FEDERAL RESERVE BANK OF NEW YORK



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The President's request for a tax surcharge is a most welcome development. As he has explained, the increase in tax receipts will contribute significantly to preserving economic balance. It is needed to reduce a large deficit in the Federal budget and to limit demands on credit markets from Treasury borrowing; to relieve prospective inflationary pressures on supplies of goods and services; to avoid placing an unduly heavy burden on monetary policy; and to protect the dollar at home and abroad.

The need for prompt and decisive fiscal action is clear. I trust it will receive the deserved support of the business and financial community, and indeed of the entire country.

ALFRED HAYES President

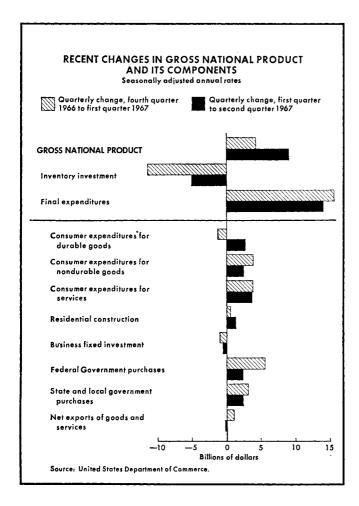
The Business Situation

Economic activity has quickened during recent months, with the nation's real output of goods and services rising again after a slight decline in the first quarter. Consumer spending showed a large increase during the second quarter, and automobile sales in particular rose sharply. Residential construction continued to advance from the depressed level of the fourth quarter of 1966, and the latest figures on building permits and housing starts point to further gains. While business fixed investment eased again in the second quarter, surveys of business spending plans as well as new orders for business equipment point to a modest upturn in the months ahead. The reduction in the rate of inventory accumulation continued to dampen the growth of total output in the second quarter, but the effect of the inventory adjustment was considerably more moderate than in the first quarter of 1967. While further cutbacks in inventory spending are likely, it now appears that a major portion of the inventory adjustment has been completed. Government spending increased again in the second quarter and should continue to rise under the impact of mounting defense outlays. The advance in prices appears to be accelerating. Both the consumer and wholesale price indexes recorded sharp rises in June, with food prices on both the retail and the wholesale levels showing large increases.

GNP IN THE SECOND QUARTER

The nation's total output of goods and services (GNP) advanced by \$9.0 billion in the second quarter (see chart) to a seasonally adjusted annual rate of \$775.3 billion, according to preliminary estimates of the Commerce Department.¹ Although the second-quarter advance was moderate when compared with quarterly GNP increases in the last three years, it represented a substantial improvement over the first quarter when total output in real terms actually showed a small decline. Of the \$9.0 billion added to GNP during the second quarter, \$4.5 billion constituted

¹ The Commerce Department's annual midyear revisions of the national income and product accounts raised GNP by \$0.7 billion in 1964, \$2.7 billion in 1965, and \$3.7 billion in 1966. For the first quarter of 1967, GNP was revised upward by \$2.6 billion to a level of \$766.3 billion.



a real increase in the production of goods and services while the remaining \$4.5 billion reflected higher prices. The average price of overall national output, as measured by the implicit GNP price deflator, continued to advance at the relatively high 2½ per cent annual rate of the first quarter. In June the consumer price index advanced by a substantial 0.4 percentage point, following increases of 0.3 percentage point in the two preceding months. Food prices at the retail level rose by a very sharp 1.2 percentage points, and other major categories also showed gains. The wholesale price index increased by 0.5 percentage point in June, as prices of food products recorded another sharp rise pointing to more increases in the consumer price index in the near future. Preliminary wholesale price figures for July indicate a further rise in food prices and the first increase in four months in the price of industrial commodities.

The most substantial gain among the components of GNP in the April-June period was in the consumer sector where the advance in spending amounted to \$8.7 billion,

the largest increase since the first quarter of 1966. Consumer expenditures on services and nondurable commodities continued to move up, and spending on durable goods also advanced after declining for two consecutive quarters. The rise in consumer spending on durables was concentrated primarily in automobiles. Sales of new domestically produced cars accelerated during the second quarter, and by June reached a seasonally adjusted annual rate of 8½ million units. According to preliminary estimates, total retail sales showed a small gain in June, the fourth consecutive month of increase. The rise in sales was concentrated in durables, with automobiles accounting for most of the advance. Automobile sales in July held at the June rate.

The strong 7.2 per cent annual rate of increase in consumer purchases of goods and services during the second quarter was striking in view of the modest 5.6 per cent rise in disposable personal income. Personal income rose by \$6.0 billion in the second quarter, compared with a rise of \$11.3 billion in the first three months of 1967. The advance in April and May was well below the first-quarter average, as increases in wage and salary payments moderated, reflecting a slower growth in employment and shorter workweeks in manufacturing. In June, however, a rapid rise in employment boosted earnings, and total personal income increased by a strong \$3.7 billion.

With consumption expenditures rising more rapidly than income, consumer savings fell. Some decline in savings was not entirely unexpected in view of the fact that consumers have been saving an unusually large proportion of their incomes since the fourth quarter of 1966. While the savings ratio dropped back from the exceptionally high level of 7.3 per cent reached in the first quarter, it remained at a high 6.9 per cent in the April-June period.

A decline in the rate of inventory accumulation dampened total output in the second quarter, but the impact of the inventory adjustment on GNP was considerably less than in the first three months of 1967. While the Commerce Department estimates of GNP components are preliminary, the data available indicate that inventory spending declined by \$5.0 billion in the second quarter, compared with a drop of \$11.4 billion in the first quarter. These cutbacks have sharply reduced the rate of accumulation from the rapid 1966 pace, particularly as compared with the fourth quarter of 1966 when inventory spending rose by \$7.1 billion and accounted for more than half of the increase in GNP. The problems of inventory adjustment have been concentrated in manufacturing where the inventory-sales ratio has been particularly high. While manufacturers have been reducing the rate of inventory accumulation for several months, in June they made the first actual cutback in total inventories in three years. This cutback further

reduced the inventory-sales ratio for all manufacturing from its April peak. Nevertheless, the inventory-sales ratio in manufacturing remains above the level reached in mid-1966, when the problem of excessive inventories began to emerge. Thus, while the greatest part of the inventory adjustment appears to be over, some further cutbacks in inventory spending are likely before a rising level of economic activity brings sales into a more normal relation to inventories.

Along with the slower rate of inventory accumulation, business fixed investment eased slightly again in the second quarter as expenditures on structures, which had held steady in the first quarter, moved down. Spending on equipment, however, edged up after declining in the first three months of the year. In June, new orders for machinery and equipment rose again, suggesting further spending gains in coming months. Moreover, business surveys of capital spending plans point to increased capital investment over the second half of the year. Thus it appears that, over the balance of the year, the impact of labor cost pressures and the restoration of the investment incentives, as well as the general expectation of rising sales, are likely to offset the negative influence of currently declining utilization and profit rates on plant and equipment spending.

During the second quarter, residential building continued to move up from the depressed levels of 1966. Although residential spending in the second quarter remained considerably below the rates prevailing before the housing slump began early in 1966, June data on housing starts and permits point to a continuation of the recovery in new housing construction. The supply of mortgage funds appears to be more than adequate to support a further advance in residential building.

Total government purchases of goods and services boosted GNP again in the spring months, although the increase was smaller than the record advance of the first quarter. While Federal spending for nondefense purposes held at about the first-quarter level, defense expenditures climbed again after showing an unusually large rise in the first quarter. State and local government expenditures also continued to mount; although the April-June increase was smaller than the first quarter's record rise, it was large by historical standards.

PRODUCTION, ORDERS, AND EMPLOYMENT

Industrial output edged off slightly again in June. The Federal Reserve Board's index of industrial production declined 0.3 percentage point to 155.2 per cent of the 1957-59 average. Output of industrial equipment eased further, and production of both materials and consumer

goods was off slightly. Production of automotive products increased substantially despite the continuation of a strike in the rubber industry, which had dampened the auto index in May. Auto assemblies rose to a seasonally adjusted annual rate of 8 million units in June, after two months of production at a 7½ million unit rate. Production of other consumer goods declined, partly because a strike at a major producer of radio and television sets cut sharply into production. The output of furniture and appliances also eased off during the month. On the other hand, defense equipment production increased further, and the curtailment of supplies from the Middle East helped boost crude petroleum output.

The volume of new orders received by durables manufacturers in June advanced again, following a strong rise in May. Orders for machinery and equipment rose for the fourth consecutive month, and defense orders continued to mount. While shipments of nondurable goods eased after the May surge in sales, durables shipments rose for the second month. The increase in durables shipments, however, was smaller than the rise in new orders for durable goods. Thus, the volume of unfilled orders rose for the second successive month, reaching the highest level since the backlog began to drop last January.

Reflecting the moderate strengthening of the economy in the second quarter, the employment picture appears to be relatively good. In June, a sharp increase brought nonfarm employment almost to the record level set in March. While a rise in government employment accounted for more than half of the overall increase, manufacturing employment also edged up slightly for the first time since January. The rise occurred entirely in nondurables manufacturing, since employment increases in several lines of durables production failed to offset the effects of the strike in radio and television manufacturing. Construction employment also increased in June after declining for three consecutive months. Average weekly hours of production workers showed a small increase in the nondurables sector, but continued to ease in durables industries.

The civilian labor force after seasonal adjustment showed one of its largest advances of recent years in June, following six months of virtual stability when slack economic activity discouraged many individuals from joining or remaining in the labor force. As a result, the number of unemployed rose substantially despite the large advance in total employment. The seasonally adjusted unemployment rate increased from 3.8 per cent in May to 4.0 per cent in June. Unemployment rates for most groups edged up, but the rise in the number of unemployed adult women accounted for about two thirds of the increase in total unemployment.

The Money and Bond Markets in July

A steadier tone developed in the Government securities market in July in the wake of the sharp upward adjustments in yields that had occurred in June. This improvement primarily reflected the favorable market reaction to more intensive discussion of an early tax rise which would moderate future Treasury debt financing needs. A cautious atmosphere briefly reappeared in the coupon market after midmonth, as participants awaited the terms of the Treasury's August refunding, news of the Administration's revised budget figures for fiscal 1968, and clarification of pending tax action. Late in the month, demand for coupon issues expanded again, and the Treasury's announcement of the details of its August refunding was well received by the market (see page 143).

In the Treasury bill market, the considerably higher levels to which rates had risen in late June and early July eventually stimulated renewed investor and professional demand, and a steadier tone emerged during the first two thirds of the month. Rates then moved higher for a few days when demand contracted, but a stronger tone reappeared in the market in late July and rates again declined.

Higher available yield levels revived investor demand for corporate and tax-exempt bonds during the first half of July, dealer inventories were steadily reduced, and the technical position of both sectors improved considerably. In this atmosphere, traders became more confident of the ability of these markets to absorb the heavy demands for capital which were expected to persist. From about midmonth onward, the tone of the corporate sector deteriorated somewhat, reflecting renewed market uncertainty over the future course of fiscal policy and the buildup in the calendar of scheduled corporate flotations. The tax-exempt sector continued to improve, however.

A comfortable tone predominated in the money market in July. Weekly average free reserves ranged from a low of \$109 million to a high of \$592 million in July (see Table I), but the effective rate on Federal funds generally fluctuated in a narrow 334 to 4 per cent range. During the month, money market banks selectively raised their offering rates on new time certificates of deposit (C/D's) in an effort to replace their portion of the more than \$4.4 billion maturing in July.

THE GOVERNMENT SECURITIES MARKET

In the market for Treasury bills, rates continued to rise sharply at the beginning of July (see the left-hand panel of the chart on page 145). During this period, the bill market cautiously assessed the Treasury's plans (outlined in late June) for raising \$6.2 billion of new cash through the sale of bills beginning in July. In this atmosphere, dealers pressed bill offerings on the market in their eagerness to lighten their inventories, and showed little interest in absorbing customer offerings. By midday on July 5, three-month bills were being bid at 4.36 per cent, more than 1 percentage point above the 3.33 per cent low rate for the year recorded on June 23. At the rising rate levels, however, demand for bills expanded somewhat. In the July 5 auction of \$4 billion of March and April tax anticipation bills, commercial banks were the principal bidders, attracted not only by the prevailing rate levels but also by the fact that they were permitted to make full payment for the tax bills in the form of credits to Treasury Tax and Loan Accounts. (Market sources estimated this privilege to be worth between 25 and 30 basis points to the banks.) Average issuing rates for the March 22 and April 22 tax bills were set at 4.861 per cent and 4.899 per cent, respectively.

From July 6 through July 19, investor interest in outstanding bill issues revived markedly. As customer demand began to weigh upon the thin market supply of most issues, dealers sought to replenish their inventories. At the regular weekly auction on July 10—the first auction to include an extra \$100 million of three-month bills in line with the Treasury's new bill financing program—bidding was fairly strong and average issuing rates of 4.285 per cent for the new three-month bill and 4.688 per cent for the six-month issue (see Table III) were about unchanged and 3 basis points lower, respectively, than the auction rates established a week earlier. Sub-

¹ For details, see this Review, July 1967, pages 130-31.

sequently, the broadly based demand persisted, while investor selling was limited, a situation which partly reflected the more comfortable tone that had gradually developed in the money market. In view of the continued uncertainty over the future course of interest rates, however, demand generally favored 1967 bill maturities. Against this background, rates on most outstanding bills in this maturity area fell, although declines offset only part of the pronounced upward rate movement that had occurred in late June and early July, and rates on longer bills fluctuated irregularly.

The atmosphere of the Treasury bill market briefly deteriorated from July 20 through July 24, when investor demand contracted and dealers again pressed their offerings. As higher bill rate levels emerged, demand broadened once more. In the regular monthly auction of nine-month and one-year bills on July 25, bidding was quite aggressive and average issuing rates were set at 5.164 per cent for the new nine-month bill and 5.150 per cent for the new one-year bill—in each case considerably below earlier market forecasts. The market tone strengthened in the wake of the aggressive bidding at this auction, and over the remainder of the month rates on outstanding bills declined in response to good professional and investor demand.

At the final weekly auction of the month on July 31, average issuing rates were set at 4.182 per cent for the new three-month bill and 4.638 per cent for the new six-month bill, about 72 and 69 basis points higher, respectively, than average rates at the weekly auction on June 26. At the close of business on July 31, the latest outstanding three-month bill was quoted at 4.12 per cent (bid), 12 basis points higher than the rate quoted at the end of June, while the newest outstanding six-month bill was bid on July 31 at 4.60 per cent, 19 basis points above its June 30 level.

As the month opened, sentiment in the coupon sector of the Government securities market remained generally apprehensive in reaction to the sharply rising trend in yields that had beset the capital markets and the Treasury bill market in June. After the July 4 Independence Day holiday, however, demand for coupon issues began to expand at the more attractive current yield levels, as the market derived encouragement from several factors. Widespread discussion of the likelihood that the Administration would seek an early tax increase, and speculation that any further buildup of troops in Vietnam might be smaller than had been expected, led many in the coupon sector to feel that market pressures might ease. In addition, improvements in the tone of the corporate and tax-exempt bond markets during the first half of the month also bolstered the Treasury securities market. Nevertheless, despite the appearance of a somewhat more optimistic

atmosphere in the coupon sector, market observers remained basically cautious in their appraisal of the interest rate outlook. Against this background, prices of Treasury notes and bonds fluctuated widely through midmonth, moving generally higher on balance. (See the right-hand panel of the chart showing the associated decline in yields.) With some issues in rather scarce supply, a small volume of trading or the appearance of additional factors affecting market psychology tended to have an exaggerated effect on prices. During this period, the largest price gains were recorded in the long-term maturity area.

After midmonth, traders began to shift their attention to the Treasury's approaching August refunding announcement. In addition, President Johnson's reference at his July 18 press conference to a possible 6 per cent surcharge on income taxes was cautiously appraised in the market for Treasury coupon issues where many traders hoped for a larger tax rise. Investor offerings of notes and bonds expanded and, in the absence of significant demand, prices of intermediate- and long-term issues moved sharply lower from July 18 through July 24. As prices reached lower levels, a better demand developed, including dealer short covering. Prices of intermediate-term issues rebounded strongly, but prices continued to move downward in the longer term sector where some investor switching out of Governments into new, high-yielding corporate issues took place.

After the close of business on July 26, the Treasury announced the details of its August refunding. It offered \$9.6 billion of new fifteen-month 51/4 per cent notes (priced to yield 5.30 per cent), the proceeds of which will be used to redeem in cash three outstanding Treasury issues maturing on August 15. Subscription books were open on July 31, with payments—in the form of cash or in any of the maturing securities—due on August 15. The Treasury also announced that it will raise \$2 billion to \$2½ billion of new cash through an offering late in August, possibly in the form of somewhat longer term notes than those used in the refunding. Market reaction to the refunding announcement was quite favorable. In the closing days of the month, prices of outstanding intermediateand long-term coupon issues generally moved higher in response to good demand.

In the market for Government agency obligations, prices of outstanding issues drifted lower in light trading at the beginning of July. Subsequently, investment demand expanded, and prices of many issues rebounded and then fluctuated irregularly. Over the month as a whole, public offerings by agencies totaled approximately \$1.6 billion. Most of these offerings were accorded favorable investor receptions.

Table I FACTORS TENDING TO INCREASE OR DECREASE MEMBER BANK RESERVES, JULY 1967

In millions of dollars; (+) denotes increase,

Factors	Chai	Net changes			
	July 5	July 12	July 19	July 26	
"Market" factors		}			
Member bank required reserves*	- 306	+ 21	237	+ 125	- 397
Operating transactions (subtotal)	741	+ 97	+ 606	153	191
Federal Reserve float	177	+ 473	+ 143	— 2 39	+ 200
Treasury operations;	208	+ 2	+ 47	162	321
Gold and foreign account	20	+ 14	+ 5	+ 12	+ 11
Currency outside banks*	488	307	+ 321	+ 207	267
Other Federal Reserve accounts (net) ‡	+ 152	86	+ 80	+ 28	+ 184
Total "market" factors	_1,047	+ 118	+ 369	_ 28	588
Direct Federal Reserve credit transactions					
Open market instruments Outright holdings:	}				!
Government securities	+ 831	+ 346	— 63 0	+ 244	+ 791
Bankers' acceptances	+ 12	+ 2	- 9	- 6	- 1
Repurchase agreements:	1			1	ļ
Government securities	+ 35	+ 1	52	-	— 16
Bankers' acceptances	- 3	+ 21	— 66	-	— 4 8
Federal agency obligations	+ 3	+ 2	- 5		_
Member bank borrowings	+ 212	284	18	+ 3	87
Other loans, discounts, and advances	- 11	- 8	_ 3	2	— 24
Total	+1,078	+ 81	— 785	+ 240	+ 614
Excess reserves*	+ 31	+ 199	— 416	+ 212	+ 26
		Daily ave	rage level	s	
dember bank:	09 004	94.009		92.070	eo okor

		Daily average levels			
Member bank: Total reserves, including vault cash* Required reserves* Excess reserves* Borrowings Free reserves*	23,884 23,422 462 853 109	24,062 23,401 661 69 592	23,883 23,638 245 51 194	23,970 23,513 457 54 403	23,950\$ 23,494\$ 456\$ 182\$ 824\$
Nonborrowed reserves*	23,531	23,993	23,832	23,916	23,818\$
	Chan	ges in We	ednesday	leveis	
System Account holdings of Government securities maturing in:					
Less than one year	+ 854	334	— 451	+ 545	+ 614
More than one year	+ 62	_	_	_	+ 62
Total	+ 916	334	451	+ 545	+ 676

Note: Because of rounding, figures do not necessarily add to totals.

* These figures are estimated.

† Includes changes in Treasury currency and cash.

‡ Includes assets denominated in foreign currencies.

‡ Average of four weeks ended on July 26.

Table II

RESERVE POSITIONS OF MAJOR RESERVE CITY BANKS **JULY 1967**

In millions of dollars

Factors affecting	Daily	Averages of four weeks			
basic reserve positions	July 5	July 12	July 19	July 26	ended on July 26*
Eight banks in	a New Y	ork City	,		•
Reserve excess or deficiency(-)†	117	63	19	8	52
Less borrowings from Reserve Banks Less net interbank Federal funds	173		-	-	43
purchases or sales(-)	452	986			694
Gross purchases	1,268		1,534		1,479
Gross sales	816	733	677	915	785
Equals net basic reserve surplus or deficit(—)	- 508	- 923	838	472	685
Net loans to Government	500	- 723	_ 050	- 7/2	- 003
securities dealers	732	523	694	700	662
Thirty-eight banks o	outside I	New Yor	k City		
Reserve excess or deficiency (-) †	46	38	39	9	33
Less borrowings from Reserve Banks.	81	2		8	23
Less net interbank Federal funds	015	4.000	4 400		
Gross purchases	817 1.730	1,283 2,128			999 1.922
Gross sales	913	845	894		923
Equals net basic reserve surplus	715	1 545	1	2,039	723
or deficit(—) Net loans to Government	852	-1,247	-1,161	— 6 96	989
Net loans to Government					
securities dealers	224	292	391	404	328

Note: Because of rounding, figures do not necessarily add to totals.

* Estimated reserve figures have not been adjusted for so-called "as of" debits and credits. These items are taken into account in final data.

† Reserves held after all adjustments applicable to the reporting period less required reserves and carry-over reserve deficiencies.

Table III AVERAGE ISSUING RATES* AT REGULAR TREASURY BILL AUCTIONS

In per cent

	Weekly auction dates—July 1967							
Maturities	July July 3 10		July 17	July 24	July 31			
Three-month	4.280 4.285		4.245	4.423	4.182			
Six-month	4.716 4.688		4.745	5.044	4.638			
	М	onthly auct	ion dates—!	May-July 19	67			
	May 24		June 27	July 25				
Nine-month	3.94	4	4.723		5.164			
One-year	3.93	3	4.732		5.150			

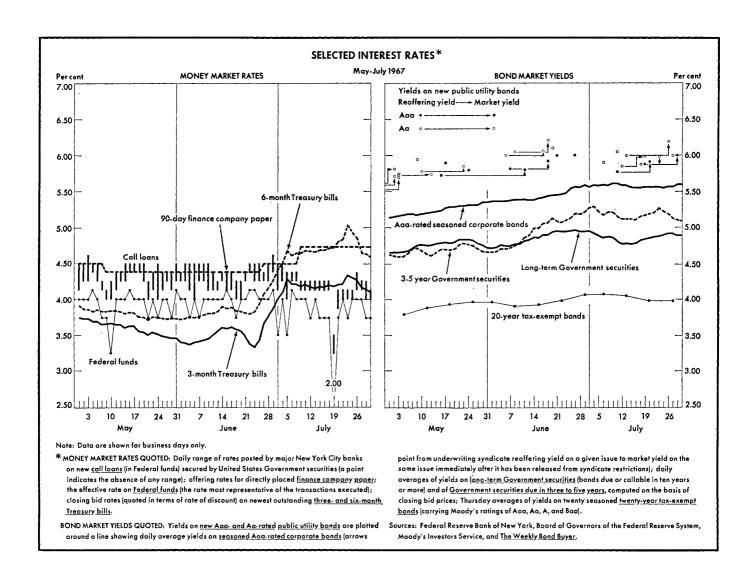
^{*} Interest rates on bills are quoted in terms of a 360-day year, with the discounts from par as the return on the face amount of the bills payable at maturity. Bond yield equivalents, related to the amount actually invested, would be slightly higher.

OTHER SECURITIES MARKETS

A better atmosphere developed in the markets for corporate and tax-exempt bonds in the first half of July, as investor demand responded to the relatively high yield levels which had been reached in late June. The corporate sector was favorably affected by some short covering in selected issues and by indications of renewed investment interest on the part of savings banks. Although an undertone of caution generated by the continuing heavy current calendar of flotations could be detected throughout this period, dealers' inventories of corporate bonds were kept to manageable proportions and observers expressed some confidence in the market's ability to accommodate large upcoming credit demands. Against this background, un-

derwriters bid fairly aggressively for new corporate flotations and reoffering yields receded somewhat from their June highpoints (see the right-hand panel of the chart). A heavier atmosphere emerged in the corporate sector in the second half of July when participants cautiously awaited more information concerning future fiscal policy and also reflected upon the large calendar of scheduled corporate bond offerings. In reaction, prices of corporate issues began to decline once more. As yields on new corporate bonds moved higher, demand expanded and some switching out of long-term Government securities into new corporate issues took place.

In the tax-exempt sector during the first half of July, widespread price cutting persisted and somewhat higher yields seemed necessary on new offerings in order to at-



tract good investor interest. However, at rising yield levels considerable demand was forthcoming from institutional investors (notably insurance companies), and dealers steadily reduced their unsold balances of recent offerings. In part, the better demand reflected the growing conviction that some tax increase is inevitable and that tax-exempt securities will thus become more attractive investments. In the second half of July, the market was also buoyed by the moderate near-term calendar of scheduled tax-exempt financings and prices generally steadied.

Over the month as a whole, the average yield on Moody's Aaa-rated seasoned corporate bonds rose by 4 basis points to 5.60 per cent. The Weekly Bond Buyer's average yield series for twenty seasoned tax-exempt issues, carrying ratings ranging from Aaa to Baa, fell by 8 basis points to 3.98 per cent (see the right-hand panel of the chart). These indexes are, however, based on only a limited number of seasoned issues and do not necessarily reflect market movements fully, particularly in the case of new and recent issues.

BANK RESERVES AND THE MONEY MARKET

The money market remained basically comfortable in July. Early in the month, the market was significantly affected by reserve adjustments related to the June 30 bank-statement publishing date and the July 4 holiday. Banks managed their reserve positions very cautiously prior to both these dates. They bid aggressively for Federal funds at rates as high as 41/8 per cent and 41/4 per cent, and then borrowed heavily at the Federal Reserve "discount window" to cover their residual reserve needs. As a result of these Federal funds purchases and heavy borrowings from the Federal Reserve, the major money market banks managed to accumulate substantial excess reserves. After the July 4 holiday, these heavy accumulations of excess reserves spilled into the money market, Federal funds were bid at rates as low as ½ per cent on July 5, and member bank borrowings contracted sharply. Despite the substantial volume of reserves supplied by System Account operations over the July 5 statement period, nationwide free reserves dipped to an unexpectedly low average of \$109 million while member bank borrowings from the Reserve Banks averaged \$353 million (see Table I), the highest weekly level since February.

In the statement weeks ended on July 12 and July 19, a fairly comfortable tone prevailed in the money market, although the underlying conditions were quite different in each week. Reserve distribution sharply favored "coun-

try" banks during the July 12 period. Thus, while nation-wide average free reserves expanded to almost \$600 million, primarily reflecting increases in float and in System Account holdings of Government securities, the basic reserve deficit of banks in the leading money centers increased (see Table II). However, their reserve needs were readily filled in the Federal funds market to which some of the abundant reserves lodged in country banks gravitated. Against this background, most Federal funds trading took place in a 3¾ to 4 per cent range and member bank borrowings from the Federal Reserve Banks contracted sharply.

During the July 19 statement period, nationwide average free reserves contracted, but available reserves were more evenly distributed within the banking system and an easier tone emerged in the money market. As a result, the basic reserve deficits of banks in the leading money centers declined somewhat, member bank borrowings from the Federal Reserve Banks contracted further, and the effective rate on Federal funds steadily declined from 4 per cent at the beginning of the period to 2 per cent at the close. The money market remained comfortable during the remainder of the month. The reserve positions of the major money market banks improved further, while nationwide reserve availability increased and Federal funds continued to trade largely in a 3¾ to 4 per cent range.

The money market banks generally continued to boost their offering rates on negotiable C/D's during July in order to attract additional deposits and replace the substantial amount maturing during the month. Individual banks frequently posted higher rates for selective maturities, placed new certificates, and then lowered their rates. Toward the end of the month, the most frequently quoted rates on new C/D's ranged from 4.50 per cent for the shortest available maturities to 5.25 per cent for longer certificates, approximately 25 to 37 basis points above the comparable rates a month earlier. The C/D's outstanding at weekly reporting banks rose by approximately \$545 million between June 28 and July 26. During the month, some of the major money market banks also borrowed substantial amounts of Euro-dollars from their foreign branches.

Adjustments were made in the rates on several other short-term money market instruments during July. By the end of the month, offering rates on prime commercial paper and on directly placed finance company paper were generally ½ per cent higher than a month earlier, while rates quoted by dealers in bankers' acceptances on ninety-day unendorsed paper were ½ per cent lower.

Banking and Monetary Developments in the Second Quarter of 1967

Commercial bank deposits and credit increased substantially in the second quarter of 1967, although the growth of bank credit was considerably slower than in the first quarter. Member bank reserve positions eased further in the April-June period, and the Federal Reserve Bank discount rate was cut from 4½ per cent to 4 per cent in early April.

The second-quarter growth of the money supply—currency outside banks and private demand deposits—was the most rapid since the fourth quarter of 1965. In part, this sharp increase was the counterpart of a larger than seasonal reduction in United States Treasury balances at commercial banks and associated Treasury payments to the public. While business firms ran down their holdings of large-denomination negotiable certificates of deposit (C/D's) to make tax and other payments during the second quarter, savings deposits and "consumer-type" time deposits rose strongly. Total time and savings deposits at commercial banks increased again at about the very substantial first-quarter rate.

At the same time, deposit inflows into mutual savings banks and savings and loan associations accelerated, and these deposits reached record levels. While the nonbank public's holdings of short-term United States Government securities declined during the quarter because of heavy net redemptions of tax anticipation bills, the public's holdings of currency and deposits at banks and other depository institutions grew sufficiently to raise its total liquidity at a 6.9 per cent annual rate, a considerably faster rate of increase than in the first quarter. With overall economic activity rising at a more moderate pace than the public's liquidity, the ratio of nonbank liquid assets to gross national product (GNP) rose for the second consecutive quarter.

The slower rate of growth of bank credit in the second quarter was evident in both loans and investments. The decline in the rate of bank acquisitions of securities was especially sharp; large holdings of Treasury bills were sold or run off, offsetting much of the continued strong accumulation of state and municipal securities. Business loans grew at almost the same pace in the April-June period as in the previous three months. However, the growth of total loans

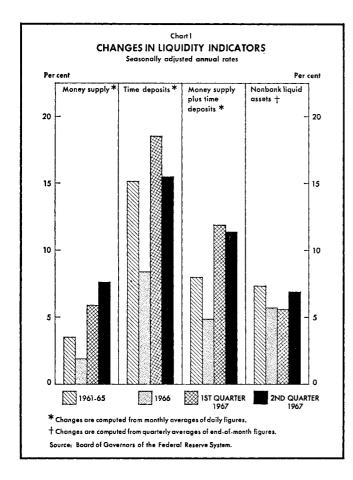
slowed significantly in the second quarter, reflecting the sharp rundown in loans to Government securities dealers who reduced inventories in view of rising yields.

MONEY SUPPLY, BANK DEPOSITS, AND RESERVES

The money supply—currency outside banks and private demand deposits—rose quite rapidly in the second quarter. On a seasonally adjusted daily average basis the money supply increased \$3.2 billion between March and June, an annual rate of 7.6 per cent compared with the 5.9 per cent rise of the first quarter (see Chart I). For the first six months of 1967 the growth of the money supply, at 6.8 per cent annually, was well in excess of the modest 1.9 per cent increase in 1966. The second-quarter strength in the money supply was, in part, a result of sharp declines in Treasury deposits at commercial banks, which are excluded from the money supply. In the short run, sizable declines in these deposits tend to be associated with increases in the money supply as Treasury expenditures are made and the proceeds deposited in private accounts.

Time and savings deposits at commercial banks showed another substantial increase in the April-June period, although the 15.5 per cent annual rate of growth was a bit below the 18.5 per cent pace set in the first quarter. Over the first half of this year, time and savings deposits have grown at more than twice the 1966 rate. For a considerable period in 1966, the maximum interest rates allowable under Regulation Q effectively restrained the growth of these deposits.

At weekly reporting banks, the growth of total time and savings deposits was concentrated in passbook savings accounts and in small-denomination, consumer-type time deposits, which combined grew by more than \$2.2 billion over the quarter. Passbook savings accounts rose \$641 million in the April-June period, the first quarter in which these deposits have advanced since the third quarter of 1965. Although rates on consumer-type time deposits tended to remain relatively high over the second quarter, these deposits rose only \$1.6 billion, compared with a rise of \$2.8 billion in the previous quarter. The gains



in these deposits in the second quarter were more than sufficient, however, to offset the \$146 million decline in large-denomination C/D's that occurred despite rising offering rates, over the latter part of the quarter, on C/D's with maturities of ninety days and longer. The rundown in outstanding large-denomination C/D's in part reflected sizable declines in business holdings of these instruments, as the heavy tax payments of mid-April and mid-June were made, offsetting increased holdings by other economic units during the quarter.

With the money supply growing more rapidly and time and savings deposits at commercial banks expanding slightly more slowly, the combined total of the money supply plus time deposits rose at almost the same rate in the second quarter as in the first, at seasonally adjusted annual rates of 11.4 per cent and 11.9 per cent, respectively.

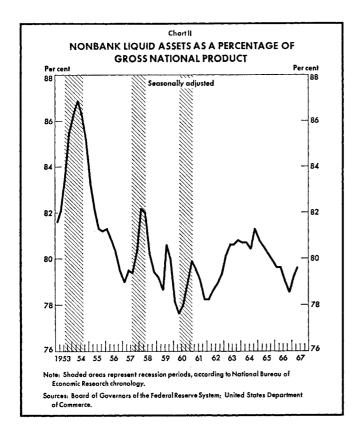
Net reserve availability continued to increase in the second quarter of 1967, although the growth of total member bank reserves slowed substantially. Total reserves

rose at a seasonally adjusted annual rate of 2.6 per cent in the second quarter, following the very sharp 18.1 per cent gain of the first quarter (daily average basis). Nonborrowed reserves grew somewhat faster than total reserves, as borrowings by member banks from the Federal Reserve declined almost without interruption through the second quarter, from an average of \$199 million in March to \$123 million in June. Both excess reserves and free reserves—defined as the difference between excess reserves and member bank borrowings from the Federal Reservedeclined somewhat in April, but generally rose over the remainder of the quarter. At \$420 million, excess reserves in June averaged slightly below the March level. However, average free reserves rose by \$61 million from the March level to \$297 million in June, the highest average since early 1963. Over the whole April-June period, free reserves averaged \$247 million, compared with an average of \$72 million during the first quarter.

NONBANK LIQUIDITY

The liquidity of the nonbank public rose more rapidly in the second quarter than at any time since the first quarter of 1966. Public holdings of liquid assets grew at a seasonally adjusted annual rate of 6.9 per cent in the second quarter, compared with the 5.6 per cent rise in the first three months of the year. Thus, the 6.3 per cent rate of expansion in the first half of 1967 exceeds that of all of 1966, when a major sector of the public—nonfinancial corporations—found their liquidity positions severely squeezed. Holdings of currency and demand deposits rose sharply during the second quarter as did personal-type savings, mainly commercial bank time and savings deposits and savings accounts at mutual savings banks and savings and loan associations. Interest rates on these deposits remained relatively high, while yields on some short-term market instruments, such as Treasury bills, declined during much of the quarter. The growth of deposits at nonbank thrift institutions over the period is among the strongest on record: deposits at mutual savings banks rose at a seasonally adjusted annual rate of more than 9.3 per cent in the second quarter after a 7.3 per cent gain in the first three months, and shares at savings and loan associations grew at better than a 10 per cent annual rate following an increase of less than 7 per cent earlier in the year. While a substantial part of these inflows has been devoted to rebuilding liquidity positions strained in 1966, mortgage lending by these institutions has also been accelerating.

The nonbank public's holdings of United States Government securities maturing within one year declined by



\$5.7 billion in the second quarter, to the lowest level since the beginning of 1965, as a large volume of tax anticipation bills matured without replacement.

The sharp overall improvement in the public's liquidity position in the second quarter was accompanied by a moderate expansion of economic activity, with the result that the ratio of liquid assets held by the nonbank public to GNP rose from 79.1 per cent in the first quarter to 79.6 per cent (see Chart II). At this level, the nonbank liquid assets ratio is almost back to the 79.7 per cent of the first half of 1966 but is still below the average of the 1964-66 period.

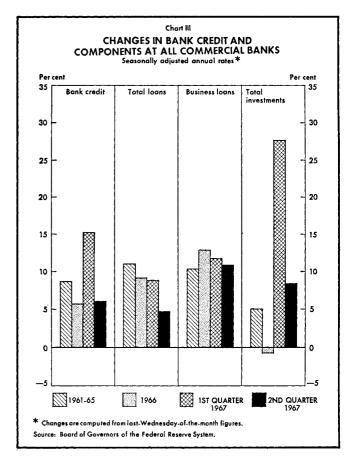
BANK CREDIT

Credit extended by commercial banks grew at a seasonally adjusted annual rate of 6.0 per cent in the second quarter of 1967, a sharp reduction from the 15.1 per cent rate of the first three months of the year (see Chart III). With a small increase in bank credit during the final quarter of 1966, the growth of bank credit over the nine months ended in June averaged 7.8 per cent, an annual rate slightly in excess of the pace of the first nine months of

1966. Both loans and investments at commercial banks grew at significantly reduced rates during the second quarter of 1967.

Total loan expansion at commercial banks fell to a 4.7 per cent seasonally adjusted annual rate in the April-June period, after increasing at an 8.9 per cent rate in the first quarter. This decline in the rate of growth was due primarily to a sharp reduction in securities loans, as expectations of rising interest rates and falling bond prices caused Government securities dealers to reduce inventories sharply. The growth of loans other than securities loans during the second quarter was only slightly lower than during the previous three months.

Business loans increased at a seasonally adjusted annual rate of 10.9 per cent during the second quarter, compared with gains of 11.8 per cent in the first quarter and 12.9 per cent over the year 1966. Business loan growth was subject to several opposing influences during the period. On the one hand, the growth was held down by the sharp decline in inventory accumulation along with



a strong drive by business firms to reduce their indebtedness to banks and reconstitute their lines of credit. A substantial proportion of the record amount of funds obtained by business firms in the capital market in the second quarter was apparently used to repay bank loans. In addition, nonfinancial businesses continued to substitute commercial paper for bank loans. The demand for business loans was bolstered, on the other hand, by the continued high level of fixed investment expenditures relative to internally generated funds and by the acceleration of corporate-profits tax payments in the second quarter. Bank loans to nonbank financial institutions were also affected by the tax speedup, as finance companies sought to replace commercial paper maturing around tax dates. Bank lending to nonbank financial institutions rose sharply in both April and June, and was up substantially on balance for the quarter. In contrast, there had been a moderate decline in loans to nonbank financial institutions over the first three months of the year, when yields on commercial paper were dropping faster than bank lending rates and when finance companies were finding ample funds in the commercial paper market. Other areas of bank lending showed diverse movements in the second quarter. Although the pace of residential construction continued to pick up, real estate loans rose somewhat more slowly than in the first quarter. Consumer loans continued to grow at their modest first-quarter pace. Agricultural loans, however, expanded sharply, on a seasonally adjusted basis.

Holdings of securities by commercial banks grew at a seasonally adjusted annual rate of 8.4 per cent in the second quarter, less than one third of the extremely rapid rise in the first three months of 1967. This reduced rate of growth of bank investments reflected a sharp rundown of short-term United States Government securities coupled with a continued strong rise in holdings of state and municipal securities.

The decline in bank holdings of Treasury securities in the second quarter reflected a number of special factors. Bank purchases of the bulk of the \$2.7 billion issue of tax anticipation bills auctioned in mid-March brought bank holdings of Treasury issues to relatively high levels at the end of the first quarter and the beginning of the second quarter. The subsequent sale of a major part of these bills by the banks in April and the redemption on June 22 of a sub-

stantial amount of tax bills held to maturity by banks served to reduce sharply their holdings of Government securities by the end of the quarter. May was the only month of the quarter in which commercial banks as a whole added to their stock of Treasury securities. This rise resulted from commercial bank participation in the midmonth refunding of \$22.1 billion of Treasury notes maturing in May, June, and August of 1967; banks picked up substantial amounts of Treasury notes with one- to five-year maturities in the refunding, partly at the expense of short-term issues. Over the full quarter, bank holdings of Treasury obligations fell at a seasonally adjusted rate of 9.0 per cent, after rising at a 25.8 per cent pace in the first quarter. In the first six months of the year, however, bank purchases of Government securities were strong on balance—up 8.1 per cent annually in comparison with the nearly 6 per cent declines of 1965 and 1966, when loan demands pressed heavily on available bank resources.

Commercial banks continued to purchase substantial amounts of securities other than United States Governments during the second quarter. Bank holdings of these securities—mainly tax-exempt state and municipal issues—rose at an annual rate of 27.5 per cent during the quarter, and have reached record levels on a seasonally adjusted basis in each of the last six months. However, the banks have generally been reluctant to take up substantial amounts of long-term tax-exempt securities.

Bank liquidity, as indicated by loan-deposit ratios, changed little during the second quarter. For all commercial banks as a group, the aggregate ratio moved up from 63.6 per cent in March to 64.8 per cent in June on a last-Wednesday-of-the-month basis. Most of this increase, however, stemmed from a sharp rise in loans (not adjusted for seasonal variation) in June. At weekly reporting New York City banks the loan-deposit ratio (monthly average of weekly figures) remained constant at 76.2 per cent over the quarter, while at banks outside New York City the ratio moved up 0.3 percentage point to 67.1 per cent in June. Because the money market banks tend to respond rapidly to changing monetary conditions, the ratio at New York City banks is now substantially below last year's high while the all-commercial-bank ratio is less than 1 percentage point below its high of 65.6 per cent in September 1966.

Recent Changes in United States Silver Policy*

Following the emergence in the late fifties of an increasingly severe shortage of silver, United States silver policy has undergone a series of changes, which in effect provide for the demonetization of silver. For a brief period in the late fifties, the Treasury was able to accommodate market demands by sales of "free" silver, that is, its holdings of silver over and above the amount legally required as "backing" for outstanding silver certificates. By late 1961, however, it was clear that the Treasury could not continue to fill market demands and at the same time meet the nation's increasing coinage requirements. Accordingly, in November of that year, the Treasury moved to conserve its free silver stock by temporarily suspending sales of silver to the market. At the same time, and for the same purpose, it also began to retire silver certificates in the first of a series of moves toward the removal of certificates from the currency system. The Treasury found it necessary to reenter the silver market in 1963 to prevent hoarding of silver certificates and coin as the market price approached \$1.29 per ounce. At this price the silver content of the silver dollar equals its face value, as does the bullion equivalent of silver certificates.1 Then in June 1965 Congress authorized the substitution of copper and nickel for silver in dimes and quarters, and reduced the silver content of the half-dollar. This move substantially reduced the domestic use of silver for coinage, but the Treasury still had to stabilize the market price of silver until the amount of silverless coins was adequate to meet public needs. In acting as a residual source of supply for foreign as well as domestic buyers, the Treasury, in effect, stabilized prices in world markets. However, following a burst of speculative purchases in May of this year, the Treasury discontinued sales of silver to buyers other than "legitimate domestic concerns" and simultaneously invoked its statutory authority to prohibit the melting and export of silver coins. By early July it became clear that the amount of clad coins was adequate to meet public needs, and on July 14 the Treasury halted sales of silver to domestic users at the fixed price of \$1.29 per ounce.

SOURCES AND USES OF SILVER

The changeover to a silverless coinage system as well as earlier changes in silver policy was dictated fundamentally by the development of a global imbalance between industrial and other demands for silver and available supplies. The absorption of silver for industrial uses in noncommunist countries rose from an estimated 240 million ounces in 1961 to almost 360 million ounces last year (see Table I), largely reflecting a tremendous increase in silver requirements for such uses as photographic film, electronic components, and batteries. Moreover, with the increase in population and widespread use of vending machines, the demand for coinage has increased enormously. In the early sixties, the amount of silver needed

Table I

FREE WORLD SILVER PRODUCTION AND CONSUMPTION
1961-66

In millions of ounces

Silver	1961	1962	1963	1964	1965	1966
Consumption:						
Industrial usage	240	259	261	304	347	357
Coinage	137	128	166	267	376	108
United States	56	77	112	203	320	54
Foreign	81	50	55	64	55	54
New production	203	209	215	211	215	231
Global deficit	173	177	213	361	507	233

Note: Because of rounding, figures do not necessarily add to totals.

Sources: Handy and Harman, Annual Reviews; Annual Reports of the Director of the Mint.

^{*} Martin Barrett, Economist, Foreign Research Division, had primary responsibility for the preparation of this article.

¹The silver content of the standard silver dollar, as established by Congress in 1792, is 371.25 grains or 0.7734 of an ounce of pure silver and is thus equal to its face value when the price of silver is \$1.2929 per ounce. Silver certificates are also exchangeable for 0.7734 ounces of silver per dollar. The value of the silver content of dimes and quarters is the same as their face value at \$1.3838 per ounce.

Table II
UNITED STATES SILVER CONSUMPTION AND SOURCES OF SUPPLY
1961-66

In millions of ounces

Silver	1961	1962	1963	1964	1965	1966
ndustrial consumption	105.5 34.9	110.4	110.0	120.5	137.0	150.0
Less new production		36.3	35.0	37.0	39.0	42.0
Difference	70.6	74.1	75.0	83.5	98.0	108.0
Add United States coinage	55.9 126.5	77.4 151.5	111.5 186.5	203.0 286.5	320.3 418.3	53.9 161.9
Accounted for by: Net commercial imports Lend-lease returns Decline in Treasury stock	- 9.1 - 10.4 - 129.5	- 63.3 - 8.3 - 94.4	- 32.5 184.0	55.7 — 366.3	- 12.2 414.4	22.3 — — 209.4
Total accounted for	149.0	166.0	— 216.5	— 310.6	— 426.6	— 187.1
Discrepancy	- 22,5	- 14.5	- 30.0	- 24.1	- 8.3	- 25.2

Note: Because of rounding, figures do not necessarily add to totals.

Sources: Handy and Harman, Annual Reviews; Annual Reports of the Director of the Mint.

to satisfy the demand for coins in the United States grew very rapidly. Thus, despite a slight reduction in the use of silver for coinage abroad, Free World absorption of silver for coinage alone rose from 137 million ounces in 1961 to as much as 376 million ounces in 1965—the last full year before the changeover to cupro-nickel dimes and quarters in this country. Over the same period, Free World production of silver remained almost stationary and has averaged only 211 million ounces annually. Consequently, the overall deficit widened from about 170 million ounces in 1961 to as much as 507 million ounces in 1965. The gap narrowed considerably in 1966 with the reduction in the use of silver for coinage in the United States, but the imbalance between industrial consumption and new production remained very large.

The global deficits, as shown in Table I, provide a rough measure of the degree of disequilibrium that has developed in Free World silver markets. However, they considerably overestimate the excess market demand, mainly because United States coinage requirements have been satisfied entirely by drawing on Treasury stocks rather than market sources. Moreover, new production has been supplemented from time to time through a variety of other sources—demonetized coin, liquidation of private holdings, and sizable sales by communist countries. While the indicated deficits cannot be interpreted literally as measures of excess demand, they do indicate some of the dimensions of the overall shortage.

In the United States, silver usage increased very rapidly in the early sixties mainly as a result of the accelerated production of coins (see Table II). Inclusive of coinage requirements, total domestic usage almost tripled from 1961 to 1965, after having remained virtually unchanged during the fifties. Part of the resulting imbalance was met by net commercial imports and, for a while, by returns of lend-lease silver. By 1963 foreign countries had almost fully discharged their obligation to return such silver, and in 1964, after the Treasury had reentered the market as a residual source of supply, all the excess domestic demand and some foreign requirements as well were filled by Treasury sales of free (or nonmonetized) silver. Indeed, in 1964 the global deficit was almost exactly matched by a decline in Treasury silver holdings, and in subsequent years both the annual drain on Treasury silver and global deficits were roughly comparable in size. The decline in Treasury holdings, together with other sources of silver, was consistently larger than the indicated domestic deficit, which suggests that in each year there was net private domestic accumulation of silver.2 This steady buildup in private silver holdings represented, not only regular business inventory needs, but also precautionary and speculative buying which was particularly large in 1964, when an unprecedented rise in coin production focused attention

² This discrepancy, as shown in the final line in Table II, is measured by the difference between the indicated deficit and the amount accounted for by net imports, lend-lease returns, and changes in Treasury holdings. While this discrepancy contains residual errors and includes Treasury sales to Government agencies, it also provides a rough measure of changes in private domestic holdings of silver.

on the limited availability of silver for both industrial uses and coinage requirements. Although speculative pressures apparently subsided in 1965, inventory accumulation again increased considerably in 1966 and continued during the early months of this year.

TREASURY POLICY

In accommodating excess market demands, while at the same time increasing coin production, the Treasury's total holdings of silver were necessarily subject to a continuous drain. However, the only silver that the Treasury was legally authorized to sell consisted of its stock of free silver, that is, the portion of its total holdings that was not required to back silver certificates (see Table III). These stocks were accumulated under the silver purchase legislation of the thirties, which required the Treasury to support the market through purchases of newly mined domestic silver. During the early postwar period the Treasury continued to add to its holdings, but by the late fifties the combined requirements for coinage and industrial uses began to exceed world production by increasingly larger amounts. For a while the Treasury was able to fill the gap through sales of free silver at \$0.925 per ounce. However, in the fall of 1961, there was a burst of speculative purchases, which

Table III
COMPOSITION OF TREASURY SILVER

	Outstanding	Silver stock			
End of period	silver certificates	Total	Backing	Free	
	Millions of dollars	Mi	ces		
1961: December	2,336.5	1,831.5	1,807.0	24.5	
1962: June	2,276,6	1,778.0	1,760.8	17.1	
December	2,214.0	1,728.1	1,712.3	15.8	
1963: June	2,126.4	1,658.3	1,644.5	13.8	
December	1,998.0	1,554.6	1,545.2	9.3	
1964: June	1,810.5	1,430.6	1,400.2	30.4	
December	1,347.6	1,192.6	1,042.2	150.3	
1965: June	888.8	982.6	687.4	295.2	
December	687.5	803.6	531.7	271.8	
1966: June	602.1	689.4	465.6	223.8	
December	568.8	594.3	440.0	154.3	
1967: March	5 58.4	531.7	431.9	99.9	
June	397.6*	442.5	307.5	135.1	

Note: Because of rounding, figures do not necessarily add to totals.

Source: United States Department of the Treasury, Daily Statement.

would have quickly exhausted the remaining holdings of free silver. Accordingly, on November 28, the Treasury temporarily suspended sales of free silver to the market.

At the same time, the President instructed the Treasury to obtain silver required for coinage through the retirement of five- and ten-dollar silver certificates—denominations for which a replacement was available in the form of Federal Reserve notes. The potential supply of silver immobilized as backing for certificates in these denominations amounted to about 400 million ounces, or almost one fourth of the Treasury's total holdings. Since the Federal Reserve System was not authorized to issue notes in denominations of less than five dollars, there was no substitute available for the replacement of one- and two-dollar certificates. The President announced that he would recommend legislation to permit the Federal Reserve to issue notes in smaller denominations as well. The enabling legislation was enacted in June 1963.

Within two weeks after the Treasury's withdrawal from the market in 1961, the price of silver rose to about \$1.05 per ounce but then moved slightly lower on profit taking. In August 1962, there was a renewed wave of speculative purchases. These purchases, together with increasing industrial and foreign coinage demands, resulted in a series of price increases that carried the quotation to almost \$1.21 by the year-end. During the first half of 1963 the price moved gradually upward, and by the summer had reached its monetary value of \$1.29 per ounce. The Treasury could not allow the price to rise much above that level, for at higher prices silver certificates would have gone to a premium and, in the process, disappeared from circulation. Moreover, prices above \$1.38 would have provided an incentive to recover silver from subsidiary coinage through melting.

The June 1963 legislation, which authorized the issue of one-dollar Federal Reserve notes, eliminated the threat of a diminishing supply of one-dollar bills and, at the same time, increased the availability of silver for use in coinage. Moreover, the mechanics of the redemption procedure assured the availability of silver bullion to the market at its monetary value. It was not necessary that silver certificates be presented physically in exchange for bullion. Substantial amounts of silver certificates were being retired each day. Anybody wishing to acquire bullion could tender other funds in a form satisfactory to the New York or San Francisco Federal Reserve Banks and request those banks to purchase an equivalent amount of silver certificates and exchange them for bullion. As bullion was released, an equivalent amount of certificates was retired. From July 1963 until August 1965, the rate of retirement of silver certificates exceeded the Treasury's bullion losses resulting

^{*} Reduced by \$150 million under legislation approved in June 1967. The Secretary of the Treasury has determined that this amount of silver certificates has been destroyed, irretrievably lost, or held in collections and will never be presented for redemption.

from market sales and use in coinage. Consequently, the amount of free silver rose in the face of a decline in the Treasury's total holdings. By August 1965, the Treasury had been able to accumulate a supply of unencumbered silver in excess of 300 million ounces. Thereafter, bullion losses began to exceed the rate of certificate retirements, and the amount of free silver steadily declined.

While the retirement of silver certificates provided the Treasury with free silver needed to accelerate coin production, it failed to provide a lasting solution to the coinage problem. To be sure, increased production had virtually eliminated the shortage of silver coins by the end of 1965. However, in order to protect the existing silver coinage, it was necessary to continue to stabilize the market through silver bullion sales. For, if the Treasury had discontinued its sales, the price would have quickly risen above \$1.38, and in the process subsidiary silver coinage would have disappeared from circulation, as silver dollars already had. After exhaustive study, the Treasury recommended and Congress enacted the Coinage Act of June 1965, which authorized the production of silverless dimes and quarters and reduced the silver content of the half-dollar to 40 per cent. In order to hold the market price at the \$1.29 level and thereby assure an orderly transition to the new coinage system, the act extended the Treasury's authority to sell unobligated silver. Among other provisions, the act authorized the President to establish a Joint Commission on the Coinage which would make recommendations upon such matters as "the time and circumstances under which the United States should cease to maintain the price of silver".

The passage of the act enabled the Treasury to reduce substantially the use of silver in coinage. Despite the reduced use of silver in coinage, the Treasury's stocks continued to decline and by the end of 1966 had fallen to slightly less than 600 million ounces, of which 440 million were required as cover for \$569 million of outstanding certificates. In the early months of 1967, the return flow of certificates from the public to the Federal Reserve Banks dwindled to negligible amounts. A substantial part of the certificates reported as still outstanding was probably lost or destroyed and presumably will never be presented for redemption under any circumstances. However, some certificates had probably been withdrawn from circulation in anticipation of an increase in the market price of silver. In any event, the resultant slowdown in the rate of certificate retirement, coupled with increasing silver purchases from the Treasury, some of which were undoubtedly speculative in character, resulted in a further erosion of the supply of free silver.

During the first two weeks in May, in particular, there

was an unprecedented increase in purchases and orders for silver, mostly for export, which if unchecked would have quickly led to the exhaustion of the Treasury's supply of free silver. This, in turn, would have resulted in an immediate increase in the market price and imperiled the continued circulation of silver coinage at a time when the amount of clad coin was not yet considered sufficient to meet the country's needs. In order to assure the continued availability of silver to the domestic market, the Treasury on May 18 discontinued sales of silver to buyers other than "legitimate domestic concerns" and simultaneously invoked its statutory authority to prohibit the melting or export of silver coin. These steps effectively removed the Treasury as a source of supply for buyers overseas, but domestic demands remained very strong.

On June 24, the President signed legislation, authorizing the Treasury to write off a maximum of \$200 million of outstanding silver certificates deemed to have been lost or destroyed, or held in private collections, in the expectation that such certificates would never be presented for redemption or flowback to the Federal Reserve Banks for retirement. Under this legislation the Treasury has already written off \$150 million in certificates, thereby releasing 116 million ounces of silver previously immobilized. The bill also provided that holders of silver certificates would have one year from the date of enactment of the legislation to redeem certificates for silver. After this period, silver certificates would continue as legal tender—the purpose for which they were issued as currency—but with no special redemption privileges.

By mid-July, the mints had produced about 81/4 billion pieces of the new silverless dimes and quarters and, in the process, virtually duplicated the entire stock of silver dimes and quarters in circulation. Moreover, during the remainder of this year the production of coins is scheduled at a monthly rate of 300 million pieces, and this rate can be stepped up to 700 million pieces should the need arise. Even if some silver coins should begin to disappear, as silver dollars already have, the amount of clad coins in circulation and in inventory or in process of production is fully adequate to meet forseeable needs. In view of the success of the coinage program and continued heavy demands for silver from domestic buyers, the Treasury-acting on a recommendation of the Joint Commission on the Coinage —on Friday, July 14, decided to halt all sales of silver at its monetary value. The following Monday, the price of silver for spot delivery in the New York market was raised to \$1.78 per ounce, and by early August had increased to about \$1.85 per ounce. At these levels the silver content of subsidiary coins exceeds their face value, but the prohibition on melting, which carries severe penalties, remains in effect.

The Treasury has announced that it will sell about 2 million ounces of silver a week under a competitive sealed-bid procedure. At first these sales will be restricted to domestic users, but later on foreign buyers may also be allowed to bid. Since the Treasury has written off \$150 million of silver certificates, the amount of free silver available for market sales has been substantially increased. Indeed, the Treasury's stock of free silver, which now stands at approximately 110 million ounces, is about as large as the 1966 domestic imbalance between industrial

demands and new production. While Treasury sales will help substantially to alleviate the domestic shortage of silver, such sales will no longer be made at an artificially low price. The price of silver, like many other commodity prices, is now determined fundamentally by market forces. In June 1968, when the right to redeem silver certificates comes to an end, the demonetization of silver will in effect have been completed. While this process has resulted in a slight change in the composition and appearance of the nation's coins and currency, it has in no way affected their value as a means of payment.