conditions of full employment the new money created by loan expansion adds to the total demand for goods without a corresponding increase in the supply. The result is higher prices. Credit expansion has financed mainly higher prices instead of larger output.

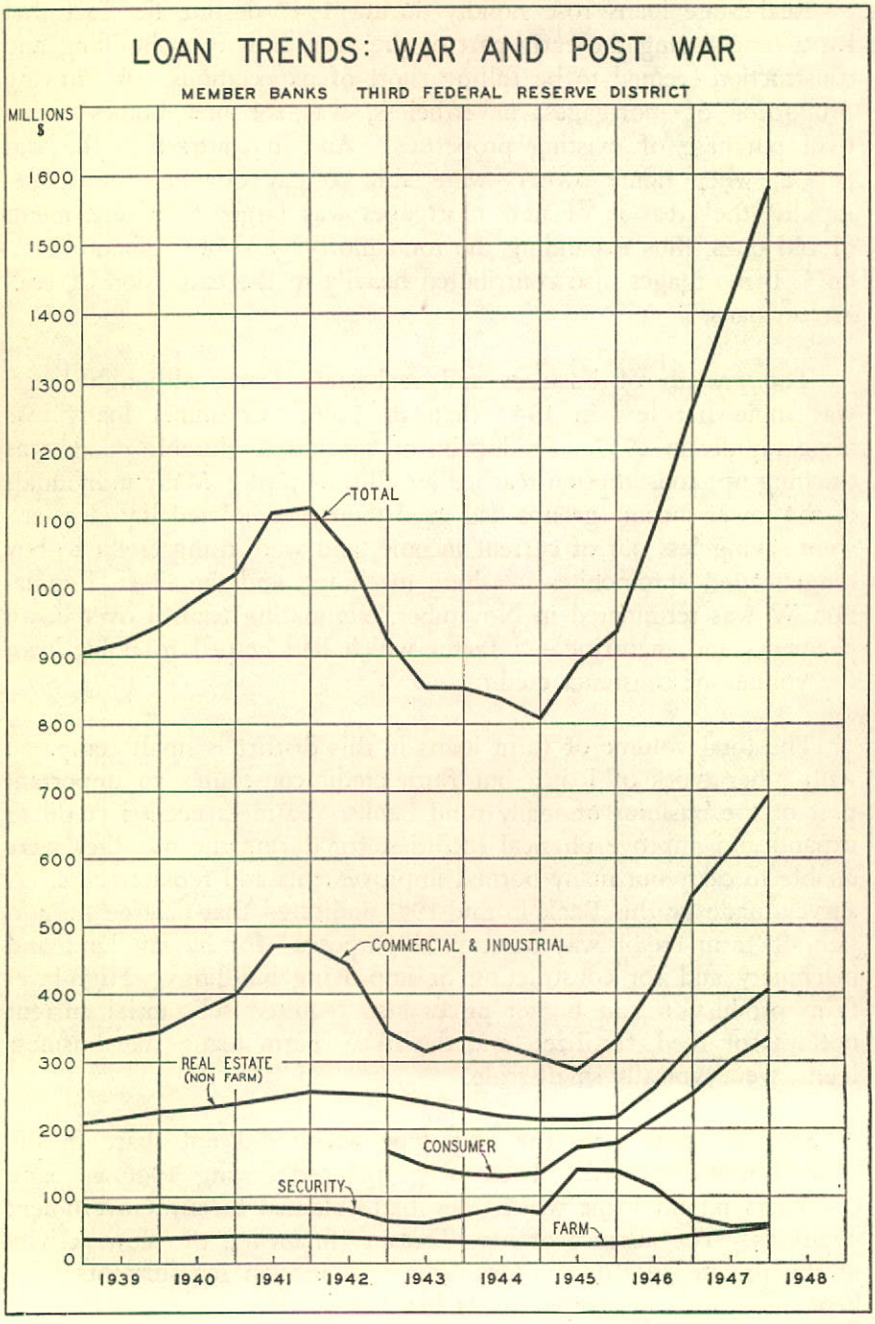
The above analysis indicates the reasons for the difference of opinion between the commercial banker and the central banker as to the meaning of "productive credit." The difference in the two views is likely to become pronounced during a period of inflation when the economy is operating at capacity. Even under those circumstances, the individual banker commonly thinks of his loans as being productive. They are mainly to business firms and for purposes of production. It is to his interest for them to be so, for such loans are more likely to be repaid. To the central banker, however, who has a responsibility to contribute to economic stability, credit expansion may or may not be productive, depending upon general economic conditions.

What are the implications of this analysis for credit policy? For the commercial banker it means he should be particularly cautious during times such as these to grant only sound, productive loans from the individual point of view. But this alone will not suffice, both because the banker can not measure the effect of his loan on total national output and because the concerted action of all lenders, rather than individual action, is necessary. Restricting credit expansion which goes primarily to finance higher prices can best be accomplished by the central banker through his control over the availability of reserves which serve as the basis for credit expansion. The promotion of economic stability and the general welfare impose upon the central bank the responsibility of checking increases in the volume of credit when productive resources are being fully utilized, and therefore when credit expansion is unproductive from the social point of view.

"Productive credit" may mean different things to different people, but there is no doubt that the overwhelming majority of the loans which banks have been extending conform to the banker's conception of what "productive credit" is. More and more, banks are returning to one of their traditional functions of meeting the community's demand for credit. In providing this credit, member banks in the Third Federal Reserve District have expanded their loans to the largest volume since 1931. Their loans at the end of 1947 comprised 29 per cent of their earning assets, a ratio which may seem small when compared with the 69 per cent prevailing in 1929, but which is considerably above the 16 per cent existing at the end of the war. As shown in the chart, banks last year made increasing amounts of credit available to all the important types of borrowers—businessmen, home owners, consumers, and farmers.

The greatest expansion was in business loans. The number of concerns in operation was increasing, and business activity was at a higher level than in any previous peacetime year. Businesses needed more fixed and working capital to meet the huge demands for their products. A large part of their capital expansion was financed out of their own depreciation reserves and liquidation of Government security holdings. Money was raised also by floating new security issues; but although the volume of new issues was the largest in many years, market conditions made such financing increasingly difficult and some businesses turned to banks for long-term funds. As prices and costs rose, business also needed larger working capital. Receivables were expanding, and inventories, although still low in relation to sales, were growing.

A survey made by this Bank toward the end of 1946 revealed many important facts as to how banks were meeting these demands for business loans. Perhaps the most significant finding was that bank lending is predominantly small scale. Nine out of ten business loans were to small concerns—the local grocer, dry cleaning establishments, or restaurant—and most loans were of small amounts. The interest rate was typically 5 per cent or more and the term was usually short.


LOAN TRENDS: WAR AND POST WAR
MEMBER BANKS THIRD FEDERAL RESERVE DISTRICT
MILLIONS $
1600
1500
1400
1300
1200
1100
1000
900
800
700
600
500
400
300
200
100
0
TOTAL
COMMERCIAL & INDUSTRIAL
REAL ESTATE (NON FARM)
CONSUMER
SECURITY
FARM
1939
1940
1941
1942
1943
1944
1945
1946
1947
1948

Real-estate loans rose rapidly during 1947 despite the fact that for a time during the early part of the year, activity in building and construction seemed to be falling short of expectations. A growing proportion of mortgages, nevertheless, was for new homes rather than purchase of existing properties. And in contrast to the war period, when home owners were able to pay off their mortgages rapidly, the creation of new mortgages was larger than repayments of old ones, thus expanding the total mortgage debt. Liberal terms on G.I. mortgages also contributed heavily to the expansion of real-estate loans.

The growth of business and real-estate loans, although large, was somewhat less in 1947 than in 1946. Consumer loans rose more rapidly in 1947. Production of consumers' durable goods was catching up; consumption reached an all-time peak. Many individuals in the lower income groups had used their accumulated liquid assets, were saving less out of current income, and were using credit to buy long-awaited automobiles, washing machines, and the like. Regulation W was terminated in November, eliminating control over down payments and maturities—a factor which had helped to hold down the volume of consumer credit.

The total volume of farm loans in this district is small compared with other types of loans, but farm credit constitutes an important part of the business of many rural banks. Farmers needed credit to expand and improve physical facilities, for during the war they were unable to carry out many normal improvements and replacements. A survey made by this Bank in mid-1947 indicated that a large proportion of farm credit was for capital purposes—for buying land and machinery and for constructing or improving buildings. High-level farm production and higher prices also required substantial current outlays for feed, fertilizer, and the like. Farm loans, like business loans, were typically small scale.

Security loans were the only type which did not share in the general upward trend. These were reduced during 1946 as bank customers repaid loans which they had obtained to buy Government securities. The absence of new Treasury financing, the slow activity in the private security markets, and high margin requirements have kept these loans at comparatively low levels.

Lending problems In the process of expanding their loans by 75 per cent since the war, member banks in this district have experienced a certain amount of growing pains. Banks always have three basic problems, and these often may not be consistent with each other: how to supply credit to the community, how to protect depositors, and how to make a profit. They have been solving the first by making more loans, but in doing so they have been complicating the other two.

Expansion of loans means assumption of additional risks. The ratio of capital accounts to "risk" assets (total assets less cash and Governments) at the end of 1947 was 27 per cent as compared with 39 per cent in 1944, when Governments were a much larger proportion of bank assets. The ratio has returned to the level prevailing in the 1930's.

Each type of loan reflects evidences of factors tending to increase risks. There is constant danger, for example, of over-expansion of fixed capital in business concerns. The ratio of debt to net worth does not yet appear to be excessive, but it would be better if a larger proportion of business financing were done with internal funds and equity financing rather than fixed debt. Inventories are still low compared with sales but could always become top-heavy if sales fell off. Collection of receivables in some lines seems to be slowing down.

In real-estate lending, risks arise in making loans against inflated property values. For some time, banks have been taking steps to avoid undue risks in G.I. loans by exercising greater caution in appraisals and by requiring down payments of 10 per cent or more. Government guarantees cannot eliminate risks in mortgage lending, but merely shift them to the taxpayer. Undue reliance on guarantees and unsound lending would ultimately reflect on the lenders themselves.

In consumer credit, there are growing evidences that the financial position of consumers in the low income groups is weakening and that collections are slowing down, even though such credit is still low compared with consumers' incomes. With the elimination of Regulation W, there is danger of excessive liberalization of loan terms in an effort to compete for new business.

Farmers are still much better off than before the war, yet excessive capital investment at inflated prices, particularly through borrowing, can weaken their position in the future.

Bankers are constantly on the lookout for such risks which are inherent in bank lending. But the problem is particularly difficult because risks usually show up only long after the loan is made. Losses and charge-offs always rise after the lending peak has passed and business activity turns down. During 1945 and 1946, member banks in this district recovered more on their old loans than they lost and charged off. In 1947, however, recoveries balanced losses and charge-offs, and we may expect losses and charge-offs in 1948 to exceed recoveries. Risks will become an increasingly difficult problem.

Expansion of loans in some ways appears to solve the third basic problem of banks—how to make a profit—for the gross return on loans is 3.8 per cent as compared with 1.8 per cent on investments. But from the gross return must be subtracted net losses and charge-offs, which in a bad year such as 1934 amounted to as much as 3 per cent of total loans. And the costs of making and servicing loans are considerably more than the costs of buying Government securities. The greater the problems of lending become, the more essential it is to have well-trained and experienced credit men. Since good credit men command and deserve high pay, increasing loan volume is apt to mean rising expenses for wages and salaries. Payment of high salaries can contribute toward the maintenance of a competent staff and result in net gain through higher net returns per unit in lending activity.

Bank lending and inflation Like the rest of us, the individual banker is caught in the inflationary spiral. Inflation is a fundamental factor expanding his loan volume. Higher costs and prices increase the amount of bank credit which business, home owners, consumers, and farmers need. Higher prices boost bank earnings but they increase risks and expenses.

Yet, paradoxical as it may seem, rising bank loans are a cause as well as a result of higher prices. As loans expand, bank deposits also rise and bank deposits constitute the bulk of our money supply. More money means more spending power. To the individual banker

the key to the problem lies in more production, and when he makes a loan it is usually to enable a producer to increase his output. Actually, since our resources are being practically fully utilized, this producer can expand his output only by bidding goods away from some other producer. Production cannot be the immediate solution to inflation. This fact became clearly apparent in the business world during 1947.

The Trend of Business

Business developments in 1947 may be reviewed either as a chronology of events or in terms of basic factors which provide a key to the nature of events. Chronologically, a marked change in the general business outlook and in the buying attitude of the public occurred about mid-year. Of greater fundamental significance, however, was a continuing discrepancy between spending power and the supply of goods at stable prices, resulting in a substantial rise in the price level during the year.

Intense business activity

The record of business and industry in the Third District during the year as a whole matches that of banking. It is a record of intense business activity and high employment. For example, during much of 1947, although a few localities experienced exceptional difficulties, the Pennsylvania State Employment Service reported labor shortages throughout the state, especially during the second half of the year. The number of persons claiming unemployment compensation and veterans' allowances at the end of the year was less than half the already small total at the beginning. Employment in construction and trade and services expanded substantially. Factory employment in December was slightly above the high level of the previous year. People in Pennsylvania factories during 1947 averaged over 39 hours of work a week, slightly more than in 1946, and exceeded 40 hours during the last quarter.

Advances in hourly rates of pay and weekly earnings were general throughout industry in the Third District as in the nation. Unlike the 1946 series, the "second round" of wage increases was accomplished without wide-spread work stoppages. Workers in Pennsylvania factories averaged nearly $50 a week at the end of the year—a 15 per

cent increase over December 1946 compared with a nation-wide gain of about 11 per cent. Weekly wages ranged from about $35 to $40 in some soft goods lines to nearly $60 in some durable and producers' goods factories.

Agricultural incomes in Pennsylvania, New Jersey, and Delaware were also at very high levels. Delaware showed a slight drop in cash receipts from farm marketings in comparison with the previous year, but gains in the other Third District states were in the neighborhood of 15 per cent. The increase in net farm income was probably somewhat smaller than this percentage because of the pinch of high grain prices which were generally unfavorable to eastern feed-deficit areas.

Big pay rolls — booming trade High incomes on the part of virtually every group made for active trade throughout the district. The dollar value of department store sales was about 11 per cent above that for 1946. The last two months of the year established new monthly records. Philadelphia appears to have made a slightly greater gain for the year than other Third District trading centers, but in general, the increase in sales was fairly evenly distributed.

The experience of the department stores illustrates one of the year's outstanding characteristics—a marked shift in business and consumer attitudes, from cautious pessimism to buoyant optimism. During the first quarter of the year, especially during the pre-Easter season, department store sales were disappointing. Customers were spending at a faster rate than early in 1946, but viewed in contrast with a record Christmas season and considering the high level of inventories which the stores were holding, the spring slow-down was a matter of some concern. It seemed to be a confirmation of the widespread belief that the end of inventory accumulation during 1947 would signal a recession of significant proportions. Scattered lay-offs in the textile and apparel industries reinforced this view.

Steps were taken immediately, therefore, to reduce inventories and to shorten commitments. Clearance sales, especially in women's apparel lines, were publicly advertised for the first time in years. The result of a spring survey of Philadelphia department stores, conducted by this Bank, revealed that prices in many lines were lower. It was

clear that department store buyers had stopped placing orders indiscriminately and that overdue orders were being cancelled whenever possible. New orders were held to a minimum, substantially below the level of the previous year.

Abrupt change in outlook With rising sales in April and May, however, the situation changed abruptly. Inventories had declined and the stores were running out of merchandise in many instances. By the middle of the year, the Newburyport Plan for a 10 per cent across-the-board price slash and the fanfare of publicity which accompanied it were all but forgotten. Department store buyers reentered the wholesale markets with heavy orders. In July, among the larger department stores in the district, new orders began to exceed those of the previous year. In the last quarter, net new orders were 60 per cent greater than in 1946.

A parallel development occurred in construction. Early news on building was unfavorable in that it failed to show a substantial recovery from the precipitous decline in construction activity late in 1946. But by July it became apparent that home buyers either had been reconciled to high prices or expected even higher prices later on, and that businessmen had decided increased capacity would pay for itself despite high building costs. Residential construction rose to near-record levels and a survey of manufacturing concerns in the Philadelphia area showed that expenditures on new plant and equipment in this area, as in the nation, were at a very high rate.

The recession that was so generally expected, and which many considered to be upon us in the spring of 1947, did not materialize; nor was it clearly in sight at the turn of the year. The consensus of "expert" predictions and business polls at the beginning of 1948 was definitely optimistic. 1947 was described in our January *Business Review* as the "year of the slump that never came." Renewed optimism and the expectation of higher prices, moreover, helped strengthen those factors which act to continue the inflationary spiral.

Price inflation overstated real gains While the records of department store activity and construction in the district illustrate one outstanding characteristic of the year, the record of production points to another. Construction increased significantly over 1946 here as elsewhere, but agricultural output probably did not gain

(for the nation as a whole there was a slight decline); and industrial production—mining and manufacturing—for the entire district inched upward a mere 1 per cent. This suggests that gains in income and trade were more in dollar than in physical terms. The really spectacular advances have not been in goods made available for purchase or labor performed but in the prices of goods and labor. We have witnessed an inflation of serious proportions.

Although its manifestations are apparent in individual households, the problem of inflation is basically a matter of the total supply of goods and services available and total spending power in the entire national economy. Gross national product—the value of all goods and services produced in the nation—was $230 billion for 1947 as compared with $204 billion for 1946, a 13 per cent rise. During the fourth quarter of 1947 we attained a rate of $241 billion a year. The term "gross national product," of course, is a value or dollar magnitude. It could just as well be called "gross national expenditure," which in this case would seem to have a more appropriate connotation. The rate of gain in *physical* output was only about half that which took place in gross national product or expenditure. Moreover, much of this gain over the previous year appeared merely because widespread strikes of 1946 were not repeated. The monthly rate of output did not increase greatly during 1947.

Peak production reached Our economy operated close to maximum capacity during the entire year. Employment reached peacetime records and unemployment, at about 2 million, was at the minimum allowed by seasonal changes and job turnover. The appearance of labor shortages made it clear that unless some services were drastically curtailed or hours of work increased, a bigger rise in output was not possible. And even if it were agreed that working hours should be increased, bottlenecks in those industries which were already producing around the clock would not have allowed great over-all expansion. Under prevailing conditions, a sudden increase in the flow of goods and services can not be expected. Expansion of our physical output at a rate greater than, say, 5 per cent a year would seem extremely unlikely.

In the process of increasing physical production by 7 per cent, personal incomes after taxes—wages, dividends, farm earnings, and

other categories—were increased more than 10 per cent over 1946 to $175 billion. Undistributed profits of corporations rose more than 50 per cent, though over half was "paper profits" arising out of inventory appreciation. The increase in personal incomes does not reveal the full impact of consumer spending. Consumers saved 9 per cent of disposable incomes in 1946; they saved only 6 per cent in 1947. Consumption expenditures by individuals, therefore, rose nearly 15 per cent and personal savings dropped from $15 billion to $11 billion.

To some extent, increased outpourings of consumer dollars looking for goods and services were offset by a slight decline in Government purchases; but an increase in net exports and larger investment outlays by business tipped the scales further in the direction of a greater increase in spending than output. The record of business expenditures for new plant and equipment compiled by the Department of Commerce and the Securities and Exchange Commission seems to confirm the results of the survey of manufacturing plants in Philadelphia conducted by this Bank. Exclusive of agriculture, American business is estimated to have spent nearly $16 billion for new factories and machinery during 1947. It is expected that this rate will be maintained at least through the first half of 1948. The outlay for producers' durable equipment by all users in the second half of 1947 was at a rate of $18 billion a year. Even taking price changes into account, this is a volume of investment in producers' goods which exceeds that of 1929. There is little doubt that 1947 witnessed a capital boom of large proportions.

Money, goods, prices

The extra money for higher wages, bigger dividends, and record spending during 1947 came from several sources, which are set forth in detail in other sections of this report. Obviously, the decline in the rate of personal savings was one source. Past savings was another. Bank credit was still another. But however it came into being, the increase of effective money supply in markets for relatively scarce goods and services made increased prices and wages possible. Indeed, in an atmosphere of business optimism, with inflation no longer suppressed by price control, greater money supply and faster money turnover made higher prices virtually inevitable.

The average of wholesale prices in 1947 was 25 per cent above 1946. A rapid increase, of course, came toward the end of 1946 with decontrol. Prices rose about 15 per cent during 1947 alone. This figure, in historical perspective, represents a sharp rise.

Contrary to the pattern of price movements in 1946, when farm and food commodities led all others, prices of industrial commodities and durable consumers' goods increased somewhat faster than the average during 1947. Food prices lagged. Fuel and lighting materials and building materials led all other price groups with gains of 29 and 21 per cent, respectively. Prices of goods purchased by consumers, formerly called the "cost-of-living" index, rose 9 per cent during the year. Modification of rent controls allowed that item to rise by about 6 per cent on the average, the first appreciable increase since 1941.

One of the most significant price developments was the persistence of high prices for many goods whose supply, it had been presumed, had "caught up" with demand. This was true of women's apparel and of shoes, a line in which substantial production cut-backs actually occurred. A price cut for tires in the spring was erased not many months after it was made. For those who believed that "supply and demand" would stabilize prizes during the year, this development was the most disturbing of all. It soon became evident that demand did not stand still while supply tried to catch up, and that if increased output was accompanied by increased spending power, demand in terms of dollars might move even further ahead.

The individual firm in the economy From the analysis of the year's events which has been made here, beginning with the fact that our productive resources are fully utilized, it is obvious that successively higher price levels do not necessarily bring forth greater output. Those who expected that higher prices would "take care of themselves" by bringing a flood of goods were forced to re-examine their assumptions. Either they had been thinking in terms of our pre-war economy, in which excess capacity was usual, or they were thinking of the industrial system as an individual firm. A year or more ago, if one were to ask a manufacturer whether he could produce more goods, provided the price of his product were higher, the

answer would most likely have been in the affirmative. He could envision his ability to pay higher wages and raw material costs and so acquire additional labor and supplies. He could foresee greater profits which would enable him to buy more machinery and extend his plant. The same answer would have come from a second manufacturer and a third, and, in fact, did come from scores of other industrialists who had the same visions. It might have come, too, from some labor groups.

When the opinions of individual producers as to their own abilities were added up, the consensus so obtained seemed to imply that higher prices for everybody would mean proportionately more output from everybody. On this basis it is understandable that all the credit put into producers' hands to meet higher prices and wages was at first thought to be truly productive. But the consensus was misleading. In this case the whole was something other than the sum of its parts. Higher prices for one manufacturer enabled him to take workers from a second; more profit for the second allowed him to bid away construction materials from a third producer; more money for the third man gave him the wherewithal to buy some of the steel which the first might have used. Increased wages for workers vanished in higher living costs. The factors involved in policy decisions for individual firms are different from those concerning the industrial *system.*

Monetary Policy

The very existence of the Federal Reserve System is an illustration of a basic fact learned from our economic experience: that the sum of unrestricted individual actions often falls short of the maximum overall welfare.

Indeed, it is a particularly apt illustration. For money plays a strategic role in our economy, performing the indispensable function of facilitating the exchange of goods between buyers and sellers—of "greasing the wheels" of commerce. Even more important, we have built up a system in which changes in the quantity and use of money exert a tremendous influence on the level and nature of our economic activity.

Commercial banks occupy a key position in this system. For it is through the banks that money is created and retired. With due regard to their responsibilities toward their stockholders, depositors, and communities, banks generally endeavor to expand their earning assets. In doing so they expand their deposits; and bank deposits constitute the great bulk of our money supply. We have long since found that this system, if allowed to operate without some sort of restraint, can produce undesirable fluctuations in spending power, inducing disastrous fluctuations in economic activity. Congress has partly circumscribed the profit motive as the ultimate determinant of the money supply by eliminating the profit motive for Federal Reserve Banks and by giving the Federal Reserve System the responsibility for exerting an over-all influence on the ability of commercial banks to expand or—under other circumstances—to contract their earning assets and simultaneously deposit money.

All this is not just theory. In 1947, more than at any time in recent years, it had a direct application to pressing business and financial problems. The economy was plagued by a persistent tendency for demand to outrun supply at stable prices. And, as we have seen, the actions of individual groups did little to solve the problem —indeed, in most cases aggravated it. The individual producer could increase output only by bidding scarce resources away from another producer; then he offset his higher costs by charging a higher price for his product. The worker, in turn, sought to make up for higher living costs by demanding more wages; and as costs and prices rose, the individual banker did his utmost to perform his traditional function of supplying "sound productive credit" to the community. The combined effect of all these individual actions was to give us more inflation.

The problem did not arise over-night. Throughout 1946 the Federal Reserve System had been concerned with the monetary aspects of it, particularly the so-called "monetization of the public debt." This was a practice which had been going on for some time, and was directly traceable to the "pattern of rates" on Government securities maintained by the monetary authorities to help assure the success of war financing. Inasmuch as the liquidity of all Government securities, regardless of maturity, was virtually assured by maintenance of a fixed

pattern of rates, banks naturally tended to sell short-term issues yielding 3/8 or 7/8 per cent in order to buy longer-term securities yielding 2 or 2½ per cent. Sales of short-terms, however, tended to push up their yields, forcing the Federal Reserve to buy in order to maintain the pattern. But Federal Reserve purchases supplied reserves which the banking system could use to expand earning assets and deposits to several times the original amount. This was monetization of the public debt. It was reflected in rising deposits, a heavy concentration of short-term Governments in Federal Reserve portfolios, the lengthening of commercial bank Government security portfolios, and declining yields on long-term bonds.

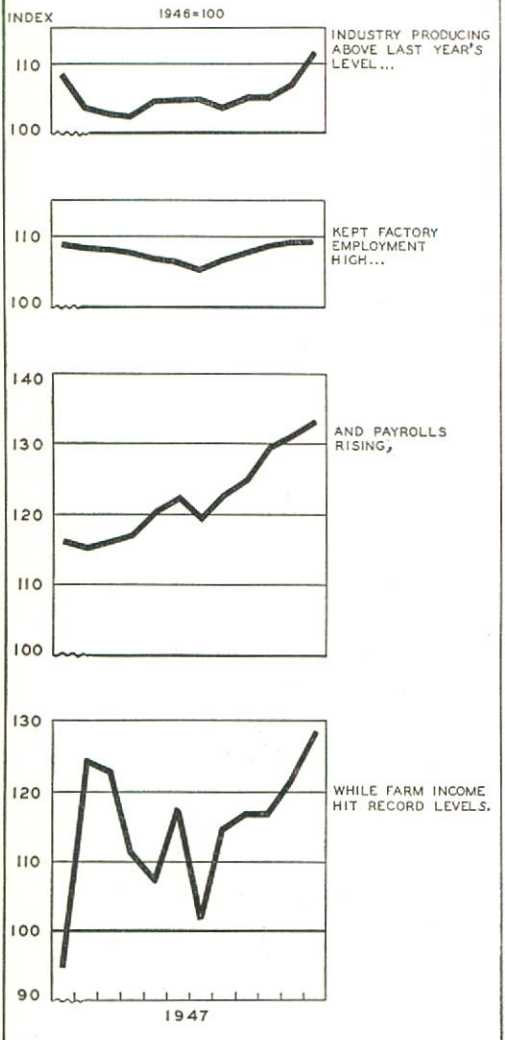
A number of steps had been taken in 1946 to discourage the practice. In the spring of the year, the Reserve Banks had eliminated their preferential rate of ½ per cent for loans on short-term Government securities—a rate which had prevailed throughout the war. Shortly thereafter some large commercial banks had raised their charges on certain types of loans secured by Government securities and on brokers' borrowings. Rates on acceptances were increased slightly at various times around the middle of the year. In the meantime, the monetary authorities pursued what the market described as an "open-mouth policy" in an effort to stem monetization of the public debt by injecting some uncertainty into the securities market.

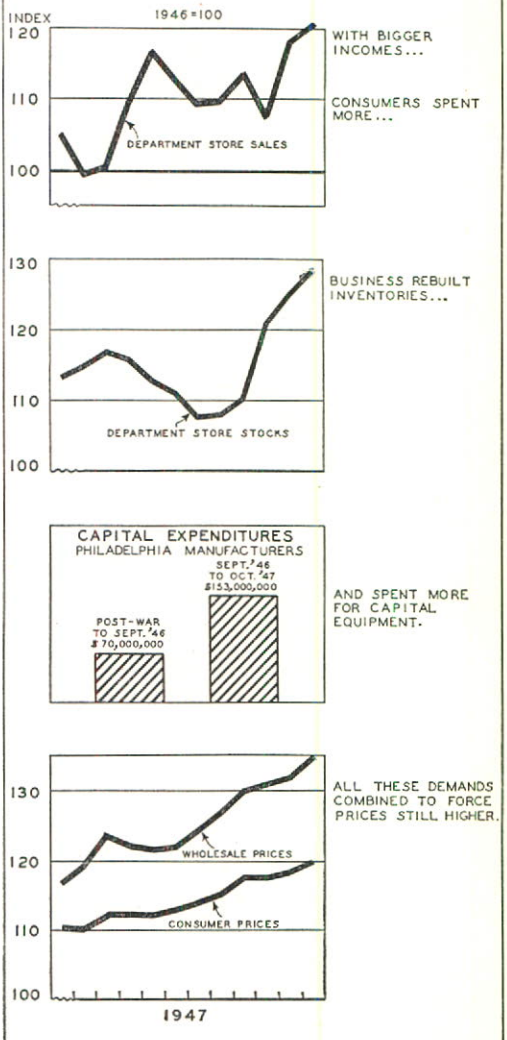
These steps, taken in 1946, met with some success, as is indicated by the fact that the downward trend of yields on long-term Governments was halted in the spring of the year. The Treasury's debt retirement program, inaugurated in March, reduced commercial bank holdings of Government securities by $13 billion. Such retirement, however, did not greatly reduce the amount of privately held money since the reduction was accomplished largely by use of existing War Loan deposits.

To the monetary authorities another problem—monetization of *private* debt—was becoming increasingly troublesome. By the end of 1946 the post-war expansion in commercial bank loans had already amounted to $7½ billion and would have been considerably more had loans to finance Government security purchases not been paid off in substantial amounts during the period.

BUSINESS DEVELOPMENTS IN 1947

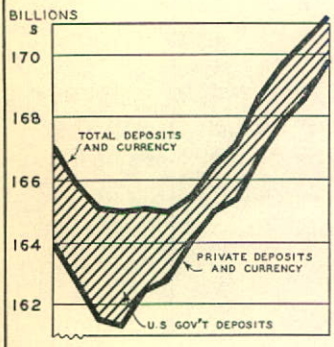
THIRD FEDERAL RESERVE DISTRICT



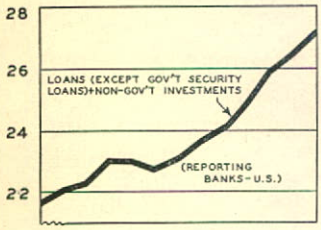


FINANCIAL DEVELOPMENTS IN 1947

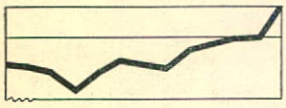
UNITED STATES



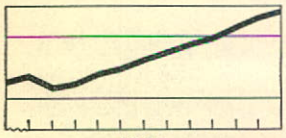
THE MONEY SUPPLY ROSE...



AS BANKS EXPANDED PRIVATE CREDIT...



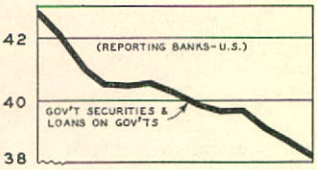
ON THE BASIS OF GROWING RESERVES...



FED LARGELY BY AN INFLOW OF GOLD.

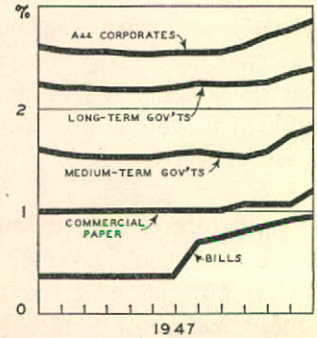
THESE INFLATIONARY FORCES WERE PARTLY OFFSET AS...

THE TREASURY TOOK IN MORE CASH THAN IT PAID OUT...



AS DEBT RETIREMENT REDUCED PUBLIC CREDIT OF BANKS...

AND FEDERAL RESERVE CREDIT...



AND AS INTEREST RATES ROSE.

Objectives of policy As we entered 1947 the basic problem still facing the Federal Reserve authorities was an excessive supply of money. Individuals and business held $143 billion of money either in cash or in their bank accounts. They owned, moreover, $80 billion worth of Government securities which could be regarded as "near money." This money supply alone, a heritage of war financing, was an inflationary threat, for people were still using their money less intensively than before the war. In other words, the *existing* money supply could be used to drive up prices solely by being turned over more rapidly.

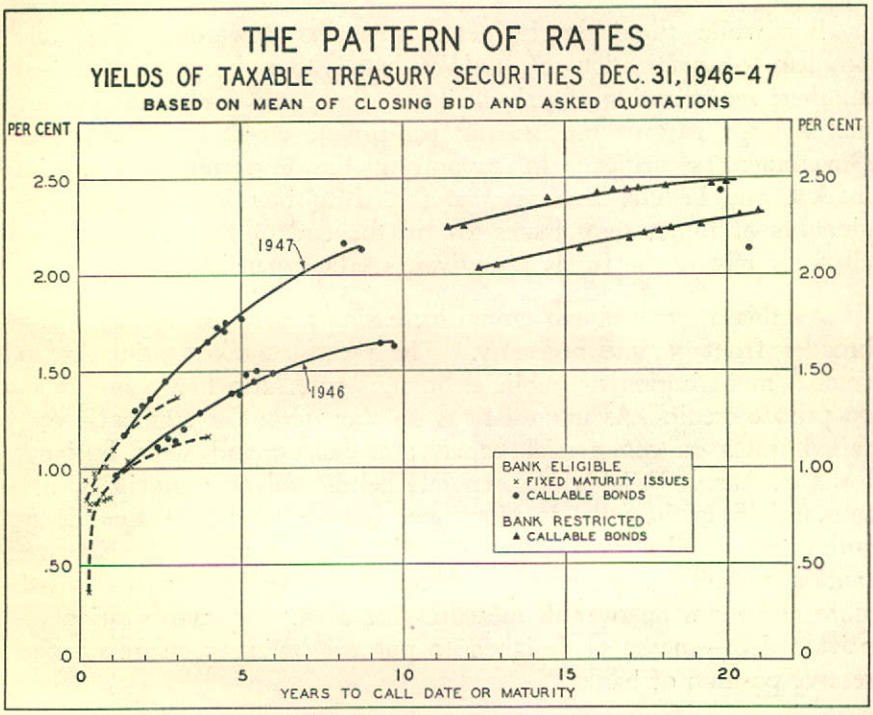
One objective of Federal Reserve policy in 1947 was to restrain monetization of public and private debt and the further growth of the money supply. Another was to discharge the System's responsibilities for maintaining orderly conditions in the Government security markets. Policy decisions in 1947 reflected attempts to reconcile these conflicting objectives.

Policy action Action taken by the monetary authorities during a considerable part of 1947 was directed primarily toward combating monetization of the *public* debt. In the first half of the year the Treasury paid off $2.9 billion of maturing issues of Government securities held by commercial banks. Yet, in retrospect, it seems that many people were confused as to the deflationary effects of this debt retirement. They could see that our money supply grew during the war because banks bought Government securities, and believed that the money supply could be reduced merely by reversing the process—by paying off Governments held by commercial banks. But even though the Treasury withdrew funds from the spending stream and reduced bank reserves when it collected taxes and sold savings bonds—as soon as it retired securities held by banks it returned to them reserves which could be used again to expand deposits. It was not enough to retire Government debt held by the commercial banks; other measures were needed.

In July, therefore, the monetary authorities began their efforts to break out of the "strait jacket of the pattern of rates" which they had established as a measure of wartime financing. To remove the incentive for monetization of public debt through switching from short- to long-term issues, the Treasury and the Federal Reserve System

undertook a series of steps to raise short-term rates and to diminish the spread between short- and long-term rates. During the second half of the year, rates on 90-day Treasury bills were permitted to rise from 3/8 per cent to nearly 1 per cent and rates on one-year certificates were increased from 7/8 per cent to 1 1/8 per cent.

On July 2 the Federal Reserve Banks announced that beginning with the July 10 issue, they would no longer offer banks the privilege of selling Treasury bills to the System with option to repurchase at a fixed rate of 3/8 per cent. The purpose of this action was to restore "the bill as a market instrument and [give] added flexibility to the Treasury's debt management program." To prevent any rise in short-term rates from increasing the Treasury's debt servicing costs unduly, provision had already been made to transfer 90 per cent of the net earnings of the Federal Reserve Banks, which held most of the bills, to the Treasury. The Treasury then offered, between August and the end of the year, a number of short-term issues for maturing securities, and by increasing the rate or by reducing the maturity, raised the "short end of the pattern," as shown in the chart.



But the longer end of the interest rate curve moved upward as well. This occurred as a result of both supply and demand factors. On the supply side, heavy sales by Treasury trust funds and the issuance of $970 million of special non-marketable 2½ per cent bonds in October were designed to meet the needs of those institutional investors who had previously been depressing the yields of marketable long-term Governments as they sought for investment outlets.

On the demand side, the rise in longer-term rates reflected both uncertainties created by rising short-term rates and rapidly expanding opportunities for extending *private* credit. In the second half of 1947, commercial banks increased their loans and their investments other than Government securities by $5 billion—two-thirds again as much as in the first half of the year. Other lenders, such as insurance companies, were taking advantage of a growing supply of corporate and municipal issues and were lending to private industry and individuals on a large scale. These opportunities for private credit expansion took away the appetite of banks and other large investors for longer-term Government securities.

But while these developments went far toward solving one problem — monetization of *public* debt — they greatly intensified another; monetization of *private* debt. For banks and other lenders met a large part of the demand for private credit by selling their Government securities. In supporting the Government securities market, the Federal Reserve was forced to buy increasingly large amounts of longer-term issues toward the end of the year, thus, in effect, supplying the funds for private credit expansion.

As this new problem grew increasingly serious, action on a broader front became necessary. The measures taken primarily to combat monetization of public debt, it is true, also had some effect on private credit. As interest rates on short-term Governments were raised, rates on commercial paper, acceptances, and some business loans increased. Yields on corporate bonds and on municipals rose substantially in the fall. In November, national and state supervisory authorities issued a joint statement urging bankers to exercise extreme caution in their lending policies. Nevertheless, policy became focused more and more on over-all measures for combating monetization of private debt—measures designed to put continuing pressure on the reserve position of banks.

Fiscal policy was the most potent weapon. By taking in more through taxation than it spent and by selling securities to non-bank investors, the Treasury drew down private deposits and bank reserves. During 1947 the Treasury enjoyed a net budget surplus, sold more savings bonds and other public issues than it redeemed, and obtained funds from special issues to Government trust funds and agencies. It was primarily with these funds that the Treasury retired $10.9 billion of its maturing marketable issues.

Increasing emphasis, however, was placed on retiring Federal Reserve holdings rather than commercial bank holdings. By taking this action the authorities could prevent the reserves from returning to the banks and forming the basis for a further expansion of deposits. Whereas in the first half of 1947 one-fourth of the retirements were of Federal Reserve holdings, in the second half one-third were of this nature. The net effect of these operations would have been, "other things being equal," to reduce bank reserves and bank lending power.

But "other things" were not equal. In the first place, a substantial volume of gold flowing into the country added to bank reserves and bank deposits. In the first half of the year the gold stock rose $700 million and would have increased more had the United States not turned over $688 million of gold to the International Monetary Fund; and in the second half it rose $1.5 billion.

In the second place, the System bought Government securities in order to maintain their prices and yields at the desired levels. These purchases changed in character as the year progressed, reflecting the shift from monetization primarily of *public* debt to monetization of *private* debt. As long as the former was the main problem, System purchases consisted of short-term issues: bills and certificates, in order to support their prices. Concurrently, the Federal Reserve and Government agencies and trust accounts sold bonds in order to relieve the upward pressure on bond prices. Toward the end of the year, however, as bond prices declined, the System became a reluctant buyer of bonds, both for its own and for Treasury investment accounts. Finally, on December 24, the Reserve authorities lowered the support prices of fully taxable issues. This action was taken in anticipation of the need for continued bond purchases in substantial quantities in the future, an unwillingness to pay the premiums established when public debt was being monetized, and a desire to reduce the volume of purchases.

The System became an aggressive buyer—over $1 billion of bonds were acquired in the last week of the year—in order to maintain the new pattern. The net result for the year 1947 was that, despite retirement of $3 billion of maturing issues held by the System, the total portfolio declined only $800 million, indicating net purchases of $2.2 billion in the market.

Results of policy It is always difficult to evaluate the results of policy action, for we live in a real world and seldom can know with certainty what might have happened had different action been taken or had no action been taken at all. But it is possible to draw some conclusions by looking at events of 1947 in the light of the two basic objectives of monetary policy: maintenance of orderly conditions in the Government securities market, and restraint over the expansion of credit and the money supply.

The first objective was successfully achieved. At no time were Treasury debt management operations disrupted by disorderly market conditions. The transition to a higher level of interest rates was accomplished smoothly and on the few occasions when the market might have been upset, as after December 24, the System stepped in aggressively to maintain orderly conditions.

Changes in the Money Supply and What Caused Them

(Billions of dollars)	March 1—Dec. 31, 1946	1st half 1947	2nd Half 1947	Year 1947
Private money supply	+ 11.7	—	+ 6.0	+ 6.0
U. S. Gov't deposits	− 21.9	− 1.7	—	− 1.7
Total money supply	− 10.2	− 1.7	+ 6.0	+ 4.3
Bank-held public debt:				
Federal Reserve—				
Retirements	− 4.6	− 2.0	− 1.0	− 3.0
Net purchases	+ 5.1	+ 0.5	+ 1.7	+ 2.2
Commercial banks—				
Retirements	− 12.8	− 2.9	− 1.2	− 4.1
Net sales	− 5.8	− 1.4	− 0.1	− 1.5
Total bank-held public debt	− 18.1	− 5.8	− 0.6	− 6.4
Bank loans and other investments	+ 5.4	+ 3.0	+ 5.0	+ 8.0
Gold stock	+ 0.3	+ 0.7	+ 1.5	+ 2.2
Other factors	+ 2.2	+ 0.4	+ 0.1	+ 0.5
Total money supply	− 10.2	− 1.7	+ 6.0	+ 4.3

In achieving the first objective, unfortunately, it was necessary to compromise the second. But it would not be accurate to conclude that actions to curb increases in the supply of money were without result. Large-scale monetization of the public debt was halted. In the first half of the year, banks had been selling their short-term securities in order to buy longer-term bonds while, on the other hand, the System was buying short-terms and selling bonds. In the second half of the year this situation was reversed. Part of the reversal can be attributed directly to the policy by which short-term interest rates were raised, and is reflected by the fact that commercial banks held an increasingly large share of outstanding Treasury bills.

A less tangible result of policy was the injection of a greater degree of caution into the market for private credit. Rising interest rates and growing uncertainty made it more difficult for some borrowers to obtain funds in the open capital markets. On the other hand, some of these borrowers then turned to banks for their funds, thus nullifying the anti-inflationary effects of uncertainty. Banks themselves were screening their loans more carefully, however, both in an effort to combat inflation and in growing recognition of increasing risks.

Yet the plain facts are that, despite efforts to maintain pressure, bank reserves actually rose by $1.8 billion. On the basis of larger reserves the money supply continued to grow during the year. At the end of 1947, individuals and business had $6 billion more in their bank accounts than they had at the beginning. Monetization of private debt, together with the inflow of gold, had more than offset the decline in bank-held public debt.

The Federal Reserve Bank of Philadelphia

General operations Operations of the Bank as a whole continued at high levels during 1947, although volume in some departments ran somewhat below 1946. In dollars and in number of pieces, currency counted ran ahead of 1946, but there was some decline in the coin division due in part at least to extension of arrangements for banks with surplus stocks to ship coin directly to those in need.

The dollar volume of ordinary checks handled established a new peak, although in physical units some decline was reported as the volume of checks for unemployment compensation declined. Declines also were shown in the collection of non-cash items—notes, drafts, and coupons. The Bank continues to facilitate the direct exchange of checks in county and city areas by making settlement on its books on mail or wire advices.

Lower Government expenditures and financing operations naturally reduced the volume of work in departments concerned with the handling of Treasury issues and Government checks. Early in the year the savings division of the Fiscal Agency Department returned to the Bank from rented quarters that had been occupied during some years of war-stimulated activity.

Borrowing by member banks, although still small, increased somewhat in 1947. The number of banks accommodated increased from 113 to 153, and some tendency was apparent to borrow for a longer period than in 1946. Purchases of Treasury bills under the repurchase option dropped sharply, but this was due to termination of this arrangement shortly after the middle of the year with respect to all bills subsequently issued.

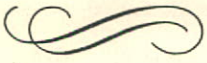
During these days of huge money supply and inflationary pressures it is particularly desirable that bankers and the business public comprehend the reasons for and the objectives of Federal Reserve policy, to the end that the gains made by the economy may be preserved through the wholehearted cooperation of all concerned. To accomplish this and to obtain on our part a sympathetic understanding of the problems facing banks and the public, this Bank actively sought opportunities for the exchange of views. County meetings reaching into every corner of the district were held during 1947 in addition to two conferences of the Federal Reserve Relations Committee, composed of representatives of bankers' groups and state associations in this district. Members of the staff also have participated in many other meetings, often as speakers, and through the medium of the monthly *Business Review* and other publications they have sought to make the results of our research and statistical activities available to the public.

Directors and officers Elections in the fall of the year resulted in the selection of Archie D. Swift, Chairman of the Board of the Central-Penn National Bank, Philadelphia, as a Class A director by the banks of Group 1, and of Walter H. Lippincott, President and Director of the Lobdell Company of Wilmington, Delaware, as a Class B director by the banks of Group 2. Their terms began January 1, 1948. Mr. Swift succeeds Howard A. Loeb, Chairman of the Tradesmens National Bank and Trust Company, Philadelphia, who was serving his second term as a director and who for ten years prior to that was the representative of the district on the Federal Advisory Council. Mr. Loeb, a firm believer in the principle of rotation, asked not to be considered for renomination. Mr. Lippincott takes the place of Charles A. Higgins, Chairman and President of the Hercules Powder Company of Wilmington, Delaware, who also asked that he not be renominated.

By appointment of the Board of Governors of the Federal Reserve System, Thomas B. McCabe continued as Chairman of the Board of Directors and Federal Reserve Agent at this Bank during 1947 and was reappointed to serve in 1948. C. Canby Balderston was reappointed a Class C director for a term of three years, beginning January 1, 1948.

The district's representative on the Federal Advisory Council during 1947 was David E. Williams, President of the Corn Exchange National Bank and Trust Company of Philadelphia. The Board of Directors designated him to serve for the year 1948.

Casimir A. Sienkiewicz, Vice President in charge of research, and long associated with the Bank, resigned in the early summer to accept the presidency of the Central-Penn National Bank, Philadelphia. Effective July 1, Karl R. Bopp, Director of Research, was appointed a Vice President.



Directors

as of January 1, 1948

Class A:	Group	Term Expires December 31
Archie D. Swift Chairman of the Board, Central-Penn National Bank, Philadelphia, Pennsylvania	1	1950
George W. Reily President, Harrisburg National Bank, Harrisburg, Pennsylvania	2	1948
John B. Henning President, Wyoming National Bank, Tunkhannock, Pennsylvania	3	1949
Class B:		
William J. Meinel President and General Manager, Heintz Manufacturing Company, Philadelphia, Pennsylvania	1	1949
Walter H. Lippincott President and Director, Lobdell Company, Wilmington, Delaware	2	1950
Albert G. Frost President, The Esterbrook Pen Company, Camden, New Jersey	3	1948
Class C:		
Thomas B. McCabe, Chairman and Federal Reserve Agent President, Scott Paper Company, Chester, Pennsylvania		1948
Warren F. Whittier, Deputy Chairman Agricultural Consultant, Chester Springs, Pennsylvania		1949
C. Canby Balderston Dean, Wharton School of Finance and Commerce, University of Pennsylvania, Philadelphia, Pennsylvania		1950

Officers
as of January 1, 1948

ALFRED H. WILLIAMS, *President*

W. J. DAVIS,
First Vice President

C. A. MCILHENNY,
Vice President

ERNEST C. HILL,
Vice President

WILLIAM G. MCCREEDY,
Vice President and Secretary

ROBERT N. HILKERT,
Vice President

KARL R. BOPP,
Vice President

PHILIP M. POORMAN,
Cashier

L. E. DONALDSON,
Assistant Vice President

ROBERT R. WILLIAMS,
Assistant Vice President and Assistant Secretary

JAMES V. VERGARI,
Assistant Vice President and Assistant Secretary

WALLACE M. CATANACH,
Assistant Cashier

RICHARD G. WILGUS,
Assistant Cashier

NORMAN G. DASH, *General Auditor*

APPENDIX

Statistical Tables

Statement of Condition

Federal Reserve Bank of Philadelphia (000's omitted in dollar figures)	December 31		
	1945	1946	1947
RESOURCES			
Gold certificates	$ 878,051	$ 858,145	$1,016,538
Redemption fund—Fed. Res. notes	61,134	61,009	60,691
Total gold certificate reserves	$ 939,185	$ 919,154	$1,077,229
Other cash	15,576	19,235	14,687
Discounts and advances	4,386	15,547	6,841
Industrial loans	1,763	523	1,358
United States Government securities	1,610,468	1,645,130	1,565,522
Total loans and securities	$1,616,617	$1,661,200	$1,573,721
Due from foreign banks	10	8	8
Fed. Res. notes of other Fed. Res. Banks	7,298	8,181	10,866
Uncollected items	139,850	157,813	192,379
Bank premises	3,313	3,170	3,182
All other resources	4,353	2,912	7,455
Total resources	$2,726,202	$2,771,673	$2,879,527
LIABILITIES			
Federal Reserve notes	$1,635,242	$1,699,277	$1,681,880
Deposits:			
Member bank reserve account	799,634	818,125	867,113
U. S. Treasurer—general account	59,678	34,511	77,363
Foreign	72,195	39,555	26,649
Other deposits	4,308	2,424	4,708
Total deposits	$ 935,815	$ 894,615	$ 975,833
Deferred availability items	106,130	122,081	164,635
Other liabilities	500	528	898
Total liabilities	$2,677,687	$2,716,501	$2,823,246
CAPITAL ACCOUNTS			
Capital paid in	$ 13,064	$ 13,926	$ 14,370
Surplus—Section 7	28,946	34,720	35,350
Surplus—Section 13b	4,501	4,489	4,489
Reserves for contingencies	2,004	2,037	2,072
Total liabilities and capital accounts	$2,726,202	$2,771,673	$2,879,527
Ratio of gold certificate reserves to deposit and Federal Reserve note liabilities combined	36.5%	35.4%	40.5%
Commitments to make industrial advances	$703	$1,281	$490

Profit and loss account Federal Reserve Bank of Philadelphia (000's omitted)	1945	1946	1947
Earnings from:			
United States Government securities	$9,929	$10,600	$11,193
Other sources	134	192	220
Total earnings	$10,063	$10,792	$11,413
Expenses:			
Operating expenses*	$ 3,007	$ 3,704	$ 3,887
Cost of Federal Reserve currency	349	373	316
Assessment for expenses of Board of Governors	204	187	214
Total net expenses	$ 3,560	$ 4,264	$ 4,417
Current net earnings	$ 6,503	$ 6,528	$ 6,996
Additions to current net earnings:			
Profit on sales of U. S. Government securities	$ 256	$ 138	$ 200
Transfers of reserves in excess of requirements	150	55	2
Other additions	52	34	3
	$ 458	$ 227	$ 205
Deductions from current net earnings	5	178	38
Net additions to current earnings	$ 453	$ 48	$ 167
Net earnings available for distribution	$ 6,956	$ 6,577	$ 7,163
Distribution of net earnings:			
Paid to U. S. Treasury—			
Interest on Fed. Res. notes	0	0	$ 5,672
Under Sec. 13b	$ 84	0	7
Dividends paid to member banks	766	$ 814	854
Transferred to surplus (Sec. 13b)	32	— 11**	0
Transferred to surplus (Sec. 7)	6,074†	5,774	630

*After deducting reimbursements received for certain fiscal agency and other expenses.
**Transferred from surplus (Sec. 13b).
†$3,000,000 also transferred to Surplus from Reserves for Contingencies.

Volume of operations Federal Reserve Bank of Philadelphia	1945	1946	1947
Pieces or transactions handled (000's omitted)			
Discounts and advances	1	1	2
Currency counted	208,611	243,613	253,406
Coins counted	474,170	540,658	463,374
Ordinary checks	115,501	143,234	141,232
Checks handled in packages by automobile run service	17,321	20,820	24,506
U. S. Government checks (including Treasury card checks)	70,155	34,410	23,832
Ration checks	5,041	832	327
Collection items:			
Coupons of U. S. Government and agencies.	1,373	1,400	1,378
All other (notes, drafts, and coupons)	180	193	184
Transfers of funds	65	69	68
Issues, redemptions, and exchanges by Fiscal Agency Department:			
U. S. Government direct obligations	26,756*	17,241*	12,900*
All other	22	16	1
Dollar amounts (000,000's omitted)			
Discounts and advances	$ 1,184	$ 1,065	$ 1,246
Currency counted	1,178	1,428	1,547
Coins counted	44	48	44
Ordinary checks	47,441	56,278	60,726
U. S. Government checks (including Treasury card checks)	8,401	5,074	3,657
Collection items:			
Coupons of U. S. Government and agencies.	131	152	142
All other (notes, drafts, and coupons)	260	257	224
Transfers of funds	9,032	10,323	11,745
Issues, redemptions, and exchanges by Fiscal Agency Department:			
U. S. Government direct obligations	8,686*	6,902*	4,570*
All other	110	48	5
Securities held in custody for member banks at end of year	$2,207 mil.	$2,485 mil.	$2,329 mil.
Savings bonds in safekeeping at end of year (number of pieces)	303,000	345,000	354,000

*Includes savings bonds sold through other issuing agents, and redemptions through qualified commercial banks.

Changes in member bank reserves and related items Third Federal Reserve District (Millions of dollars)	1945	1946	1947
Sources of funds:			
Reserve Bank credit extended in district	+ 39	− 74	− 148
Interdistrict commercial transfers	+ 944	+ 722	+ 751
Mint gold purchases, net	− 1	+ 1	+ 1
Treasury operations	− 660	− 587	− 587
Total	+ 323	+ 62	+ 17
Uses of funds:			
Currency demand	+ 233	+ 43	− 34
Member bank reserve deposits	+ 89	+ 18	+ 49
"Other deposits" at Reserve Bank	− 0	− 2	+ 2
Other Federal Reserve accounts	+ 1	+ 3	+ 0
Total	+ 323	+ 62	+ 17

All member banks Third Federal Reserve District (Millions of dollars)	Dec. 31, 1947	Change from		Percent distribution	
		Dec. 31, 1946	June 30, 1939	Dec. 31, 1947	June 30, 1939
Assets					
Loans and discounts	$1,582	+$ 319	+$ 662	22.3%	26.3%
U. S. Government securities	3,196	− 309	+ 2,447	45.1	21.4
Other securities	605	+ 41	− 23	8.5	17.9
Cash assets	1,613	+ 142	+ 613	22.8	28.6
Fixed assets	66	+ 1	− 111	.9	5.1
Other assets	30	+ 1	+ 5	.4	.7
Total	$7,092	+$ 195	+$3,593	100.0%	100.0%
Liabilities and capital accounts					
Deposits:					
Individuals, partnerships, and corporations—					
Demand	$3,802	+$ 132	+$2,548	53.6%	35.8%
Time	1,818	+ 78	+ 754	25.6	30.4
U. S. Government	68	− 93	− 18	.9	2.5
Bank	411	+ 17	+ 28	5.8	10.9
Other	346	+ 45	+ 147	4.9	5.7
Total deposits	$6,445	+$ 178	+$3,459	90.8%	85.3%
Other liabilities	40	− 2	+ 19	.6	.6
Capital accounts	607	+ 19	+ 115	8.6	14.1
Total	$7,092	+$ 195	+$3,593	100.0%	100.0%

Applications for industrial loans Federal Reserve Bank of Philadelphia	1947	June 30, 1934— December 31, 1947
Number		
Approved	7	378
Rejected	3	460
Withdrawn	0	71
Under consideration	0	0
Total number	10	909
Amount		
Approved	$2,142,500	$66,468,926
Rejected	907,000	18,033,350
Withdrawn	0	4,032,700
Under consideration	0	0
Total amount	$3,049,500	$88,534,976

Member bank reserves Third Federal Reserve District (Dollar figures in millions)	Actually held	Required	Excess	Ratio of excess to required
Philadelphia banks:				
Average: Jan. 1-15				
1944	$370	$357	$ 13	4%
1945	388	374	15	4
1946	423	411	12	3
1947	425	415	10	3
1948	451	436	15	3
Country banks:				
Average: Jan. 1-15				
1944	272	215	57	26
1945	316	247	69	28
1946	379	297	82	28
1947	388	339	49	15
1948	401	350	51	15
All members:				
Average: Jan. 1-15				
1944	642	572	70	12
1945	704	621	84	14
1946	802	708	94	13
1947	814	754	60	8
1948	852	786	66	8

Employment and Earnings — Pennsylvania Factory Workers

	All Manufacturing			Durable Goods			Non-durable Goods		
	Employment*	Pay rolls*	Weekly earnings	Employment*	Pay rolls*	Weekly earnings	Employment*	Pay rolls*	Weekly earnings
Average:									
1939	100	100	$22.42	100	100	$25.99	100	100	$19.24
1940	108	117	24.22	118	129	28.40	100	103	19.82
1941	130	168	29.02	154	204	34.33	108	124	22.22
1942	140	219	34.95	178	283	41.19	106	141	25.59
1943	147	268	40.85	195	356	47.37	104	162	29.91
1944	142	278	43.81	189	369	50.63	101	169	32.33
1945	127	240	42.26	162	299	48.10	96	168	33.52
1946	120	219	40.69	141	241	44.27	102	192	36.25
1947	129	268	46.47	156	305	50.85	105	222	40.69
1947:									
January	130	254	43.71	158	287	47.30	106	214	38.94
February	130	252	43.50	157	281	46.63	106	217	39.37
March	130	254	43.90	156	284	47.21	106	218	39.55
April	129	256	44.34	157	291	48.23	105	213	39.14
May	128	264	46.14	156	303	50.48	103	216	40.27
June	127	268	47.15	156	313	52.19	102	214	40.29
July	126	262	46.56	153	303	51.38	102	213	40.11
August	128	269	47.13	154	309	52.04	104	220	40.63
September	129	274	47.51	155	310	51.90	106	230	41.76
October	130	284	48.81	156	323	53.71	107	236	42.45
November	131	286	49.15	156	327	54.39	108	237	42.36
December	131	291	49.78	157	332	54.82	108	242	43.21

*1939=100

Production, Farm Income and Prices

1935-1939=100 (Adjusted for seasonal variation)	Industrial Production Third Federal Reserve District			Income from farm marketings N. J., Pa., and Del.[1]	Consumer prices in Phila.[2]
	Total	Durable goods	Consumer goods		
Average					
1939	101.7	103.9	100.3	99.4	98.6
1940	108.7	133.0	95.3	103.6	98.8
1941	136.3	199.4	106.0	122.4	103.6
1942	162.0	289.4	101.3	155.0	115.3
1943	183.3	355.2	103.5	197.1	122.7
1944	178.4	332.7	106.2	199.0	124.4
1945	149.5	251.0	102.3	231.0	127.4
1946	128.1	159.6	113.2	253.2	138.4
1947	134.1	168.5	117.2	291.5	158.4
1947 January	138.7	175.4	120.9	....	152.3
February	132.8	166.3	117.6	....	151.6
March	131.8	164.3	116.2	....	156.1
April	131.2	166.0	116.0	....	154.9
May	134.1	163.2	121.4	....	155.1
June	134.3	169.2	117.5	....	157.1
July	134.2	168.6	119.0	....	158.3
August	133.1	163.0	116.5	....	159.5
September	134.9	169.1	114.2	....	163.2
October	134.8	170.1	115.2	....	162.2
November	136.9	173.4	118.3	....	164.2
December	142.7	184.3	123.6	....	166.3

Sources: [1]U. S. Department of Agriculture. [2]U. S. Bureau of Labor Statistics.

DEPARTMENT STORES SALES

1935-1939=100 (Adjusted for seasonal variation)	Third District	Phila.	Lancaster	Reading	Trenton	Wilkes-Barre	York
1939	104.1	101.0	103.7	102.6	109.8	101.1	106.9
1940	111.2	107.5	107.3	110.9	120.4	100.7	113.8
1941	129.2	124.0	129.3	132.7	139.6	118.4	133.3
1942	142.8	139.6	150.6	151.5	153.5	129.3	157.5
1943	151.3	146.8	165.5	164.5	177.2	144.6	176.9
1944	166.5	157.9	178.4	176.9	192.3	174.4	200.0
1945	183.7	171.5	190.3	185.3	223.0	205.5	219.8
1946	235.4	214.1	247.7	249.2	294.0	276.9	276.1
1947	261.4	238.1	275.7	275.7	320.7	306.3	285.1
1947 January	247.6	220.8	278.1	256.3	323.4	271.3	280.5
February	231.0	210.6	244.3	257.8	263.0	270.0	237.7
March	236.3	219.9	248.8	241.9	277.6	287.6	260.9
April	258.4	239.8	275.0	278.2	296.8	317.8	290.1
May	274.7	254.0	287.3	297.7	332.8	339.8	303.8
June	264.2	245.3	268.4	269.9	281.7	309.0	276.4
July	257.4	233.2	286.8	266.7	332.5	298.7	274.0
August	257.7	221.1	259.5	266.5	341.8	276.6	282.8
September	266.5	241.3	277.4	264.9	309.9	309.6	278.1
October	252.6	234.5	260.8	275.6	326.9	293.6	276.0
November	277.9	249.6	293.6	315.2	366.3	332.0	298.5
December	284.0	260.1	301.1	287.2	362.4	323.7	308.4

DEPARTMENT STORE INVENTORIES

1939	96.2	95.1	101.2	105.7	97.0	92.8	108.1
1940	99.4	92.4	105.2	112.4	101.5	91.4	112.6
1941	119.4	110.2	120.3	140.7	141.4	113.3	137.1
1942	167.0	164.9	147.8	189.8	183.8	142.5	176.5
1943	141.2	137.8	126.6	158.3	162.4	134.5	161.2
1944	147.0	143.0	132.0	181.5	165.6	144.4	164.9
1945	150.1	145.6	128.8	190.6	166.5	154.2	158.7
1946	191.0	184.4	176.8	229.5	204.6	210.0	211.6
1947	220.1	207.3	218.4	256.2	244.2	250.0	230.5
1947 January	217.5	195.6	225.6	296.1	227.7	253.1	243.9
February	218.2	203.0	223.1	292.7	249.8	252.0	242.0
March	223.1	206.9	221.0	281.6	229.2	262.5	247.7
April	221.0	210.7	227.5	247.9	234.6	244.2	251.2
May	214.7	206.3	223.1	236.6	227.0	231.7	237.8
June	211.6	202.4	216.1	230.8	223.2	233.9	214.2
July	205.1	197.3	209.5	218.8	224.5	222.2	201.8
August	206.0	195.6	197.5	206.9	221.8	227.1	194.5
September	210.3	197.3	200.5	232.2	216.7	229.0	199.7
October	231.0	216.2	222.2	272.9	279.7	258.0	234.6
November	238.3	225.0	224.4	278.2	289.9	268.2	243.6
December	244.6	230.5	230.8	290.6	301.2	320.2	262.2