

FEDERAL RESERVE BANK OF NEW YORK



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Contents

The Business Situation	207
The Money and Bond Markets in September ..	210
Commercial Banks and the Government Securities Market	215

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The Business Situation

Economic activity continued to expand as the third quarter ended. The August statistics gave some evidence of a slowing, primarily as a result of reduced production, orders, and shipments in the steel industry, as steel users began to work down their large strike-hedge inventories accumulated earlier in the year. The sharp drop of steel demand during August was reflected in a decline in industrial production. Output in other industries continued at a high level, however, in part due to a large buildup of manufacturers' inventories other than steel. Moreover, most other indicators of business activity remained strong. Retail sales, spurred by steadily increasing personal income and by a reduction in the savings rate, moved substantially higher in July and apparently remained at a high level over the balance of the summer. Record increases in consumer credit have made it possible, at least temporarily, for consumers to absorb the tax surcharge and still increase their retail purchases. At the same time, leading indicators of residential construction are considerably stronger than most observers had expected. With significant effects of the recently enacted fiscal restraint program yet to be felt, inflationary pressures have remained, and the rise in prices has continued little changed from earlier months.

PRODUCTION, INVENTORIES, AND CONSTRUCTION

Industrial output fell sharply in August, largely as a result of rapidly declining steel production. The Federal Reserve Board's index of industrial production dropped 1.6 percentage points to 164.0 per cent of the 1957-59 average. Aside from steel, output in most industrial sectors changed only marginally from very high July levels. Indeed, the overall production index excluding iron and steel rose by a modest 0.3 percentage point. Production of automobiles as well as other consumer goods declined slightly, with offsetting gains recorded in the output of both business and defense equipment.

The August decline in iron and steel production—which amounted to roughly 23 per cent—was severe. After both the 1962 and 1965 contract settlements, it took about four

months for output to decline by comparable magnitudes. Steel production fell again in September but apparently by less than half the August drop. Judging from the depleted order books, the industry's operations will remain at a depressed level for several months. An important factor inhibiting recovery in the domestic steel industry is the heavy volume of orders for foreign steel which were placed in anticipation of a strike.

Manufacturers' inventories surged by \$1 billion in August to a seasonally adjusted level of \$86.9 billion, recording the largest monthly increase of 1968. The gains were spread fairly evenly through most manufacturing sectors, led by the primary and fabricated metals, transportation, food, and textile industries. On the other hand, manufacturers' shipments fell \$1.7 billion to a seasonally adjusted annual rate of \$49.4 billion. Nearly 70 per cent of the decline was accounted for by reduced shipments from steel mills, with only marginal changes in other industries. As a result of the opposite movements in the two series, the ratio of inventories to shipments in manufacturing increased from 1.68 in July to 1.76 in August, an unusually large one-month rise.

New orders received by durable goods manufacturers rose in August by \$200 million to a seasonally adjusted \$26.8 billion. The entire gain was accounted for by sharply higher orders to the producers of transportation equipment, especially aircraft and shipbuilding companies. The orders flow in other durable goods industries was generally off a bit. The primary metals industries showed the largest decline, reflecting the depressed state of the steel industry. Orders for machinery were down about 3½ per cent, although they remained quite high relative to earlier this year.

Private housing starts edged down in August by about 1½ per cent, but remained at a strong seasonally adjusted annual rate of 1.51 million units. The fact that housing starts changed so little from the high July level suggests that the sharp surge in that month was not due to temporary factors. The number of housing units authorized by new building permits also declined slightly in August. Though the number of permit authorizations has been

edging down in recent months, a new data series recently published by the Department of Commerce indicates that there is a very sizable backlog of unused permits.

The drop in housing starts back in May and June prompted a wave of pessimism about the near-term outlook for residential construction. By the same token, the July and August recovery has given rise to a fresh wave of optimism. In view of the well-known volatility of housing starts, such sharp swings in expectations are clearly unwarranted on the basis of starts behavior over a very short time span.

INCOME, CONSUMER DEMAND, AND EMPLOYMENT

Personal income rose by \$5.1 billion in August to a seasonally adjusted annual rate of \$694.3 billion (see Chart I). Although slightly less than the \$5.5 billion gain registered in each of the three preceding months, the August increase was right in line with the average gains of the last fifteen months. In July, wage and salary income

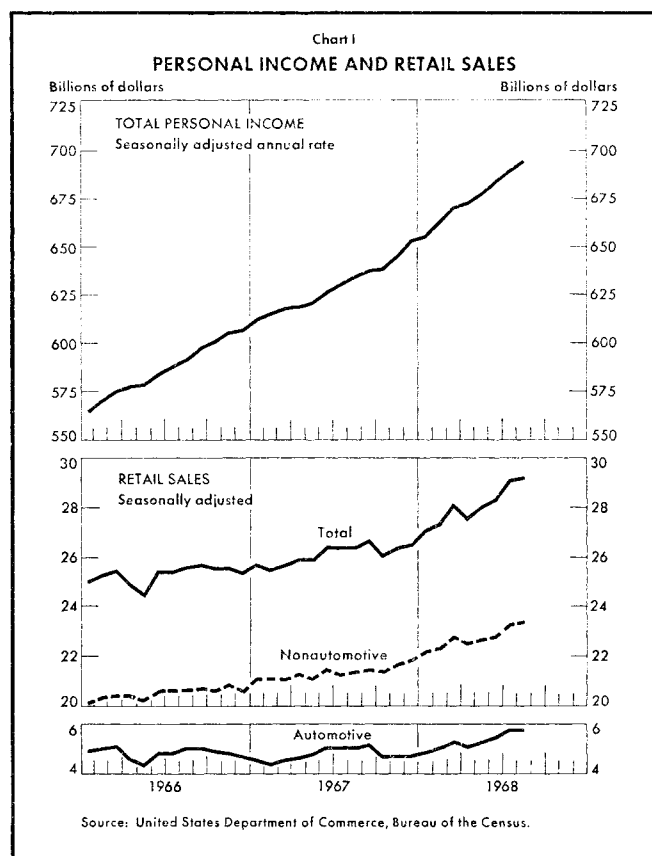
was pushed up by the pay raise for Federal Government employees. The August increase was primarily due to larger payrolls in the nondurables manufacturing and service industries. Other sources of personal income—such as dividends, interest, and transfer payments—rose in August by amounts generally in line with those recorded in the last few months.

Although personal income has continued to grow strongly, the income tax surcharge that became effective in July has of course had the effect of cutting back disposable income. In response to this, consumers have the option of cutting back on consumption or alternatively on savings, which has been accounting for an unusually high share of income during the past year or more. It will be some time before the consumer's reaction to the surtax is clearly established, but so far consumer spending has been remarkably strong. Retail sales edged up by a further 0.3 per cent in August, according to preliminary estimates, following an unexpectedly large July surge. The total dollar volume of durable goods sales was unchanged, while purchases at nondurables outlets were up by 0.4 per cent. Sales of new domestically produced cars fell about 5½ per cent in August to a seasonally adjusted 8.6 million unit sales rate.

Total consumer credit outstanding expanded by a record \$880 million in July and by an extraordinarily large \$1.12 billion in August. The July increase was based on a continued heavy demand for durable goods, particularly automobiles, but also included a sharp upturn in the expansion of noninstalment credit. The August increase was unusual in that all categories of consumer credit expanded at extremely high rates. Since August retail sales increased only fractionally from the high July levels, it would appear that the proportion of consumer purchases made on credit was larger than in preceding months.

Some consumer credit market analysts think that conditions favor a continued rapid expansion of credit: consumers are quite solvent—outstanding debts appear to be low relative to financial assets—and they are devoting a somewhat smaller share of disposable income to instalment repayments than they did in the period of rapid credit expansion in 1965-66. Whether or not consumers continue to avail themselves of this borrowing capacity will have an important bearing on the strength of consumer demand in the months ahead.

The civilian labor force declined in August by about 300,000 persons, as sizable numbers of women and teenagers left the labor force. The unemployment rates for these two groups dropped, returning to the levels which had prevailed last spring. Consequently, the overall unemployment rate fell from 3.7 per cent to 3.5 per cent,

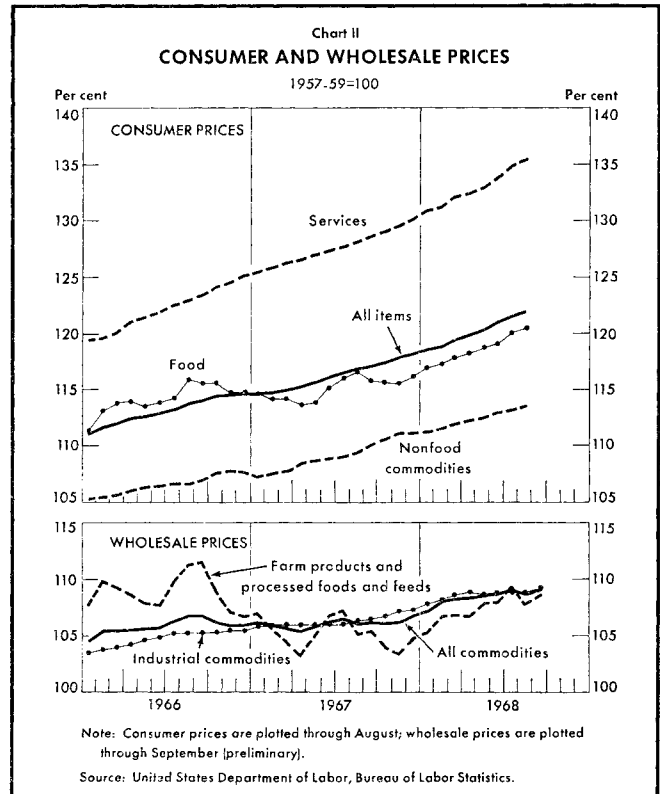


marking the fourth month this year in which that very low rate has been registered. The jobless rate for adult men remained at the very low level of 2.2 per cent. The number of jobs in nonfarm establishments rose by just over 200,000 in the month, led by increased employment in the trade, services, and government sectors.

PRICE AND COST DEVELOPMENTS

The consumer price index rose in August at a 4 per cent annual rate to 121.9 per cent of the 1957-59 base (see Chart II). The price gains were widespread, affecting virtually all commodity and service groups. Housing costs rose at a 6 per cent annual rate, pushed up mainly by higher mortgage interest charges. Prices of food and apparel also increased more rapidly than did the overall index. Medical care costs, however, were up only 0.3 per cent, equaling the smallest monthly increase in over two years.

According to preliminary estimates, the wholesale price index jumped 0.4 percentage point in September, rebounding to the July level of 109.1 per cent of the 1957-59 average. Most of the increase was accounted for by sharply higher prices of farm products and processed foods and feeds, which often fluctuate considerably from month to month. The index of industrial wholesale prices also moved higher, after several months of relative stability. However, this index has been significantly influenced by strike-related movements in copper prices since late last year. The very large drop in the prices of copper and copper-based products since the April labor settlement in the copper industry has held back the overall index, hiding somewhat the continuing upward movement in the wholesale prices of other industrial commodities. Copper prices had returned to pre-strike levels by August, and the September increase in the industrial wholesale price index reflected, in part, the reemergence of the underlying up-



ward trends in the prices of many industrial commodities.

Labor costs per unit of output jumped 1.6 per cent in August, the largest monthly increase since January 1967. The combination of increased labor costs in manufacturing and a sharp decline in productivity raised the index of unit labor costs in manufacturing to 112.0 per cent of the 1957-59 average. The productivity decline was mostly the result of the substantial drop in steel output without a commensurate reduction of hours worked in the industry.

The Money and Bond Markets in September

The capital markets functioned effectively in September, distributing to investors a substantial share of the overhang of unsold securities on hand when the month opened and a sizable volume of new issues. Interest rates in the several sectors of the bond market continued to rise in the first part of the month, but then moved lower or stabilized over the remainder of the period. Market participants, like most other observers of the economy, found the economic indicators suggesting greater strength than they had expected, but most continued to believe that fiscal restraint would slow the pace of activity in the months ahead. Moreover, at midmonth, Government securities dealers tended to take heart from the decline in day-to-day money rates. Also at work was widespread expectation that major commercial banks would reduce their prime lending rate once mid-September seasonal borrowing needs had been met. On September 24, after action earlier by a few smaller banks, a large New York City bank lowered its prime rate by $\frac{1}{2}$ percentage point to 6 per cent. Other major banks across the country subsequently took action, but limited their reduction to $\frac{1}{4}$ percentage point. Reflecting some disappointment in the market over the size of the prime rate reduction and the strengthened business outlook, bond prices declined during the last few days of the month.

Money market rates edged higher early in September but moved irregularly lower thereafter. The Federal funds rate fluctuated widely around $5\frac{3}{4}$ per cent during the month. In contrast, this rate had held generally within a narrow range of $5\frac{3}{4}$ to 6 per cent in the latter half of August after the reduction in Federal Reserve discount rates to $5\frac{1}{4}$ per cent began. New York City bank lending rates on new overnight loans against Government securities collateral rose briefly in early September to a $6\frac{1}{2}$ to $6\frac{3}{4}$ per cent range, but then declined to about $6\frac{1}{4}$ per cent. Treasury bill rates rose during the first third of the month and declined irregularly thereafter. The bid rate on three-month bills attained a high of 5.30 per cent around September 10 but fell back to close the month at 5.16 per cent. During the latter half of September, rates on prime commercial paper and directly placed finance company paper were lowered by $\frac{1}{8}$ percentage point.

BANK RESERVES AND THE MONEY MARKET

The money market operated smoothly during September, despite extraordinary pressures on the major banks, uncertainties resulting from a shift to new reserve accounting procedures, and the usual seasonal churning of funds in connection with quarterly corporate dividend and tax payments. Net reserve availability at member banks expanded during the month, both in reflection of the difficulties of reserve management in the face of abnormally large swings in reserve factors and in accommodation of the period's special strains. Member bank borrowings from the Reserve Banks were little changed, averaging \$492 million (see Table I) as compared with \$577 million in August. Heavy flows of Federal funds occurred on most days as major day-to-day reserve swings were accommodated.

System open market operations were presented with unusual problems during September because of large swings in member bank reserve positions imposed by operating factors. After the usual decline in reserves brought about by the outflow of cash to the public over the Labor Day holiday, reserves mounted sharply as a result of an \$800 million decline in average Treasury balances at the Reserve Banks in the week ended on September 11 and a strong increase in float and gains from other factors in the week ended on September 18. Subsequently, reserves were heavily drained by a rebuilding of Treasury balances in the last statement week of the month. In view of the short-lived nature of the reserve bulge, System open market operations made extensive use of matched sale-purchase transactions to absorb reserves temporarily. A maximum of \$1.8 billion of these transactions, whereby securities are sold and simultaneously repurchased for delivery one or more days later, was outstanding on September 18.

The forty-six banks in the major money centers came under very heavy reserve pressures during the month. In the first statement week, these banks had a relatively high average basic reserve deficit of \$2.5 billion (see Table II), reflecting in part substantial loans to Gov-

Table I
FACTORS TENDING TO INCREASE OR DECREASE
MEMBER BANK RESERVES, SEPTEMBER 1968

In millions of dollars; (+) denotes increase,
(-) decrease in excess reserves

Factors	Changes in daily averages— week ended on				Net changes
	Sept. 4	Sept. 11	Sept. 18	Sept. 25	
	“Market” factors				
Member bank required reserves	+ 16	- 59	+ 59	- 59	- 43
Operating transactions (subtotal)	- 303	+ 780	+ 691	- 400	+ 768
Federal Reserve float	- 22	+ 205	+ 270	+ 17	+ 470
Treasury operations*	+ 150	+ 801	- 62	- 659	+ 230
Gold and foreign account	- 15	+ 6	+ 6	+ 5	+ 2
Currency outside banks	- 350	- 285	+ 143	+ 217	- 275
Other Federal Reserve accounts (net)†	- 63	+ 52	+ 333	+ 21	+ 343
Total “market” factors	- 287	+ 721	+ 750	- 459	+ 725
Direct Federal Reserve credit transactions					
Open market instruments					
Outright holdings:					
Government securities	+ 312	- 647	- 693	+ 214	- 819
Bankers’ acceptances	- 2	-	- 1	- 1	- 4
Special certificates	-	+ 13	- 13	-	-
Repurchase agreements:					
Government securities	-	-	-	-	-
Bankers’ acceptances	-	-	-	-	-
Federal agency obligations	-	-	-	-	-
Member bank borrowings	+ 80	+ 180	- 229	+ 70	+ 101
Other loans, discounts, and advances	-	-	-	-	-
Total	+ 392	- 455	- 941	+ 284	- 720
Excess reserves	+ 105	+ 266	- 191	- 175	+ 5

	Daily average levels				
	Sept. 4	Sept. 11	Sept. 18	Sept. 25	
Member bank:					
Total reserves, including vault cash.....	25,871	26,196	25,946	25,839	25,961‡
Required reserves	25,599	25,658	25,599	25,658	25,629‡
Excess reserves	272	538	347	172	332‡
Borrowings	454	634	405	475	492‡
Free (+) or net borrowed (-) reserves	- 182	- 96	- 59	- 303	- 160‡
Nonborrowed reserves	25,417	25,562	25,541	25,355	25,469‡
Net carry-over, excess or deficit (-)§.....	-	-	-	115	-

	Changes in Wednesday levels				
	Sept. 4	Sept. 11	Sept. 18	Sept. 25	
System Account holdings of Government securities maturing in:					
Less than one year	+ 110	- 1,844	- 557	+ 2,010	- 281
More than one year	+ 68	-	-	-	+ 68
Total	+ 178	- 1,844	- 557	+ 2,010	- 213

Note: Because of rounding, figures do not necessarily add to totals.
* Includes changes in Treasury currency and cash.
† Includes assets denominated in foreign currencies.
‡ Average of four weeks ended on September 25, 1968.
§ Not included in average levels of excess or free reserves.

Table II
RESERVE POSITIONS OF MAJOR RESERVE CITY BANKS
SEPTEMBER 1968

In millions of dollars

Factors affecting basic reserve positions	Daily averages—week ended on				Averages of four weeks ended on Sept. 25
	Sept. 4	Sept. 11	Sept. 18	Sept. 25	
Eight banks in New York City					
Reserve excess or deficiency(-) *	- 25	129	19	- 14	27
Less borrowings from Reserve Banks	104	225	86	84	125
Less net interbank Federal funds purchases or sales(-)	976	1,478	1,416	1,123	1,248
Gross purchases	1,495	1,781	1,905	1,635	1,704
Gross sales	519	302	490	512	456
Equals net basic reserve surplus or deficit(-)	- 1,105	- 1,575	- 1,483	- 1,221	- 1,346
Net loans to Government securities dealers	1,094	1,104	1,340	1,303	1,210
Net carry-over, excess or deficit(-)†	-	-	-	22	-

Thirty-eight banks outside New York City					
Reserve excess or deficiency(-) *	38	84	- 1	5	32
Less borrowings from Reserve Banks	90	201	128	213	158
Less net interbank Federal funds purchases or sales(-)	1,322	2,095	2,533	2,235	2,046
Gross purchases	2,636	3,117	3,562	3,166	3,120
Gross sales	1,314	1,022	1,029	931	1,074
Equals net basic reserve surplus or deficit(-)	- 1,374	- 2,211	- 2,661	- 2,442	- 2,172
Net loans to Government securities dealers	929	1,092	1,215	1,006	1,061
Net carry-over, excess or deficit(-)†	-	-	-	4	-

Note: Because of rounding, figures do not necessarily add to totals.
* For statement weeks prior to the week ended on September 25, reserves held after all adjustments applicable to the reporting period less required reserves and carry-over reserve deficiencies.
† Not reflected in data above.

Table III
AVERAGE ISSUING RATES*
AT REGULAR TREASURY BILL AUCTIONS

In per cent

Maturities	Weekly auction dates—September 1968			
	Sept. 9	Sept. 16	Sept. 23	Sept. 30
Three-month	5.246	5.218	5.151	5.182
Six-month	5.277	5.248	5.230	5.283
Monthly auction dates—July-September 1968				
	July 24	Aug. 27	Sept. 24	
Nine-month	5.342	5.245	5.202	
One-year	5.309	5.151	5.108	

* Interest rates on bills are quoted in terms of a 360-day year, with the discounts from par as the return on the face amount of the bills payable at maturity. Bond yield equivalents, related to the amount actually invested, would be slightly higher.

ernment securities dealers and continued acquisitions of investments apparently in the expectation of lower interest rates during the month ahead. Seasonal credit demands and a rapid rundown of Treasury Tax and Loan Account balances before the September 16 tax date led to an increase in the basic deficit to \$4.1 billion in the week ended on September 18. This was a considerably larger deterioration in position than normal for the season. Subsequently, the rebuilding of Government deposits at the major banks, a decline in loans, and other seasonal factors led to a marked relaxation of pressure. By the end of the month, the daily basic reserve deficit of the forty-six banks had fallen sharply.

The major money market banks managed their reserve positions cautiously during the September 11 statement week. Confronted with a sharp increase in their basic reserve deficit to an average of \$3.8 billion for the week, they bid heavily in the Federal funds market and borrowed in volume at the "discount window". Federal funds traded predominantly at 6 per cent during the early part of the week, but transactions took place at rates as low as 2 per cent on Wednesday when cumulative excesses flooded into the market at the close of the last biweekly period for "country" banks.

The initiation of new reserve accounting procedures by the Federal Reserve System in the week ended on September 18 exerted a significant influence on the reserves and behavior of banks during the month. Under the new procedures, all member banks are required to meet their daily average reserve requirements on a weekly basis, whereas country banks had previously had a biweekly statement period. In addition, beginning in that week the reserve requirements of all banks are based on average deposits two weeks earlier rather than on current deposits. The vault cash component of the banks' total reserves is recorded with the same two-week lag. An additional element of the new system permits member banks to carry forward into the following reserve week excesses or deficits up to a limit of 2 per cent of average required reserves.

The transition to the new accounting procedures in the September 18 statement week compounded the uncertainties normally present in the banking system around the corporate tax date. As the average basic deficit of the forty-six banks mounted to a record high, the major banks bid heavily for funds and also borrowed from the Reserve Banks. Nevertheless, the money market remained relatively steady, with Federal funds trading primarily at $5\frac{3}{4}$ per cent.

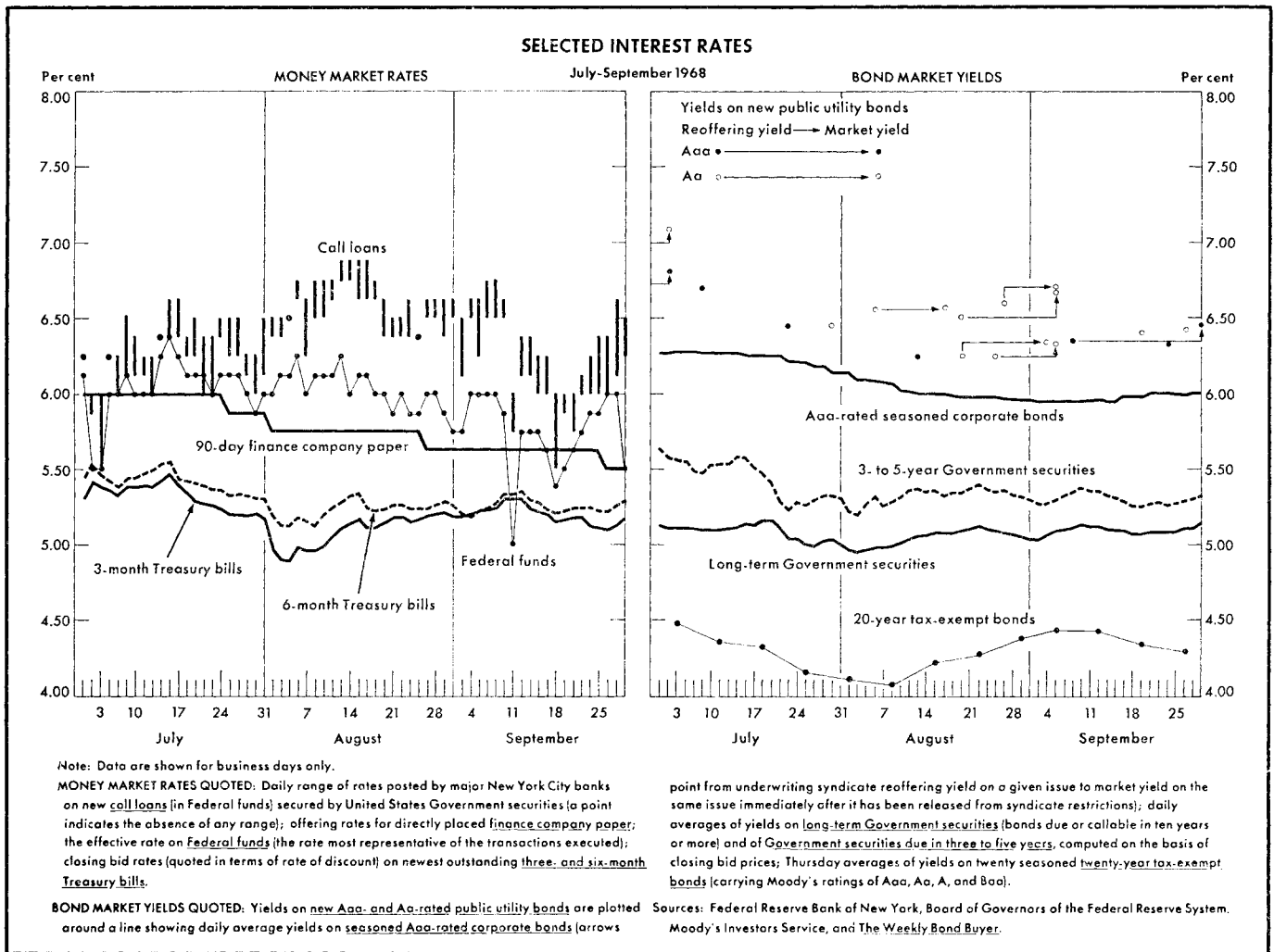
In the final statement week of the month, the money market banks experienced a moderate improvement in their basic reserve positions. At the same time, they were able to carry over about \$25 million of average excess reserves

from the preceding week under the new reserve accounting rules. In consequence, the banks appeared willing to accumulate sizable reserve deficiencies through much of the week, contributing to a somewhat more comfortable tone in the Federal funds market. However, when these banks scrambled to cover their deficiencies on the final day, the Federal funds rate rose as high as $6\frac{1}{4}$ per cent, and member bank borrowings from the Federal Reserve bulged to \$1.6 billion. The experience of the first two weeks under the new procedures suggests that reserve city banks were able to economize considerably on excess reserves, but that country banks were less quick in adapting to obtain the full benefits of the new system.

The reductions in rates on commercial and finance company paper, which occurred on September 18 and 26, respectively, brought the rate on prime four- to six-month commercial paper to $5\frac{3}{4}$ per cent and that on directly placed finance company paper maturing in sixty days or more to $5\frac{1}{2}$ per cent. Offering rates posted by the New York City banks on new large-denomination negotiable certificates of deposit (C/D's) were largely unchanged during September at levels well below Regulation Q ceilings. At these rates, the weekly reporting banks experienced a mild net erosion of their C/D liabilities, amounting to \$81 million for the four statement weeks ended on September 25. This loss of funds was more than compensated for by an increase in liabilities to the banks' own foreign branches. The apparent preference of the banks for Euro-dollars was related in part to the easing in rates on these funds during most of September.

THE GOVERNMENT SECURITIES MARKET

Prices of Treasury coupon securities drifted lower during the first part of September, but recovered before the middle of the month when the prevailing mood over the future trend of interest rates shifted from pessimism to optimism. Nevertheless, caution again emerged near the end of the period, as it became evident that the economy remained more robust than had been expected by many observers. At the beginning of the month, market opinion seemed inclined to the view that further declines in yields would be dependent upon definite signs of slackening in business activity. With a majority of economic indicators pointing to a continued strong upward movement of the economy, prices of coupon securities came under downward pressure. Additional price depressants in the Treasury market came from the unrelieved congestion in the markets for corporate and tax-exempt debt issues and from an announcement at the start of the month of a sizable financing by the International Bank for Recon-



struction and Development (IBRD) scheduled for later in September. Isolated instances of reductions in prime lending rates of commercial banks outside New York City had no market effect, since these moves were widely regarded as premature. In the climate that prevailed, investors generally preferred to sit on the sidelines awaiting further interest rate developments, and trading was largely professional.

Toward midmonth, market sentiment was buoyed by the publication of weekly reserve statistics, revealing a substantial reduction in the level of net borrowed reserves during the September 11 statement week. This event sparked a technical price rally which generated a revival of investment demand, mainly for intermediate-term coupon securities. Encouraged by this demand, and also by

some temporary easing of the money market and a reduction in their financing costs, dealers were reluctant to reduce their own holdings of coupon issues. Subsequently, the upward price movement was given further impetus by the bullish content of market advisory letters and by a marked improvement in the condition of the corporate and tax-exempt bond markets. Added factors in the market strength were the successful distribution of the new IBRD issue, the lowering of the British bank rate, and the report of an August decline in industrial production, all of which occurred soon after midmonth. Announcements of a reduction in the prime rate at major New York City banks on September 24 and 25 had little net impact on the market, since rumors concerning this move had circulated widely after midmonth and the emergence of a

split rate proved a disappointment to market participants. As the month drew to a close, market enthusiasm tended to be dampened by fresh evidence of continuing strong inflationary pressures in the economy. Prices of intermediate coupon maturities, in strong demand around mid-month, closed $\frac{1}{8}$ point lower to $\frac{1}{4}$ point higher for the month, while long-term issues closed about $1\frac{1}{4}$ points lower.

Market rates on Treasury bills moved in a pattern similar to that of yields on coupon securities during September, rising early in the month and declining thereafter. Throughout the period, there was a strong demand for issues maturing in the tax months of December 1968 and March 1969. The relative scarcity of these maturities was gradually relieved over the month, as the supply increased with each regular weekly auction of three- and six-month bills. Bidding in these auctions was generally quite aggressive. In the first auction of the month, the three- and six-month bills were awarded at average issuing rates of 5.25 and 5.28 per cent, respectively, 5 and 3 basis points higher than rates established in the preceding auction (advanced to Friday, August 30, because of the Labor Day holiday). In two subsequent auctions, average issuing rates also moved lower, but in the final weekly auction rates rose slightly (see Table III).

Around midmonth, as a better atmosphere began to emerge in the Government coupon market, the Treasury bill sector was given an added lift by a sharp easing of money market conditions, which spurred professional buying, and by a contraseasonal tax-period investment demand. Toward the latter part of the month, commercial banks made purchases prior to the September 30 statement publishing date. On balance for the month, market rates on outstanding Treasury bills changed only slightly, declining to 5.16 per cent for the three-month issue and rising to 5.28 per cent for the six-month issue.

OTHER SECURITIES MARKETS

During the first half of September, the corporate and tax-exempt bond markets labored under heavy pressure, reflecting the carry-over of large unsold balances of August debt offerings and a continuing heavy volume of new

financing. The tax-exempt market was in a particularly poor technical position as the month opened, with the Blue List of dealers' advertised inventories at a near-record high of \$794 million. Despite the rapid flow of new offerings and the release of a substantial volume of recently floated securities through syndicate terminations, dealers succeeded in reducing inventories steadily over the first half of the month. Price concessions on older issues were deep, however, and new issues were marketed at a higher pattern of reoffering yields. The relatively large number of syndicate terminations during the period resulted in upward yield adjustments of as much as 30 basis points on tax-exempt securities and 16 basis points on corporates. One corporate termination occurred on September 17, when the market felt the impact of the highly successful sale of long-term bonds by the IBRD. The \$250 million issue, carrying $12\frac{1}{2}$ -year call protection, sold out rapidly at a yield of 6.435 per cent, 11 basis points lower than that on the last previous offering by the same borrower in late March but somewhat higher than many observers had expected.

At mid-September, the six-week decline in prices of tax-exempt securities came to a halt, and pressures on the corporate market also lifted, though less dramatically. Rumors of an impending decline in the prime lending rate in New York City, which began to circulate around midmonth, had a relatively greater effect on tax-exempt securities, generating an active demand from commercial banks and dealers alike. Trading in tax exempts remained brisk over much of the month, and the larger part of the month's heavy new offerings was distributed without difficulty at a moderately reduced level of reoffering yields. After declining to a September low of \$584 million, the Blue List rose to close the month at \$663 million, still well below its starting level. *The Weekly Bond Buyer's* average yield on twenty seasoned tax-exempt issues (carrying ratings from Aaa to Baa) declined from a monthly high of 4.44 per cent in early September to 4.30 per cent near the month end (see chart on page 213). In contrast, yields on seasoned corporate issues registered an increase for the month, the average yield on Moody's Aaa-rated bonds closing at 6.00 per cent as compared with 5.96 per cent at the end of August.

Commercial Banks and the Government Securities Market

By JOSEPH SCHERER*

Commercial banks are a dominant force in the market for United States Government securities. They are still the largest single ownership group, even though their holdings have declined in the postwar years, both absolutely and as a percentage of the total Federal debt outstanding. And, aside from dealers and brokers, banks are also the heaviest participants in the Government securities market, buying and selling for their own account and as agents for their customers. Moreover, the United States Government securities market is itself the largest and most active financial market in the country. For instance, in 1967 the dollar value of total trading in Government securities far exceeded the volume of trading on the registered stock exchanges.

Marketable Government obligations serve a variety of purposes in the portfolios of commercial banks. Most obviously, these investments are an important source of income. In 1967, for example, the interest earned by commercial banks on their portfolios of Government securities exceeded \$2½ billion, almost 14 per cent of bank earnings from total loans and investments. In addition to providing income, Government securities—especially short and intermediate maturities—provide liquidity because they are the most readily marketable of all fixed-income securities. Consequently, the United States Government securities market is a principal avenue by which banks adjust their reserve positions. Moreover, as a matter of convenience, commercial bank borrowings from the Federal Reserve “discount window” in recent years have been secured chiefly by Government obligations rather than by rediscounting commercial paper. Government securities are also used as a temporary haven for funds in order to secure income at times when demand for bank loans is low, either for seasonal or cyclical reasons. Finally, they serve

as collateral to secure governmental (Federal, state, and local) bank deposits, which typically require such protection. Over time, of course, there is considerable shifting in the relative importance of each of these motives for purchasing and holding United States Government securities. Banks, of course, also invest and trade in these securities for their trust accounts, but this article deals only with banks’ direct holdings.

In managing its portfolio of Government securities to serve these various objectives, the individual bank must constantly reassess its position and decide what avenues, singly or in combination, it will choose to achieve its objectives. Thus, the passage of time automatically shortens the maturity composition of a bank’s holdings without any overt action by the bank. On the other hand, decisions must be made, and implemented, if a bank wishes to acquire new issues offered for cash and exchange by the Treasury. Finally, a bank must weigh the relative attractiveness of making adjustments in its portfolio through the purchase or sale of outstanding issues in the secondary market. This article does not explore the decision-making process of an individual bank; rather it is concerned with explaining the observed variations in the holdings of United States Government securities of the commercial banking system as a whole.

Unfortunately, the standard published data on bank holdings of Government securities are inadequate for properly identifying the factors which, in the aggregate, explain the changes in bank holdings. A retabulation of the available data, however, makes it possible to assess the relative importance of new Treasury borrowings, of the progression of outstanding issues toward maturity, and of secondary market activity of commercial banks on changes in the level of total bank holdings and in the level of holdings in particular maturity classes. Failure to account explicitly for these influences—in particular the passage of time—may introduce significant errors.

Some of the highlights of this study are briefly summarized here. The most important single factor influenc-

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ing the *level* of total bank holdings of Government securities since 1951, as well as holdings in broad maturity sectors, has been bank acquisition of new securities in Treasury financings in both cash operations and exchange operations. Acquisition of new issues has averaged about \$8 billion per quarter. Second in importance has been the passage of time, which has operated to reduce holdings by about \$5½ billion per quarter on the average. Third in importance is net market transactions of outstanding issues, which have averaged about \$2 billion of sales per quarter. The relative importance of these three factors in each of the broad maturity classifications—short, intermediate, and long—is approximately the same, although the dollar magnitudes drop off sharply in the intermediate and long sectors as compared with the short sector.

Net market transactions (purchases less sales) typically have been negative; that is, on balance, commercial banks sell more Government securities in the secondary market than they buy. Several factors help explain this statistical finding, including the special tax position of banks, the underwriting role played by banks in some Treasury operations, and the tendency of banks to liquidate holdings of Governments to undertake other bank credit activities. The timing and magnitude of bank sales of Government securities is, of course, also influenced by market conditions as they are affected by other participants in the market, including the Federal Reserve System's conduct of open market operations. However, the overall result is due entirely to net selling in the short- and intermediate-term sectors. Net market transactions in the long maturity sector, by contrast, typically have been positive; that is, on balance, the banking system buys outstanding issues over five years to maturity. The different pattern in the long sector probably stems from the relative infrequency of new issues in this maturity sector, so that banks must acquire securities in the secondary market to maintain a balanced portfolio as the erosion of time reduces their holdings in this area. In addition, the special tax position of the banks probably provides an incentive to acquire those longer issues in the market which are selling appreciably under par.

Among the three maturity classes (short, intermediate, and long) the most regular cycle-related pattern—an inverse relationship—is found in the long maturity sector, where holdings increase during the recession period and are reduced during the recovery. This pattern has been modified since the advance refunding technique was introduced in 1960. The reduction in holdings of long-term securities in the recovery period stems primarily from the movement of large amounts into the intermediate maturity classification as time passes, rather than from market sales out of banks' portfolios.

CYCLICAL PATTERN OF COMMERCIAL BANK HOLDINGS OF GOVERNMENT SECURITIES

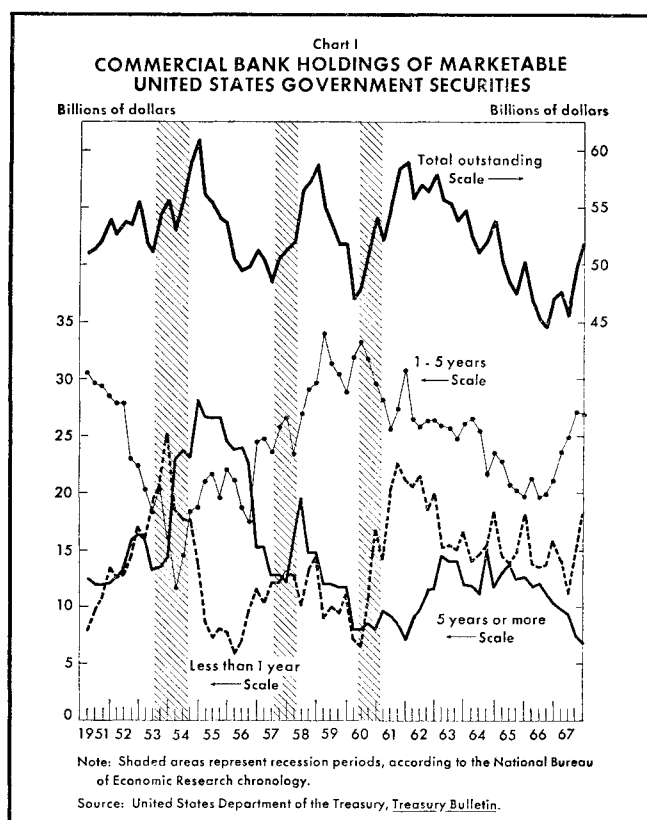
PATTERNS BASED ON PUBLISHED DATA. For banks included in the Treasury's Survey of Ownership,¹ there has been no strong *secular* trend in total commercial bank holdings of Government securities in recent years. Since 1954, holdings have fluctuated within a band some \$14 billion wide, ranging from \$45 billion to \$59 billion (see Chart I). Fluctuations within this band, however, display a pronounced cyclical pattern, with total holdings attaining a peak about two or three quarters after the cyclical troughs and bottoming out approximately at the cyclical peaks.

Total bank holdings of Government securities tend to trace a cyclical path roughly the inverse of that traced by bank loans. In periods of recession when loan demand is weak relative to deposit flows, banks seek other income-producing uses for their available funds and therefore add to their investment portfolios, particularly United States Government securities. Then, when business activity picks up and loan demands grow stronger, holdings of Government securities are partially liquidated to provide additional funds for financing the growing demand for loans.

To pinpoint more precisely the avenues whereby these cyclical adjustments take place, it is necessary to examine changes in the components of total bank holdings. The conventional grouping of Government securities is by years to maturity in three categories—less than one year, one to five years, and five years or more—as shown in Chart I. While these series provide valuable information, at times they are subject to misinterpretation. In subsequent sections, the interpretation of these data will be discussed, and new data will be presented to picture more accurately some of the factors that influence the level of commercial bank holdings of Government securities.

The component displaying the strongest cycle-related pattern, again an inverse relationship to business activity, is the long-term maturity sector (five years or more to maturity) in which holdings increase for about four quarters after each cyclical peak, and then as the next cyclical peak is approached bank holdings of these long-term

¹ Although the survey includes only about 6,000 out of an approximate 14,000 commercial banks, the marketable Government securities held by these reporting banks represent about 90 per cent of the total held by commercial banks. Consequently, the survey data are a good proxy for the holdings of the entire commercial banking system.



Government securities decline. Two factors work in tandem to create this pattern. First, during the postwar period the Treasury confined most of its offerings of long-term securities to recession periods, because at that time the supply of long-term funds seeking investment outlets was large as compared with the demand for such funds. Long-term rates tend to be low, thus minimizing the longer run cost of carrying the debt. Second, as already noted, during periods of recession banks are eager to find investment outlets for idle funds, since the demand for bank loans is relatively slack at such a time. While this pattern has been modified to some extent with the introduction by the Treasury of the advance refunding technique in 1960, the basic contour remains essentially unchanged.²

A problem arises, however, in using the standard series for the outstanding long-term securities, because a reduc-

tion in the amount of bank holdings of such securities is often interpreted as a *market* sale of these securities when in fact this is not the reason for the decline in holdings. Some observers of this cyclical pattern of increase in bank holdings of long-term Governments in periods of recession and of reduction of holdings as a cyclical peak approaches have wondered whether such behavior is not questionable from a profit-maximizing point of view. This view, that banks frequently liquidate large amounts of long-term Government securities at a loss to finance their loan expansion, is examined critically in a later section.

The cyclical pattern of holdings becomes less regular when bank holdings of Government obligations in other than the long maturity sector are examined. For the years just prior to the cyclical peak in 1957, the decline in Government securities, which was concentrated mainly in the long sector, appears to have been partially offset by additions to bank holdings in the intermediate maturity sector (one to five years to maturity) and to a lesser extent in the short maturity sector (less than one year to maturity). On the other hand, in the years just prior to the 1960 cyclical peak, bank liquidation of Government securities was concentrated about equally in the short sector and the long sector, while the intermediate sector showed substantial, though irregular, increases. In summary, then, only the long maturity category regularly shows consistent declines as the cyclical peak is approached (except for the period when advance refundings have modified the pattern for this maturity sector).

What lies behind this diversity of movement among the three maturity sectors? In part, different patterns reflect the special influences in each maturity sector as, for example, those already mentioned for the long maturity sector. But these special influences do not account for all the differences. Some of the alleged differences can be attributed to the data which are not always in the appropriate form for the problem under investigation.

Bank holdings of Government securities, as shown on Chart I, give the *level* of bank holdings of these securities. But changes in the levels for any maturity sector, or for the total, do not necessarily reflect market activity, i.e., purchases and sales of outstanding securities. To analyze properly the changes in the level of holdings in each of the standard maturity classifications, data in the Treasury's Survey of Ownership must be reclassified to separate three different factors: (1) changes due to purchases and sales of *outstanding* issues, (2) changes due to new issues acquired through Treasury cash financings and exchange operations, and (3) changes due to the inevitable impact of the passage of time which moves outstanding issues into ever-shorter maturity classifications

² In an advance refunding, the Treasury offers owners of a given issue which still has some time to run the opportunity to exchange their holdings for securities of longer maturity.

until the issues reach final maturity and are redeemed. Such a reclassification of the available data can be made by tracing what happens over time to each individual issue as reported in the Treasury's Survey of Ownership.

PATTERNS BASED ON RECLASSIFIED DATA. The results of such a reclassification of the data for total holdings are summarized in Chart II. Almost invariably, the acquisition of new issues in Treasury financings for cash and exchange has constituted the largest single factor affecting the size of bank holdings. In most quarters, purchases of new issues (for cash and exchange) run between \$6 billion to \$10 billion; occasionally, such purchases have totaled \$14 billion. To a considerable extent, purchases on such a scale are inevitable, even when the banking system is reducing its total holdings, because the passage of time carries large blocks of securities to final maturity and banks generally do not want to reduce their holdings by the full amount of the maturing issues.

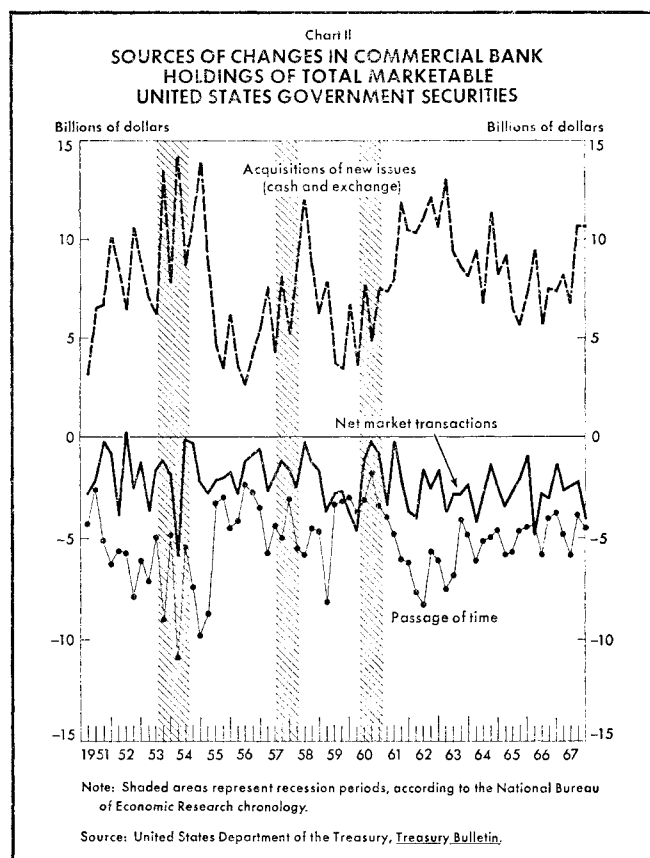
Runoffs of issues due to the passage of time, on the

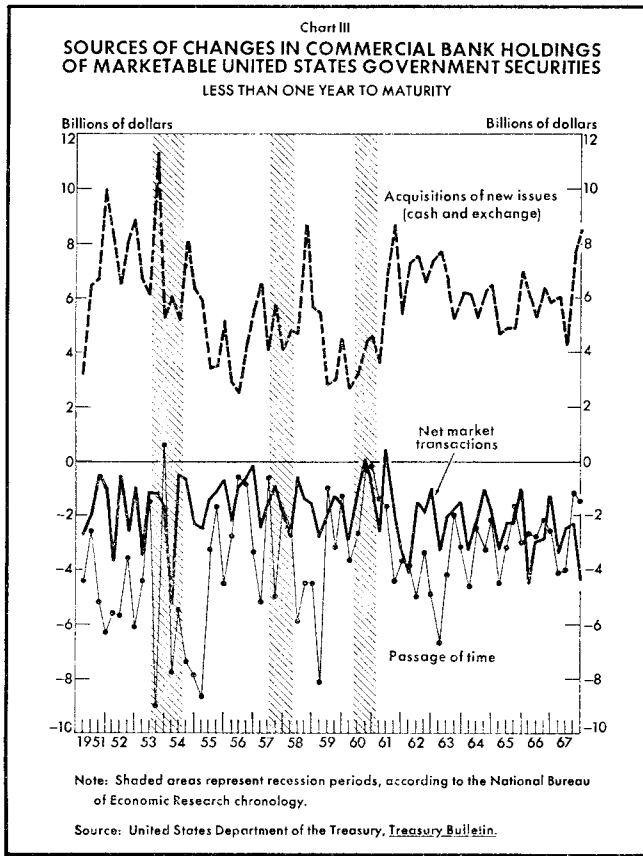
other hand, generally range from \$4 billion to \$8 billion per quarter. These include, not only Treasury bill issues, but also large amounts of coupon issues which have reached maturity. Finally, market sales of outstandings usually are greater than purchases, so that *net* secondary market activity (purchases less sales) is almost always negative—that is, on balance, the banking system is almost always selling in the market for its own account. Such selling generally ranged between \$1 billion to \$3 billion per quarter prior to 1958 and from \$2 billion to \$4 billion from 1958-67.

In a broad overview, then, the portfolio of Government obligations is continuously subject to large-scale reductions in size and to marked shortening of the maturity structure because of the automatic erosion stemming from the passage of time. New Treasury financings and the passage of time frequently account for a larger share of the changes in the level of bank holdings than secondary market purchases and sales. Nonetheless, market transactions play a critical role in the management of the portfolio. The ready marketability of Government securities provides the most flexible avenue for portfolio adjustments to meet the varying needs of banks responding to their own changing situations—changes which are related not only to local influences but also to developments in the economy as a whole, including monetary policy developments. Without an efficient secondary market in Government securities, the role of these securities as a liquidity instrument would be appreciably reduced.

Short maturity sector. A complex picture emerges from an examination of specific maturity sectors. The patterns in the short maturity sector (less than one year to maturity) are generally similar to those already described for the total, except that the dollar totals in each category are somewhat smaller than those for the same category of total holdings. Acquisition of new issues in Treasury financings—cash and exchange—is the largest single variable (see Chart III). Activity in bill issues is always heavy, even in periods when total holdings of Governments are unchanged, or declining, because large amounts of bills are maturing every week. Banks are likely to replace maturing bills, at least to some extent, by new purchases in the bill auctions. During most of the period since 1950, purchases of new short-term issues for cash and in exchanges have ranged between \$4 billion to \$8 billion per quarter, although at times they have fallen as low as \$3 billion and risen as high as \$11 billion. On the other hand, the banking system, on balance, sells more short-term securities in the secondary market than it buys, generally supplying (net) from \$1 billion to \$3 billion per quarter.

Passage of time in the short maturity sector typically



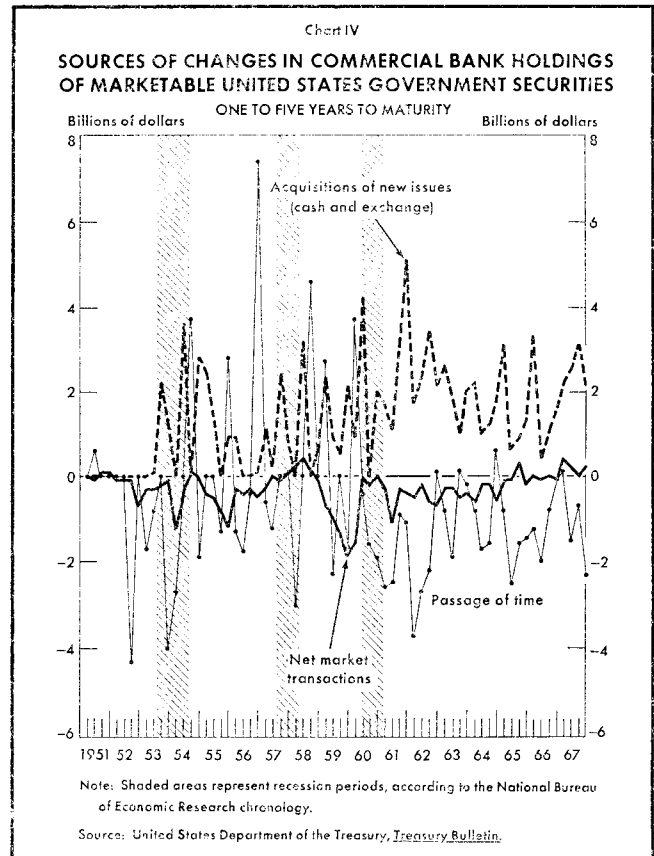


operates to run off securities in amounts ranging from \$1 billion to \$5 billion per quarter, although the actual spread varies from a gain of \$½ billion to a runoff of more than \$9 billion. The wide variability of passage of time, with fairly wide fluctuations from one quarter to the next, stems from two opposing forces at work in this sector. There are always large amounts of securities reaching maturity, both bills and coupon issues; but as time passes there are also large amounts of securities dropping into this maturity sector from the intermediate maturity sector (one to five years to maturity). Occasionally, therefore, passage of time actually adds to the total holdings in the short sector because the drop-ins exceed the runoffs. Thus, specific allowance must be made for the impact of the passage of time if all the important factors at work influencing the size and maturity distribution of these holdings are to be identified. This factor, however, is generally more important for analyzing the changes taking place in the longer maturity sectors, as noted below.

Intermediate maturity sector. In the intermediate

maturity sector, as in the short maturity sector, passage of time is two directional: that is, large blocks of issues periodically fall out of the long maturity sector adding to the intermediate sector, while at the other end large blocks of intermediate issues move into the short sector. The interplay of these two forces in the intermediate sector produces results much more varied from those shown in the short sector. Passage of time has a very irregular influence, at times adding and at times subtracting large or small amounts (see Chart IV). Passage of time usually ranges from losses to the intermediate sector of more than \$4 billion to gains of the same amount. In one instance, gains almost reached \$7.5 billion. A change of \$4 billion from one quarter to the next is not at all unusual. Indeed, in many quarters passage of time is the most important single influence on the level of intermediate-term holdings.

Passage of time also accounts for much of the apparent anomaly noted earlier—that, even though *total* bank holdings of Government securities were declining as the 1957 cyclical peak was approaching the normal pattern for total



holdings over the cycle, bank holdings of intermediate Government securities were increasing. The increase in holdings of intermediate securities at that time stemmed from the unusually large block—almost \$7.5 billion—of long-term securities which dropped into the intermediate sector just a few quarters before the 1957 peak.

It is to be expected that secondary market activity in the intermediate sector should run considerably smaller than in the short sector. Similar to the short maturity sector, purchases of outstanding issues are typically much smaller than sales, so that net market activity is almost always on the selling side and generally amounts to less than \$1 billion per quarter. However, net market sales ranged between \$1 billion to \$2 billion during 1959 and 1960, coinciding with the period when total outstandings in this maturity sector were at a peak.

Long maturity sector. The long maturity sector often attracts much attention because the cyclical pattern of total bank holdings of Government securities seems to be reflected most strongly and regularly in this sector. It was noted earlier that banks increase their holdings of long Government securities for several quarters after the cyclical peak and then reduce their holdings during the business expansion. As shown in Chart V, the increase in holdings occurs primarily through the acquisition of new issues, either for cash or exchange, via Treasury financings, followed by long periods of inactivity during which the Treasury offers no further new issues in this maturity category (again, with the exception of the period since the advance refunding technique was introduced).

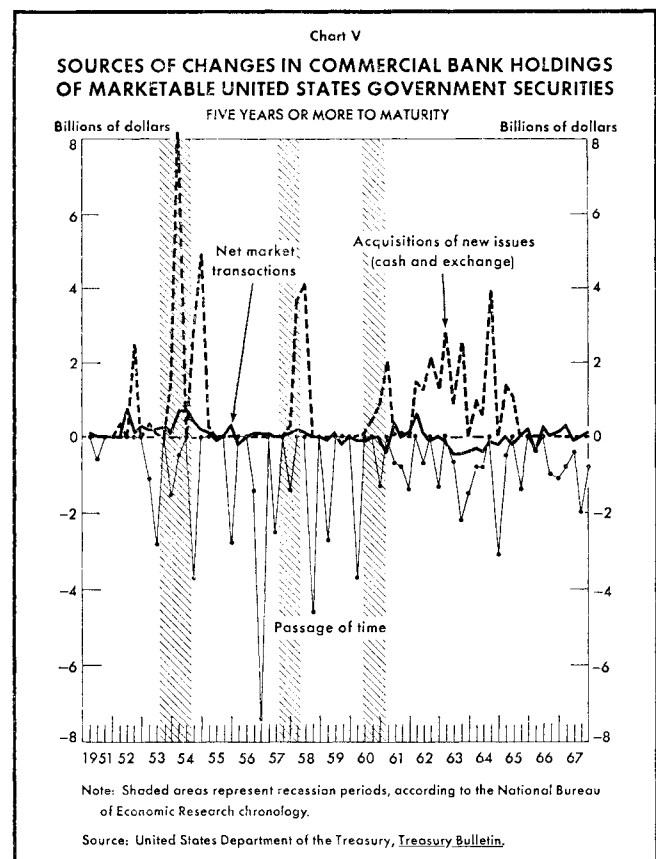
Contrary to widely held views, the reduction in holdings in this sector as the business expansion proceeds is not accomplished primarily by sales of outstanding issues in the secondary market. Instead, the reduction mainly arises from the heavy shift of securities from this sector to the intermediate sector due to the passage of time, which inexorably shortens the maturity of every security once it is issued. Generally, large blocks of securities, often totaling more than \$2 billion per quarter, move out of this sector in at least two quarters of each year and drop into the intermediate maturity classification.

It is now possible to explain why banks buy long-term Government securities during recession when interest rates are low to earn some income and then appear to sell them at a loss during the recovery when they seek additional funds to help finance loan expansion. The evidence cited for this seemingly irrational behavior is the decline in bank holdings of long-term securities—those classified as five years or more to maturity. But, in fact, the bulk of the reduction of bank holdings in the long maturity sector does not come through market sales but through the passage of

time. Liquidation of total bank holdings through market sales takes place primarily in the short and intermediate maturity sectors, as shown above.

Despite the overriding importance of Treasury financings and the passage of time, market purchases and sales do play a significant role. In part, the amount of market activity is a function of the total amount outstanding in the sector, so that activity tended to be smaller during the midfifties when the amount outstanding was particularly small as compared with the years preceding or following the midfifties. Unlike the other maturity sectors, however, net market activity is frequently on the buying side, which probably reflects, at least to some extent, the relative infrequency of new long-term Treasury offerings.

Market purchases and sales of long-term Treasury issues, as in other maturity sectors, provide an avenue whereby banks can adjust their portfolios whenever they find that their holdings are not at desired levels or well balanced in their maturity distribution. A bank may use the market to adjust its position when securities acquired



in a new financing exceed its needs—a situation which may prevail when a new financing for cash allows a bank to pay for its purchases by crediting its Tax and Loan Account. Likewise, a bank may use the market to increase its holdings when it acquires less than it desires of a security because the allotment turns out to be smaller than anticipated. In addition, if banks wish to restore the previous maturity mix, which has been shortened by the passage of time, there are periods when it can be accomplished only through market transactions, if no additional long-term securities are being offered by the Treasury.

A portion of the market activity recorded in Chart V (as well as the market activity in the intermediate sector, shown in Chart IV) may also arise from the fact that securities in this maturity sector at times sell at large discounts below par. Some market transactions in this sector (and in the intermediate sector) undoubtedly can be traced to the special tax position of banks. Unlike other financial institutions, banks may use the capital gains tax rate for their net long-term capital gains on Government securities and deduct losses on these securities against ordinary income subject to regular tax rates. With such tax flexibility, they can minimize the tax bite in years when sales of Government obligations are profitable by choosing the capital gains option, but in years of losses banks can deduct the full loss against other income by treating transactions in Government obligations as ordinary income.

This tax option makes long-term Government securities an attractive investment whenever a coupon issue is selling significantly below par and there still is sufficient time to run on the issue so that it may again be quoted at or near par. The tax option on Government securities also is likely to increase the total amount of *gross* market

activity above that which otherwise might take place because it encourages “tax swaps”. Thus, a bank might sell a particular issue of Government securities at a loss, deducting it against ordinary current income. At the same time, by simultaneously purchasing a different, though similar, issue of Government securities, which is also selling below par, the bank maintains an approximately unchanged asset position. This swap establishes the base for realizing potential capital gains in the future if the securities should rise in price because of interest rate changes. Tax swaps do not change the total amount of long-term securities held by commercial banks as a group, and consequently such transactions are not reflected in the statistics on “net market activity” by maturity classification.

CONCLUDING COMMENTS

This article has dealt with only selected aspects of the relationships between commercial banks and the United States Government securities market. It has, for instance, largely ignored the mechanisms by which policy actions of the Federal Reserve System influence the behavior of the commercial banking system in the market. Also, as noted earlier, commercial banks buy and sell Government securities for their customers, but such transactions, including those made by a bank’s trust department, were not considered in this article. Instead, this article has emphasized some neglected aspects of bank operations for their own account in the Government securities market. The fact that a reworking of the available published data reveals new empirical generalizations suggests that additional insights might be obtained by further examinations of the data at a more detailed level than has been customary.

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