

FEDERAL RESERVE BANK OF NEW YORK



MONTHLY REVIEW

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The Business Situation

Economic activity again expanded sharply in the second quarter of this year. Gross national product (GNP) valued at market prices increased just short of \$20 billion, nearly matching the record first-quarter gain. Inventory investment contributed substantially to the latest growth in overall spending, however. Indeed, final expenditures—total GNP less the change in business inventories—advanced only half as fast as in the first quarter. Spending by consumers, which had been exceptionally strong in the first three months of the year, advanced slowly in the second quarter despite a further steep rise in disposable personal income. As a result, the personal savings ratio increased, reversing most of the decline in the preceding quarter and bringing the savings rate almost back to the previous peak level.

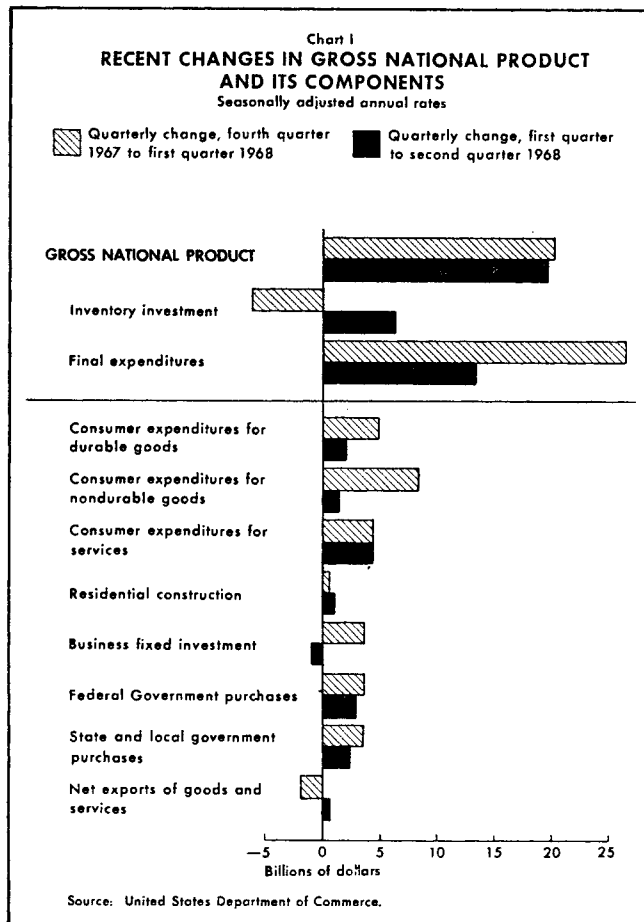
Prices of goods and services continued their sharp increase in the second quarter. The GNP price deflator—which gauges price trends throughout the economy—rose at a 4.0 per cent annual rate, in line with the excessive rise that began after mid-1967 when economic activity started to accelerate. The tax increase that became effective in July, coupled with the program of restraint in Federal spending, should help to remove some of the inflationary pressures in the economy originating from the demand side. However, much of the current upward thrust on the price level reflects increases in costs of production, especially wage costs. Indeed, negotiated settlements involving current and future wage raises far in excess of productivity gains continue to be the rule. These cost increases, in turn, are partly the legacy of earlier excess demand conditions prevailing much of the time since mid-1965 when the Vietnam military outlays began to increase sharply. Experience since World War II has shown that cost-push can be a particularly tenacious form of price inflation, and consequently substantial price rises must be anticipated for some time to come even if the dampening of demand materializes as expected. Meanwhile, the currently high level of savings gives consumers the option of absorbing part of the tax increase by reducing savings rather than spending. Also, the substantial decline in market rates of interest that accompanied the tax increase has

buoyed the outlook for some types of spending, notably residential construction. Agreement on a wage contract in the steel industry without a strike removed some uncertainty about the economy in the months ahead, but the steel price increases announced immediately after the settlement underscored the inflationary cost pressures that now pervade the economy.

GROSS NATIONAL PRODUCT IN THE SECOND QUARTER

The nation's total output of goods and services increased by \$19.6 billion in the second quarter (see Chart I) to a seasonally adjusted annual rate of \$850.8 billion, according to preliminary Department of Commerce estimates. This advance amounted to 9.4 per cent at an annual rate, only slightly below the 10.0 per cent rate of gain of the first quarter when GNP increased \$20.2 billion. Though price inflation accounted for more than 40 per cent of the second-quarter growth in the market value of newly produced goods and services, real output also expanded strongly at a 5.2 per cent annual rate. This real gain was less than the first-quarter rate of 6.4 per cent but otherwise the biggest increase since the end of 1966. Inflationary pressures remained strong in the second quarter. The GNP deflator rose by 4.0 per cent at an annual rate, a bit faster than in the first three months of the year. In the last four quarters, the deflator has risen overall at a rate of 3.9 per cent, the largest one-year increase since the year ended in the second quarter of 1957. The consumer price index has risen even more—registering a 4.2 per cent gain in the twelve months ended in June 1968, the most rapid one-year increase since early in the Korean war.

A large rise in inventory investment accounted for 32 per cent of the second-quarter GNP growth. Inventory spending increased to an \$8.4 billion annual rate from the rather low \$2.1 billion pace in the first quarter. This \$6.3 billion step-up in inventory spending contrasted markedly with the \$6.2 billion first-quarter drop. Strike-hedge steel buying and the buildup of larger than normal retail auto inventories undoubtedly contributed to the strength of total



inventory buying in the second quarter, but the tapering-off of final demand, especially consumer spending, may have led to some unplanned inventory accumulation if business sales fell short of expectations. Nonetheless, the level of inventories appears to be reasonably moderate, since inventory-sales ratios have remained at or near their relatively low first-quarter levels.

Business spending on structures and equipment weakened in the second quarter, dropping by \$1.0 billion to an annual rate of \$87.6 billion. This was the first decline in business fixed investment in a year, and was somewhat larger than had been projected in the May survey of plant and equipment expenditures conducted by the Department of Commerce and the Securities and Exchange Commission. The survey also found, however, that businessmen were planning modest increases in their plant and equipment spending during the remainder of the year.

Residential construction spending rose by \$1.0 billion

to an annual rate of \$30.1 billion during the quarter just ended. This extended to five the number of consecutive quarters in which residential construction activity has increased, following the steep decline of building associated with shortages of mortgage financing in 1966. Moreover, while new residential housing starts and building permits declined in both May and June from their high April levels, the longer run outlook for residential construction has improved markedly in recent weeks as factors affecting the availability of mortgage finance have turned more favorable. The substantial decline since mid-June in both short- and long-term interest rates has increased the ability of nonbank thrift institutions (the principal mortgage lenders) to attract and retain deposit funds. At the same time, the improvement in yields on mortgage loans relative to yields on other long-term investments should encourage diversified institutional lenders to undertake more mortgage financing.

Consumers, whose spending had been the principal factor contributing to the record first-quarter GNP gain, reverted in the second quarter to the cautious spending patterns characteristic of 1967. Consumer outlays increased \$7.7 billion, less than half the first-quarter gain of \$17.2 billion and not much larger than the slow \$7.1 billion average quarterly gain during 1967. Disposable income, on the other hand, continued to advance rapidly, registering a \$12.0 billion increase in the second quarter. While less than the first-quarter rise of \$14.8 billion, this income growth exceeded any of the quarterly gains recorded in 1966 or 1967. The large increase in consumption expenditures in the first quarter was accompanied by a drop in the savings rate and, conversely, with disposable income continuing sharply upward, the second-quarter slowdown in the growth in consumption spending was associated with a sharp rise in the savings rate. Savings increased to 7.7 per cent of disposable income from the first-quarter level of 7.1 per cent. The second-quarter savings rate was the second highest recorded since the end of the Korean war, exceeded only fractionally by the 7.8 per cent registered in the fourth quarter of 1967 when strikes in the automobile industry held back consumption spending.

Consumer purchases of durable and nondurable goods, which together had accounted for 75 per cent of the record \$17.2 billion first-quarter advance in total personal consumption outlays, slowed sharply and accounted for only 44 per cent of the \$7.7 billion second-quarter increase. On the other hand, consumer expenditures on services, which seldom show much departure from their upward trend, increased in the second quarter by \$4.3 billion, unchanged from the first quarter. The modest second-

quarter spending on durable and nondurable goods was reflected in a virtually unchanged level of monthly retail sales, from the high March total of \$28.1 billion. Preliminary data indicate that June retail sales were \$28.0 billion. Sales of domestically produced autos reached an annual rate of 8.4 million units in the April-to-June period, up 3.1 per cent from the first-quarter figure of 8.2 million units. Sales of imported cars also continued strong through the second quarter, raising the distinct possibility that imports will exceed the record 10.2 per cent market share achieved in 1959.

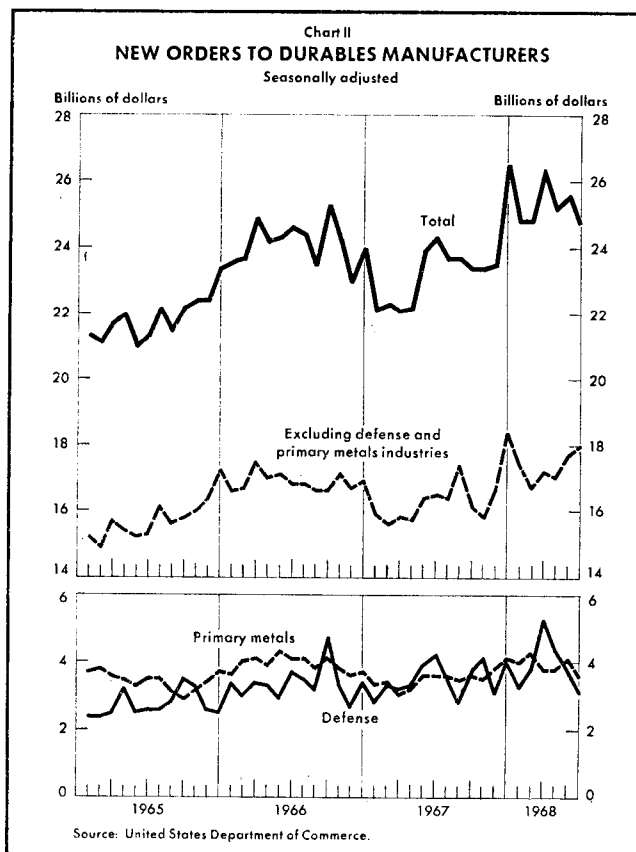
Total spending for goods and services by all levels of government contributed \$5.1 billion to second-quarter GNP growth, rising to an annual rate of \$195.6 billion. This gain, while down somewhat from the first-quarter increase of \$7.0 billion, was about in line with the \$5.0 billion average quarterly gain recorded in 1966 and 1967. The principal elements of the growth in government expenditures were a \$2.5 billion increase in defense spending and a \$2.3 billion rise in state and local purchases. Nondefense Federal spending edged up by a modest \$0.4 billion, but a relatively sharp increase can be expected in the third quarter as the second stage of the previously legislated Federal civilian pay raise goes into effect.

RECENT DEVELOPMENTS IN PRODUCTION AND EMPLOYMENT

Industrial production in June rose to a record level for the second consecutive month. The Federal Reserve Board's index of industrial production advanced 0.3 percentage point to 164.4 per cent of the 1957-59 base, following a large 1.6 percentage point gain in May. But despite recent increases in industrial output, manufacturing utilization rates declined from 84.9 per cent in the first quarter of 1968 to 84.5 per cent in the second quarter, as growth in capacity outstripped gains in production.

The June increase in output was led by gains in defense equipment production and in consumer goods output, particularly autos. Business equipment and materials output, on the other hand, held steady. Auto production has been very strong since May in preparation for the end of the 1968 model year. In June, auto assemblies rose to an annual rate of 9.4 million units, slightly above the high May rate, and July total production is scheduled to equal the heavy June pace, despite the production slowdown at the end of the month as model changeovers begin. Iron and steel output continued to rise in June, as steel mills worked to fill the high level of orders received in anticipation of a strike in August. Steel production in July climbed to 151 million tons at a seasonally adjusted annual rate.

Total new orders received by durables manufacturers fell by \$767 million in June to a seasonally adjusted \$24.8 billion (see Chart II), primarily as a result of sizable declines in new orders to the primary metals and defense products industries. Excluding these two components, new orders to durables manufacturers moved higher, with machinery and equipment orders showing strength. The rise in business machinery orders supports earlier survey reports that capital expenditures on plant and equipment would increase in the second half of the year. The sharp falloff in new orders for primary metals partly reflects the high level of steel inventories built up by steel users in anticipation of a steel strike in August, and the working-down of these large stockpiles should continue to dampen steel orders for several months. In addition, the decline in primary metals orders was associated with strikes at some aluminum plants. New orders to defense products industries have been declining since March, with the June level the lowest since November. Total shipments by durables manufacturers eased \$0.1 billion from the record May level of \$25.5 billion, and since shipments in the



month exceeded the flow of new orders, the backlog of unfilled orders dropped \$0.6 billion to \$80.3 billion.

Employment, like production, reached record levels in June. The civilian labor force, however, grew even more rapidly than employment, and the overall unemployment rate rose. Since both the surge in the civilian labor force and the 0.3 percentage point advance in the unemployment rate to a seasonally adjusted 3.8 per cent stemmed from an unusually large increase in the number of teenagers and young adults seeking jobs, the higher unemployment does not seem to indicate any slackening in the economy. The end of the school year normally increases the number of persons unable to find work, but the June increase was larger than seasonal. As a result, the unemployment rate for teen-agers climbed 1.0 percentage point to 13.6 per cent, and the rate for 20- to 24-year-olds jumped 1.2 percentage points to 6.5 per cent. The unemployment rate for adult workers 25 and over, however, remained unchanged at 2.2 per cent. The rise in unemployment, thus, seems to reflect the difficulty of teenagers and college students in finding employment. At the same time, the number of workers on nonfarm payrolls rose 82,000 to a record seasonally adjusted 67.9 million as increases were shown in all major industry groups except construction and mining. The weakness in construction employment and the very modest expansion of retail trade jobs probably contributed to the problems of youths looking for employment, since these industries normally employ many persons of such age groups.

PRICE AND COST DEVELOPMENTS

Both prices and costs advanced sharply in June, in most cases exceeding the already excessive average increases of the first five months of the year. The consumer price

index, which moved up at an annual rate of roughly 4.0 per cent over the last several months, registered a 6.0 per cent annual rate of gain in June. All major components of the index showed substantial increases, but prices of services, which had risen at a 4.5 per cent annual rate in May, climbed at a steep 8.1 per cent annual rate in June. An important source of the higher services prices was housing costs which rose at an even larger 9.2 per cent annual rate.

Preliminary July data indicate that industrial wholesale prices, which were stable from April to June, rose at a modest 1.1 per cent annual rate in July, well below the increases of late 1967 and early 1968. However, prices of farm products and processed foods, which often fluctuate rather widely, turned sharply higher. Farm products prices rose at an annual rate of 16.4 per cent, and processed foods and feeds at a 13.6 per cent rate. Consequently, the overall wholesale price index rose at a 4.4 per cent annual rate, the biggest gain since February.

Moreover, trends in production costs threaten the recent comparative stability of industrial wholesale prices. Unit labor costs in manufacturing were up in June at an exceptionally high 9.8 per cent annual rate. The history of this series since the middle of 1966 gives a rather clear indication of an accelerating cost-push inflation. In midsummer 1966 the unit labor cost index was still within 1 percentage point of its 1957-59 average. In the following year, however, unit labor costs moved up 5.7 per cent, the most rapid sustained period of increase since the 1955-57 boom. Then, after leveling off considerably in the latter half of 1967, the series expanded at a 6.5 per cent annual rate over the first six months of this year. The large number of negotiated wage settlements in the 6 to 7 per cent range over the last few months suggests that this trend will be difficult to reverse in the near future.

The Money and Bond Markets in July

Interest rates moved substantially lower during July, while expectations mounted that the fiscal restraint legislation enacted in late June would moderate economic growth and reduce overall credit demands. As the month progressed, opinion in the financial markets turned increasingly to the view that the pace of economic expansion was already slowing, and there was widespread discussion in the market concerning the possibility of an easing of monetary policy. Activity in the markets for intermediate- and long-term Government securities expanded sharply since market participants, anticipating lower interest rates in the future, sought to commit funds at prevailing rate levels and to lengthen the maturity of their portfolios. Consequently, average market yields on Treasury coupon securities fell by 35 basis points on intermediate issues and 15 basis points on long-term maturities. In the corporate and tax-exempt markets, an unusually heavy volume of new securities reoffered by underwriters around midmonth, at yields considerably lower than those offered on comparable issues in recent periods, was accorded an enthusiastic reception by investors.

Rates on longer Treasury bills fell sharply during July, despite the sale of \$4.0 billion of tax anticipation bills near midmonth. In the three- to six-month area, however, rate declines were relatively modest because of occasional selling pressures. Rates on bankers' acceptances, prime commercial paper, and directly placed finance company paper were reduced during the month, and the rate charged by the Federal Reserve System on repurchase agreements with nonbank Government securities dealers was also lowered. Around midmonth, rates offered by the large New York City banks on new large-denomination negotiable certificates of deposit (C/D's) with maturities of six months or more were reduced lower than the $6\frac{1}{4}$ per cent Regulation Q ceiling adopted in April. Later, offering rates on new three-month C/D's were dropped below their 6 per cent legal ceiling. At the declining pattern of offering rates, the city banks succeeded in expanding their C/D liabilities steadily over the period. Despite a moderate increase in average net reserve availability at member banks in July, the effective rate for Federal funds remained generally in a 6 to $6\frac{1}{8}$ per cent range.

BANK RESERVES AND THE MONEY MARKET

The money market was generally steady in July, and banks were under somewhat less reserve pressure than in June. Average borrowings from the Reserve Banks fell substantially, reflecting both the improved availability of reserves and a marked decline in the average level of excess reserves carried by the "country" banks. Average net borrowed reserves of all member banks were \$199 million for the five statement weeks ended in July (see Table I), compared with \$397 million in June. The net reserve position of the banking system ranged widely within the month, from average net borrowed reserves of \$310 million in the opening week to average free reserves of \$39 million in the second week. The sharp reserve improvement in the latter week failed to produce any money market easing, however, with gains largely concentrated in banks outside the major money centers.

Throughout the month, the effective rate for Federal funds remained generally at a premium of $\frac{1}{2}$ to $\frac{5}{8}$ percentage point over the discount rate. Around midmonth, pressures from a number of sources converged on the large banks in New York City and other major money centers. Financing needs of United States Government securities dealers increased substantially, the Treasury made very heavy calls on Tax and Loan Accounts, and on July 11 the banks had to pay for large awards of both regular Treasury bills and the new tax anticipation issue. In preparation for anticipated heavy reserve losses, the New York City institutions early in the month sharply stepped up their borrowing from branches overseas. Over the first three statement weeks of the month, average Euro-dollar holdings of the city banks soared a record \$720 million. Nevertheless, the average basic reserve deficit jumped to \$700 million in the statement week ended on July 17 from about \$250 million earlier in the month (see Table II). This deficit subsequently rose even higher, reflecting the further expansion of dealer financing and the repayment of a portion of the Euro-dollars previously acquired. Although bank demand for Euro-dollars was unusually heavy over much of the month, rates on these

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

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

Factors	Changes in daily averages— week ended on					Net changes
	July 3	July 10	July 17	July 24	July 31	
	"Market" factors					
Member bank required reserves*	- 15	+ 263	- 340	- 133	+ 47	- 178
Operating transactions (subtotal)	- 245	+ 56	+ 385	+ 192	- 354	+ 34
Federal Reserve float	+ 94	+ 195	- 113	+ 103	- 406	- 127
Treasury operations†	- 140	+ 259	- 194	+ 88	- 19	- 6
Gold and foreign account	- 24	+ 4	+ 26	+ 13	- 13	+ 6
Currency outside banks*	- 283	- 680	+ 375	+ 207	+ 182	- 208
Other Federal Reserve accounts (net)‡	+ 108	+ 288	+ 290	- 220	- 97	+ 369
Total "market" factors....	- 260	+ 319	+ 45	+ 59	- 307	- 144
Direct Federal Reserve credit transactions						
Open market instruments						
Outright holdings:						
Government securities	+ 420	- 14	- 313	+ 14	+ 180	+ 287
Bankers' acceptances	+ 6	- 1	-	- 1	+ 1	+ 5
Repurchase agreements:						
Government securities	- 146	+ 75	+ 29	- 104	+ 34	- 112
Bankers' acceptances	- 22	- 35	+ 10	- 18	+ 48	- 17
Federal agency obligations	- 66	+ 4	- 4	-	-	- 66
Member bank borrowings	- 314	- 81	+ 58	+ 169	- 37	- 205
Other loans, discounts, and advances	-	-	+ 1	- 1	-	-
Total	- 123	- 51	- 220	+ 59	+ 227	- 108
Excess reserves*	- 383	+ 268	- 175	+ 118	- 80	- 252

Member bank:	Daily average levels					Average of five weeks ended on July 31, 1968
	25,834	25,839	26,004	26,255	26,128	
Total reserves, including vault cash*	25,834	25,839	26,004	26,255	26,128	26,012§
Required reserves*	25,651	25,388	25,728	25,861	25,814	25,688§
Excess reserves*	183	451	276	394	314	324§
Borrowings	493	412	470	639	602	523§
Free (+) or net borrowed (-) reserves*	- 310	+ 39	- 194	- 245	- 288	- 199§
Nonborrowed reserves*	25,341	25,427	25,534	25,616	25,526	25,489§

System Account holdings of Government securities maturing in:	Changes in Wednesday levels					Net changes
	July 3	July 10	July 17	July 24	July 31	
Less than one year	+ 136	- 192	+ 280	- 414	+ 493	+ 303
More than one year	+ 62	-	-	-	-	+ 62
Total	+ 198	- 192	+ 280	- 414	+ 493	+ 365

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 five weeks ended on July 31, 1968.

Table II
RESERVE POSITIONS OF MAJOR RESERVE CITY BANKS
JULY 1968

In millions of dollars

Factors affecting basic reserve positions	Daily averages—week ended on					Averages of five weeks ended on July 31*
	July 3	July 10	July 17	July 24	July 31*	
Eight banks in New York City						
Reserve excess or deficiency(-)†	67	20	22	- 9	68	34
Less borrowings from Reserve Banks	26	2	25	11	-	13
Less net interbank Federal funds purchases or sales(-)	173	404	697	704	860	568
Gross purchases	1,152	1,451	1,337	1,277	1,488	1,341
Gross sales	979	1,047	640	573	628	773
Equals net basic reserve surplus or deficit(-)	- 132	- 386	- 700	- 724	- 792	- 547
Net loans to Government securities dealers	615	737	1,231	1,823	1,595	1,200

Thirty-eight banks outside New York City

Reserve excess or deficiency(-)†	41	59	22	29	36	37
Less borrowings from Reserve Banks	115	73	96	260	157	140
Less net interbank Federal funds purchases or sales(-)	945	1,037	1,380	1,059	698	1,024
Gross purchases	2,268	2,476	2,475	2,214	1,984	2,283
Gross sales	1,323	1,439	1,095	1,155	1,288	1,260
Equals net basic reserve surplus or deficit(-)	- 1,020	- 1,051	- 1,454	- 1,290	- 819	- 1,127
Net loans to Government securities dealers	168	202	351	401	606	346

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

Maturities	Weekly auction dates—July 1968				
	July 1	July 8	July 15	July 22	July 29
Three-month	5.400	5.368	5.467	5.293	5.190
Six-month	5.589	5.410	5.554	5.366	5.287
Monthly auction dates—May-July 1968					
	May 23	June 25	July 24		
Nine-month	6.086	5.745	5.342		
One-year	6.079	5.731	5.309		

* 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.

funds declined steadily and sharply. Rates posted by the New York City banks on new call loans to United States Government securities dealers were raised to a range of $6\frac{3}{8}$ to $6\frac{5}{8}$ per cent at midmonth from the $5\frac{7}{8}$ to 6 per cent range that had prevailed at the start of the month, but were subsequently lowered.

Dealers in bankers' acceptances lowered rates by $\frac{1}{4}$ percentage point through two reductions of $\frac{1}{8}$ percentage point each on July 10 and July 18, bringing the offering rate on ninety-day paper to $5\frac{3}{4}$ per cent. The move, occurring at a time when the money market was under increased pressure, was in line with the consensus in the financial markets that interest rates were slated for a near-term decline. The Federal Reserve System reduced the rate it charges on repurchase agreements with nonbank dealers in United States Government securities in two steps, of $\frac{1}{8}$ percentage point each on July 5 and July 17, to $5\frac{1}{2}$ per cent. Near the month end, dealers in prime commercial paper lowered their offering rate on four- to six-month paper by $\frac{1}{4}$ percentage point to 6 per cent, and major finance companies reduced their offering rate on paper placed directly with investors by $\frac{1}{8}$ percentage point to $5\frac{7}{8}$ per cent for 30- to 270-day maturities. Large New York City banks began a gradual rollback of offering rates on new negotiable C/D's early in July, adjusting rates first on maturities of one-year or more and later on progressively shorter maturities. By the close of the month, a rate of $5\frac{3}{4}$ per cent was generally in effect on maturities of nine months or more and a $5\frac{7}{8}$ per cent rate on maturities of three to nine months. Posted rates on longer maturities were thus $\frac{1}{8}$ to $\frac{1}{2}$ percentage point lower than the maximum permissible rates under Regulation Q. Rates on C/D's of shorter maturities, however, remained at their legal ceilings. Despite the declining trend of offering rates, large banks across the country succeeded well in attracting C/D funds: in the four weeks ended on July 24, C/D liabilities of the weekly reporting banks rose by \$2.0 billion, even though an estimated \$5.4 billion of outstanding issues matured during the month.

THE GOVERNMENT SECURITIES MARKET

Prices of Treasury coupon securities recorded further sharp gains during July on a greatly expanded volume of trading. Dealers were encouraged at the start of the month when selling by investors did not materialize. Such selling had been regarded as a potential influence on the market since the Congressional passage of the surtax-spending legislation on June 21 and 22. Over much of July, in fact, there was considerable investment demand for intermediate-term issues, both outright and on maturity-

lengthening switches. This demand was augmented, at times, by strong professional buying for inventory purposes and by demand from speculative sources.

The generally buoyant atmosphere in the market reflected the growing conviction of participants that a decline in interest rates was inevitable now that the Federal Government's fiscal restraint program was in operation. Early in the month, reports that the monetary authorities wanted lower interest rates sparked a sharp rally. While this soon faded, optimism revived following the second reduction in the rate charged by the System on repurchase agreements with nonbank dealers. This move was interpreted in market circles as a signal that some modification of the policy of monetary restraint had been made. Expectations of lower interest rates were further reinforced by discussion in the press of the possible slowdown in the pace of economic expansion, suggested by recently released data, and by the publication of New York City banking statistics revealing a tax-period increase in business loans which was much smaller than many had expected in light of the sharp increase of corporate income tax payments. During July, corporations were required to make accelerated income tax payments and, under the recently enacted tax legislation, to pay one third of their total surtax liability for calendar 1968.

Against these favorable market influences, several factors worked to restrain coupon prices during the first half of July. The prospect of substantial Treasury cash borrowing in the latter half of the year and the month's heavy calendar of corporate and tax-exempt debt offerings exerted pressure on the long-term sector over the first half of the period. However, the sale of participation certificates by the Federal National Mortgage Association (FNMA) at midmonth served to galvanize investor interest and contribute to the downward thrust of yields. Later, market participants became more cautious with the approach of the Treasury's August refunding, but prices firmed at the close of the month as a strong interest developed for an expected long option in the financing. For the month as a whole, price increases amounted to as much as $1\frac{3}{16}$ points in the three- to five-year area and $\frac{2}{4}$ points in longer issues.

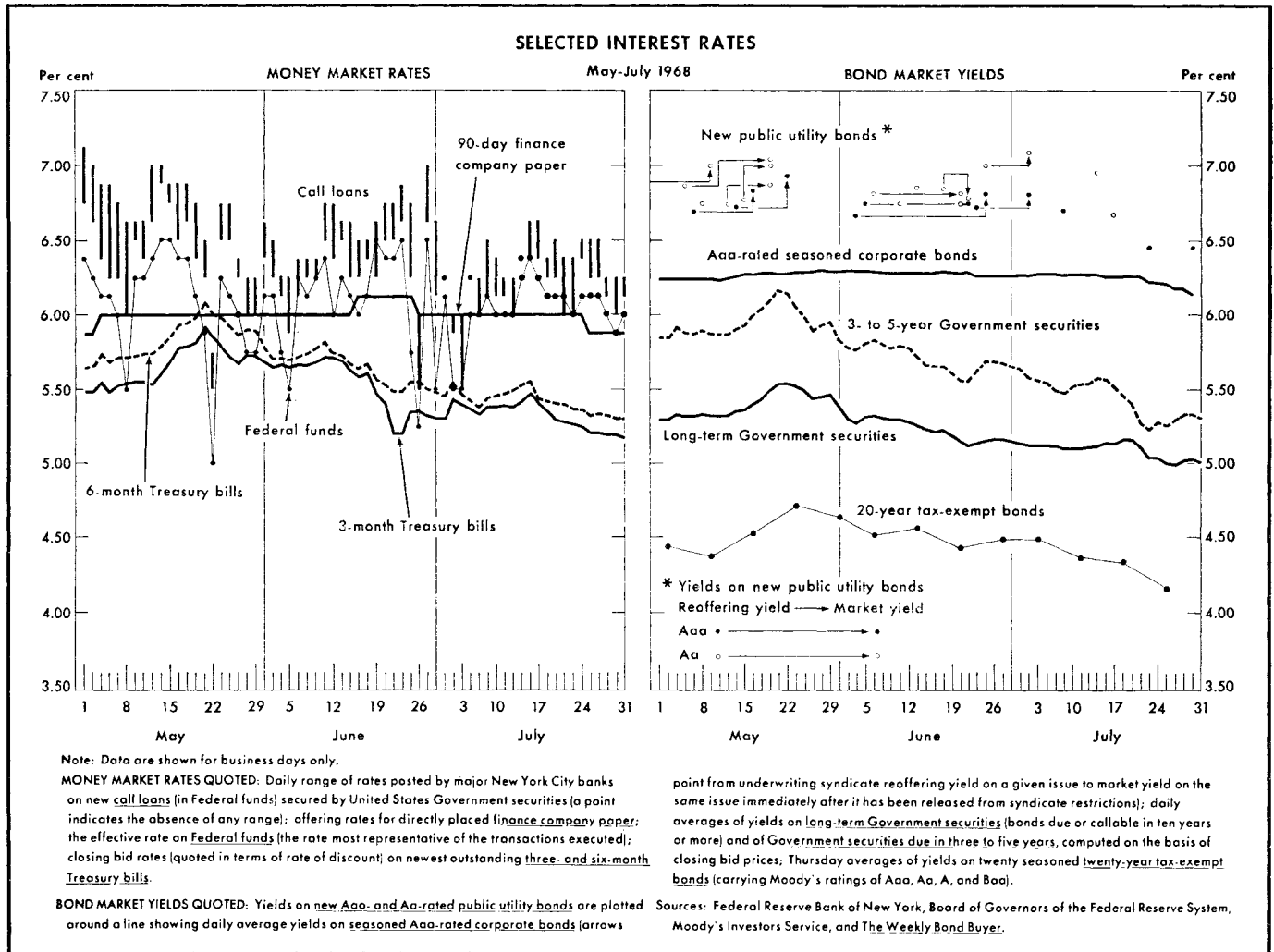
The Treasury announced on July 31 an offering of 5% per cent six-year notes to redeem \$8.6 billion of securities maturing on August 15 (of which approximately \$3.6 billion is publicly held) and to raise \$1.5 billion of cash. The new issue is priced at 99.62 to yield 5.70 per cent, 30 basis points less than the yield on a similar offering last May. Banks will be permitted to pay for 50 per cent of their acquisitions by crediting Treasury Tax and Loan Accounts. The announcement met with a very favor-

able response from the market.

Market rates on Treasury bills declined on balance during July, despite the additional supply in the market resulting from the sale by the Treasury on July 11 of \$4 billion of tax anticipation bills to mature in March and April of 1969. In the auction held on July 2, the new bills were awarded at average issuing rates of 5.399 per cent for the eight-month issue and 5.424 per cent for the nine-month maturity. Commercial banks, who were permitted to make payment through credits to Treasury Tax and Loan Accounts, bid aggressively for the offering and resold less of their awards of the bills than expected.

The tone of the bill market was generally firm in the early part of the month, when a strong investment demand for longer issues encountered a relatively limited supply of

offerings. Shorter bills, however, came under some selling pressure during this period since commercial banks reversed purchases that had been made prior to the June 30 statement publishing date. Around midmonth, bill rates backed up temporarily throughout the list under the impact of professional profit-taking activity, a rise in dealer financing costs, and the liquidation of bills by commercial banks. Once the midmonth pressures in the money market had subsided, however, a strong tone reemerged in the bill market. Investment demand revived, and the rate decline was given further impetus on July 17 by the second cut in the System's rate on repurchase agreements. Bidding in the monthly auction of nine- and twelve-month bills, held on July 24, was aggressive, resulting in average issuing rates of 5.342 per cent and 5.309 per cent, respectively,



down 40 and 42 basis points from rates established in the previous monthly auction (see Table III).

Prices of Federal agency issues moved moderately higher in early July, largely as a result of the temporary lull in agency financing. Around midmonth, however, prices weakened in response to the July 17 announcement of a \$1.33 billion offering of participation certificates by FNMA, scheduled for the final week of the month, and to the heavy volume of new corporate and tax-exempt securities in the market. Following the initial unfavorable impact of the announcement, investor response to the offering was quite enthusiastic, and the certificates were in heavy demand at yields roughly $\frac{1}{4}$ percentage point lower than those on a similar financing last March. The FNMA issue consisted of an \$800 million portion offered to the public and \$530 million sold directly to Government investment accounts. The public offering included a \$300 million ten-year issue, priced to yield 6.125 per cent, and a \$500 million twenty-year issue, priced to yield 6.20 per cent.

OTHER SECURITIES MARKETS

Financing activity in the corporate and tax-exempt bond markets was relatively light during early July but expanded sharply around midmonth. Nevertheless, reoffering yields trended lower during the month under the impact of the spreading optimism in the capital markets over the future course of interest rates. In the corporate sector, an attitude of wariness was evident on the part of investors as the month opened. Two syndicates were dissolved with large unsold balances of public utility bonds, which had been aggressively priced by underwriters in the latter part of June immediately following the passage of the surtax-spending legislation. After the removal of syndicate pricing restrictions, yields on these issues were adjusted upward by 9 basis points. Early in the month, a public utility Aaa-rated issue with five-year call protection received an initially unenthusiastic reception at a reoffering yield of 6.70 per cent, 2 basis points lower than the yield on a

similarly rated utility offering in late June. Distribution of this and several other slow-moving issues accelerated, however, in the wake of the rapid sellout on July 11 of a \$250 million Aaa-rated industrial offering of $6\frac{1}{2}$ per cent bonds carrying ten-year call protection.

Most corporate issues marketed during the latter half of July were accorded a favorable investor response, as expectations of lower rates spurred investor demand. Illustrating the sharp improvement in the market tone, a new Aa-rated utility issue was offered to investors at midmonth at a yield of 6.67 per cent (compared with a 7 per cent reoffering yield on a similar issue sold on May 20) and was traded in the market near the month end at prices to yield about 6.45 per cent. Prices of outstanding corporate bonds increased over the month, and the average yield on Moody's Aaa-rated seasoned issues fell over the month to 6.14 per cent from 6.27 per cent (see chart).

The market for tax-exempt securities displayed a somewhat more confident attitude during the first half of July, and a few of the relatively scant number of new offerings sold out rapidly. With the sharp expansion in the financing calendar at midmonth, however, a number of offerings (which were aggressively priced) encountered investor resistance, and some temporary congestion developed in the market. By July 17, the Blue List of dealers' advertised inventories had risen to a 1968 record of \$698 million, after having been at \$570 million approximately one week earlier. Among the offerings encountering initially lukewarm receptions were large issues of the State of California, New York State, New York City, and Maryland, all of which carried yields roughly 5 to 15 basis points lower than recent comparable offerings. Subsequently, the market tone improved rapidly, facilitating sales of these and other issues, and the Blue List declined gradually through the latter part of the month to \$482 million, compared with \$669 million at the close of June. *The Weekly Bond Buyer's* average yield series for twenty seasoned tax-exempt issues (carrying ratings ranging from Aaa to Baa) declined by 32 basis points over the month to 4.16 per cent.

Banking and Monetary Developments in the Second Quarter of 1968

The growth of total bank deposits and total loans and investments slowed somewhat further in the second quarter of 1968. The reserve positions of member banks were brought under considerably greater pressure in the second quarter than in the first, as the Federal Reserve System took firm steps to moderate increasing inflationary pressures in the domestic economy and to defend the position of the dollar internationally. The discount rate, which had remained at 4½ per cent through most of the first quarter before being raised to 5 per cent in late March, was increased further to 5½ per cent early in the second quarter in action initiated shortly after mid-April. Moreover, net borrowed reserves averaged \$360 million in the April-June period, compared with \$44 million in the first three months of the year. The Federal funds rate—the rate at which banks with reserve deficits borrow from those banks with excess reserves—averaged almost 6 per cent in the second quarter, up from an average of about 4¾ per cent in the first quarter.

The reduced rate of expansion of total bank credit in the second three-month period of the year was entirely attributable to bank holdings of securities, which failed to increase during the period. Indeed, loan expansion in the second quarter actually increased relative to the first quarter, largely as a result of a sizable pickup in business borrowing related to heavy tax payments and increased inventory accumulation.

Although total bank deposit liabilities grew very slowly in the second quarter, this was due entirely to a steep rundown of Treasury deposits and a falloff in the rate of growth of time deposits. Privately held demand deposits grew quite rapidly as did currency held outside banks. Thus, the money supply—the total of private demand deposits and currency outside banks—rose during the second quarter at a rate nearly double the 4.6 per cent annual rate gain of the first three months of the year. This acceleration in money supply growth was associated with significantly higher average interest rate levels than those of the first quarter, implying that the demand for money increased more rapidly than its supply. Apparently, a very

sharp increase in financial transactions, especially on the stock exchanges, resulted in large amounts of money balances being demanded for this purpose.

The slowing of time deposit growth in the second quarter was attributable in large measure to the rise of short-term market rates of interest above the maximum rates payable on time and savings deposits set by Regulation Q. The ceiling rate on large certificates of deposit (C/D's) was raised on April 19, when the discount rate increase to 5½ per cent became effective, in order to help forestall an excessive loss of these deposits. The new maximum rate was scaled up from 5½ per cent on the shortest maturities (30 to 59 days) to 6¼ per cent on the longest (180 days or more); the maximum rate previously payable on large-denomination C/D's had been 5½ per cent on all maturities. However, as short-term interest rates on competing market instruments continued to rise, banks soon found it necessary to offer the new ceiling rates on most maturities, and large C/D's continued to decline though not so much as before. It was not until the end of the quarter, after market rates of interest had fallen sharply on improved prospects for, and final passage of, the tax increase, that banks found it possible to stem and reverse their C/D losses. Indeed, the recent decline in market rates of interest has substantially improved the competitive position of savings and loan associations and mutual savings banks as well as commercial banks.

BANK CREDIT

The growth of total bank credit continued to slow in the second quarter of 1968, as monetary conditions became more restrictive. Loans and investments of commercial banks expanded at a 5.5 per cent seasonally adjusted annual rate, less than the 6.8 per cent annual rate of expansion in the first quarter and about one half the pace recorded in 1967. Moreover, the April-June advance in bank credit was concentrated primarily in the first two months, with little credit growth occurring in June. Over the quarter as a whole, loans accounted for

New Publications

The Board of Governors of the Federal Reserve System made public in July 1968 a report entitled "Reappraisal of the Federal Reserve Discount Mechanism". This report, the result of a three-year study, sets forth the conclusions and recommendations of a System committee which was appointed to reappraise and, where necessary, recommend redesign of the Federal Reserve lending facilities. Copies may be obtained—at a cost of 25 cents each (20 cents per copy for quantities of ten or more sent to one address)—from Publications Services, Division of Administrative Services, Board of Governors of the Federal Reserve System, Washington, D. C. 20551.

Copies are still available of three books published within the last few years by the Federal Reserve Bank of New York:

Central Bank Cooperation: 1924-31 by Stephen V. O. Clarke (January 1967), \$2 per copy. Discusses the efforts of American, British, French, and German central bankers to reestablish and maintain international financial stability between 1924 and 1931.

Money, Banking, and Credit in Eastern Europe by George Garvy (September 1966), \$1.25 per copy. Reviews recent changes in the monetary systems of the seven communist countries in Eastern Europe and the steps taken toward greater reliance on financial incentives.

The New York Foreign Exchange Market by Alan R. Holmes and Francis H. Schott (February 1965), 50 cents per copy. Describes the organization and instruments of the foreign exchange market, the techniques of exchange trading, and the relationship between spot and forward rates.

These books may be ordered from the Public Information Department, Federal Reserve Bank of New York, 33 Liberty Street, New York, N. Y. 10045, at the prices indicated, plus New York City sales tax where applicable.

all the growth in bank credit, while total investments remained unchanged. Increasing pressures on banks' holdings of securities were evident throughout the first half of 1968. Gains in holdings of United States Government securities occurred only in February and May, when there were major Treasury financings, and in each case these gains were quickly followed by substantial rundowns. Moreover, investments in other securities began to lessen after the start of the year, and bank holdings of these securities actually declined during the second quarter—the first time this has occurred since the second half of 1966.

Business loans expanded at an annual rate of 12.3 per cent during the April-June period, nearly twice the pace registered in the first quarter of the year, despite a late-April increase to 6½ per cent from 6 per cent in the rate charged by banks on loans to prime business borrowers. The growth in business loans soared to a 19.1 per cent annual rate in April, dropped to 5.4 per cent in May, and recovered again in June to 12.1 per cent. The rapid

advance of business loans in April, the most vigorous monthly expansion in the first half of 1968, was associated with heavy tax borrowing at midmonth. The decreased growth in May possibly resulted from some switching of business borrowing from banks to the securities markets following the rise in the banks' prime rate in April. The revival of business loan demand in June partly reflected more than seasonally heavy borrowing for quarterly dividend and tax payments. Moreover, business loan demand was undoubtedly strengthened in all three months by the increased rate of inventory accumulation, particularly among durables manufacturers who were stockpiling steel against the possibility of a strike in August.

In spite of the late-May increase in interest charges on commercial bank consumer credit and moderate growth of consumer spending, these loans expanded at an 8.6 per cent annual rate in the second quarter, only slightly below the rapid pace registered in the first quarter of the year. Real estate loans rose in the second quarter at a

moderately lower pace than in the previous three months, while loans to nonbank financial institutions moved up at a 10.8 per cent rate through the second quarter, reversing the 10.5 per cent annual rate of decline in the previous three-month period. Securities loans fell sharply in the second quarter, primarily in the months of April and June, reflecting both the absence of any major Treasury financing in those months and the generally high rates charged by banks on dealer loans.

Although banks' securities holdings did not increase on balance over the quarter as a whole, there were wide swings related to acquisitions and sales of Treasury securities. Bank holdings of United States Government securities fell in April, rose very strongly in May when banks purchased a sizable share of the \$3.8 billion of new securities sold by the Treasury, and then declined again in June. Holdings by banks of other securities, mainly tax-exempt municipals, actually contracted slightly in the second quarter after expanding at a 13.7 per cent annual rate in the first quarter of the year and by 26.1 per cent in 1967.

With banks placing a larger share of their new funds in loans, the ratio of loans to deposits at commercial banks climbed to a near-postwar high in the second quarter of 1968, from an average of 63.1 per cent in March to 65.3 per cent in June. At weekly reporting New York City banks, where the ratio has been much higher and the slowing in total deposit growth more pronounced, the ratio climbed from 75.3 per cent in March to 80.0 per cent in June, a rise of fully 4.7 percentage points. However, New York City banks have acquired increasingly large amounts of Euro-dollar balances through their foreign branches and, when these balances are counted as deposits, the level of the loan-deposit ratio for New York City banks is reduced and its recent rate of growth appears more moderate.

MONEY SUPPLY AND TIME DEPOSITS

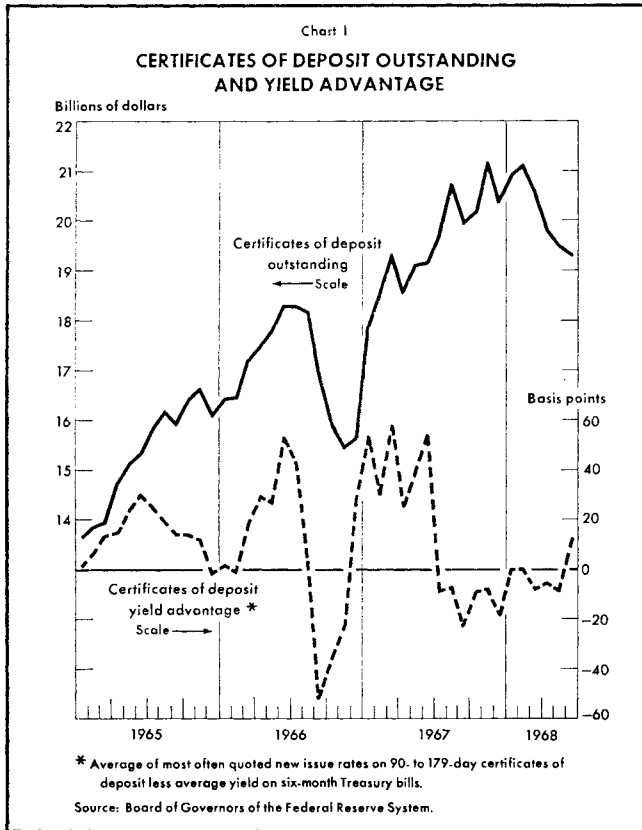
The daily average money supply grew rapidly during the second quarter, as both privately held demand deposits and currency outside banks increased more than in the preceding three months. Total time deposits, on the other hand, rose much less rapidly than in the first quarter, with weakness evident in all time deposit classifications.

The daily average money supply expanded at a seasonally adjusted annual rate of 8.3 per cent from March to June, compared with only 4.6 per cent in the preceding three-month period. A contributing factor may have been the steep rundown of Treasury deposits, on a seasonally adjusted basis, with a resultant increase in privately held deposits as these funds were spent. However, the accel-

ated second-quarter rise in the money supply was associated with higher average levels of interest rates than had prevailed in the first quarter, the late May and June declines in rates notwithstanding. This suggests that the demand for money increased even more rapidly in the second quarter than the supply. Accelerated growth in the demand for money cannot be explained by the trend in economic activity inasmuch as gross national product (GNP) actually grew slightly less rapid than in the first quarter. This would ordinarily imply, if anything, a slightly slower rate of increase in the demand for transactions balances needed to support economic activity.

The sharp increase in the demand for money in the second quarter can be explained most plausibly by the surge in financial transactions that occurred during the period. For example, transactions on the national stock exchanges totaled almost \$58 billion in the second quarter, 32 per cent higher than in the first quarter or about 130 per cent higher at an annual rate. Little, if any, of this rise in the volume of stock exchange activity can be explained on seasonal grounds. Because of the typically large unit size of these transactions, an expansion of such magnitude undoubtedly required a sizable accumulation of money balances earmarked for this purpose. Further evidence of the recent importance of financial transactions in increasing the demand for money in the second quarter is provided by the statistics on activity in demand deposit accounts (other than interbank and those of the United States Treasury). Total debits to such deposits increased during the second quarter at a 22.2 per cent seasonally adjusted annual rate, compared with 15.5 per cent in the first quarter.

Time and savings deposit growth slowed in the second quarter to a 3 per cent seasonally adjusted annual rate, less than half the rate of expansion during the preceding quarter. Weakness was apparent in all deposit categories, as the increased market rates of interest made it difficult for banks to attract and retain deposits at the maximum rates payable under the various Regulation Q ceilings. Regulation Q ceilings on savings deposits and smaller denomination time deposits continued unchanged at the levels established in late 1966. However, the Regulation Q ceiling on large C/D's (those of \$100,000 or more) was liberalized, effective April 19. The new schedule of maximum permissible rates on large C/D's was set at 5¾ per cent on 60- to 89-day maturities, 6 per cent on 90- to 179-day maturities, and 6¼ per cent on maturities of 180 days or more. The 5½ per cent ceiling that had previously applied to all maturities continued in effect for the new 30- to 59-day C/D's. But even after this Regulation Q increase, banks continued to have difficulty attracting C/D funds, as com-



peting short-term market rates moved still higher (see Chart I). Between the end of March and the end of June, large C/D's outstanding at weekly reporting banks fell by about \$1.3 billion, with about half of these losses occurring at New York City banks. Consumer-type C/D's were also weak, and state and local governments ran down their time deposits, possibly in response to difficult borrowing conditions in the municipal bond market.

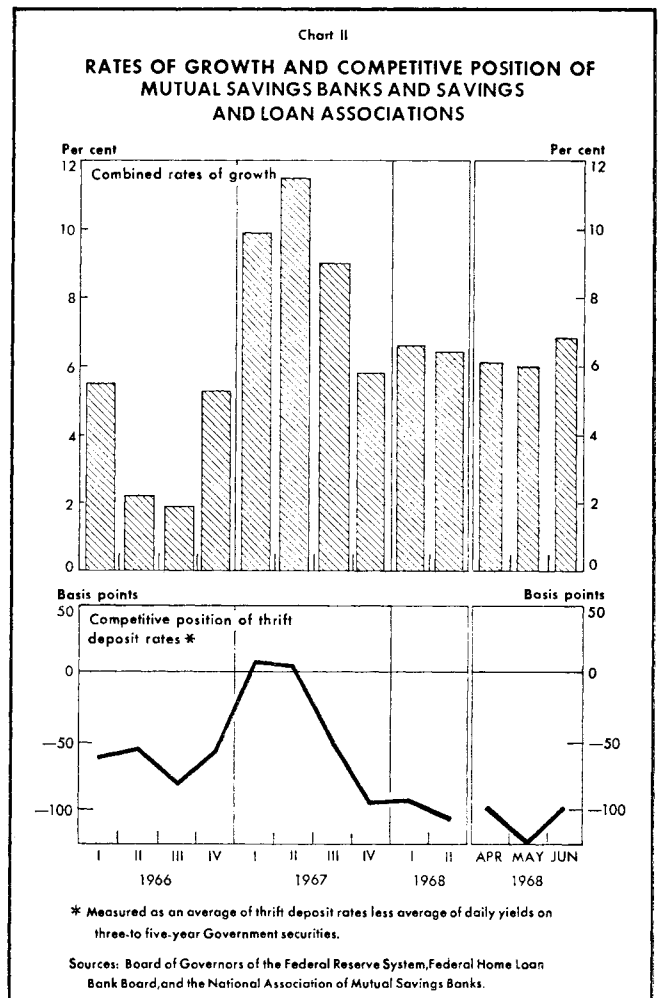
However, toward the end of the quarter, the competitive position of banks in the time deposit market began to improve greatly. The sharp rise of short-term market yields in the first half of the quarter had carried these yields well above maximum offering rates on comparable-maturity large C/D's. Thus, in the third week of May, the yield on six-month bills was 27 basis points above the maximum 6 per cent rate payable on 90- to 179-day large C/D's under the revised Regulation Q ceilings. But, by the end of June six-month bill yields had dropped below the Q ceiling, and in July banks were able to lower their offering rates to less than 6 per cent.

Some large banks were able to offset all or part of their losses of large C/D's during the second quarter by acquir-

ing funds in the Euro-dollar market through their foreign branches. Thus, between the end of March and the end of June, weekly reporting banks expanded their liabilities to their foreign branches by \$1.4 billion, twice the increase of the preceding quarter.

NONBANK LIQUIDITY

Liquid asset holdings of the nonbank public advanced at only a 3.8 per cent annual rate in the second quarter, well below the 9.1 per cent rate of gain in the previous quarter. Slowing was evident in almost every major component, with the notable exception of the money supply. Time and savings deposits at commercial banks registered little growth over the quarter because of the pull of higher yielding market instruments. Total deposits



and shares at savings banks and savings and loan associations rose 6.3 per cent in the second quarter, slightly lower than the 6.6 per cent rate of growth in the first quarter of the year (see Chart II). In the April-June period, negative spreads between interest rates paid by thrift institutions on their deposits and yields on competing market instruments reached a peak in the second half of May (about 143 basis points in the case of three- to five-year Governments) and more than exceeded the average peak spreads recorded in September 1966. However, the retardation in deposit flows in the second quarter of this year never reached the proportions of the 1966 experience, apparently because these institutions now have considerably less interest-sensitive money than in that earlier year. Thrift institutions were able to expand their mortgage acquisitions at about the same pace in the

second quarter of 1968 as in the first, despite the slowing of deposit flows. The acquisition of mortgages, particularly by mutual savings banks, may have been inhibited in late 1967 and early 1968 by legal maximum interest-rate ceilings in many of the Eastern states. However, action has been recently taken to liberalize such ceilings in several states—notably New York, New Jersey, and Pennsylvania.

The reduction in the growth of the public's holdings of liquid assets was accompanied by a strong expansion of economic activity, with the result that the relative liquidity of the nonbank public, as measured by the ratio of total liquid assets to GNP, declined in the first half of 1968. This ratio, which averaged 79.2 per cent in the fourth quarter of 1967, declined to 78.4 per cent in the second quarter of 1968.

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Euro-Bonds: An Emerging International Capital Market*

Throughout most of the postwar period, and indeed as late as 1963, virtually all bond issues floated by foreign borrowers outside their own national boundaries were offered through the facilities of a single national market—typically the New York, London, or Swiss markets—and were denominated in the currency of the country in which they were floated. In recent years, however, this conventional form of “foreign” bond issue has been eclipsed by the emergence of the Euro-bond market as the focal point for international issues. The Euro-bond market, although centered in Europe, has no national boundaries. Unlike most conventional bond issues, Euro-bonds are sold simultaneously in several financial centers through multinational underwriting syndicates and purchased by an international investment clientele which extends far beyond the confines of the countries of issue. The market has been tapped by a multitude of government and private borrowers from a wide range of foreign countries, and since 1965 United States corporations or their overseas affiliates have become the most important single group of borrowers. However, the one aspect of the Euro-bond market that most differentiates it from all conventional foreign bond issues is that Euro-bonds are denominated in a currency other than those of the markets of issue. Occasionally Euro-bonds are denominated in pounds sterling or German marks. From time to time, issues may provide currency options, which enable the creditor to demand repayment in one of several currencies and thereby to reduce the exchange risk inherent in single-currency foreign bonds. However, more often than not, interest and principal on the bonds are payable in United States dollars. In short, the Euro-bond market, as it has developed over the past few years, has become essentially a market for dollar-denominated obligations of foreign as well as United States borrowers, purchased

by non-United States investors.

The need to create a more unified European capital market, although generally recognized for many years, became particularly pressing after mid-1963 when interest costs in the New York market increased substantially for European borrowers as a result of the United States interest equalization tax. Individual domestic securities markets in Europe have limited capacity to absorb large bond issues at frequent intervals, and access to these markets by foreign borrowers has long been subject to official restrictions. Indeed, almost all the major continental European countries exercise direct control over conventional foreign bond issues in their markets—in some cases to insulate the level of domestic interest rates from foreign demands and in others for balance-of-payments reasons. In contrast, the control exercised over European investors’ purchases of foreign currency securities on foreign markets has been less stringent than the limitations on the issue of foreign securities in their own markets. Thus, in order to create adequate facilities for borrowers to raise funds in Europe, ways had to be found that would permit borrowers to tap several European financial centers simultaneously while avoiding restrictions on borrowing in local currencies. To achieve this, investment bankers in the United Kingdom, the United States, Belgium, and elsewhere began to arrange securities issues denominated in dollars or in European currencies for sale outside the country of currency denomination. This technique has not only avoided national restrictions of foreign borrowing in local currencies, but also enabled borrowers to mobilize funds on a continental scale.

The Euro-bond market in the few years of its existence has already developed into a highly efficient channel for the redistribution of savings, both within Europe and between Europe and the rest of the world. The market has managed to attract a stream of investors from European and other countries to take up issues at yields somewhat below those prevailing on a number of individual European capital markets. With the growth of the Euro-bond market, a number of European countries have reemerged

* Martin Barrett, Special Assistant, Research and Statistics function, had primary responsibility for the preparation of this article.

as exporters of sizable amounts of long-term funds. The market has not only led to an international redistribution of long-term capital, but also tended to mobilize dollars that might have remained in official hands or in other forms of short-term investments. By linking the leading European capital markets together, the Euro-bond market has been an integrating influence on those markets in a period when steps toward more formal integration of capital markets have been very few.

THE DEVELOPMENT OF THE MARKET

Before the emergence of the Euro-bond market, most international borrowing took the form of flotations of dollar-denominated securities by foreigners in the New York market. Canadian and World Bank bond issues accounted for virtually all the funds raised by nonresidents in New York prior to 1958, but thereafter there was a steady growth in bonds issued by Western European countries as well. Although United States investors were the major source of funds for the purchase of these issues, substantial amounts were also purchased by European and other nonresident investors, particularly after the return to convertibility of the major European currencies at the end of 1958. In numerous cases, New York underwriters of foreign bonds offered in the United States arranged a selling group of leading banks and dealers in the major European financial centers to facilitate sales of bonds to non-United States investors. Foreign investors often found foreign dollar bond issues attractive not only because they were denominated in dollars, but also because yields on foreign governments' dollar issues offered in the New York market were often higher than those on bonds of the same governments issued in their domestic markets and denominated in local currencies. To the extent that foreign funds were attracted, the New York market served as an intermediary between foreign borrowers and foreign lenders. Thus, long before the Euro-bond market had emerged as the dominant segment of the international capital market, dollar-denominated bonds had become an important instrument through which non-United States lenders could employ their resources internationally.

The market for dollar-denominated bonds issued outside the United States first began to take shape after the announcement of the United States interest equalization tax in July 1963. With the announcement and later the retroactive imposition of the tax, borrowers from most Western European countries and Japan were effectively discouraged from participation in the United States capital market. Although the American lender was (and remains) legally liable for the interest equalization tax, in effect the

foreign borrower has to absorb most or all of the tax, since to be salable to United States investors the after-tax yield must be competitive with yields on comparable domestic securities. Consequently, new foreign bonds issued by developed countries in the New York market quickly subsided. For those borrowers subject to the tax, the only feasible alternative source of international funds was Western Europe itself.

Initially, the center of international financing shifted to London. Shortly before the announcement of the United States interest equalization tax, the London capital market had begun to reemerge as an important center for international securities issues.¹ As far back as October 1962, the British authorities had begun to explore the possibility of reviving London as a capital market where foreign-owned funds could be channeled to borrowers through the issue of foreign currency bonds, that is, bonds denominated in currencies other than sterling. The use of a currency other than sterling was necessary to minimize outflows of domestic funds for the purchase of nonresident issues. In other respects, however, the London market, with its long tradition in the issuance of overseas loans, was in a good position to take advantage of the effective closure of the New York market. Most of the leading financial institutions in London had extensive overseas connections. Costs of placing a foreign issue in London were lower than in Continental centers and, on average, not much higher than in New York. Finally, London provided all the advantages of a broad and active securities market.

Specific steps were taken to make the London market even more attractive for nonresidents in August 1963, when the issue of bearer securities which had been prohibited for exchange control reasons was again permitted and the tax on securities transfers was reduced substantially. At about the same time, the facilities of the London market were opened to members of the European Free Trade Association (EFTA) to raise loans in sterling, and in October were extended to all other countries for the issue of foreign currency bonds. Foreign borrowers quickly responded to these measures. As early as May 1963, the Belgian government issued the first of a series of dollar-denominated bonds in London, all of which were sold to investors outside the United States.

The Belgian issue was soon followed, shortly after the

¹ For a discussion of the revival of the London capital market, see "Recent Innovations in European Capital Markets", this *Review* (January 1965), pages 9-15.

interest equalization tax was announced, by a series of flotations by other European borrowers and Japan. From July 1963 through the end of 1964, more than \$800 million was raised through Euro-bonds, most of which were issued through London and denominated in dollars. The bulk of the bonds was issued by the Scandinavian governments and by private borrowers from Japan, all of whom had been large borrowers in the New York market before mid-1963. Borrowers from the same countries also turned to domestic securities markets on the Continent, but the scope for conventional bond issues was further reduced in April 1964 when the Swiss authorities placed severe restrictions on new foreign issues. Indeed, by 1964, the first full year after the announcement of the interest equalization tax, the volume of Euro-bond sales, at about \$700 million, was more than twice as large as the combined amount of conventional foreign bond issues floated in both London and in Continental financial centers.

The shift of European borrowing from the New York market to London and other European financial centers was followed in the latter half of 1965 by the entry of United States corporations or their foreign affiliates as large borrowers in the Euro-bond market.² Under the voluntary balance-of-payments program, announced in February 1965, participating corporations were asked to improve by 15 per cent to 20 per cent the aggregate of selected components of their individual balance of payments with developed countries. A wide range of possibilities was allowed to achieve this improvement, including higher exports, increased repatriation of earnings, and increased borrowing abroad. As a result, participating corporations began to borrow heavily overseas, even at interest rates substantially above those in the United States. The demand for finance was initially met through direct borrowing from banks, but after mid-1965 the volume of Euro-bond flotations by United States firms began to increase sharply, and for the year as a whole amounted to \$331 million, or about one third of total Euro-bond issues. With the appearance of United States corporations as large borrowers in the Euro-bond market, the London institutions that had been active in the market lost their

early lead as sponsors of Euro-bond issues to New York underwriters.

The adoption of progressively more stringent balance-of-payments guidelines for United States companies in 1966 and again in 1967 resulted in a further increase in their recourse to the Euro-bond market. However, during 1966, as credit conditions tightened throughout the industrial world, offering yields on Euro-bonds rose to the highest levels in the short history of the market. A large number of borrowers postponed previously announced issues, pared down the size of their borrowings, or in some instances shortened the maturity of the loans in order to avoid expensive long-term commitments. With the return to monetary ease on the Continent in 1967, more normal issue activity was resumed and the volume of Euro-bonds amounted to almost \$1.9 billion. Issues by United States borrowers again accounted for roughly one third of the total. Since the start of 1968, and largely as a consequence of the new United States balance-of-payments program, United States companies have clearly become the dominant borrowers in the market.

BORROWERS, LENDERS, AND INTERMEDIARIES

As noted above, the Euro-bond market, in its early stages, was used primarily by borrowers from a relatively small group of industrialized countries, all of which had relied heavily on the New York market before mid-1963. As a group, the Scandinavian countries, particularly Norway and Denmark, have always ranked among the leading borrowers in the Euro-bond market. Other members of the EFTA, notably Portugal and Austria, have also utilized the market to a considerable extent. Japan was a heavy borrower in 1964, but in 1965, when it received a limited exemption from the United States interest equalization tax, Japanese borrowers again began to turn increasingly to the New York market. International institutions, largely the European Coal and Steel Community and the European Investment Bank, have borrowed steadily for a number of years. Among the leading non-European borrowers other than United States companies, the Australian and New Zealand governments have been the most continuous and active participants in the market.

During 1967 the market was broadened by the entry of several continental European countries which had not previously utilized the market on a very large scale. France alone absorbed \$157 million through Euro-bond issues, and Spain entered the market for the first time. In total, flotations by European borrowers amounted to almost \$950 million during 1967, or almost twice as much as the volume of issues by United States companies. A num-

² For tax and other reasons, borrowings by United States corporations are usually done through financial subsidiaries, domiciled in either Luxembourg or Delaware. In either case, purchases of these bonds by United States residents are subject to the interest equalization tax. Thus, bonds issued by United States companies are described throughout this paper as United States borrowing abroad, although in a technical sense bonds issued through Luxembourg-based affiliates represent borrowing by overseas affiliates of United States firms.

ber of less developed countries in Latin America also appeared in the Euro-bond market, despite their exemption from the United States interest equalization tax. The Mexican government entered the market for the first time in 1967, borrowing a total of \$85 million through a series of issues at rates not substantially higher than market yields on its outstanding bonds in the New York market.

United States companies, as already noted, absorbed almost one third of the funds raised through the Euro-bond market in each of the past three years, but in recent months the market has seen an avalanche of issues by United States corporations. Under the revised and more stringent balance-of-payments program announced on January 1, 1968, transfers of United States funds for direct investment in most Western European countries are subject to a complete moratorium. The new program permits companies to continue to invest abroad, but they must rely to a far greater degree than before on foreign sources of funds and, within the allowable limits, on reinvested earnings. In effect, overseas projects must be financed largely with funds obtained locally—through the Euro-bond market, through bank borrowing, or through the regulated and limited national securities markets. In response to the program, affiliates and subsidiaries of United States corporations borrowed about \$1.3 billion through the Euro-bond market during the first half of 1968 alone—an amount roughly double the volume of United States borrowings for 1967 as a whole. As a result, the total volume of Euro-bond flotations by all borrowers during the first half of 1968 rose to an estimated \$1.7 billion—or more than the volume of conventional foreign bond issues in Europe and the United States combined.

This enormous surge in the amount, frequency, and average size of the flotations has been absorbed by the market with relatively little difficulty. To be sure, new issue activity came to a virtual standstill in March as a result of the uncertainty in the gold and foreign exchange markets, and offering yields on straight debt bonds issued by United States corporations this year have risen to as high as 7.5 per cent. In an effort to broaden investor interest, United States (and other) corporate borrowers have shifted increasingly from straight debt issues to bonds convertible into common stock.³ Thus far this year,

convertible issues by United States corporations have amounted to about two thirds of their total. In every instance, the convertible issues have been oversubscribed, at yields close to 5 per cent. The marketability of such issues depends, of course, on the terms of the conversion, how foreign investors rate the company's stock, and on general stock market developments in the United States. In a declining market, convertible issues might not normally sell as well as they have this year. Nevertheless, the shift from predominantly straight debt to convertible issues has considerably extended the absorptive capacity of the Euro-bond market.

The funds invested in Euro-bonds come from a variety of sources outside the United States, although their relative importance is difficult to quantify. Whether issued by United States or foreign borrowers, the bonds must find their market almost exclusively with non-United States investors. Purchases by United States residents are probably negligible because they are subject to the interest equalization tax, and the net yield on Euro-bonds after payment of that tax has generally been lower than yields on comparable domestic securities. Of course, some funds may become available indirectly from the United States if foreigners, in order to acquire Euro-bonds, sell some of their holdings of United States securities to United States residents.

British investors can participate in Euro-bond issues only by purchasing investment dollars at a premium or by borrowing dollars either through the Euro-dollar market or directly from United States banks. Such borrowing is subject to official approval, however, and after allowance is made for the cost of obtaining dollars through these channels, there is usually little or no incentive for United Kingdom investors to purchase Euro-bonds. However, with the exception of the Scandinavian countries, few countries on the Continent maintain any restrictions that impede the flow of funds into the Euro-bond market. Italy has been a large and continuous lender in the market for several years, and the net flow of funds from the Netherlands and Belgium has been considerable at times. Although German banks have participated actively in underwriting and selling Euro-bonds, German investment in the Euro-bond market has been relatively small because yields on domestic securities were, until quite recently, considerably higher. Since the start of 1968, however, as long-term interest rates in Germany moved lower, German residents have become large investors in Euro-bonds. Switzerland has been the most important single source of funds for investment in the Euro-bond market, particularly since late 1966 when Swiss banks entered the market as formal underwriters and on that basis alone

³ For the nonresident investor, one of the main attractions of a convertible issue is that it usually offers a more generous current income than the dividend of the underlying stock. Not only is the coupon rate normally higher than the dividend yield on the stock at the time of issue, but the foreign investor, while subject to the United States withholding tax on dividend payments, receives bond interest free of United States tax.

tended to absorb one third or more of the issues. Thus, in broad terms, the most important sources of funds for investment in Euro-bonds are those countries with strong balance-of-payments or reserve positions, mainly continental European countries. However, a major part of the issues in Switzerland are subscribed for the accounts of nonresident holders of Swiss francs. In view of Switzerland's role as a haven for flight capital, a large part of the funds supplied to the Euro-bond market through the Swiss banks undoubtedly reflects participation by investors from the Middle East, Latin America, and other less developed areas.

In view of the need to reach an international investment public which is geographically widespread, the size of the underwriting syndicates participating in Euro-bond issues is usually much larger than those arranged for conventional bond issues. Indeed, the market has developed to its present size largely by patient and continuous expansion of the range of investors. For Euro-bond issues, a managing syndicate, which normally includes a minimum of four or five members, agrees to subscribe to the issue at the issue price, less a commission of about 2½ per cent. The leading members of the syndicate are usually drawn from New York, London, Belgium, and Germany, but many syndicates may include a leading bank of the borrowing country, particularly for Scandinavian or Japanese borrowers.

While many of the issues are sponsored by New York or London banks, the success of the market depends on a cooperative effort of a large number of financial institutions throughout Europe in placing loans with international investors. Once organized, the sponsoring syndicate makes arrangements with a group of underwriters—among them bankers and securities dealers—drawn from a wide range of countries. The principal underwriters in the market include a total of about 100 of the leading European banks, of which as many as 50 may be involved in marketing a single issue. Underwriting groups are chosen not only for their capacity to absorb the issues if the need arises, but also for their financial contacts and expertise in forming national selling groups which can place the issue with investors. In some instances, the underwriters act as the selling group itself. But more often than not, the selling group includes members not represented in the underwriting group and thereby achieves even wider geographic coverage. In this way, virtually the entire European capital market is tapped for funds.

Because of the careful management of the pace at which issues are brought forward, the periods of heavy overhang of securities in the market have been fairly brief. Since the same issuing houses act for many borrowers and

appeal largely to the same group of investors, the flow of bonds to the market can be regulated and issue prices carefully tailored to changing market conditions. To be sure, the market suffered periods of "indigestion" in late 1965 and again during 1966 as interest rates rose sharply throughout Western Europe. Since then, however, periods of strain have been relatively short in duration and no more pronounced than those on domestic securities markets.

Indeed, with the notable exception of the Swiss capital market, the Euro-bond market is a less expensive source of long-term capital for foreign borrowers than most European domestic securities markets and not much more costly than the New York market. Part of the explanation would seem to be that almost all the issues are free of income or withholding tax of the borrowing countries, and since most bonds are issued in bearer form and held outside the country of the investor, the domestic income tax can be evaded. Thus, for all practical purposes, those investors who choose to do so may regard the gross yield on Euro-bonds as virtually tax free. A further explanation for the relatively low interest costs in the Euro-bond market is the character of the borrowers themselves. Many of the borrowing governments are regarded as prime borrowers in international capital market, as are most of the industrial and commercial borrowers. Finally, the use of the dollar as the predominant currency for Euro-bond issues has helped to extend the absorptive capacity of the market and at the same time stabilize market yields. Since there are no restrictions on the use of the dollar as a vehicle for international investment, foreigners can easily switch between dollar issues quoted in New York or elsewhere. In fact, the average yield in the New York market either on foreign bonds or on issues of United States corporations is, in a broad sense, the effective minimum yield which can be offered to investors in the Euro-bond market. For, if yields in the Euro-bond market fall below yields on comparable issues in New York, foreigners would tend to buy outstanding issues in New York.

CONCLUDING OBSERVATIONS

In less than five years, and largely as a consequence of United States balance-of-payments measures, Europe has become a major source of funds for foreign borrowers and has assumed the same role as an entrepôt that the New York market had played earlier. Indeed, many of the same considerations that had made the New York market attractive to both European borrowers and lenders have made dollar bonds attractive in Europe. Dollar-

denominated issues can command wider participation, and hence a larger market, than securities denominated in other currencies. Thus, the market has widened the alternative sources of long-term capital available to borrowers. Moreover, for foreign lenders, especially those who prefer dollar-denominated assets, the array of investment opportunities has been broadened considerably.

The development and expansion of the Euro-bond market has major implications for the United States balance-of-payments position. When United States corporations finance foreign business investment through Euro-bond market borrowing rather than by exporting domestic funds, our balance-of-payments position benefits. The spending abroad of dollars acquired abroad merely results, of course, in a reshuffle among foreigners of an unchanged total of liquid claims against the United States. This contrasts with the case where a United States corporation spends abroad funds acquired in this country, the immediate effect of which would be to increase the total of foreign liquid claims against the United States and thus our deficit on the liquidity basis. Also, the Euro-bond market has helped to improve our balance-of-payments position by providing foreign official and private borrowers a viable alternative to the United States market. When foreigners borrow funds in this country for use elsewhere the United States balance of payments is worsened, but this is not the case when the borrowing is done in the Euro-bond market, even though the loans are denominated in dollars. The growth of Euro-bond issues has a potentially favorable effect as well on the United States balance of payments measured on the official reserve transactions basis. By limiting the expansion of liquid dollar claims held abroad in the manner described above, the spillover of dollars into foreign official reserves is diminished. Additionally, the presence of an attractive investment outlet for foreign-held dollar balances may tend to strengthen the willingness of private foreigners to accumulate liquid dollar balances rather than sell them to their central banks.

Of course, these beneficial effects on the United States balance of payments are partially offset, even in the short run, by an increase in interest payments to nonresidents. Moreover, to the extent that nonresidents' purchases of convertible bonds issued by United States corporations

are financed through the sale of outstanding equities to United States investors, there is no improvement at all in the United States balance of payments, because in this case dollars would flow out from the United States to the same extent they would if the foreign investment had been financed here rather than abroad. (In fact, however, foreigners have been net buyers of outstanding United States securities in 1967 and thus far this year.) Finally, it should be noted that, if outstanding Euro-bond indebtedness of United States corporations should at some point begin to decline as a result of repayments exceeding new borrowings, the effect of that would be a deterioration in the balance of payments.

In addition to its effects on the balance-of-payments positions of this and other countries active in the market, the development of the Euro-bond market has introduced a new element of fluidity into the structure of European capital markets. As noted earlier, Europe's national capital markets are heavily insulated by a variety of regulatory, institutional, and psychological barriers to capital flows both within Europe and between Europe and the rest of the world. The emergence of the Euro-bond market has, however, tended to unify these individual markets. Since Euro-bond issues are for many European investors an alternative to long-term investments available in local markets, the Euro-bond market tends to bring long-term interest rates in Europe's various national markets closer together than they would be otherwise.

Despite the strong link which the Euro-bond market has forged between national markets, substantial insulation remains. Although liberalization of capital movements has gone quite far in a number of European countries, foreign bond issues are still treated on a discriminatory basis as compared with domestic issues. To be sure, the removal or relaxation of restrictions on foreign issues would undoubtedly result in some loss of control by the monetary authorities over the structure or level of domestic interest rates. But until foreign bond issues are permitted freely and on the same terms that govern the issue of domestic securities, European capital markets will remain less than fully integrated. The development of the Euro-bond market is only a partial substitute for the removal of many of the official restrictions that still characterize various European capital markets.