

THE BUSINESS REVIEW



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INFLATIONARY STRESSES AND STRAINS

THE recent break in the commodity markets has strengthened the current "what-goes-up-must-come-down" philosophy. This is no scientific theory of the business cycle. It is widely accepted, and often unquestioningly, because deflation always has followed inflation. But it fails to tell us why or how soon.

What usually lies behind this philosophy, however, is the idea that inflation inevitably puts pressure on various segments of the economy, engendering certain distortions—stresses and strains which bring on a recession. The only way they can do this is by influencing total demand or total supply, or both. For just as inflation is a problem of total money demand in excess of total supply—a discrepancy which is made up by rising prices—deflation is the reverse. To maintain a stable economy, the total flow of money from buyers must equal the counter-flow of goods and services, at current prices, from sellers. And the pattern of production should match the pattern of expenditures. Otherwise, adjustments must be made, and in fact are always being made.

In the following articles, available data are analyzed to ascertain what these so-called distortions are and what their possible effects may be—first on supply, then on demand.

I. Bottlenecks in Industry

The idea that there are distortions on the production side of the economy grows out of what seems to be a paradox. Current statistics show that the rate of output of American industry—all products taken together—is greater than ever before in our peacetime history. Even allowing 10 per cent for the increase in population, the rate of physical output on a *per capita* basis is probably in the neighborhood of 55 per cent higher now than in 1939. Yet it seems that we have too few new machines, too little steel, not enough housing, not enough lead, and insufficient transportation. The impression is widespread that somehow, the “shortages” and “bottlenecks” in the midst of plenty are leading to imminent price collapse and recession.

It is not difficult to explain the reasons for shortages. Rising prices mean that total goods and labor are *relatively* short compared to present demand, even though plentiful compared to prewar consumption. The demand for certain goods has increased more than the ability to produce them with the available facilities. But, although this explanation helps to make the situation understandable, it obviously does not remove any maladjustment that may exist nor answer the question as to whether a slump is close at hand or not.

One important point which the production figures and other recent developments make clear is that the period frequently referred to as “post-war reconversion” is past. The influence of the war on our economy is pervasive and permanent, but its direct impact on production has run its course. Extraordinary foreign demands of a non-recurrent nature remain and these have a significant effect in several fields; however, it is quite probable that the relatively small part of our total output which constitutes the export surplus would be easily swallowed up by domestic users. Also, on the demand side, the war has left us with an unusually large deficiency of durable consumers’ and producers’ goods. But while the magnitude of the deficiency may be unprecedented, it is similar in nature to that created during periods of depression which may occur in peacetime. It is questionable whether it is any longer helpful, then, to think of bottlenecks and shortages primarily as a temporary result of the war. They cannot be eliminated by solution of

“reconversion” difficulties or by plant reorganization. They are part of the general problem, always with us, of the allocation of productive resources—the problem of how much to make of this type of equipment or that, of whether to make television sets or steel mills; or, under other circumstances, whether to produce guns or butter.

Labor, materials, factories are limited: the rate at which goods and services can be produced at any given time is definitely limited as to total quantity. But it may vary as to composition. And since many types of productive resources possess little “mobility”—that is, they can be switched from output of one type of product to another only with difficulty—the necessity for fitting together into an integrated system the many and various units of the industrial machine and the labor supply raises problems. Whenever a high total demand pushes many lines to capacity production it usually develops that all the tiers and segments of industry have not kept in step. Demand for lathes might be met, except for a shortage of electric motors. Automobile assembly plants may be adequate but there is not enough steel. Building stone may be sufficient but skilled stonemasons cannot be found. The parts of the productive machine are not able perfectly to complete the job of every other part—they do not “complement” each other. As far as production is concerned our problem is, in large part, that of the *complementarity* of productive resources.

Output Distortions

One of the maladjustments frequently mentioned as a factor contributing to an imminent downturn in business is a lack of balance among industries.

In a boom period of the type we are now experiencing, expansion of output proceeds much more rapidly in some lines than in others. Whether by reason of poor judgment or relative price inflexibility or some other factor, certain lines may be induced to expand capacity beyond the limit of sustained demand for the product, which, when it becomes obvious, creates a “depressed” condition in that and related industries. Failure of a key industry to expand rapidly

enough may bring about higher costs in plants which it supplies, with similar effect.

The accompanying charts illustrate the dispersion in production trends since the 1935-1939 period and since the period of recovery from reconversion strikes early in 1946. The industry designations on the charts are not mutually exclusive, nor are they broken down into such narrow categories as would be necessary to permit discovery of all possible maladjustments. They do help, however, in explaining the nature of the problem. There has been a wide difference in the size of increases in output by various industries since the pre-war period. Manufacture of durable goods has outrun nondurable manufactures and mineral output by far. In part, this is a result of the tremendous wartime expansion of the aircraft and shipbuilding industries, but it is machinery that has made the greatest gains, and both iron and steel and automobile advances are well in excess of the average growth in nondurables. The same general trend may be noted in the chart covering the last year and a half. Metal manufactures, both iron and steel and non-ferrous, are high on the list during this period, along with an increase in metallic ore output, though the last is perhaps somewhat overstated due to month-to-month fluctuations not shown on the chart.

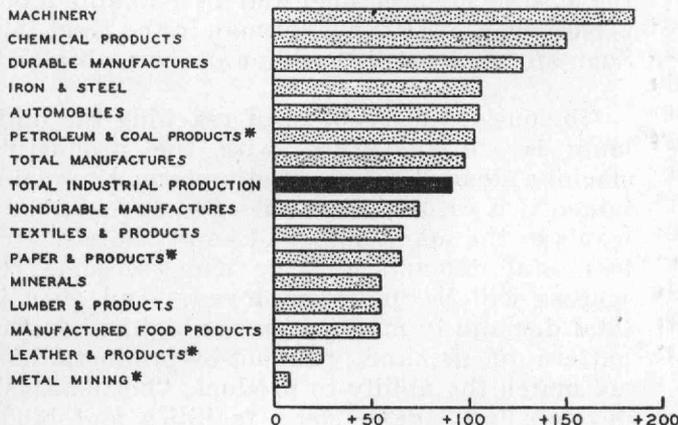
Even among nondurable manufactures, although the trend seems to have been less marked in recent months, it is the "industrial" products—chemicals, rubber, petroleum, and coal products—which have made the greatest advances.

In contrast with a 1947 average in industrial production some 86 per cent above that for 1935-1939, agricultural output last year (also in physical terms) was only 29 per cent above pre-war, and had declined slightly from the 1946 total. Construction was 32 per cent above 1935-1939; transportation, 108 per cent above; and electric and gas utility output, 117 per cent above.

Interpretation of disparities in industrial growth is extremely difficult. Indeed, it is unlikely that conclusive evidence of real distortion can be found in the statistics by themselves. In the first place, it is entirely natural that some types of activity should expand more rapidly than others. The demand for the great mass of agricultural products, for instance, while more closely related to changes in incomes than was once supposed, is still limited by the size of the human appetite and the growth in population. Discounting temporary foreign demand, it is clear that the need for food cannot possibly increase as fast as the desire for manufactured

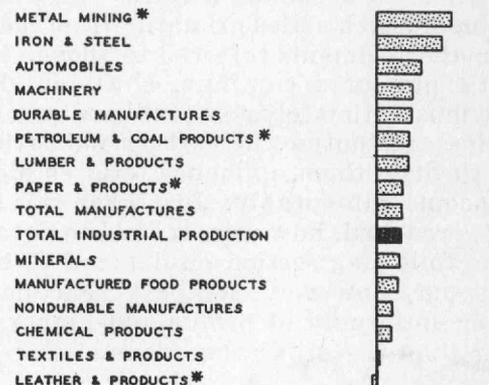
DISPARITIES IN INDUSTRIAL OUTPUT

PER CENT CHANGE, AVG. 1935-39 TO DEC. 1947



*NOVEMBER FIGURES

PER CENT CHANGE, JUNE 1946 TO DEC. 1947



*NOVEMBER FIGURES

products whose variety and use are practically unlimited. Similarly, it is unlikely that the demand for many nondurable manufactures can expand as rapidly as that for most durable.

In the second place, "distortion" in industrial expansion can be discovered in the statistics only if the base period to which one has reference—in this case 1935-1939 or June 1946—was a period in which the distribution of productive resources was perfect, and provided that no changes in technology or demand took place since that time. Obviously, no such perfection existed. Considering the eight to ten million unemployed of the 1935-1939 period, it is more likely that changes since that time have lessened industrial unbalance. With respect to June 1946, the issue is not so clear but considering the production difficulties prevalent at that time it would not be well to regard that as a "normal" period either.

The existence and magnitude of "distortions" cannot be proved or measured by differences in rates of expansion of various industries nor can they be proved by disturbed cost and market conditions. Costs are up, "break-even points" are higher as a result of high wage rates, output interruptions and use of less efficient labor and facilities; but this is a general condition to be discussed in another connection. It cannot be related directly to disparities in industrial growth. There are some industries which seem to feel the pinch of rising costs to a greater extent than others. At the moment, however, since reconversion difficulties in durable manufacture have been solved, it is mainly in those industries whose prices are fixed—the railroads and public utilities—that the situation is anywhere near to becoming serious. But this is not a problem which arises primarily from the industrial maladjustments referred to above. If inflationary pressures continue, shifts in demand which must ultimately come will endanger profit margins and output in certain industries and may, through them, influence total employment and income unfavorably. Just when this danger point is reached, however, is hard to determine. As the following section on demand distortions points out, however, the past year has seen greater uniformity of profits and higher profits rather than the other way 'round.

The existence of "under-the-counter" markets of various shades of gray in several fields may be regarded as a symptom of lack of balance and

inability to adjust through normal channels. Waste is great and costs of all kinds are increased in the affected industries by a proliferation of middleman-functions and complex "deals." The size of the gray markets and whether they are becoming more or less extensive is conjectural. In all probability the amount of publicity they have received is disproportionate to their true importance. While their existence and influence are undoubtedly significant, they are not conclusive evidence of distortions serious enough to bring on depression.

What businessmen and bankers are seeking to mitigate or avoid are distortions in the structure of production — "bottlenecks" or "shortages" or "overproduction," which may bring an end to the current boom. If their existence cannot be determined or measured on the basis of market conditions or by reference to some past period, what, then, may be used as a standard? Analysis suggests that in a dynamic economy nothing like a fixed standard can be found; nor can industrial balance be considered without reference to the whole economy, including prices, incomes, and the pattern of demand.

Optimum and Maximum Production

It has been pointed out time and time again in recent months that our economy is working at "capacity," and this is substantially true. Capacity, however, may be thought of in two different ways: as optimum output and as maximum output. Optimum output—the best possible production for a given labor force—is attainable when all the gears of the productive machine mesh perfectly. All resources are fully used in the most efficient manner and all available labor is employed, with the right man in the right job. Such an "optimum" is seldom, if ever, obtained.

Obviously, the problem of reaching the optimum is not concerned with the productive machine alone. Peak production cannot be maintained if it results in output of gadgets nobody wants or the maintenance of empty hotels. Unless total demand is large enough, some resources will be under-employed. And even if total demand in money terms is high, when the pattern of demand, product-by-product, does not match the ability to produce, "bottlenecks" develop and, again, some facilities and labor may be idle. There is some leeway. Machines and labor are flexible to some extent, but they

cannot always be shifted rapidly enough, especially when the change in demand involves changes in the amount of work devoted to basic materials and heavy industry.

When total demand is high enough to push many lines to the limit of their facilities and beyond, while additional output is possible in industries where demand is low or where bottlenecks impede production, we may be said to be producing at "maximum" capacity. Shortages of material and labor, especially skilled labor, develop in fields which expand most rapidly. Inflation may allow costs to increase all around as wages are bid up. Efficiency declines. This might be considered the approximate position of industry today except that, despite labor shortages, efficiency has probably improved over the unusually low level of a year or two ago, and recent estimates anticipate a further rise in output per man-hour. It is obvious, too, that few shortages are acute.

The Problem of Maximum Production

Failure to achieve perfect industrial balance need not be considered a distortion. A lack of complementarity among productive resources to the extent that it exists at the present time may be quite consistent with the continuous progress of a dynamic economy in which change and growth must take place here and there. If we want to have a high-employment economy, we may have to get used to a condition of "maximum" output with its recurrent shortages and bottlenecks. But there is more to the problem of maximum production than merely getting used to it. Distortions *can* develop out of initial imbalance which may ultimately become large enough to endanger the maintenance of high total demand. If a shift in demand occurs which is big enough to cause substantial unemployment and a decline in incomes in important sectors of the economy, it is quite possible that a downswing in business will be generated.

In boom periods, when plant and equipment outlays are high, it is usual that a disproportionately large share of resources are diverted to producers' goods industries. There is some evidence, both in the record size of new investment and in expansion of heavy goods output, that the present boom is no exception. Under these conditions, as long as the demand for capital goods continues, the fact that consumers may seem to

be "squeezed" by inflation need not create unemployment. But when the inflation which is financing capital formation is brought to an end, or if it becomes obvious that capital expansion has overshot the mark, the demand for producers' goods falls off. The mismatch of production and demand patterns which then occurs may leave some factories idle, and a gradual increase in unemployment may occur.

This bit of theoretical description would not seem to be fully applicable to the present situation. Unemployment is at a minimum and recent reports have not shown any significant increase. Estimates of plant and equipment expenditures for the coming year are close to the record for 1947. The financial position of the great majority of firms appears to be excellent and the debt burden is not high. While there has been some tightening of credit in recent months in an effort to prevent excesses, investment funds are still relatively plentiful.

Part of the price of maintaining a free economic system may arise out of the fact that such a system does not have a built-in automatic stabilizer. Our productive machine will not tend toward a balanced position without intelligent decisions on the part of producers and consumers.

The steel dilemma is a case in point. Steel is undoubtedly our most serious bottleneck. Shortages of transportation facilities, fuel, and construction materials are linked to it. We could use a lot more steel *now*. But the erection of additional smelting furnaces, coke ovens, rolling mills, and all the other paraphernalia of steel production would entail tremendous expenditure on capital goods for many months before any steel would be turned out. With total production already at a maximum, materials and labor with which to accomplish the expansion in steel would have to be bid away from other producers, restricting the output of consumption goods and increasing prices still further—and this at a time when post-war expansion of plant, which will most likely slow down, and a backlog of pent-up consumer demand may be overstating the longer-run requirements for steel.

The decision on additional investment on steel capacity is a delicate one. To be led into over-expansion in steel and other industries under the pressure of inflation would bring about pro-

duction distortions of a serious nature. It does not yet seem that we have traveled too far along

this road, but the scenery suggests the wisdom of looking at the signposts with great care.

II. Demand Distortions

Inflation and deflation are basically problems of aggregate money demand in relation to the supply of goods and services. The trend of demand throughout the war and post-war periods has been persistently upward. Backed by a rapidly rising money supply, total demand has continually outrun supply—inflation is the result.

As indicated in the chart, the per capita disposable income of individuals (i.e., after taxes) at the end of 1947 was \$1,262 as against \$536 in 1939. But the chart also illustrates a significant development from the point of view of those who believe inflations are ended and slumps brought on by stresses and strains in the economy. This is the decline in *real* per capita disposable incomes. The plain facts are that consumers' prices have been rising faster during the last two years than have disposable incomes. Thus far demand has remained high, but some consumers in the low and fixed income groups have been forced to draw upon their savings to meet rising living costs, and have been using increasing amounts of consumer credit to pay for their purchases. These developments have suggested to some observers that serious "distortions" have been or are developing and that consumers are being, or soon will be, priced out of the market. And if this is true, a decline in total demand and a slump in business may be imminent.

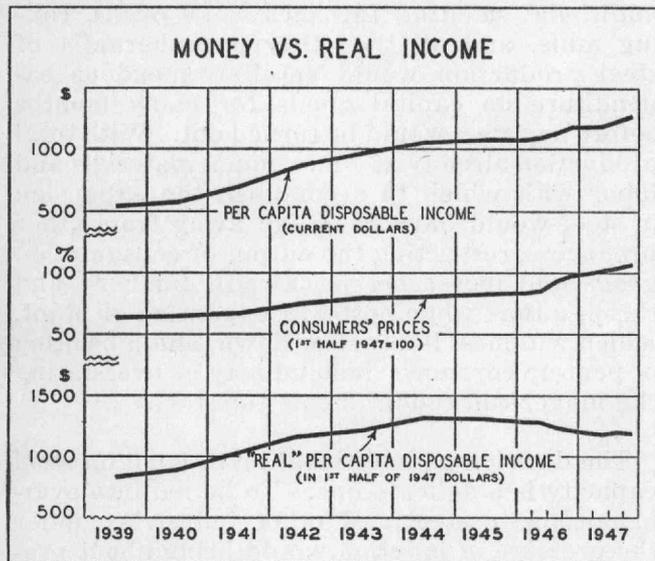
The picture is not as clear-cut as all this, however. We must have a more definite understanding of what these so-called distortions are, what evidence there is of their existence, and what might be their effects on total demand.

The Facts About Distortions

The idea of distortions, as the preceding section has already indicated, is a nebulous thing. It implies that something has moved out of line, but the question is: out of line with what? It assumes some sort of normal or optimum relationship between supply and demand factors and among their component parts. A perfectly adjusted economy, of course, has never existed; economic forces are constantly changing, requiring adjustments to new conditions.

One approach to the problem is to measure rates of change among the various demand factors since a base period—say, 1939. But we must exercise care in interpreting these results. That some prices, for example, have advanced disproportionately since 1939 does not demonstrate that distortions have been created. Some prices might have been out of line in 1939, and disparate advances may actually have brought about better balance. Or basic underlying supply and demand conditions may have changed so that new price relationships are more appropriate to the current situation. Dispersions or disparities over a period of time, in other words, may not necessarily reflect "distortions."

Nevertheless, by measuring diverse changes among wages, prices, profits, and incomes in general, we may be able to get some idea of what groups are being squeezed by the inflationary process. Then, by analyzing these pinches we may be able to determine to what extent, if any, total demand is being curtailed because certain groups are being forced out of the market. "Demand distortions," then, for this purpose might be regarded as pinches caused by disproportionate rates of change which result in a decline in aggregate demand. What evidence is there that such distortions are developing?



Wages

The largest group of consumers in our economy consists of wage earners. The average manufacturing employee is now earning \$51 a week—more than twice as much as in 1939. Workers in all lines of industry, in trade, and in services are now substantially better off than they were before the war as far as money wages are concerned.

But relative gains in wages have varied widely over the past eight years. As a result of the many forces in operation during and after the war, some wage earners now find themselves better off than others. The chart shows, for example, that whereas employees in the soft coal industry are earning three times as much a week as they made in 1939, employees of insurance companies are making about two-fifths again as much as in 1939. Wages in the service industries, particularly those in the "white collar" category, have lagged considerably behind wages in manufacturing.

It is too easy to conclude from these evidences of wide disparities in rates of increase that inflation has brought about serious distortions in the wage structure. Other facts suggest the opposite conclusion. Before the war, for numerous reasons, weekly earnings differed substantially from one type of job to another. Employees in security brokerage earned \$36.63 a week; workers in textile mills averaged \$16.84. During the past eight years, disparities such as these have been lessened. Workers who earned less than average wages before the war have enjoyed relatively large wage increases since then; wage earners who were relatively highly paid in 1939 experienced a less rapid growth. This development is indicated in the chart by bars to the left and right of vertical lines; the distance on either side represents the percentages by which the weekly wage in the particular industry differs from the average for all manufacturing.

Of course, all disparities among wages have not disappeared in the last eight years. Generally speaking, those industries in which wages were below average in 1939 are still below average. But the net effect of war and post-war changes has been to narrow the dispersion.

Up to this point the analysis has been in terms of money, not real wages. But even when

changes in the cost of living are taken into account, the great majority of wage earners are better off than before the war. Only three of the groups shown in the chart—employees of telephone and telegraph companies, security brokerage and insurance companies—experienced increases in weekly wages less than the rise in living costs. But despite widespread increases during the "first and second rounds," weekly wages of almost all groups have risen less rapidly than the cost of living since abandonment of price controls.

Prices

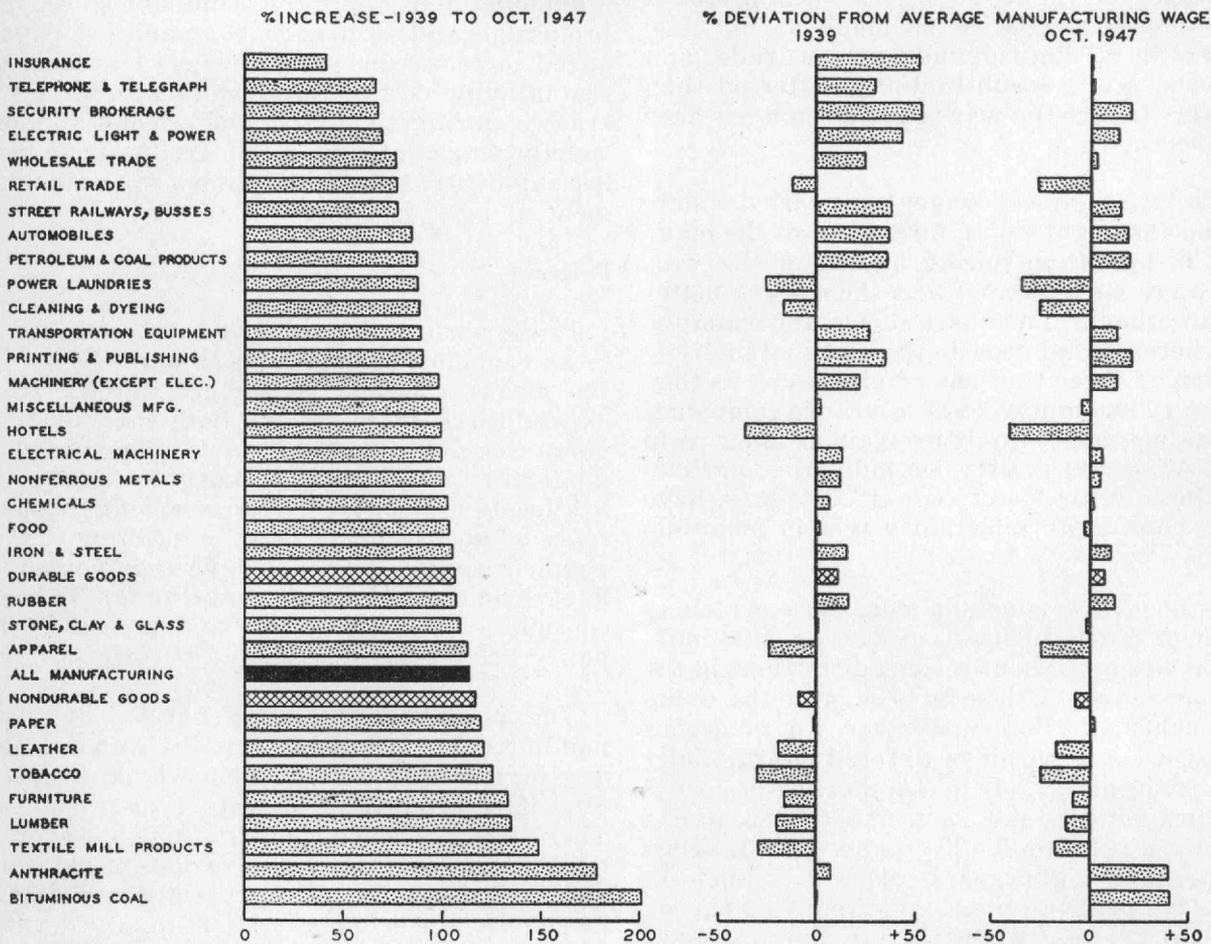
Prices perform some very important functions in an economic system such as ours. They are the means whereby consumers, through their expenditures, make known both the kinds and quantities of goods they want. They serve as guideposts which enable business enterprises to allocate productive resources among the many types of goods and services in accordance with people's wants. And they have an important influence on the amount of goods the family has to consume—for both income and its purchasing power are largely determined by prices.

The increase in demand generated by an expanding money supply during the war and post-war periods resulted in a general rise in prices, especially after the removal of price controls. There was considerable variation, however, as the chart shows, among the various markets and commodity groups. These variations reflect, in large part, the economy's effort to adjust unbalanced conditions.

Wholesale prices have risen to more than double the 1939 level. The prices of raw materials have risen much more, being about 2½ times as high in December as in 1939, and finished goods prices have risen by only 90 per cent. Prices of farm products registered the greatest increase of any of the sub-groups of wholesale prices. In December 1947, \$3.01 was required to buy the same quantity of farm products one dollar would have bought in 1939. Food products also have risen considerably more than the average. As important raw materials and cost-of-living items, these commodity groups occupy a key position in the price structure. The prices of chemicals, fuels, metals, housefurnishings, and the miscellaneous group have risen considerably less than the wholesale price average.

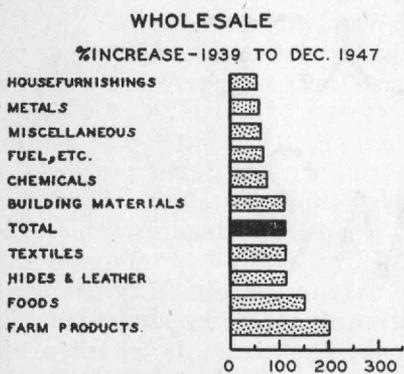
DISTORTIONS ?

WEEKLY WAGES

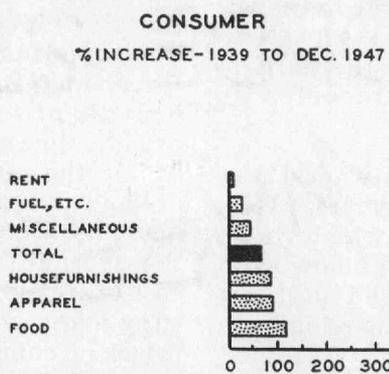


SOURCE: BUREAU OF LABOR STATISTICS.

PRICES

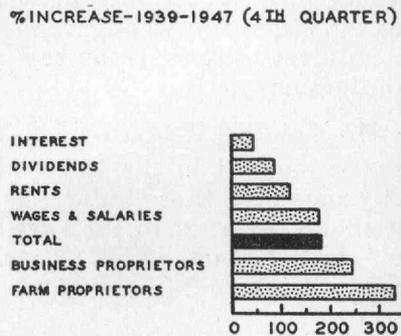


SOURCE: BUREAU OF LABOR STATISTICS.



SOURCE: BUREAU OF LABOR STATISTICS.

PERSONAL INCOMES



SOURCE: DEPARTMENT OF COMMERCE.

Retail prices have risen less than wholesale prices. In December 1947, the index of consumers' prices was 68 per cent above 1939, as compared to 112 per cent for wholesale prices. Food prices have more than doubled, and the prices of apparel and housefurnishings have risen considerably more than the average. Rents, reflecting continued control, and fuel and miscellaneous groups have experienced below-average increases.

Many of these disparities were caused by the fact that price control and rationing insulated certain parts of the price structure against the influence of market forces more than it did other parts. Since abandonment of price controls, raw material prices have moved further out of line, but prices of semi-finished goods have been catching up. Farm product prices actually have risen less than the average, whereas up until mid-1946 they led all other groups. Prices of textiles, leather, and building materials have also moved somewhat closer to the average for wholesale prices.

Several commodities have moved farther away from the average since June 1946. The sharp rise in food prices, both retail and wholesale, has carried these products still further out of line with the retail and wholesale price averages. Metal products, housefurnishings, and miscellaneous wholesale prices have continued to lag and were further below the average in November than in June 1946. The same was true for rents, fuel, and miscellaneous consumer goods prices.

Profits

Business profits are an important source of funds for capital expansion and serve as a guide for the allocation of outside sources of funds seeking investment. High profits attract investment funds, and low profits or losses repel them.

Business profits after taxes reached a new peak in 1947, reflecting the high level of business activity and rising prices. Corporate profits after taxes were estimated at nearly \$17 billion, as compared to \$12.5 billion in 1946 and \$5 billion in 1939. Despite the large increase in corporate profits, they represent only a slightly higher portion of national income—somewhat over 8 per cent in 1947, as compared to 7 or 8 per cent in 1939 and 1940.

Net profit on investment (net worth) is generally higher than pre-war but the rate of increase has varied considerably both by size of business and type of industry. During the war the small corporations experienced a greater increase in net profit on investments than medium- and large-sized corporations. But in 1946 the medium-size corporations had the greatest relative increase in profits over 1945.

Data for a selected list of large corporations reveal divergent trends in profit growth from 1939-1947 among the industry groups. Iron and steel, machinery, and the miscellaneous durable goods groups had above-average increases in profits during this period. Below-average profit increases were registered by nonferrous metals, industrial chemicals, food, beverages, and tobacco, automobiles, and other transportation equipment.

During the last year or so, profit trends have generally tended to narrow the spread among the industry groups. The durable goods industries which had substantially below-average profits in the latter part of 1945 and the first part of 1946 have registered above-average gains since, whereas some nondurable goods industries suffered decreases in net profits in 1947.

Personal Income

In each of the major categories, then—in wages, prices, and profits—there have been wide disparities in war and post-war experience. Yet, in several respects the disparities either are less now than they were before the war or have given indications of diminishing in the last year and a half.

All these facts may be brought together and, by way of summary, analyzed in terms of the sources of personal incomes. As shown in the chart, incomes of proprietors have risen more rapidly in the past eight years than other major types of personal income. Farmers, more by dint of much higher prices received for their products than because of larger output, now receive $4 \frac{1}{3}$ times as much as in 1939. Incomes of business proprietors and professional people have also risen rapidly, reflecting the expansion in sales and profits of small unincorporated businesses. Wages, salaries and other labor income—the largest single source of personal

income—are about $2\frac{3}{4}$ times the pre-war level, having risen at about the same rate as total income. Relatively strict controls over rents, however, have held this source of income to a below-average rate of growth, and the rise in dividends has lagged even further behind the average. The growth in interest payments has been the least rapid, reflecting the prevailing low interest rates, particularly on Government securities, during the war.

The chart gives ample evidence of wide disparities in rates of growth over the eight-year period. But there are also indications that developments since abandonment of price controls have somewhat narrowed, not intensified, the disparities. Incomes of farm proprietors in general have continued to rise more rapidly than average but not as much so as before; prices of non-farm commodities have been catching up.

In contrast to their lag behind the average in the period of price control, dividend payments since mid-1946 have risen more rapidly than average due to the fact that corporations have been earning more and distributing more to their stockholders. The growth of business proprietor and professional incomes has still exceeded the average, but not as much so, relatively, as in the earlier period. Although still experiencing a below-average rate of growth, rents have not been lagging so far behind as

previously, reflecting increasing relaxation of rent controls. Similarly, interest payments have been catching up, probably as a result of rising interest rates and a greater volume of higher-yielding private securities in investors' portfolios.

Disparities between small- and large-income recipients have been narrowed rather than widened over the past several years. Between 1941 and 1946, incomes (before taxes) of families in the lowest fifth of the income range increased 68 per cent. In the second fifth, incomes rose 59 per cent; in the third fifth, 36 per cent; in the fourth fifth, 30 per cent; and in the highest fifth, 20 per cent. The main reasons for these striking differences are the greater number of jobs, the rapid growth in farm incomes, and the large increases of wages in the low brackets.

In terms of money income, therefore, all groups are better off than before the war. And although some types of income have risen much more rapidly than others, the recent tendency seems to be toward some narrowing rather than widening of disparities in growth. Even in terms of real income the picture for the past eight years, as a whole, appears favorable. All types of personal income except interest have risen faster than the cost of living. Since the abandonment of price controls, however, interest, rents, and salaries and wages have all lagged behind the rise in living costs.

III. Conclusions

Disparate changes do not necessarily reflect any departure from a balanced relationship among the various segments of the economy. In part, at least, they merely reflect adjustments to changes in underlying supply and demand conditions which have already occurred. But they have effected some redistribution of income and buying power, which in turn has been manifested in the pattern of expenditures for and the production of goods and services.

The significance of these disparities for our purposes is not in whether one group can buy less and another more, but in whether the tendency is to decrease total demand. For it is only in this way that such "pinches" will check inflation and bring on a depression.

What, then, are some of the possible effects on aggregate demand? These vary with each individual situation and, therefore, are too numerous to analyze in detail. However, there are some basic factors which should be kept in mind in attempting to determine the effects of disparities:

1. An increase in the price of one or of a group of products, unless there is a decrease in total physical production, does not necessarily reduce total money incomes. The additional money which may be taken out of the pockets of consumers is put into the pockets of the producers, as the analysis of income shifts demonstrates.

2. A shift in income has resulted in some changes in the pattern of demand. In 1947, personal consumption expenditures accounted for a somewhat smaller proportion and private domestic investment, especially in producers' durable goods, a somewhat larger proportion of the total than before the war. This will not occasion any decrease in total production and in money incomes so long as producers change their output so that the flow of goods matches the flow of money demand. Yet, when the economy is running at high gear and when all resources are being fully utilized, bottlenecks make it increasingly difficult for industry to adjust to new patterns of demand.

3. The production pattern indicates that in response to a shift in demand, output is being increasingly concentrated in producers' goods. Some of this expansion in our productive facilities has been made possible by the very disparities we are discussing. Producers are obtaining materials and resources with the aid of expanding credit, while some consumers have been unable to buy goods because of high prices. This may serve a useful purpose for a time, but it may create problems in the future. The pent-up demand for certain goods and a price-cost-profit structure which may be temporarily out of balance could result in misdirected and excessive capital investments in certain lines. If producers in some lines over-estimate future demand for their products, a realization of the error will bring a drop in production in these industries which may spread and initiate a general decline. The total volume of

capital goods production is now geared to a money flow which is being supplied in part from forced savings and credit expansion. As these sources of funds dry up, it will be difficult to adjust the rate of production, without initiating a general decline, to that which can be sustained out of current income. And the difficulty will become greater the longer the inflation continues.

There is no conclusive evidence as yet that disparities and pinches have become serious enough to bring a reduction in total demand. Thus far enough new money has been pumped into the income stream, and the use of savings has been sufficient to more than offset the tendency for some groups to be priced out of the market.

In the immediate future it is possible that the squeeze on certain groups, far from bringing on a slump may actually aggravate inflation. Consumers draw on their savings and borrow to supplement dwindling real incomes. Labor demands wage increases to compensate for higher living costs. Producers demand higher prices for their products to offset rising prices of the goods they buy. Higher costs result in a demand for more credit, and so on. It is by no means clear that we have reached the point where a substantial deflation is imminent. In fact, just so long as producers and consumers can go into the credit market and borrow on liberal terms to compete for the limited supply of goods, the upward pressure on prices is likely to continue. But the rise may well be interrupted again by waves of nervous selling in the commodity and security markets emanating from the fear that "depression is just around the corner."



BUSINESS STATISTICS

Production
Philadelphia Federal Reserve District

Production Workers in Pennsylvania
Factories

Indexes: 1923-5 = 100	Adjusted for seasonal variation						Not adjusted		
	Dec. 1947	Nov. 1947	Dec. 1946	Per cent change			Dec. 1947	Nov. 1947	Dec. 1946
				Mo. ago	Year ago	1947 from 12 mos. ago			
INDUSTRIAL PRODUCTION	116p	111	114	+ 4	+ 1	+ 5	113p	114	111
MANUFACTURING	118p	113	116	+ 5	+ 2	+ 6	115p	115	113
Durable goods	127p	121	122	+ 5	+ 4	+ 6			
Consumers' goods	108p	103	109	+ 5	- 1	+ 4			
Metal products	149	141r	140	+ 6	+ 6	+ 23	142	142r	134
Textile products	77p	72	75r	+ 8	+ 3	0	76p	75	75
Transportation equipment	149p	141	160	+ 6	- 6	- 24	148p	133	159
Food products	135p	134	136r	0	- 1	+ 6	133p	137	134r
Tobacco and products	146	113	167	+ 30	- 12	0	106	135	121
Building materials	58p	55	53	+ 6	+ 9	+ 9	52p	54	48
Chemicals and products	166p	168	161r	- 1	+ 3	+ 12	163p	168	158r
Leather and products	99p	102	85	- 3	+ 16	+ 13	93p	97	80
Paper and printing	120	120	118	0	+ 2	+ 2	121	121	119
Individual lines									
Pig iron	105	107r	84	- 1	+ 25	+ 20	104	108r	83
Steel	121	120r	108	+ 1	+ 12	+ 21	114	115r	102
Iron castings	93	80	82	+ 17	+ 14	+ 11	87	81	76
Steel castings	97	96	103	+ 1	- 6	+ 4	93	89	99
Electrical apparatus	224	202r	223	+ 11	0	+ 27	217	214r	217
Motor vehicles	55	53	59	+ 3	- 8	+ 58	43	46	47
Automobile parts and bodies	143	143r	131	0	+ 10	+ 21	140	132r	128
Locomotives and cars	59	64	67	- 8	- 12	+ 5	59	60	67
Shippbuilding				+ 15	- 15	- 50			
Silk and rayon	87	87	89	0	- 2	- 2	89	88r	91
Woolens and worsteds	87p	71	81r	+ 22	+ 8	+ 2	81p	77	75r
Cotton products	38p	39	48	- 1	- 20	- 16	41p	41	52
Carpets and rugs	112p	93	84r	+ 20	+ 33	+ 27	108p	103	82r
Hosiery	86	72	82	+ 20	+ 5	- 2	84	82	80
Underwear	154	148	150	+ 4	+ 2	- 4	152	150	149
Cement	103p	92	90	+ 13	+ 16	+ 13	85p	90	73
Brick	60	60	57	0	+ 5	+ 7	58	60r	55
Lumber and products	29	29	28	0	+ 3	+ 5	29	30	28
Bread and bakery products				- 1*	- 10*	- 4*	111	113	124
Slaughtering, meat packing	113	112	113	+ 1	0	+ 4	120	123	121
Sugar refining	115p	156	121	- 27	- 5	+ 23	75p	102	78
Canning and preserving	232p	218	211r	+ 6	+ 10	+ 16	234p	237	213r
Cigars	147	113	169	+ 30	- 13	0	106	136	121
Paper and wood pulp	99	98	92	+ 1	+ 8	+ 4	100	98	93
Printing and publishing	124	125	123	0	+ 1	+ 2	126	126	124
Shoes	125p	111r	106	+ 12	+ 17	- 9	106p	105r	90
Leather, goat and kid	74p	92	64	- 20	+ 15	+ 53	81p	89	70
Explosives	104	89r	86	+ 17	+ 22	+ 23	103	89	85
Paints and varnishes	109	103	104	+ 6	+ 6	+ 13	106	106	101
Petroleum products	218p	231	226r	- 6	- 3	- 9	215p	232	224r
Coke, by-product	180p	181	146	- 1	+ 23	+ 24	174p	174	142
COAL MINING	73p	77	77r	- 6	- 5	- 4	73p	78	77
Anthracite	70	75	76	- 7	- 8	- 7	70	75	76
Bituminous	95p	95	83r	0	+ 15	+ 16	100p	104	87r
CRUDE OIL	295	282	310	+ 4	- 5	- 6	277	274	291
ELECTRIC POWER—Output	469	467	425r	0	+ 10	+ 9	501	486	455r
Sales, total	478	471	432	+ 2	+ 11	+ 9	492	485	445
Sales to industries	354	368	339	- 4	+ 5	+ 9	336	375	322
BUILDING CONTRACTS									
TOTAL AWARDS†	134	132	76	+ 2	+ 76	0	149	143	85
Residential†	112	109	83	+ 2	+ 34	- 18	108	123	80
Nonresidential†	157	168	80	- 7	+ 95	+ 5	169	168	87
Public works and utilities†	183	125	75	+ 46	+ 142	+ 66	219	144	90

* Unadjusted for seasonal variation. p—Preliminary.
† 3-month moving daily average centered at 3rd month. r—Revised.

Local Business Conditions*

Percentage change—December 1947 from month and year ago	Factory employment		Factory payrolls		Building permits value		Retail sales		Debits	
	Nov. 1947	Dec. 1946	Nov. 1947	Dec. 1946	Nov. 1947	Dec. 1946	Nov. 1947	Dec. 1946	Nov. 1947	Dec. 1946
Allentown	+ 1	+ 1	- 2	+ 22	+ 160	+ 198	+ 28	+ 15	+ 32	+ 27
Altoona	0	- 9	+ 2	- 3	+ 640	+ 443	+ 29	+ 4	+ 19	+ 5
Harrisburg	- 1	0	+ 4	+ 17	+ 254	**	+ 26	+ 14	+ 19	+ 20
Johnstown	0	+ 8	- 8	+ 39	- 32	- 94	+ 28	+ 23	+ 12	+ 25
Lancaster	+ 1	- 1	+ 3	+ 18	- 83	+ 199	+ 27	+ 14	+ 20	+ 11
Philadelphia	+ 1	0	+ 2	+ 11	- 44	+ 57	+ 21	+ 13	+ 28	+ 8
Reading	+ 1	- 6	+ 2	+ 17	- 62	+ 22	+ 18	+ 8	+ 9	+ 10
Scranton	+ 2	+ 8	+ 3	+ 21	- 69	+ 25	+ 34	+ 8	+ 22	+ 8
Trenton					+ 3	- 30	+ 33	+ 21	+ 9	- 1
Wilkes-Barre	0	- 5	+ 3	+ 9	- 57	+ 37	+ 32	+ 11	+ 7	+ 16
Williamsport	0	- 10	- 2	+ 5	+ 281	+ 309			+ 10	+ 13
Wilmington	0	- 3	+ 3	+ 7	- 24	+ 201	+ 32	+ 18	+ 91	+ 11
York	- 1	- 3	+ 1	+ 5	+ 47	+ 158	+ 36	+ 8	+ 16	+ 9

* Area not restricted to the corporate limits of cities given here.
** Increase of 1000% or more.

Summary Estimates—December, 1947

	Employment	Weekly Payrolls	Weekly Man-Hours Worked
All manufacturing	1,126,300	\$55,901,000	45,483,000
Durable goods industries	637,500	34,771,000	25,784,000
Nondurable goods industries	488,800	21,130,000	19,698,000

Changes in Major Industry Groups

Indexes (1939 average = 100)	Employment			Payrolls		
	Dec. 1947 Index	Per cent change from		Dec. 1947 Index	Per cent change from	
		Nov. 1947	Dec. 1946		Nov. 1947	Dec. 1946
All manufacturing	131	0	+ 1	291	+ 1	+ 15
Durable goods industries	158	+ 1	+ 1	331	+ 1	+ 18
Nondurable goods industries	108	0	+ 1	242	+ 2	+ 12
Food	131	- 2	+ 1	248	- 1	+ 7
Tobacco	105	0	+ 5	238	+ 2	+ 9
Textiles	87	+ 1	0	217	+ 4	+ 14
Apparel	96	+ 1	+ 4	243	+ 5	+ 11
Lumber	91	- 4	+ 2	194	- 5	+ 15
Furniture and lumber prods.	104	+ 2	0	239	+ 2	+ 8
Paper	122	+ 1	+ 1	266	+ 3	+ 16
Printing and publishing	139	- 1	+ 4	265	- 3	+ 14
Chemicals	123	+ 1	0	248	+ 3	+ 12
Petroleum and coal prods.	149	0	+ 6	286	+ 5	+ 28
Rubber	163	+ 1	- 11	330	+ 8	- 13
Leather	97	0	+ 1	204	0	+ 10
Stone, clay and glass	136	0	- 2	283	+ 1	+ 11
Iron and steel	139	0	+ 2	288	0	+ 24
Nonferrous metals	152	0	- 9	315	+ 3	+ 1
Machinery (excl. electrical)	213	+ 2	+ 8	442	+ 2	+ 24
Electrical machinery	236	+ 1	- 1	500	+ 3	+ 14
Transportation equip. (excl. auto)	222	+ 1	- 14	430	+ 4	- 4
Automobiles and equipment	190	+ 2	+ 3	402	+ 3	+ 19
Other manufacturing	137	0	- 5	270	+ 1	+ 1

Average Earnings and Working Time

December 1947 Per cent change from year ago	Weekly Earnings		Hourly Earnings		Weekly Hours	
	Average	Ch'ge	Average	Ch'ge	Average	Ch'ge
All manufacturing	\$49.63	+ 15	\$1.229	+ 12	40.4	+ 2
Durable goods indus.	54.54	+ 17	1.349	+ 13	40.4	+ 4
Nondurable goods industries	43.23	+ 10	1.073	+ 10	40.3	0
Food	42.29	+ 7	1.015	+ 10	41.7	- 3
Tobacco	29.93	+ 4	.752	+ 1	39.8	+ 3
Textiles	44.58	+ 14	1.098	+ 12	40.6	+ 1
Apparel	35.82	+ 8	.905	+ 6	39.6	+ 2
Lumber	39.60	+ 13	.969	+ 12	40.9	0
Furniture and lumber products	42.38	+ 8	.991	+ 10	42.7	- 2
Paper	47.15	+ 14	1.043	+ 12	45.2	+ 3
Printing & publishing	53.74	+ 10	1.394	+ 13	38.5	- 3
Chemicals	48.06	+ 12	1.173	+ 12	41.0	0
Petrol. & coal prods.	58.41	+ 20	1.478	+ 17	39.5	+ 2
Rubber	50.24	- 2	1.306	+ 5	38.5	- 7
Leather	35.87	+ 9	.955	+ 8	37.6	+ 1
Stone, clay and glass	47.75	+ 13	1.174	+ 11	40.7	+ 1
Iron and steel	55.75	+ 22	1.404	+ 15	39.7	+ 7
Nonferrous metals	54.06	+ 11	1.316	+ 12	41.1	0
Machinery (excl. elec.)	52.70	+ 14	1.285	+ 11	41.0	+ 3
Electrical machinery	59.20	+ 15	1.455	+ 13	40.7	+ 1
Transportation equip. (excl. auto)	59.08	+ 12	1.448	+ 8	40.8	+ 4
Automobiles & equip.	58.29	+ 15	1.370	+ 14	42.6	+ 1
Other manufacturing	41.34	+ 7	1.070	+ 9	38.6	- 2

Distribution and Prices

Wholesale trade Unadjusted for seasonal variation	Per cent change		
	Dec. 1947 from		1947 from 12 mos. 1946
	Month ago	Year ago	
Sales			
Total of all lines.....	- 8	- 1	+ 6
Dry goods.....	-29	-10	+ 3
Electrical supplies.....	+13	+19	.....
Groceries.....	- 5	+ 9	+ 3
Hardware.....	-23	-18	+ 2
Jewelry.....	+19	+ 8	-11
Paper.....	-36	-16	+24
Inventories			
Total of all lines.....	- 2	+12	.....
Dry goods.....	- 8	+11	.....
Electrical supplies.....	+ 1	+42	.....
Groceries.....	- 5	+ 2	.....
Jewelry.....	-16	-23	.....
Paper.....	+24	+18	.....

Source: U. S. Department of Commerce.

Prices	Dec. 1947	Per cent change from		
		Month ago	Year ago	Aug. 1939
Basic commodities (Aug. 1939=100)....	353	0	+17	+253
Wholesale (1926=100).....	163	+ 2	+16	+117
Farm.....	197	+ 5	+17	+222
Food.....	178	0	+11	+165
Other.....	145	+ 2	+17	+ 81
Living costs (1935-1939=100)....				
United States.....	167	+ 1	+ 9	+ 69
Philadelphia.....	166	+ 1	+ 9	+ 70
Food.....	202	+ 2	+11	+117
Clothing.....	187	+ 1	+ 8	+ 88
Fuels.....	130	0	+ 8	+ 35
Housefurnishings.....	193	+ 2	+ 8	+ 92
Other.....	142	+ 1	+ 6	+ 40

Source: U. S. Bureau of Labor Statistics.

Indexes: 1935-1939 = 100	Adjusted for seasonal variation					Not adjusted			
	Dec. 1947	Nov. 1947	Dec. 1946	Per cent change		Dec. 1947	Nov. 1947	Dec. 1946	
				Month ago	Year ago				
RETAIL TRADE									
Sales									
Department stores—District.....	283p	278	251r	+ 2	+ 13	+ 11	458p	370	409r
Philadelphia.....	260	250	228	+ 4	+ 14	+ 11	421	347	372
Women's apparel.....	271	282r	251	- 4	+ 8	- 1	387	322r	362
Men's apparel.....	246	308r	220	-20	+ 12	+ 9	450	351r	402
Shoe.....	227p	228	223	0	+ 2	+ 1	271p	225	265
Furniture.....	.....	.....	.....	+31*	+ 22*	.....	.....	.....	.....
Inventories									
Department stores—District.....	242p	238	220r	+ 2	+ 10	.....	206p	262	187
Philadelphia.....	229	225	206	+ 2	+ 11	.....	195	247	175
Women's apparel.....	231	225	254	+ 3	- 9	.....	203	259	226
Shoe.....	152p	148	107	+ 3	+ 42	.....	137p	149	96
Furniture.....	.....	.....	.....	- 7*	+ 11*	.....	.....	.....	.....
FREIGHT-CAR LOADINGS									
Total	138	145	131	- 4	+ 6	+ 10	133	146	125
Merchandise and miscellaneous.....	133	133	128	0	+ 4	+ 8	127	137	122
Merchandise—l.c.l.....	81	88	97	- 8	- 17	- 6	80	90	96
Coal.....	143	150	133	- 5	+ 7	+ 10	154	162	144
Ore.....	165	184	105	-10	+ 58	+ 32	83	184	52
Coke.....	191	184	144	+ 4	+ 33	+ 28	207	206	156
Forest Products.....	90	100	113	-10	- 21	- 5	76	96	96
Grain and products.....	122	121	148	+ 1	- 17	+ 4	127	137	154
Livestock.....	86	92	103	- 6	- 16	- 22	93	105	111
MISCELLANEOUS									
Life insurance sales.....	201	221	161	- 9	+ 25	- 3	217	250	174
Business liquidations	.....	.....	.....	+19*	+259*	+245*	37	31	10
Number.....	.....	.....	.....	+13*	**	+225*	117	104	9
Amount of liabilities	.....	.....	.....	- 4	+ 5	+ 5	268	249	256
Check payments.....	223	232	213	.....	.....	.....	.....	.....	.....

* Computed from unadjusted data. p—Preliminary. r—Revised.
** Increase of 1000% or more.

BANKING STATISTICS

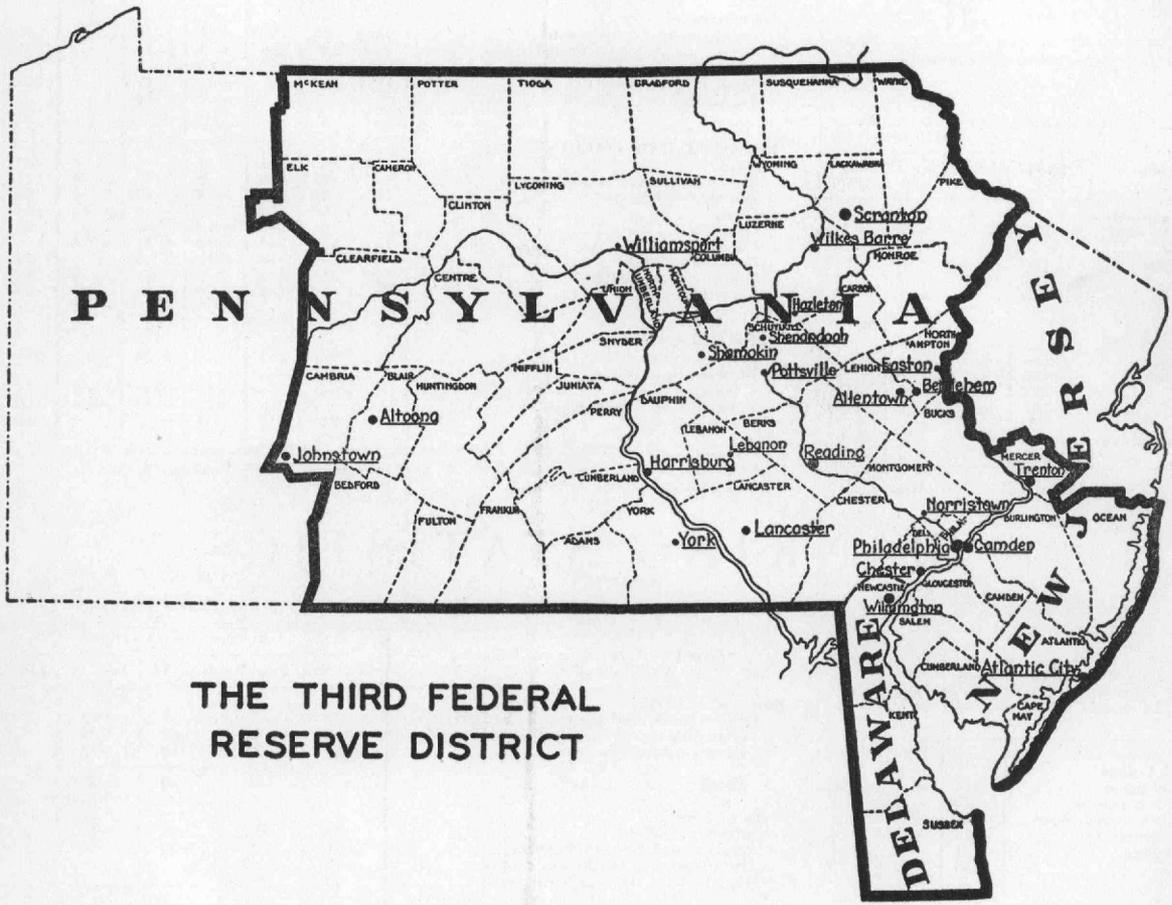
MEMBER BANK RESERVES AND RELATED FACTORS

Reporting member banks (Millions \$)	Jan. 28, 1948	Changes in—	
		Five weeks	One year
Assets			
Commercial loans.....	514	+ 3	+ 90
Loans to brokers, etc.....	23	- 3	- 2
Other loans to carry secur.....	13	- 7	- 6
Loans on real estate.....	75	- 2	+ 4
Loans to banks.....	1	- 3	- 1
Other loans.....	236	+ 2	+ 39
Total	862	-10	+124
Government securities.....	1414	-30	-175
Other securities.....	267	- 2	+ 8
Total investments	1681	-32	-167
Total loans & investments.....	2543	-42	- 43
Reserve with F. R. Bank.....	508	+ 5	+ 34
Cash in vault.....	43	+ 1	+ 1
Balances with other banks.....	105	- 3	+ 4
Other assets—net.....	54	+ 1	.....
Liabilities			
Demand deposits, adjusted.....	2146	-30	+ 60
Time deposits.....	383	-16	- 10
U. S. Government deposits.....	34	+17	- 63
Interbank deposits.....	346	-14	+ 4
Borrowings.....	18	+ 9	+ 9
Other liabilities.....	27	- 2	- 3
Capital account.....	299	- 2	- 1

Third Federal Reserve District (Millions of dollars)	Changes in weeks ended					Changes in five weeks
	Dec. 31	Jan. 7	Jan. 14	Jan. 21	Jan. 28	
Sources of funds:						
Reserve Bank credit extended in district.....	-38	+ 4	- 7	+12	-10	-39
Commercial transfers (chiefly interdistrict).....	+52	-43	+43	-39	+27	+40
Treasury operations.....	-21	-13	-16	-15	-20	-85
Total	- 7	-52	+20	-42	- 3	-84
Uses of funds:						
Currency demand.....	-25	-17	-18	-12	- 3	-75
Member bank reserve deposits.....	+16	-32	+38	-30	.....	- 8
"Other deposits" at Reserve Bank.....	+ 3	- 3	.....	.....	.....	.....
Other Federal Reserve accounts.....	- 1	.....	.....	.....	.....	- 1
Total	- 7	-52	+20	-42	- 3	-84

Federal Reserve Bank of Phila. (Dollar figures in millions)	January 28, 1948	Changes in—	
		Five weeks	One year
Discounts and advances.....	\$ 14.3	\$+ 2.0	\$- 4.9
Industrial loans.....	1.3	- 0.1	+ 0.8
U. S. securities.....	1570.5	+54.2	-103.9
Total	\$1586.1	\$+56.1	\$-108.0
Fed. Res. notes.....	\$1643.2	\$-55.3	\$- 18.2
Member bk. deposits.....	842.6	- 8.0	+ 48.5
U. S. general account.....	75.3	+18.1	+ 7.1
Foreign deposits.....	28.0	- 4.3	- 23.6
Other deposits.....	2.0	+ 0.5	- 0.2
Gold certificate res.....	993.6	-87.4	+103.0
Reserve ratio.....	38.3%	-2.3%	+3.8%

Member bank reserves (Daily averages; dollar figures in millions)	Held	Re- quired	Ex- cess	Ratio of excess to re- quired
Phila. banks				
1947: Jan. 1-15..	\$425	\$415	\$10	2%
Dec. 1-15..	428	424	4	1
Dec. 16-31..	445	433	12	3
1948: Jan. 1-15..	451	436	15	3
Country banks				
1947: Jan. 1-15..	\$389	\$339	\$50	15%
Dec. 1-15..	392	351	41	12
Dec. 16-31..	401	353	48	14
1948: Jan. 1-15..	402	351	51	15



**THE THIRD FEDERAL
RESERVE DISTRICT**