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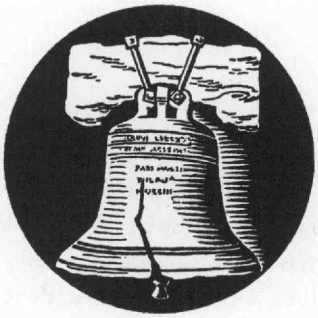
THE BUSINESS REVIEW

FEDERAL RESERVE BANK OF PHILADELPHIA



CONSUMER SPENDING

. . . in the Stores

People are still spending, but not with zest and the feeling of urgency as heretofore. Sales have been buoyed through active promotion.

. . . on Credit

Instalment credit growth slackened in the last quarter of 1948, a period of renewed controls. Yet consumer credit is likely to increase further.

. . . versus Saving

The recent rise in the rate of personal saving is the result of complex and interrelated factors. Consumer spending currently exceeds historically "normal" rates, but the consumer can not be expected to act according to formula.

CONSUMER SPENDING . . .

The consumer is boss in a free enterprise system. He may not realize this from his experience of the past seven years or so, but he can see his power increasing rapidly day by day. Production is directed toward what the consumer will buy, and if producers misjudge his attitude or if the consumer changes his mind, somebody is likely to lose money. Consumer spending is a vital factor influencing the general level of business activity. It is not only the largest single segment of expenditure, but changes in it have an important influence on activity in heavy industries. What the consumer thinks and how he acts, therefore, are important matters to everyone concerned with producing goods and services. The following articles discuss some of the factors involved.

Consumer attitudes and actions are the most immediate concern of the retailer, for he is the one who faces the consumer across the counter. Some of the retailer's current problems are discussed in the following article, which describes what the consumer has been doing recently in the stores. Not every consumer is a cash customer; many of them are buying on credit. And this, as shown in the second article, has a bearing on the ups and downs of business. Behind the consumer's activities in the stores and buying on credit lie fundamental decisions as to spending *versus* saving. These are discussed in the third article.

IN THE STORES

Consumer spending in department stores in November and December of 1948 surpassed that of the year before—in the Federal Reserve District of Philadelphia. It was a narrow "squeak"—only 2 per cent more—and it took a very fat week in December to make up for seven lean weeks.

November was disappointing from beginning to end. People just would not buy. Some said it was the election; some said it was Regulation W; some said it was the weather. The merchants were looking for explanations but they were looking even more for customers, and took action. Reams of advertising and special sales at lower prices finally did it.

Moreover, this is not just a Philadelphia story. Department stores all over the country had substantially the same experience. In Boston, Los Angeles, Dallas and Mobile, regardless of weather or political inclinations, trade hit an "air pocket" in November and early December and barely got back "on the beam" by year's end.

What does it all mean, and what are the implications for the immediate future? Are people running out of money, or have they decided to save more and spend less? Are they merely changing their seasonal buying habits, or are they getting harder to please as to quality and price? Some of the answers may be found if we examine the recent behavior of consumers as spenders at all stores, not just department stores.

RETAIL TRADE

People spent $130 billion in the country's retail stores last year. That was about 10 per cent more than the year before, and practically all classes of stores shared in the gain. "Spending more than the year before" has been going on for ten years without interruption. While we have become quite accustomed to this experience, we know very well that it cannot continue indefinitely.

Ordinarily when people have money they spend it. Under the stimulus of rapidly rising incomes, spending at retail stores rose year by year to a level three and one-third times the pre-war dollar volume. Higher prices, of course, account for much of the increased spending. For a money outlay of more than three times pre-war, people last year were getting about one and three-quarter times the pre-war amount of goods in terms of physical quantities. Recent trends in spending and what people actually got for their money are shown in the accompanying chart.

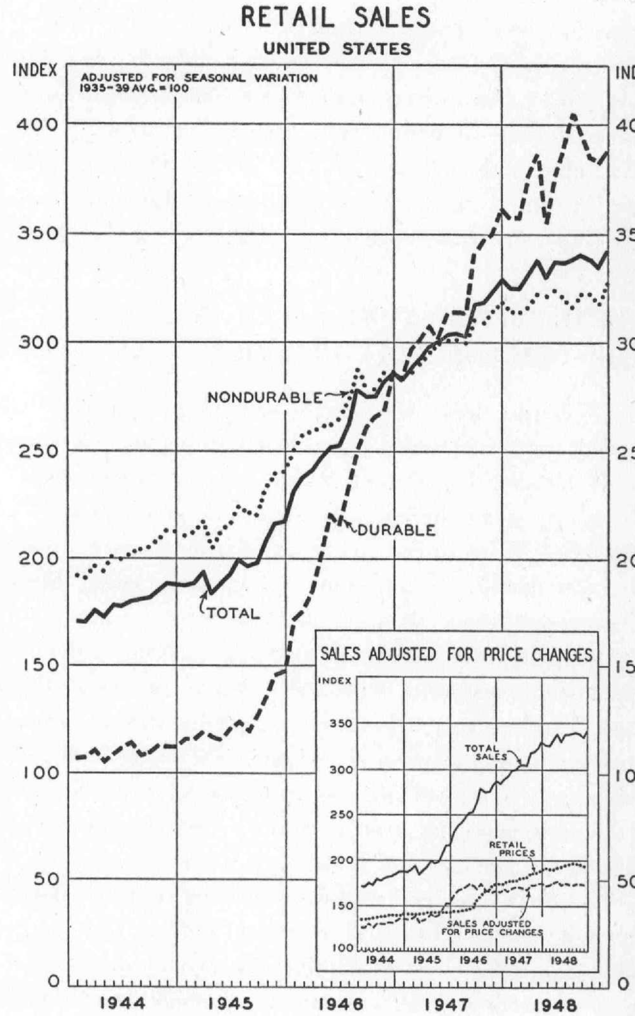
Spending gave the appearance of having reached the "top of the hill" in the fall of last year. But so it appeared also in August of 1947, which later proved to be only a terrace. It is always more fascinating and more important to speculate on what lies ahead than to review the paths we have already trod, but we can learn only from experience. We might get a better notion of the immediate prospects for retail trade if we take it apart and examine recent trends and tendencies of spending for the major classes of goods.

THINGS FOR WHICH PEOPLE SPEND THEIR MONEY

To begin with, it is helpful to observe how people divide their hundreds of purchases between durables, like automobiles, furniture, and jewelry, where serviceability is reckoned in years, and nondurables like apparel, food, and drink. Ordinarily, about 75 cents of every dollar spent by the consumer at retail stores goes for nondurables. In terms of money spent, therefore, nondurables are usually three times as important as durables—a relationship that was disrupted by war and immediate post-war conditions. When the war choked off supplies of durables for civilian use, people spent less on such things, for there was no other choice, but expenditures at nondurable goods stores were well maintained. Since the war, people have been spending even more lavishly for nondurables; that is, more than the customary relationship between expenditures for nondurables and disposable income would suggest. There was, of course, a compelling reason—many items in this category are absolute essentials like food and clothing which have risen sharply in price since the war.

Durables are different; they are wild actors. In times of peace, their replacement can be hastened by early discard or postponed by repair, depending upon whether people are flush or short of money. Today a seven-year-old motor car is a piece of junk; during the war, it was a thing of beauty and a joy for the duration.

Spending for durables, shown by the sky-bound streak across the chart, has been and still is a powerful element in the over-all business situation. During the three years since we emerged from the war, producers have been hacking away at the huge backlog of demand for durables. Just how much of a backlog remains is not pre-



cisely calculable. It is never a fixed quantity, and depends in part on how much of their income people must spend on essentials which are nondurable. Moreover, the backlog varies from one durable to another. To a large extent, the backlog of demand has already melted away for such things as vacuum cleaners, radios, and washing machines and, perhaps, refrigerators; but apparently not for automobiles, for which the American consumer will sacrifice almost anything, or at least so he has in the past.

Price is an important aspect in any backlog. Price changes do not always have the same effect upon buyers. Sometimes rising prices precipitate a landslide of orders by people who are anxious to get delivery before prices go still higher; and at other times rising prices smother many orders that are already on the books. Furniture seems to be a case in point. Judging from past relationships of furniture sales to income, furniture stores have not been doing so well in recent months and it may very well be due to the fact that since the war, furniture prices have risen more than almost any other consumer durable or nondurable. At current prices, people have apparently decided to wait it out. Or it may be that furniture was more readily available during the war than other durables, so that the backlog was not so great.

DEPARTMENT STORE SALES IN THE PHILADELPHIA DISTRICT

The ebb and flow of consumer spending, especially for nondurables, is revealed most clearly in department store trade because department stores sell just about everything except automobiles, lumber, and green groceries. Moreover, these stores supply us with a constant stream of up-to-the-minute information regarding sales, inventories, credit, and other aspects of their operations.

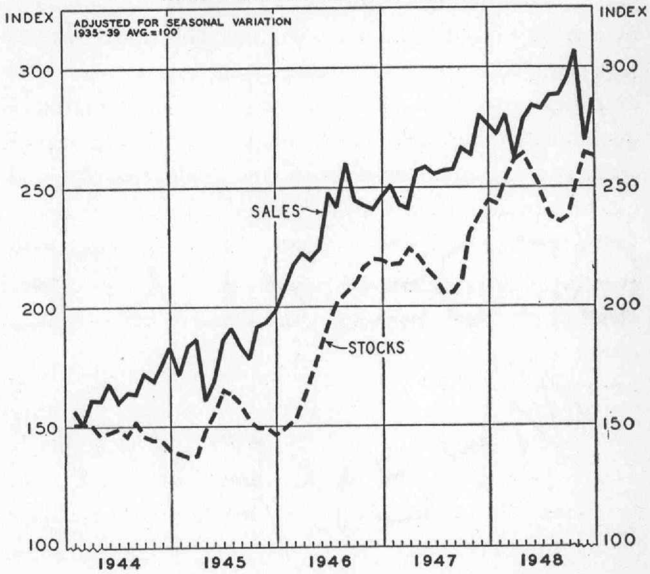
People in this district spent $658 million in department stores last year, which was 8 per cent more than they spent the year before and well above two and three-quarter times the pre-war volume. One reason department store sales did not rise quite as high as all retail sales is because department stores do not handle things like motor vehicles and building materials.

The rise of war and post-war department store sales to current levels has been rough-and-tumble. The course plotted on the chart looks like the profile of a mountain side. On several occasions the mercantile mountain climbers thought they had reached the top, only to have the mists rise and expose another ridge ahead. For example, in the late summer of 1946 the peak seemed to have been reached, but by the spring of 1947 vigorous spending was again resumed. Again late in 1947 and early 1948; but that, too, was only a momentary declivity in the grand ascent.

For the year as a whole, department stores did very well in 1948. Sales were 8 per cent higher than in 1947 but it was a different kind of year in many ways from 1946 and 1947. Closer analysis and comparison of the last two years show some marked contrasts. For example, consumer spending last year was more fitful; the curves portraying sales when adjusted for seasonality assume a pronounced sawtooth profile. In one department after another and for the stores as a whole, sales seesawed up and down month by month ever so much more than the year before. One month customers would buy, and the next month they would not. That is, of

DEPARTMENT STORE SALES AND STOCKS

THIRD FEDERAL RESERVE DISTRICT



course, a general characteristic of the department store business; but last year it was unusually spasmodic.

Last year also brought with it some peculiar changes in trends, if one year is long enough to be called a trend. Women's apparel sold better than ever, with a strong up-sweep, but sales of women's accessories developed a downcast look. In such departments as housefurnishings, furniture and bedding, the upward trends in 1947 were either reversed or greatly modified last year—and that despite a period of very active building and completion of new homes. Sales of jewelry and silverware and men's clothing pointed nowhere in particular. Sales of major household appliances described the wildest gyrations of all.

Last October, department store sales in this area hit a peak of 307 per cent of the 1935-1939 average. That was indeed an excellent beginning for the last quarter of the year, heading into the customary pre-Christmas stampede.

November, which is usually the second-best month of the year for department stores, turned out to be a blighted hope last year. It began with a sales' slump in the first week, amounting to a modest 2 per cent below the corresponding week of the preceding year. The second week was worse; it slipped to 9 per cent below. The third week was 7 per cent below, and there was little comfort to be gained from the fact that the final week was only 3 per cent below. For the month as a whole, sales had declined on a seasonally adjusted basis from 307 to 269 per cent of the pre-war base—a 12 per cent change in reverse. That is not something to be laughed off, especially if you are in the department store business.

Worse still, sales during the first week of December were 3 per cent below the corresponding week of the preceding year and Christmas was fast approaching, with only seventeen more shopping days before Christmas. Meanwhile, the merchants made mighty efforts to bring customers to the stores and to persuade them to buy. Newspapers began to swell up with pages upon pages of advertising, announcing special bargains, clearance sales, price reductions, huge savings—anything to bring in the people to buy the things the stores had already laid in for them. At last, the very last week before Christmas, people finally responded and so vigorous was the response that sales of November and December together managed to surpass the last two months of 1947 by a small margin.

The long-delayed buying may be an indication of a return to pre-war shopping habits. With most goods in much greater abundance, people could afford to take their own good time, and some shopping may have been delayed purposely in the hope of buying at lower prices.

DEPARTMENTAL SALES

The argument that people had run out of money does not sound very convincing when you thumb through the November and December sales slips of the clerks behind the various counters to see in which departments people really spent their money. In this district, customers did not scramble into the economy basements looking for bargains; on the contrary, the year-end performance in bargain basements was mediocre, if not poor. In the main store departments, some of the best sales performances were turned in by the clerks handling such things as toys and games, lounging apparel, draperies, silverware and jewelry, books and magazines, sporting goods and cameras. This is not the type of merchandise ordinarily bought by people who are short of money.

The poorest sales performance occurred in such departments as major household appliances, like refrigerators, washing and laundry machines, dishwashers and radios. For that, the quick and easy answer was Regulation W, which was recalled from exile last September to restrain unwholesome expansion of consumer credit. But that explanation does not sound entirely convincing either, because other big-tag items, like television, also subject to credit regulation, showed good year-end sales performance.

Men bought furnishings quite freely, but had to be offered substantial price reductions before they bought suits. Women spent money generously for suits, shoes, gloves and handbags; but they bought dresses more sparingly, and coats were bought still more sparingly than in the first ten months of the year. Unseasonably warm weather may very well have caused the unseasonably small sales of such items as women's and misses' coats.

INVENTORIES

In at least one respect, running a department store is something like running a bank. Money in the vault earns no profit for the banker, and goods on the shelves make no profit for the merchant. Though goods were moving off the shelves faster than the year before, storekeepers were exceedingly cautious in reloading their shelves so as not to be caught with more goods than customers. The figures show very plainly, particularly in the second half of the year, that in each succeeding month Philadelphia stores ordered less and less from their suppliers than they had in the previous year. Quicker deliveries by their suppliers enabled them to operate on smaller inventories. In view of the year-end developments the cautious inventory and buying policies of the stores proved to have been wise. They wound up the year without excessive stocks and commitments, and with few losses.

CONCLUDING OBSERVATIONS

The year-end slow-down of consumer spending cannot be passed off as just a random ripple of a curve on a chart. The fact remains that people did curtail expenditures quite substantially, and there is no simple and perhaps no single explanation. The delayed pre-holiday buying looks very much like a return to pre-war buying habits. Mild winter weather up to mid-February is a perfectly good explanation for sub-normal sales of anthracite used for space heating, and perhaps declining sales of certain articles of out-door clothing, but it is difficult to see how weather would affect buying of such things as women's dresses and men's suits. In view of the fact that people turned out in large numbers in response to substantial price reductions, it appears that people can and will buy when they think the prices are right.

The recent behavior of consumers points to the almost inevitable conclusion that they are aware that we have entered a market in which the days of "only one to a customer" are over. Goods are becoming more plentiful, and customers are becoming more critical of prices. People are again asking "how much?" before they buy, and if the price is too high, they shop around or wait until next month.

A buyers' market is more than the arithmetic of supply and demand. Along with a buyers' market has come a change in consumer psychology. When you cannot buy an article because the stores are all sold out, your need for it is tremendous. As soon as you can get it anywhere, you do not really need it right away. Remember the nylon queues during the war? Hosiery went begging as soon as it became plentiful.

Retail trade is the last link in the long chain of production. The three feet across the counter from the sales clerk to customer is the area where production ends and consumption begins. It is the focal point of business. Sales are to the retailer what production is to the manufacturer and, like other producers, retailers are under constant pressure for more volume to cover rising costs and to stay on top of rising break-even points. By reason of the retailer's position at the very end of the line of production, he is the first to observe changing attitudes and the temper of his customers. His most effective remedy for a sales slow-down is the mark-down. It took a lot of marking down to restore sales volume in December and to maintain sales volume in January. This does not necessarily mean that business is turning sour. But it is more competitive than it has been for a long time.

People are still spending, but not with as much zest and not with the feeling of urgency as heretofore. In the early weeks of this year, department stores in this district did better than their year-ago performance, but it took a lot of selling pressure on the part of the stores. Clearance sales, bargain days, and birthday sales were heralded from day to day, and always with major emphasis on reduced prices and value-giving. And it worked. The people kept on buying.

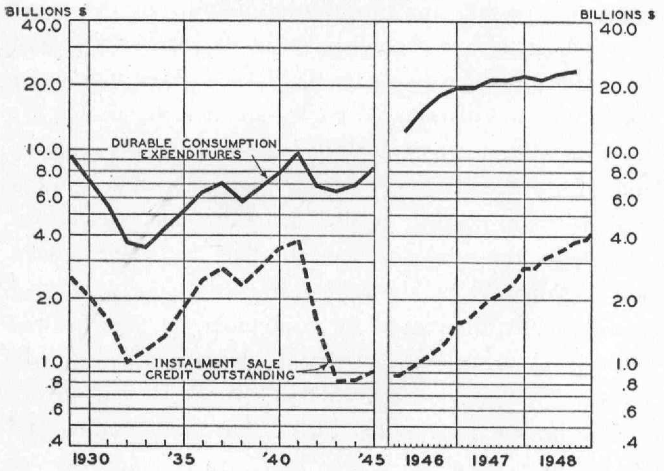
BUYING ON CREDIT

Consumer credit, like the consumer himself, appears in different guises to different people. The reformer is inclined to see consumer credit chiefly as an instrument of financial disaster, luring the consumer on to buy beyond his needs and income in an attempt to "keep up with the Joneses." On the other hand, merchants in general, and perhaps most consumers, too, are apt to visualize credit as something which has made possible the enjoyment of all kinds of modern necessities and luxuries without which life would be very dull indeed. Finally, the economist tends to think of consumer credit principally as part of our major economic problem—the business cycle—and questions how best to curb its harmful tendencies and encourage its beneficial movements.

There is a measure of truth in all three views, of course. But a more accurate picture of the role of consumer credit is a composite of the three. Their common bond—the really unique thing about consumer credit—is *timing*. Buying a durable good entails going without, or saving, for a time. Credit enables the consumer to bridge the gap between his income and his needs, for income tends to flow evenly, while expenditures for durable goods are made in large lumps. If a consumer buys a refrigerator on the instalment plan, he does only part of his saving ahead of time and the rest while he has the refrigerator. If he pays cash he has done the saving before he begins to enjoy the use of his refrigerator.

By their very nature, consumer expenditures for durable goods involve irregular outlays, and past experience has been that consumers bunch their purchases in times of prosperity. This contributes, particularly through its influence on producers' goods industries, to the violence

BUYING ON CREDIT



of business fluctuations. Consumer credit accompanies these movements, adding to demand when it is already high and curtailing demand when it is declining. The first chart shows the close relationship for many years between consumer expenditures for durable goods and instalment sales credit, which represents a large portion (one-fourth) and the most variable part of consumer credit.

To the extent that consumer credit is influenced by the lending activities of commercial banks, the implications of fluctuations are even greater. For commercial banks, unlike any other type of financial institution, create new money when they make loans and extinguish money when loans are paid off. These changes in the money supply have widespread repercussions on business activity. One of the reasons for the establishment of the Federal Reserve System was to help minimize these fluctuations so as to attain greater stability at a high level of activity.

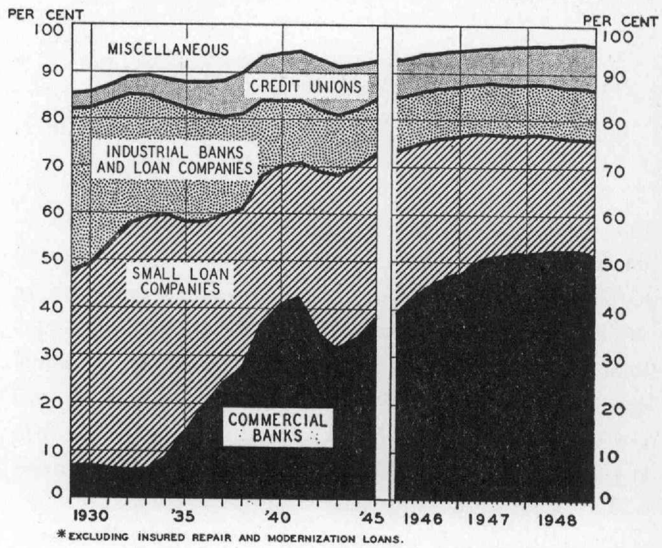
As can be seen in the chart on distribution of instalment loans by types of lenders, banks have accounted for an increasingly large share of consumer instalment loans over the past two decades. Banks also make single-payment loans to consumers and discount many instalment loans made by other lending institutions. Altogether they account for about two-fifths of total consumer credit outstanding today, compared with one-third only three years ago. Exactly how much more of the total represents the extension of bank credit to consumers indirectly through business loans to finance companies, merchants, and other lenders is impossible to say. At any rate, it is clear that the growing role of commercial bank activity in the consumer lending field emphasizes the importance of fluctuations in consumer credit.

These ups and downs would be mitigated if consumers could be induced to spend less and save more than they do during booms, and reverse the process during depressions. This would mean paying off consumer debt during prosperity and increasing it in depression. The only time on record when consumer credit moved in such manner contrary to general business activity, however, was during the war. Consumers were unable to buy durable goods, so they accumulated cash and paid off debts.

RECENT TRENDS

Since the war, consumer credit has risen at a rapid rate to an unprecedented $16 billion. Yet consumers have not used credit as extensively as would be expected from

INSTALMENT LOANS* BY TYPES OF LENDERS

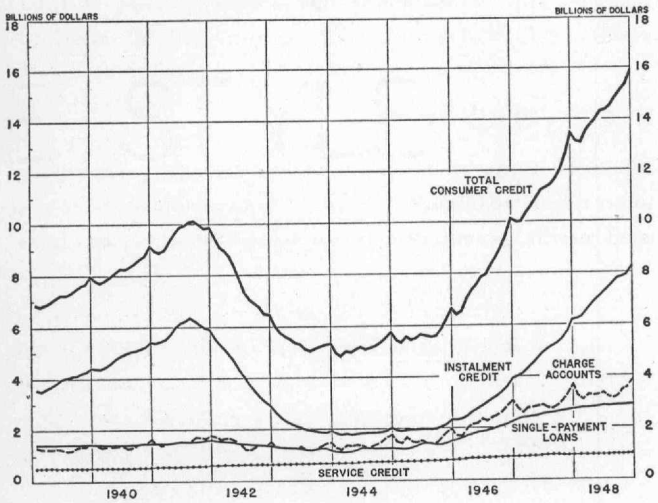


*EXCLUDING INSURED REPAIR AND MODERNIZATION LOANS.

historical trends. The relationship between income and consumer credit prevailing from 1929 to 1941 would require a volume of around $21 billion credit outstanding instead of $16 billion. One reason often given is the shortage of many consumers' durable goods. A more basic reason probably is the large back-log of savings in the form of bank deposits, savings bonds, and other liquid assets which consumers can use instead of going into debt. And even if many consumers prefer to hold on to their savings for emergencies or some other reason, the fact that the savings are there may permit greater spending and less saving out of current incomes. As will be shown in the following article, this is what consumers are actually doing.

While consumer credit has not risen as much as might have been expected, it has nevertheless been a factor in the post-war inflation. The requirement of larger down payments and shorter periods to pay off debts is intended

CONSUMER CREDIT TRENDS



to reduce the inflationary impact. It forces consumers to do more saving before buying the article and during the earlier stages of consuming it. This should mean more saving now while consumers are still prosperous rather than later when their incomes may be lower. If some consumers are unable or unwilling to do this, they cannot enter the market. In short, demand is held down. If downward pressure is exerted on some prices, this is exactly what should happen.

As can be seen in the chart on consumer credit trends, the total outstanding rose by $11 billion from its wartime low point in early 1944 to the end of 1948, adding to the upward pressure on prices. The most rapid growth during the entire period has been in instalment sale credit, particularly for the purchase of automobiles. This is the type of credit which has exhibited the widest fluctuations in the past and was most curtailed during the war. Despite its rapid rise, however, it has not recovered its pre-war position relative to other types of consumer credit. Instalment cash loans, on the other hand, declined less than sale credit during the war and have risen less rapidly since. In the last three months of 1948, a period of renewed controls under Regulation W, total instalment credit exhibited a marked slackening in rate of growth. This was particularly noticeable in automobile credit, possibly reflecting for the most part slower activity in the used car market. This new development was highlighted by the fact that credit rose somewhat more rapidly than usual in September, to some extent because of last-minute buying under the easier credit terms.

Due largely to seasonal factors, charge accounts and credit on sales of television, refrigerators, and similar durables other than automobiles, rose considerably at the end of 1948. Single-payment loans and service credit still lagged behind.

FUTURE TRENDS

The trend of consumer credit will continue to behave generally like consumer expenditures, particularly for durable goods. As indicated in the preceding article on retail trade, the outlook for sales of durable goods is more in doubt now than at any time since the war. Over the short-run, however, sales are likely to remain high, particularly in lines where backlog demands are yet unfilled. But it is hardly likely that consumer credit will soon return to its pre-war "normal" relationship to incomes and expenditures. It may very well be that consumer habits have been altered fundamentally, that the use of liquid assets will replace to some extent consumer credit. While this raises new problems for the monetary authorities, it does not mean that consumer credit will cease to be a factor contributing to the ups and downs of business activity.

SPENDING versus SAVING

By far the largest segment of total expenditure for goods and services in our economy is accounted for by the individual consumer — the man who buys at the retail store, pays the rent, and takes his family to the movies. The consumer has a different appearance to different people. To a P. T. Barnum he is a potential "sucker." To a sales manager he seems an obstinate, contrary, thoroughly unreasonable man who can only be subdued with promotion and advertising in large quantities. The mathematically-minded economist and market researcher often consider the consumer a sort of automaton who spends and saves according to formula. The consumer, himself, insofar as he is aware that he has any choice as to how much to spend, probably feels a little confused. Actually, the consumer is a little of all these things. And this not only makes it difficult to predict what he is going to do with respect to spending and saving but also difficult to interpret what he has done.

DISPOSITION OF PERSONAL INCOME, 1929-48

(Billions of dollars)	Personal income	Less: Personal tax and nontax payments	Equals Disposable personal income	Less: Personal consumption expenditures	Equals: Personal net saving	Net saving as percent of disposable income
1929	85.1	2.6	82.5	78.8	3.7	4.5%
1930	76.2	2.5	73.7	70.8	2.9	3.9
1931	64.8	1.9	63.0	61.2	1.8	2.9
1932	49.3	1.5	47.8	49.2	−1.4	−2.9
1933	46.6	1.5	45.2	46.3	−1.2	−2.7
1934	53.2	1.6	51.6	51.9	− .2	− .4
1935	59.9	1.9	58.0	56.2	1.8	3.1
1936	68.4	2.3	66.1	62.5	3.6	5.4
1937	74.0	2.9	71.1	67.1	3.9	5.5
1938	68.3	2.9	65.5	64.5	1.0	1.5
1939	72.6	2.4	70.2	67.5	2.7	3.8
1940	78.3	2.6	75.7	72.1	3.7	4.9
1941	95.3	3.3	92.0	82.3	9.8	10.7
1942	122.2	6.0	116.2	90.8	25.4	21.9
1943	149.4	17.8	131.6	101.6	30.0	22.8
1944	164.5	18.9	145.6	111.4	34.2	23.5
1945	170.3	20.9	149.4	122.8	26.6	17.8
1946	178.1	18.9	159.2	147.4	11.8	7.4
1947	195.2	21.6	173.6	164.8	8.8	5.1
1948	213.6	21.0	192.6	177.7	14.9	7.7

Source: Department of Commerce.

As the accompanying table shows, consumers spent $178 billion out of the $193 billion they had available to them after taxes in 1948. They saved the rest. If they had saved the same proportion of their incomes as in 1929 they would have spent $184 billion. Saving at the 1941 rate would have brought the total outlay down to $172 billion. Wartime saving rates were abnormally high, reaching 24 per cent of disposable income in 1944. They have dropped sharply since, and there is now considerable uncertainty as to which way they are heading.

In a general way, we have the feeling that the more income people have the more they spend, and that feeling is supported, in the long run, by statistics. Just *how much* more people spend when they have greater incomes is far from decided, however, especially on a short-term basis and during periods of great economic and social change. Four years ago the underestimation of prospective consumer spending caused serious errors in the forecasts of post-war economic conditions being made at that time. In recent months the fact that the rate of consumer saving has been rising steadily has caused some concern for the future of retail trade. What the individual family does with its money, how fast it spends, is of vital importance not only to the retailer, who feels the immediate impact of any change, but through him to the economy as a whole.

WHAT MAKES HIM SPEND?

It is necessary to know, therefore, the important factors underlying the willingness of the consumer to spend. First on the list is consumer expectations. Optimistic consumers are more willing to spend than consumers who fear unemployment in the near future. Those who expect higher prices are more eager to buy than those who expect prices to decline. Federal Reserve studies have shown that consumer expectations can undergo

(Note: Much of the material in this article is based upon two recently published studies by Federal Reserve System economists: Robert V. Rosa, "Use of the Consumption Function in Short-Run Forecasting," *Review of Economics and Statistics*, May 1948; and George Garvy, "The Role of Dissaving in Economic Analyses," *The Journal of Political Economy*, October 1948.)

sharp changes within a relatively short period. In the short run, this is a most important determinant of the rate of spending and saving.

Sudden price changes also influence the spending rate. Consumers do not adjust spending habits immediately. Rising prices for many foods may pull consumer spending up with them. A drop in food prices such as we have recently experienced may leave the consumer with extra money which he does not know what to do with for a while, except build up his bank balance.

The volume of liquid assets and their distribution are influential in the consumer's decision to spend. A high savings backlog makes him feel more comfortable in spending a greater proportion of his income. As prices rise, however, a given volume of liquid assets becomes less and less of a cushion. Moreover, the longer the consumer has the cushion the more accustomed to it he becomes and the less of a stimulant it can be. Much depends on the consumers' attitudes, however, and these vary widely.

Unusual and sudden increases in incomes such as those provided by a veterans' bonus or a tax cut may bring about a sharp and temporary increase in spending. Veterans' insurance refunds will put a sizable windfall into many buyers' hands during 1949. What they will do with it — spend it or save it — will make a big difference to merchants.

Sudden changes in total disposable income do not necessarily produce corresponding changes in spending. Consumer habits lag, tending to make the proportion of income spent rise for a time if income drops, and fall if income rises. And even if total income is stable and all other conditions are unchanged, a shift in the distribution of income among occupational groups or income groups could cause some change in the average consumer's willingness to spend. Falling farm prices and lower agricultural incomes might, for instance, give increased spending power to city dwellers whose desire to save is not so strong as that of the rural population.

WHAT MAKES HIM SAVE?

Income after taxes which the consumer does not use in buying consumption goods, he saves. Saving usually is conceived as including increases in bank deposits and holdings of securities and insurance, investment in homes, the net liquidation of mortgage debt out of current income, and the net reduction of consumer debt. Ordinarily, the individual may not think of investment in a home as saving. It is so classified because a home is a long-term asset and because the consumer must do without relatively short-lived consumption goods in order to get it. Investment in non-incorporated business is another form of saving which is frequently overlooked. During 1948 a large portion of personal income appeared to be going into investment in housing and farms and other unincorporated business, thus tending to increase saving and make less money available for spending in retail stores. Both mortgage debt and other types of consumer debt have been increasing since 1944, tending to reduce net saving. That expansion of credit may be slowing down now.

The fact that total personal saving is rising does not mean, of course, that every family is saving. It is estimated that in 1947, 28 per cent of all spending units spent more than their income — they dissaved. They did it in two ways — by drawing on past savings or by going into debt. Ordinarily, as individuals, we do not think that we are reducing our current rate of saving when we draw on a savings account that had been built up for some specific purpose, nor do we consider it as increasing our rate of saving when we make payments on an instalment loan and reduce our indebtedness. But that is their economic effect, and that is the way these actions must show up in the aggregate figures.

Dissaving is not necessarily a sign of economic distress. Frequently it is the opposite. In fact, some in the lower income groups may find it difficult to dissave at all, much as they would like it. They do not have past savings to draw upon, nor is credit easily available to them. While dissaving for emergency purposes or to meet the bare minimum of living expenses during periods of widespread unemployment is common, there are other reasons for dissaving which may be more important during periods like the present.

There are several categories of dissavers. They include people whose income normally moves up and down from year to year, and who average out their expenditures and income over a number of years; people who have experienced what they think is only a temporary loss of income; people faced with an emergency or extraordinary expense; many buyers of homes and other durable goods; and retired people and the like, who normally spend more than they earn currently.

Obviously, these are groups with different interests and different motives. They need not all respond to changes in business conditions in the same way. However, a variation in spending in excess of incomes could make a big dollar difference in net saving. Dissaving was around 44 per cent of the total saved by all spending units in 1947, and it is possible that the recent increases in the rate of net saving could be due, in part, to a decline in that proportion. It is possible, for instance, that veterans and others who drew on past savings to buy durable goods in 1947 have acquired the things they need. There is a possibility that some defense workers who dissaved to maintain a standard of living justified by a 60-hour week have now adjusted to lower incomes. Some circumstances may be operating in the opposite direction for other groups.

SPENDING-SAVING RELATIONSHIP

We have reviewed briefly some of the factors bearing on the questions of what makes the consumer spend and what makes him save. Many of these factors are interrelated. None can be put into precise quantitative terms. But although the consumer is complex, he is not altogether irrational nor completely unpredictable. Over the long run — annually during the years from 1929 to 1940, at any rate — his behavior was fairly regular. The proportion of income saved fluctuated widely from year to year, but the fluctuations fell into a definite pattern. They varied along with income in such a way that the proportion of income saved increased as disposable income rose. It was possible on the basis of yearly data to make a mathematical calculation of the spending-saving relationship. If income could be forecast, all one had to do was apply the formula—$C = 7.89 + .843Y$, or some such rig — and the volume of consumption expenditures would be known.

Now, this is a useful concept and a very important idea for many purposes. But there are two difficulties with the present use of such a formula for the purposes of formulating inventory or other business policy. One is that the war and the special conditions of the post-war period seem to have upset the old long-run formulas, and we have not had enough experience with the recent savings-spending relationship to allow the calculation of a new one. Second, the formula never was and cannot now be an indicator of month-to-month changes or of changes over a period of several months. In such a short period of time, all the factors reviewed above are active, and intelligent decisions can be made only when they are all taken into account.

When all these factors are considered, some explanation can probably be found for the November 1948 retail slump described in one of the preceding articles. Consumer incomes did not slump during that time. To find out why consumers seemed reluctant to buy and to determine whether the change is the beginning of a sustained trend, one must consider expectations, liquid asset holdings, and all the other special circumstances. This is not so neat and clean as projecting lines on a chart. But, then, nobody really believed that human behavior could be reduced to $C = 7.89 + .843Y$ anyway.

BUSINESS STATISTICS

Production

Philadelphia Federal Reserve District

Indexes: 1923-25 = 100	Adjusted for seasonal variation: Dec. 1948	Nov. 1948	Dec. 1947	Per cent change: Dec. 1948 from Mo. ago	Dec. 1948 from Year ago	1948 from 12 mos. 1947	Not adjusted: Dec. 1948	Nov. 1948	Dec. 1947
INDUSTRIAL PRODUCTION	115p	110	116	+ 4	0	+ 2	112p	113	112r
MANUFACTURING	118p	112	118	+ 5	0	+ 2	115p	115	115
Durable goods	134p	124	128	+ 8	+ 4	+ 4	.....	.....	.....
Consumers' goods	106p	101	107	+ 5	0	+ 2	.....	.....	.....
Metal products	155	145	150	+ 7	+ 3	+ 2	148	145r	143
Textile products	75p	71	75r	+ 5	− 1	+ 6	74p	74	75r
Transportation equipment	136p	123	148	+11	− 8	− 4	137p	118	147
Food products	128p	123	134r	+ 4	− 5	− 3	125p	127	132r
Tobacco and products	149	126	146	+19	+ 2	+ 4	107	150	106
Building materials	59p	55	57	+ 9	+ 5	+ 7	53p	54	51
Chemicals and products	169p	174	169r	− 3	0	+ 6	166p	174	166r
Leather and products	97p	96	97r	+ 1	0	+ 1	92p	92	93
Paper and printing	112	112	120	0	− 7	− 3	113	113	121
Individual Lines									
Pig iron	96	98r	104	− 2	− 7	− 1	95	99r	103
Steel	130	126	122	+ 4	+ 6	+ 5	122	121	115
Iron castings	95	85	93	+11	+ 2	0	88	87	87
Steel castings	108	107	97	+ 1	+12	− 1	104	100	93
Electrical apparatus	226	202	224	+12	+ 1	0	219	214r	218
Motor vehicles	31	26r	51	+19	−38	−34	25	23r	40
Automobile parts and bodies	99	107	143	− 7	−31	−15	98	98	140
Locomotives and cars	69	71	59	− 4	+16	+11	69	66	59
Shipbuilding	.....	.....	.....	+23	+14	+12	.....	.....	.....
Silk and rayon	86	88	86	− 2	0	+ 6	88	89	88
Woolens and worsteds	89p	75	78r	+18	+13	+11	82p	82	73r
Cotton products	32	32	38	− 2	−17	−14	34	34	41
Carpets and rugs	116p	98	103r	+18	+13	+20	112p	110	100r
Hosiery	84	73	86	+14	− 3	+11	81	83	84
Underwear	119	132r	154	−10	−22	− 3	118	134	152
Cement	109p	95	100	+15	+10	+14	89p	93	82
Brick	61	60r	60	+ 1	0	+ 1	59	60	59
Lumber and products	29	27r	29	+ 5	− 2	+ 2	28	28	29
Bread and bakery products	.....	.....	.....	− 2	− 2	− 1	109	111	111
Slaughtering, meat packing	104	104	113	0	− 8	+ 2	111	113	120
Sugar refining	175	48	157	+267	+11	−15	114	31	102
Canning and preserving	206p	210	222r	− 2	− 7	− 3	209p	229	224r
Cigars	151	127	147	+19	+ 2	+ 5	109	153	106
Paper and wood pulp	89	92r	99	− 3	−10	+ 2	89	92r	100
Printing and publishing	117	116	124	0	− 6	− 3	118	117	126
Shoes	118p	101	110	+17	+ 7	+ 1	100p	95	94
Leather, goat and kid	77p	91	85	−15	− 9	0	84p	88	93
Explosives	115	108r	104	+ 6	+10	+15	114	108r	103
Paints and varnishes	112	107	109	+ 4	+ 2	+ 7	109	111r	106
Petroleum products	218p	234	224r	− 7	− 3	+ 6	216p	235	222r
Coke, by-products	182p	186	181	− 2	+ 1	+ 2	177p	178	175
COAL MINING	67p	74	73	− 9	− 7	− 1	68p	75	73
Anthracite	65	73	70	−11	− 7	0	65	73	70
Bituminous	85p	79	93	+ 8	− 8	−10	90p	87	98
CRUDE OIL	288	290	295	− 1	− 2	− 1	271	281	277
ELECTRIC POWER—Output	492	498	469	− 1	+ 5	+ 7	527	517	501
Sales, total	510	511	478	0	+ 7	+ 9	526	526	492
Sales, to industries	368	368	354	0	+ 4	+ 8	350	376	336
BUILDING CONTRACTS									
TOTAL AWARDS†	175	172	134	+ 2	+30	+52	194	187	149
Residential†	193	154	112	+25	+73	+48	187	172	108
Nonresidential†	150	168	157	−10	− 4	+51	162	168	169
Public works and utilities	234	236	183	− 1	+28	+47	281	272	219

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

Local Business Conditions*

Percentage change—December 1948 from month and year ago	Factory employment: Nov. 1948	Dec. 1947	Factory payrolls: Nov. 1948	Dec. 1947	Building permits value: Nov. 1948	Dec. 1947	Retail sales: Nov. 1948	Dec. 1947	Debits: Nov. 1948	Dec. 1947
Allentown	− 1	− 4	0	+ 1	− 7	− 9	+38	+38	+18	+16
Altoona	− 1	+ 1	+ 6	+ 9	− 38	− 81	+41	− 5	+ 5	+ 2
Harrisburg	0	− 2	+ 3	+10	− 78	− 84	+43	+ 7	+13	+ 6
Johnstown	− 2	− 3	− 2	+17	− 89	− 77	+42	+ 4	+ 6	+10
Lancaster	− 1	+ 3	+ 1	+10	+334	+ 13	+44	+ 6	+32	0
Philadelphia	+ 1	− 2	+ 1	+ 3	+117	+120	+34	+ 2	+13	+ 3
Reading	+ 1	+ 2	− 1	+ 9	− 38	− 26	+32	+ 1	+11	+ 8
Scranton	− 1	− 4	− 4	− 2	− 89	+ 24	+52	+ 4	+ 8	+ 3
Trenton	.....	.....	.....	.....	+ 25	+ 30	+52	+ 4	+ 8	+14
Wilkes-Barre	− 1	+ 4	+ 1	+10	+108	+124	+50	+ 2	+ 6	+ 1
Williamsport	− 1	+ 1	− 1	+11	− 41	− 82	.....	.....	+13	+ 7
Wilmington	+ 1	− 1	+ 5	+ 9	+ 83	+230	+49	+ 1	+43	− 4
York	− 1	− 5	0	+ 2	− 19	− 83	+69	+10	+ 8	+ 9

* Area not restricted to the corporate limits of cities given here.

Production Workers in Pennsylvania Factories

Summary Estimates—December 1948

	Employment	Weekly Payrolls	Weekly Man-Hours Worked
All manufacturing	1,105,500	$59,273,000	44,025,000
Durable goods industries	633,600	37,839,000	25,709,000
Nondurable goods industries	471,900	21,434,000	18,316,000

Changes in Major Industry Groups

Indexes (1939 average = 100)	Employment: Dec. 1948 Index	Per cent change from Nov. 1948	Dec. 1947	Payrolls: Dec. 1948 Index	Per cent change from Nov. 1948	Dec. 1947
All manufacturing	129	0	− 2	308	+1	+ 6
Durable goods industries	157	0	0	360	+2	+ 9
Nondurable goods industries	104	−1	− 3	246	−1	+ 2
Food	130	−1	− 1	265	0	+ 7
Tobacco	104	−1	0	236	−3	− 1
Textiles	84	−1	− 3	220	−2	+ 2
Apparel	87	−3	− 9	214	−4	−11
Lumber	92	0	+ 1	214	+4	+10
Furniture and lumber prods.	97	−1	− 7	239	−1	0
Paper	121	0	− 1	273	−2	+ 3
Printing and publishing	133	−1	− 5	277	−1	+ 4
Chemicals	128	+2	+ 4	276	+3	+11
Petroleum and coal prods.	154	−1	+ 4	321	−4	+15
Rubber	138	−1	−15	269	−3	−19
Leather	88	+3	−10	191	+4	− 7
Stone, clay and glass	135	−1	0	311	+1	+10
Iron and steel	142	+1	+ 2	328	+1	+13
Nonferrous metals	142	0	− 6	338	+7	+10
Machinery (excl. electrical)	209	+1	− 1	461	0	+ 4
Electrical machinery	237	0	+ 1	536	+3	+ 6
Transportation equip. (excl. auto)	246	0	+15	509	+6	+22
Automobiles and equipment	127	0	−32	272	+1	−31
Other manufacturing	139	−1	+ 2	285	+1	+ 6

Average Earnings and Working Time

December 1948 Per cent change from year ago	Weekly Earnings: Average	Ch'ge	Hourly Earnings: Average	Ch'ge	Weekly Hours: Average	Ch'ge
All manufacturing	$53.62	+ 8	$1.346	+ 9	39.8	− 1
Durable goods indus.	59.72	+ 9	1.472	+ 9	40.6	0
Nondurable goods industries	45.42	+ 5	1.170	+ 9	38.8	− 3
Food	45.61	+ 8	1.110	+ 9	41.1	− 1
Tobacco	29.72	− 1	.772	+ 3	38.5	− 3
Textiles	46.80	+ 5	1.206	+10	38.8	− 4
Apparel	34.82	− 3	.943	+ 4	36.9	− 6
Lumber	43.30	+ 9	1.089	+12	39.8	− 3
Furniture and lumber products	45.73	+ 8	1.064	+ 7	43.0	+ 1
Paper	48.87	+ 4	1.142	+ 9	42.8	− 5
Printing & publishing	59.00	+10	1.560	+12	37.8	− 2
Chemicals	51.37	+ 6	1.280	+ 8	40.1	− 2
Petroleum and coal products	63.52	+11	1.644	+13	38.6	− 2
Rubber	48.43	− 5	1.395	+ 5	34.7	− 9
Leather	37.24	+ 3	1.027	+ 6	36.3	− 3
Stone, clay and glass	52.61	+10	1.285	+ 9	41.0	+ 1
Iron and steel	62.14	+11	1.538	+ 9	40.4	+ 1
Nonferrous metals	62.02	+18	1.471	+13	42.2	+ 4
Machinery (excl. elec.)	55.88	+ 6	1.394	+ 8	40.1	− 2
Electrical machinery	63.28	+ 5	1.548	+ 6	40.9	0
Transportation equip. (excl. auto)	63.04	+ 6	1.581	+ 8	39.9	− 2
Automobiles & equip.	58.89	+ 2	1.468	+ 7	40.1	− 5
Other manufacturing	42.98	+ 4	1.148	+ 7	37.5	− 3

Distribution and Prices

Wholesale trade Unadjusted for seasonal variation	Per cent change: Dec. 1948 from Month ago	Dec. 1948 from Year ago	1948 from 12 mos. 1947
Sales			
Total of all lines	−5	+1	+2
Dry goods	−28	−21	−8
Electrical supplies	+13	+16	+8
Groceries	−4	+3	+4
Hardware	0	+4	−1
Jewelry	+20	+13	+9
Paper	+21	+18	+2
Inventories			
Total of all lines	−5	+7	......
Dry goods	−15	+3	......
Electrical supplies	+20	+25	......
Groceries	−7	+7	......
Hardware	−7	+4	......
Paper	−2	+10	......

Source: U. S. Department of Commerce.

Prices	Dec. 1948	Per cent change from: Month ago	Year ago	Aug. 1939
Basic commodities (Aug. 1939 = 100)	299	−2	−15	+199
Wholesale (1926 = 100)	162	−1	−1	+116
Farm	177	−2	−10	+191
Food	170	−2	−5	+153
Other	153	0	+5	+91
Living costs (1935-1939 = 100)				
United States	171	0	+3	+74
Philadelphia	171	−1	+3	+74
Food	199	−1	−1	+114
Clothing	196	0	+5	+97
Fuels	143	0	+9	+48
Housefurnishings	202	0	+5	+101
Other	153	0	+8	+51

Source: U. S. Bureau of Labor Statistics.

Indexes: 1935-1939 = 100	Adjusted for seasonal variation: Dec. 1948	Nov. 1948	Dec. 1947	Per cent change: Dec. 1948 from Month ago	Dec. 1948 from Year ago	1948 from 12 mos. 1947	Not adjusted: Dec. 1948	Nov. 1948	Dec. 1947
RETAIL TRADE									
Sales									
Department stores—District	286	269	277	+6	+3	+8	478	356	460
Philadelphia	260	246	252	+5	+3	+7	434	335	421
Women's apparel—District	272	259r	270	+5	+1	+3	389	296r	387
Philadelphia	266	263r	270	+1	−2	+2	380	305r	386
Furniture	.....	.....	.....	+40*	−3*	.....	.....	.....	.....
Inventories									
Department stores—District	263p	264	244r	0	+7	.....	223p	290	208
Philadelphia	234	235	230	−1	+1	.....	199	259	196
Women's apparel—District	234	232	228	+1	+3	.....	206	267	201
Philadelphia	254	253	253	+1	+1	.....	237	291	235
Furniture	.....	.....	.....	−14*	+1*	.....	.....	.....	.....
FREIGHT-CAR LOADINGS									
Total	126	133	138	−5	−9	−6	121	134	133
Merchandise and miscellaneous	122	121	133	+1	−8	−6	116	125	127
Merchandise—l.c.l.	63	73	81	−14	−22	−16	62	75	80
Coal	120	127	143	−6	−16	−7	130	138	154
Ore	178	221	165	−19	+7	+4	89	221	83
Coke	200	181	191	+10	+4	+2	216	203	207
Forest products	68	74	90	−8	−24	−12	58	71	76
Grain and products	155	139	122	+12	+27	−7	161	157	127
Livestock	76	70	86	+9	−12	−22	82	80	93
MISCELLANEOUS									
Life insurance sales	205	195	233r	+5	−12	−2	190	209	217
Business liquidations									
Number	.....	.....	.....	+13*	+8*	+34*	40	36	37
Amount of liabilities	.....	.....	.....	+53*	−48*	+4*	60	40	117
Check payments	239	259	231r	−8	+3	+12	277	275	268

* Computed from unadjusted data. p—Preliminary. r—Revised.

BANKING STATISTICS

Reporting member banks (Millions $)	Jan. 26, 1949	Changes in—Four weeks	One year
Assets			
Commercial loans	512	−26	−2
Loans to brokers, etc.	18	......	−5
Other loans to carry secur.	10	......	−3
Loans on real estate	96	+5	+21
Loans to banks	13	+1	+12
Other loans	277	......	+36
Total gross	926	−20	+59
Total net	917	−21	+55
Government securities	1335	+22	−79
Other securities	281	+8	+14
Total investments	1616	+30	−65
Total loans & investments	2533	+9	−10
Reserve with F. R. Bank	544	−26	+36
Cash in vault	44	−6	+1
Balances with other banks	98	−7	−7
Other assets—net	52	+3	−2
Liabilities			
Demand deposits, adjusted	2098	−13	−48
Time deposits	438	......	+55
U. S. Government deposits	56	−7	+22
Interbank deposits	344	−6	−2
Borrowings	4	......	−14
Other liabilities	25	−3	−2
Capital account	306	+2	+7

MEMBER BANK RESERVES AND RELATED FACTORS

Third Federal Reserve District (Millions of dollars)	Changes in weeks ended—Jan. 5	Jan. 12	Jan. 19	Jan. 26	Change in four weeks
Sources of funds:					
Reserve Bank credit extended in district	+2	−13	+20	−17	−8
Commercial transfers (chiefly interdistrict)	−51	+22	−62	+25	−66
Treasury operations	+12	−16	+1	−2	−5
Total	−37	−7	−41	+6	−79
Uses of funds:					
Currency demand	−15	−17	−16	−9	−57
Member bank reserve deposits	−21	+10	−29	+18	−22
"Other deposits" at Reserve Bank	−1	....	+4	−4	−1
Other Federal Reserve accounts	....	....	....	+1	+1
Total	−37	−7	−41	+6	−79

Federal Reserve Bank of Phila. (Dollar figures in millions)	January 26, 1949	Changes in—Four weeks	One year
Discounts and advances	$ 17.4	$− 1.4	$+ 3.2
Industrial loans	.8	....	− .6
U. S. securities	1501.3	−166.4	− 69.2
Total	$1519.5	$−167.8	$− 66.6
Fed. Res. notes	$1627.5	$− 44.7	$− 15.7
Member bank deposits	941.2	− 22.3	+ 98.6
U. S. general account	73.8	− 25.0	− 1.5
Foreign deposits	54.2	+ 9.1	+ 26.3
Other deposits	1.7	− .5	− .3
Gold certificate reserves	1172.7	+ 83.1	+179.1
Reserve ratio	43.5%	+4.3%	+5.2%

Member bank reserves (Daily averages; dollar figures in millions)	Held	Required	Excess	Ratio of excess to required
Phila. banks				
1948 Nov. 16-30	$457	$450	$7	1%
Dec. 1-15	452	446	6	1
Dec. 16-31	459	451	8	1
1949 Jan. 1-15	456	446	10	2
Country banks				
1948 Nov. 16-30	$483	$441	$42	9%
Dec. 1-15	481	439	42	9
Dec. 16-31	487	441	46	10
1949 Jan. 1-15	484	437	47	11