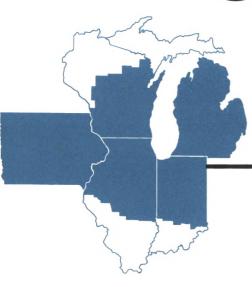
# Business Conditions



1965 August

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## THE TROO OF BUSINESS

Economic activity has continued to rise about as projected by most analysts at the start of 1965. Employment, output and income have increased rapidly, and demands for goods and services have pressed more closely upon available resources. Upward price pressures have become more apparent than at any time since 1957, but price increases have been concentrated in certain groups of commodities—particularly foods and nonferrous metals—and there has been no evidence of an intensified general inflationary movement.

Total production of goods and services reached an annual rate of almost 660 billion dollars in the second quarter. After adjustment for price changes, production in the second quarter was 4.5 per cent above the level of a year earlier and 21 per cent above the last cyclical peak reached in mid-1960. In this five-year period the average annual growth of output was about 4 per cent, compared with 3.5 per cent from 1947 to 1960. Nonfarm employment, meanwhile, has risen

at a rate of over 2 per cent a year since 1960 compared with less than 1.7 per cent in the previous postwar years.

With half of the decade of the Sixties on the record books, there can be little doubt that the period has more than measured up to earlier experience. The accompanying charts trace the course of various important economic measures since 1960, together with the cycles of 1953-57 and 1957-60. In each case the lines begin with the quarters that marked a high watermark before a general business decline.

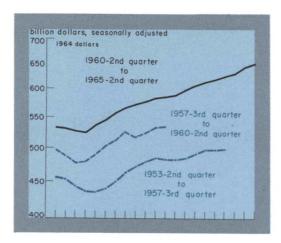
### Toward a slower pace

Even if it can be agreed that the business record of the past five years is satisfactory, there is room for disagreement on the probable course of events in the next 6 to 12 months. The rate of economic advance in the first half of 1965 was stimulated by artificially high rates of output in two major industries—autos and steel. Labor problems, auto strikes last fall and the possibility of a work stop-

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## Gross national product continues uptrend



page in steel have been responsible for abnormally high production in both industries.

Activity in autos and steel directly affects demand for copper, aluminum, zinc and tin—commodities that have been in short supply for many months, in part, because of work stoppages both in the United States and in other countries. Reduced output schedules for autos and steel would be accompanied by a lessened pressure on nonferrous metals. Premiums being paid for immediate delivery of copper, tin and zinc moderated appreciably in July as purchasers relaxed demands.

Barring unforeseen developments such as a sharp step-up in defense activity, it appears that the extremely rapid pace of business expansion is slowing and will slow further in the months ahead. Can this transition to a sustainable rate be accomplished without a multiplication of downward forces that would generate a general business decline? The past provides no clear guide. Periods of relative stability in 1947, 1956 and 1962 were followed by further expansion. But slowdowns in

1957 and 1960 were followed by recessions.

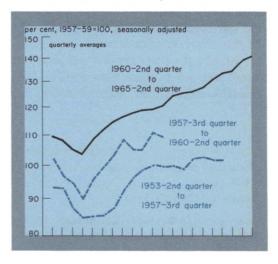
### **Labor stringencies**

Unemployment averaged 4.7 per cent of the nation's labor force in the second quarter—the lowest in almost eight years. In each of the states of the Seventh Federal Reserve District—Illinois, Indiana, Iowa, Michigan and Wisconsin—the unemployment rate averaged less than 3 per cent in the quarter, and many employers experienced unusual difficulty in staffing their firms adequately. For practical purposes the District has had relatively "full employment" in recent months.

A strong demand for workers is reported in nearly all District centers, reflecting the boom in autos, steel and machinery. In some areas labor markets are the tightest in a decade or more, with unemployment at very low levels and business firms making intensive efforts to recruit workers.

Unemployment compensation claims continue to decline in all District states. As of

## Rise in industrial production overshadows earlier expansion

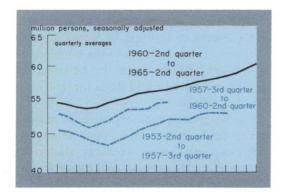


May, four District centers (Indianapolis, Grand Rapids, Kalamazoo and Kenosha) were upgraded by the Department of Labor from the "C" category (3 to 6 per cent unemployment) to the "B" category (less than 3 per cent unemployment). Fourteen of 23 classified District centers are now in the "B" group compared with 36 of 150 for the nation. (No centers anywhere are placed in the "A" group with unemployment at less than 1.5 per cent.) For the District these classifications are the most favorable since the present system was adopted early in 1957.

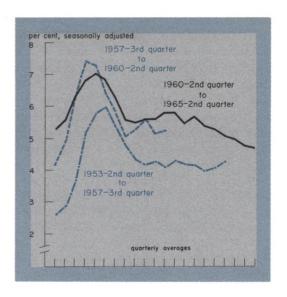
Worker recruitment problems were increased by the decision of some firms to forego usual plant-wide vacation shutdowns in July or August because of current demand pressures. Many of these firms took on large numbers of temporary summer workers.

Clearly, output of many Midwest firms would have been even larger in recent months if the available labor supply had been greater. Declines in steel industry requirements after September 1, and perhaps in those of the auto industry sometime later, will alleviate

### Rapid increase in nonfarm employment continued in second quarter



## **Unemployment rate** declined further in past year



the overall strain on the area's work force. There is no evidence, however, that demand for skilled workers, particularly those in the metals trades, will moderate substantially. In most centers not dominated by steel or autos, prospects for further employment growth appear good.

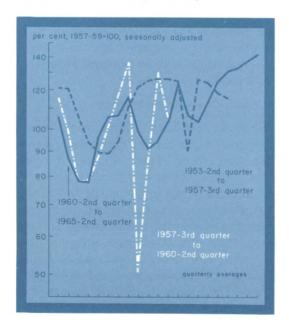
### Capital goods still rising

The steel and auto industries each account for about 6 per cent of the nation's manufacturing output. Trade sources anticipate that both industries will produce about 20 to 25 per cent less in the second half of this year than the first; enough to drop total manufacturing activity by approximately 2.5 per cent. Producers of business equipment account for over 13 per cent of manufacturing, somewhat more than steel and autos combined. These firms are likely to increase output further in the second half.

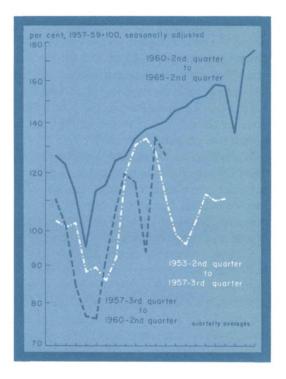
Throughout the postwar period, total output of business equipment has tended to reach a peak at about the same time as total production. In each case, however, new orders and order backlogs had been declining for about six months before the slide in output. Order backlogs for electrical and nonelectrical machinery combined have been rising steadily since late 1962. Moreover, orders have increased *relative* to shipments. At the end of May, order backlogs for machinery were 3.0 times shipments for the month compared with 2.8 times a year earlier.

Construction contracts reported by F. W. Dodge also indicate a further rise in capital spending by business firms. During the January-May period contracts for commercial and manufacturing projects were up 26 and

### Steel production at record levels partly because of inventory buildup



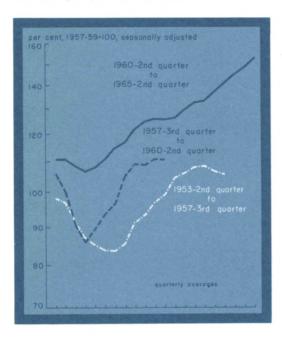
### **Production** of motor vehicles rose strongly following last year's strikes



16 per cent, respectively, from last year's high level. Capacity to fabricate and erect structural steel has been hard pressed to accommodate the demand. For the first five months of 1965 bookings for structural steel, reported by the American Institute for Steel Construction, were 28 per cent above the same period of last year. Prices for fabricated structural steel have risen and lead times for new work have lengthened.

Capital goods producers, such as railroad freight car builders, were among those who eliminated plant-wide vacation shutdowns this summer. Meanwhile, spokesmen for the machine tool industry report demand for their

### Output of business equipment rising rapidly since mid-1963



products to be the strongest since 1953. Like most producers of business equipment, machine tool builders have been hampered by shortages of skilled labor, a problem that will be overcome only gradually as apprentices are trained. Longer delivery schedules on new machinery and equipment have resulted in sharp price increases in the secondhand markets.

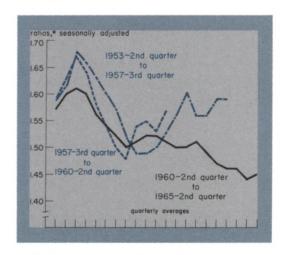
Some observers profess to see a substantial decline in output of capital goods in 1966 when current pressure on capacity has been relieved. This could develop, but forecasts of changes in activity a year or more in advance usually have not been very reliable. Meanwhile, the capital goods expansion appears to be proceeding in a fairly orderly fashion, although restricted in some lines by capacity.

Backlogs are not nearly so high relative to shipments as in the mid-Fifties, and recent price increases have been much less than in that period. It is noteworthy also that every major industry has been participating in the capital spending rise this year. The 1955-57 boom was concentrated heavily on facilities to produce basic materials such as steel, aluminum and cement.

### Inventory rise moderates

Total business inventories rose at an annual rate of 6 billion dollars in the second quarter of 1965, following a 7 billion increase in the first quarter. (In the three years 1962 through 1964, the average rate of growth was 4.5 billion dollars.) In each quarter about 2.5 billion dollars of the inventory rise was accounted for by steel. Cars and trucks accounted for about 500 million dollars of the total inventory rise in the first quarter and 2

## **Total** business inventories continue at low level compared to sales



<sup>\*</sup>Total business inventories to total sales.

billion in the second. Apparently, inventories of goods other than steel and autos have been rising at a moderate rate.

From December through May, inventories of all manufacturers of durable goods rose about 1 billion dollars. The largest share of the increase was in materials and supplies with work-in-process accounting for the remainder. There was no rise in inventories of finished goods during the period.

Part of the increase in steel and auto inventories this year would have occurred without the special factors relating to work stoppages, because of the expansion in business activity. If inventory totals are adjusted in a rough manner for the "excess" additions in steel and autos, it appears that the rate of inventory accumulation in other lines has been declining since the fourth quarter of 1964. This may have been caused largely by higher than expected sales.

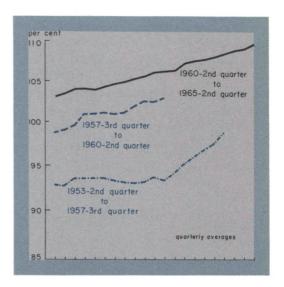
The buildup in auto inventories this year began from a low level following the strikes of last autumn. On July 1 auto inventories were at a record 1.4 million, equal to a 44-day supply based on June sales. The inventory-sales ratio was below a year earlier and was not considered excessive by most producers.

Manufacturers' holdings of finished steel at midyear amounted to about 16 million tons, perhaps 5 million more than a "normal" amount. Even with the large excess of steel, however, total business inventories at the end of May were only 1.45 times total business sales, down from a ratio of 1.48 a year earlier. To find a lower aggregate stock-sales ratio, it is necessary to go back to the period of the Korean war. Prior to each of the past three business recessions, inventories have been about 1.6 times sales.

### In choppier waters

A year ago it was possible to state in Busi-

## Consumer price index rising faster recently



ness Conditions that "a physical checkup of the economy in the summer of 1964 reveals a remarkably sound constitution..." and that "recent months have not been accompanied by signals of danger that preceded most earlier business declines."

Such an unqualified bill of health cannot be offered so assuredly at the present time. As the economy has moved closer to full employment in the past 12 months, average wholesale prices—virtually stable for about six years—have increased almost 3 per cent. More disturbing, a sizable decline in steel output is a practical certainty in the next several months and auto output may be at a reduced pace. Additional problems include strains upon capacity in some segments of the capital goods industries and shortages of certain types of labor.

The economy will be entering a -testing

phase in the months ahead—the most severe since the second half of 1962. There are solid reasons to hope that this test—the transition to a slower but more sustainable rate of growth—can be passed successfully. Excise tax cuts should help sustain sales of some types of consumer goods. Inventories in most industries appear moderate or low relative to sales judged by historical standards. Price increases, although troublesome, have not snowballed into general price inflation. Fin-

ally, relaxation of the pressure from steel and autos will help other industries expand output, sales and facilities in a more orderly fashion.

In summary, the prognosis for further economic growth remains favorable. Nevertheless, despite the five-year expansion, the problem of using the nation's resources fully and effectively without endangering future stability, will provide a continuing challenge to the private and public sectors of the economy.

### Marketing money

## How "smaller" banks buy and sell Federal Funds

Everyone knows that banks deal in money, but usually with individuals and business customers who are borrowers or depositors—often both. Individual banks depend mainly on the inflow of money from depositors to meet the needs of loan customers. It is not often, however, that deposit inflows over short periods of time even roughly match what the bank must pay out as borrowers draw on the proceeds of their loans and other transactions absorb funds.

One way in which banks can keep a balance between these short-run inflows and outflows is to trade in money among themselves—that is, to buy or sell Federal funds. Such transactions are really loans from one bank to another with a one-day maturity. They are effected through the transfer of funds on the

books of the Federal Reserve Banks from the reserve account of the seller (lender) to the reserve account of the buyer (borrower).

These reserve accounts are working balances but also constitute the legal reserves of Federal Reserve member banks. A sale of funds thus reduces the reserves of the seller and increases the reserves of the buyer. A transfer in the opposite direction on the following business day liquidates the loan and shifts the funds back to the seller. Interest is charged but the interest payment usually is handled through entries in correspondent balances (if there is a correspondent relationship between the participants) or by a separate check.

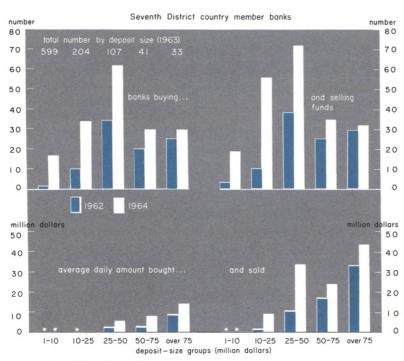
Every day between 1 and 4 billion dollars of reserve money is shifted from bank to bank

through the Federal funds market. Although the large money market banks in the nation's major cities account for the bulk of trading, many medium-sized and smaller banks now participate in this market. In the Seventh Federal Reserve District alone, about 250 country member banks either bought or sold Federal funds sometime during 1964. This was double the number in 1962. In the second half of last year, these banks together were net sellers of Federal funds amounting to nearly 100 million dollars per day.

### Willing and able

Banks are making greater use of the Federal funds market to keep earning assets at

### Country bank activity in Federal funds rose sharply from 1962 to 1964



\*Less than 0.5 million dollars.

maximum levels. Federal funds, more than any other instrument in the money market, provide a convenient way to put very short-term money to work and to cover unexpected reserve deficiencies. In the past few years, this market has become increasingly accessible to country banks that normally would not participate in the money market. In addition, relatively high interest rates have provided a strong incentive to hold excess reserves to a minimum.

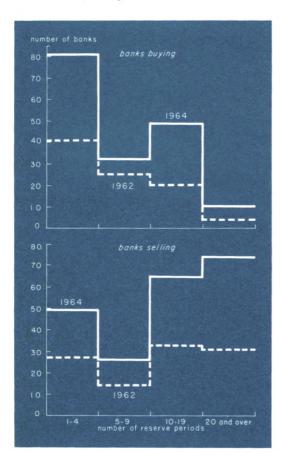
Prior to 1960 it was unusual for a bank with less than, say, 100 million dollars in deposits to buy or sell Federal funds. This was partly due to the fact that relatively few country banks felt it worthwhile to watch their

money position closely. Smaller banks normally carried sufficient excess reserves to cushion unexpected withdrawals of deposits. But if these were not adequate, they could borrow from their Reserve Bank at the discount rate. On the other hand, when reserves built up to high levels, the excess was commonly transferred to balances with correspondent banks.

More important, the standard unit of trading in the Federal funds market was 1 million dollars, a relatively large amount for small banks. The problem of small bank participation can be illustrated as follows: A

country bank with 10 million dollars of deposits—half demand and half time—would be required to hold average reserves of 800,000 dollars at current requirements. A 1 million dollar sale thus would exceed the entire amount of reserves the bank is required to maintain as a daily average balance. Moreover, at a 3 per cent interest rate, a 1 million dollar loan for one day yields \$83—a small return when telephone, bookkeeping and oth-

### Most participants make only occasional purchases but sell regularly



er transactions costs are considered. On days when a lower rate prevails, as it often does at the close of the country bank reserve settlement period, earnings are lower.

During the past two or three years, a growing number of large banks in the nation's major cities have begun to act as regional clearing houses for Federal funds. These banks generally stand ready to buy or sell to accommodate their country correspondents' needs—occasionally accepting transactions as small as 100,000 dollars.

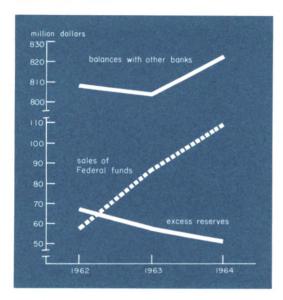
The large banks then adjust for their own needs in the national market. Their ability to do this has been facilitated by several firms that act as brokers and a few very large banks that act as dealers. These arrangements have fostered a strong and active market.

Federal funds sales have become an attractive means of offsetting the effects of rising costs on profits. Through most of 1964, the rate on the great bulk of transactions was 4 per cent and in the first half of 1965 a large percentage of trading was at 4½ per cent. Thus, not only does the funds market provide a greater degree of liquidity than other short-term uses for money, but recently it also has offered a higher rate of return than has been available on Treasury bills.

### Sellers and buyers

More country banks sell Federal funds than buy them and the amount of aggregate sales by these banks is far greater than their purchases. Both the number of banks and the amounts of their purchases and sales increased substantially from 1962 to 1964 (see chart). Growth in participation over this period was greatest among banks with 10-50 million dollars in deposits. A large proportion of the biggest size group was already in the market and accounted for most of the dollar volume of transactions. About 600 of the Dis-

### Sales of Federal funds have not reduced balances with other banks



trict's 985 country member banks have deposits of less than 10 million dollars. Federal funds transactions have been recorded for only a few of these banks.

Small banks can sell Federal funds in marketable amounts by accumulating excess reserves from day to day throughout the reserve period. But while accumulation of excess reserves for a single sale makes small bank participation more feasible, the seller must use care not to overdraw his reserve account on the day the sale is made. Analysis of the pattern of sales within reserve periods indicates that the small banks tend to make only one or two sales toward the close of the period while it is common for somewhat larger banks to spread the sales over a number of consecutive days, often with an equal amount on each day.

To be counted as a buyer or seller, as tabulated here, a bank need only have shown one

transaction at sometime during the year. There are wide differences in the extent to which banks used the market regularly. This is evident from comparison of the frequency of purchases and sales of District country banks in 1962 and in 1964 (see chart). Relatively few country banks rely heavily on the Federal funds market as a source of funds. This has been especially true for the smaller country banks; there were no banks with deposits under 25 million dollars that bought funds in as many as 20 of the 26 biweekly reserve periods in 1964. For a substantial majority of banks of this size, purchases were made in less than five periods.

The banks that sell funds, on the other hand, typically use the market as a short-term investment much of the time, and this practice has become much more general since 1962. The increase in the frequency of sales was particularly marked among banks with deposits from 10-50 million dollars.

### Sales as liquid investments

Because the immediate debits and credits in the process of Federal funds transactions are transfers into and out of reserve accounts. it is often assumed that in the absence of such transfers, sellers would have been left with excess reserves and the buyers would have been forced to borrow at the discount window of the Federal Reserve Bank. To some extent this is true and applies especially to surpluses and deficits that occur rather unexpectedly toward the close of a reserve period. But Federal funds represent only one of several alternative short-term uses of funds. Growth in sales by country member banks in this District, as measured by the wire transfer data, has been much greater than the decline in excess reserves while balances held with other banks actually averaged higher in 1964 than in 1962.

Although sales of Federal funds may result in a decline in country bank cash assets, such loans are more liquid than any other shortterm investment. Participation in the market may also add to the sellers' potential sources of funds by developing contacts for purchases as well as sales.

Purchases are basically borrowings and often are secured by the buyers' pledges of securities. Since the buyer cannot be sure of obtaining the desired amounts of funds from day to day, prudence is called for in their use. As a substitute for Federal Reserve advances to meet unexpected and temporary reserve deficiencies, the funds market can at times afford a savings in interest costs. But there is as yet no evidence that a city correspondent would be willing to supply Federal funds regularly to a bank maintaining an overinvested position, especially in the face of pressures on its own reserve position.

### **Marginal** impact

Experience in the Seventh District suggests that country bank operations in the Federal funds market are marginal but, nevertheless, important. On balance, District country banks have been supplying about 100 million dollars on a daily average basis—roughly 10 per cent of their required reserves. On the assumption

that their share of nationwide country bank net sales of Federal funds is proportional to total country bank assets, the net amount provided to the market daily by all country banks would be roughly 500 million dollars. Frequently, this would constitute a quarter to a third of the total volume of trading. The great bulk of these funds come from banks with at least 25 million dollars in deposits. As buyers, their effect is negligible.

Growth in country bank participation in the Federal funds market seems unlikely to continue at the rapid pace of the past two years. Most of the large and medium-sized country banks are already using the market as an outlet for funds. But there is no specific limit to the amount of funds that can be employed in this way. While excess reserves may well have been reduced to a practical minimum, the volume of sales will depend, at least in part, on comparative yields.

Country banks can be net sellers of Federal funds only to the extent that city banks are net buyers. The market cannot increase or decrease total member bank reserves—it can only redistribute them. But the ability to transfer reserves quickly and easily within the banking system in response to changing needs makes for a more efficient use of both bank reserves and real economic resources.

## Where's all the currency?

Does your household possess \$175 in paper money and coins for each person—\$700 for a family of four? This is the average for the entire population; at least, this is the amount of currency and coin that has been issued and remains outstanding outside the Treasury and the banks—roughly 35 billion dollars divided among a total population of about 195 million. Averages, of course, should be used with care since they often can be quite meaningless. The old adage about the six-foot man who drowned fording a river which averaged three feet in depth should be borne in mind.

The actual amount of currency that people hold varies from the computed average because individuals' needs for money and habits in utilizing it vary. 1 In addition, some portion of the amount issued over the years and assumed to be in circulation may have been permanently lost or destroyed. If allowance is made for the currency estimated to be held by businesses and that which may have disappeared or been impounded in hoards both here and abroad, the amount in circulation per capita probably would be reduced to below \$100. This article examines the reasons why people hold currency and the extent to which these reasons fail to explain either the level of "currency in circulation" or the relative importance of currency as money.

#### Cash or checks

Many individuals keep only a small amount of money in the form of currency. If the amount of currency you have seems small, it may be because nearly all your payments are made by checks. After all, demand deposits comprise about 80 per cent of the total money supply, while currency accounts for only 20 per cent. Or perhaps you find, by utilizing savings accounts at commercial banks, or share accounts at savings and loan associations a minimal amount of money is adequate. Although not money in the strict sense of the word, these assets are typically considered close substitutes for money, especially as a "store of value."

Currency has certain advantages as well as disadvantages compared with demand deposits. Probably the greatest advantage is its ready acceptability in payment of purchases. Checks, on the other hand, typically are accepted only after some form of identification.

Another advantage is that currency is inexpensive to use. Service charges are generally levied on demand deposits. Because these charges are typically a fixed amount per account plus a fixed amount per check written, the effective cost of payment by check declines as the dollar amount of the payment increases.

Despite these advantages most people would not want to risk loss, through either accident or theft, by keeping large sums about their persons or homes. Deposit money is much safer, particularly since the introduction of Federal deposit insurance in the Thirties reduced greatly the risk of deposit loss

<sup>&</sup>lt;sup>1</sup> Unless specifically noted, the term currency hereafter applies to both currency and coin.

through the failure of banks.

Whether one holds mainly currency or demand deposits probably is influenced by the kinds of expenditures he expects to make. Currency tends to be used for frequently purchased "small ticket" items for which payment by check would be less convenient and more costly. Moreover, most people are willing to take the risk of loss from carrying pocket money when the amount involved is small. Checks tend to be used for the larger, less frequent purchases where the use of currency is inconvenient and the costs of identification and service charges are low relative to the amount of the purchase. Coins, of course, have a largely unique role in providing the predominant means of making purchases from automatic vending machines.

With rising incomes and prices the proportion of large ticket items in total spending probably has increased, and with it one would expect a rise in the relative importance of demand deposits. The decline in importance of low-priced items might also be expected to reduce demands for currency by business firms which hold approximately 20 per cent of all outstanding currency. The need for cash in the tills of businesses probably is determined largely by the volume of small ticket sales.

#### Number of banks increase

An important factor affecting the amount of currency held, especially by business firms, is the accessibility of banks. Historically, as banking facilities became more easily available, holdings of currency relative to demand deposits tended to decline. This was undoubtedly a primary cause of the decline in the ratio of currency to total money between 1890 and 1910, when the number of banks more than doubled and population per bank declined 35 per cent (see chart). Although the number of

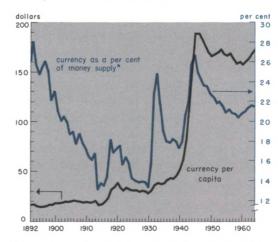
bank offices has increased slightly faster than the population in recent years, the effect of greater accessibility has been overshadowed by other forces.

One cause for increased currency use is the rise in travel and the consequent increase in transactions with strangers. While travelers' checks are used widely for this purpose, most travelers still find it convenient to carry more currency than they would use at home.

Finally, the rising percentage of the young and old relative to those 20 to 60 years of age has increased the proportion of people who are less apt, for reasons of insufficient income or memories of less safe days for banks, to use checks.

On the whole it would seem that the forces favoring the greater use of demand deposits in the Twentieth Century should have outweighed the forces favoring greater use of currency. However, available evidence seems not to support this view. In mid-1965, currency accounted for about 22 per cent of the money

## Currency increased in importance since 1960



\*Currency outside banks and private demand deposits.

supply—about the same proportion as in 1900 and higher than in most peacetime years of this century. Moreover, a recent survey by the Federal Reserve Bank of Boston found that currency accounted for the same proportion of total bank receipts as in the 1890s.

The high current ratio of currency to money may be explained by three short periods of sharp increases. Currency increased in relative importance during both world wars and in the early years of the great depression. In most other periods, currency tended to decline as a proportion of total money.

The greatest increase in the amount of currency per capita was the fourfold rise during World War II to nearly 200 dollars (see chart). Proportionately, this was twice as great as the rise during World War I and much greater than at any other time. After the second world war, the decline was slight and the per capita amount outstanding in the Fifties remained over five times as large as it had been in the Twenties.

### **Currency hoarded?**

The war and postwar pattern suggests that a considerable portion of the wartime rise may have moved into inactive holdings and is no longer in actual circulation, and that some may have been destroyed. On the basis of prewar relationships between currency and business activity, the wartime rise was considerably greater than would have been expected. The New York Federal Reserve Bank estimated, in 1948, that nearly 10 billion of the 25 billion dollars of currency then outstanding was either hoarded or destroyed. Large denomination issues, the bills most amenable for hoarding, expanded sharply during the war years. Black market operations and income tax evasion are frequently suggested as possible motives for hoarding during this period.

Hoarding was not limited to American citizens storing currency at home. United States currency was also hoarded abroad. With many countries ravaged by war, financial institutions inoperative and the American dollar "as good as gold" and probably easier to obtain, foreigners accumulated United States currency both in place of and in addition to gold, a long-time favorite hoarding medium. Estimates of currency hoards abroad range up to nearly 4 billion dollars. A sizable portion of this currency may not have returned to the United States.

The wartime experience may have important implications for the interpretation of postwar currency data. Since 1960, currency has tended to rise both as a percentage of the money supply and per capita, reversing the postwar trend at least temporarily. Part of the rise in the ratio of currency to total money may reflect the introduction in 1961 of negotiable time certificates of deposit (CDs) by large commercial banks. These instruments, which have expanded rapidly, in all likelihood have dampened somewhat the rate of growth of demand deposits of business firms and state and local governments, the main buyers of CDs. While this would not affect holdings of currency, it would tend to boost the ratio of currency to total money. The reasons underlying the rise in currency per capita are difficult to identify.

### Coins rise rapidly

Much publicized in recent years has been the tremendous increase in coin. In the four years from the end of 1960 through 1964, the amount of coin outstanding increased by about 1 billion dollars—almost as much as in the entire postwar period prior to 1960. There are three major reasons for this upsurge: increasing use of coin-operated vending machines, speculation on the price of silver and a

sharp rise in the number of coin collectors and dealers.

The rise in coin, nevertheless, accounts for only about one-fifth of the overall rise in coin and currency outside of banks since the end of 1960. Besides coin, which increased as a percentage of total coin and currency from 7.4 to 8.6 per cent during this period, only bills of \$100 denomination increased in relative importance. The rise in these bills, however, was offset by a relative decline in \$500 bills and larger so that the importance of \$100 bills and larger remained about constant. The recent uptrend in currency, therefore, probably cannot be attributed primarily to hoarding, which is generally believed to be limited to large denomination bills.

Because the current figures may overstate the amount of currency in active circulation, it is of interest to compare the amount out-

standing with the amount that would be in circulation if the relationship between the two money components—currency and demand deposits—were the same as in the Twenties. In that period, currency was about 18 per cent as large as demand deposits. Under a similar ratio today there would be approximately 22.5 billion dollars of currency outstanding. This is about 12.5 billion dollars less than the 35 billion presently reported.

If wartime hoarding and destruction of currency resulted in the overstatement of actual currency in use over the postwar period, then the apparent upturn in currency demand in

### Coins increase as a proportion of total coin and currency

	Dollar amount December 31		Share of total December 31		Change 1946-
	1946		1946	1964	1964
	(millions)		(per cent)		
Coin	1,361	3,405	4.7	8.6	150
Currency					
\$1	1,029	1,806	3.6	4.6	76
\$2	67	111	0.2	0.3	66
\$5	2,173	2,517	7.5	6.4	16
\$10	6,497	7,543	22.4	19.0	16
\$20	9,310	12,717	32.1	32.1	37
\$50	2,492	3,381	8.7	8.5	36
\$100	4,771	7,590	16.5	19.1	61
\$500	438	248	1.5	0.6	-43
\$1,000					
and ove	r 817	300	2.8	0.8	-63
Total <sup>1</sup>	28,952	39,619	100.0	100.0	37

<sup>1</sup>Includes all coln and currency outside of the United States
Treasury and Federal Reserve Banks.

Note: Figures may not add due to rounding.

1960 may not represent a "true" change in the public's currency demand. Gradual dishoarding (which may have concealed rising currency demand for some time) ended or slowed sharply in 1960, that could explain the apparent change in demand.

Until 1960, currency expanded more slowly than gross national product. Since 1961, the two series have risen at about the same rate. Assuming the effects of wartime factors now have abated, currency may be expected to continue to rise in the immediate years ahead at about the same rate as the growth in national product.