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MONEY MARKET IN SEPTEMBER

The pressures on the banking system that have resulted from the heavy demand for loans and the restricted availability of reserves over recent months were generally maintained during September. Aggregate indebtedness of member banks to the Federal Reserve Banks remained substantially above excess reserves for the second successive month. Despite further heavy demands for bank credit, however, the sustained reserve pressures were not accompanied by any marked intensification of the prevailing degree of tightness in the money market. With few exceptions short-term rates of interest, after rising rapidly in late August, tended to stabilize, and shorter-term Government securities even declined moderately in yield until late in the month. Yields of longer-term bonds, particularly United States Government issues, also moved somewhat lower.

The condition of tightness without serious strain that characterized the money market during September was at least partly attributable to the open market operations of the Federal Reserve System. By alternately supplying, withdrawing, and again supplying funds to the market, these operations offset a substantial portion of the fluctuations in bank reserves arising from the wide changes in the other factors affecting them. Establishment of $2\frac{1}{4}$ per cent discount rates during the first part of the month at the Federal Reserve Banks that had not gone to that rate in August had been widely anticipated, and thus did not provoke any sharp reactions in the money market. Four of the Reserve Banks had announced $2\frac{1}{4}$ per cent discount rates between August 3 and September 1. As a consequence, the major adjustments to the new discount rate, as well as to the sustained reserve pressures, had been largely completed by the beginning of September. The announcement on September 8 that six additional Reserve Banks, including those in the major financial centers of New York and Chicago, had raised their rates from 2 to $2\frac{1}{4}$ per cent was, however, followed by a $\frac{1}{4}$ per cent increase in rates for bankers' acceptances and a few other rate adjustments. The remaining two Reserve Banks had increased their discount rates to $2\frac{1}{4}$ per cent by September 13.

Declining yields for short-term Government securities over a substantial portion of September reflected mainly the impact of a strong demand from nonbank investors. In the first Treasury bill auction of the month on September 2, the average issuing rate edged upward, reaching a two-year peak of 2.134 per cent. Thereafter, as corporations became more aggressive buyers, rates tended to move gradually downward until the last part of the month, and the average issuing rate dipped below 2 per cent for the issue dated September 22. The rate for the issue dated September 29 rose again to 2.122 per cent.

At the end of the month, the Treasury announced that the bulk of its cash needs over the remainder of the year would be met through a 2,750 million dollar issue of $2\frac{1}{4}$ per cent tax anticipation certificates maturing June 22, 1956—an offering designed to be attractive to corporations seeking investment outlets for tax reserves. Subscription books for the new certificate, which may be redeemed at par for the payment of income taxes due June 15, 1956, will be open on Monday, October 3, with payment required on October 11. As usual in an offering of tax anticipation certificates, payment by banks for their own and customer subscriptions may be made through credit to Tax and Loan Accounts. The terms of the announcement were closely in line with market expectations.

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MEMBER BANK RESERVE POSITIONS

The reserve positions of member banks have been gradually, but fairly steadily, tightening since late in 1954, bringing about a transition from pronounced ease to persistent firmness in the money market. In September, average borrowings of member banks increased to about 840 million dollars, almost 90 million above the August figure and the highest average level for any month since the spring of 1953. Excess reserves rose only slightly over August levels, and they averaged almost 250 million dollars less than borrowings for all member banks. Week-to-week changes in aggregate reserve positions were moderate during September and reflected largely seasonal influences.

As usual in September, variations in reserve positions within the month were strongly influenced by wide fluctuations in the levels of float, in Treasury balances at the Reserve Banks, and in the amount of currency in circulation. A seasonal increase in the volume of check collections brought a midmonth bulge in float that was both greater and more prolonged than in other recent months. As shown in Table I, this factor alone contributed about 575 million dollars to bank reserves over the two statement weeks ended September 21. A return flow of currency from circulation augmented the flow of funds to the banking system at the middle of the month, as the currency needs of individuals and businesses receded after absorbing reserves around the Labor Day holiday on September 5. During the final statement week of the month, a sharp decline in float withdrew 303 million dollars from member bank reserves.

Table I
Changes in Factors Tending to Increase or Decrease Member
Bank Reserves, September 1955
(In millions of dollars; (+) denotes increase,
(-) decrease in excess reserves)

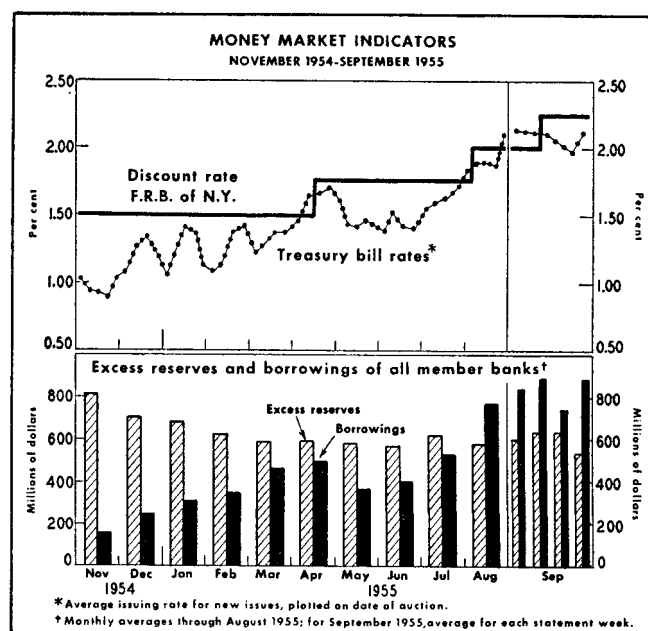
Factor	Daily averages—week ended				Net changes
	Sept. 7	Sept. 14	Sept. 21	Sept. 28	
Operating transactions					
Treasury operations*	+ 29	+ 20	-139	-107	-197
Federal Reserve float	+ 16	+139	+437	-303	+289
Currency in circulation	-168	- 84	+119	+ 78	- 55
Gold and foreign account	+ 21	- 39	+ 43	+ 7	+ 32
Other deposits, etc.	+ 4	- 6	- 42	+ 8	- 36
Total	- 97	+ 28	+418	-317	+ 32
Direct Federal Reserve credit transactions					
Government securities:					
Direct market purchases or sales	0	- 17	-180	+ 23	-174
Held under repurchase agreements	+ 65	+ 4	- 69	+ 11	+ 11
Loans, discounts, and advances:					
Member bank borrowing	+ 98	+ 53	-150	+147	+148
Other	- 4	0	0	- 13	- 17
Bankers' acceptances:					
Bought outright	0	+ 2	+ 1	0	+ 3
Under repurchase agreements	+ 8	- 5	- 3	+ 1	+ 1
Total	+168	+ 37	-401	+168	- 28
Total reserves	+ 71	+ 65	+ 17	-149	+ 4
Effect of change in required reserves†	+ 30	- 36	- 20	+ 59	+ 33
Excess reserves‡	+101	+ 29	- 3	- 90	+ 37
Daily average level of member bank:					
Borrowings from Reserve Banks	838	891	741	888	840‡
Excess reserves	599	628	625	535	597‡

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

* Includes changes in Treasury currency and cash.

† These figures are estimated.

‡ Average for four weeks ended September 28.



The principal factor tending to offset the effect of these fluctuations on reserve positions was a series of purchases and sales or redemptions of Government securities by the Federal Reserve System. When the pressures in the market threatened to become unduly severe at times during the statement weeks ended September 7 and 14, a limited volume of reserves was released through repurchase agreements with Government security dealers. As the reserve base expanded around the middle of the month, these repurchase agreements were terminated, and additional reserves were absorbed through a net reduction of nearly 200 million dollars in Treasury bills held on an outright basis by the System Open Market Account. The largest part of these bills was replaced through market purchases during the final statement week of the month, and at the same time a small amount of funds was supplied temporarily through renewed use of the facilities for extending repurchase agreements.

These offsetting actions by the System were supplemented by Treasury operations. Over the first half of the month, the Treasury's balances at the Federal Reserve Banks were held fairly stable, partly through the first use of the new arrangements for immediate calls on Class C depositaries on Friday, September 9. On Thursday, September 15, another special call was made on Class C depositaries for payment that day, thus helping to prevent the substantial net accretion to reserves that would otherwise have resulted from heavy disbursements in connection with interest payments and redemptions of Savings notes. Reflecting the rapid collection of nonwithheld individual and corporate quarterly income tax checks after the middle of the month, the Treasury's balances at the Federal Reserve Banks increased sharply during the week ended September 21, thus absorbing reserves at about the same time the banks were gaining funds from float and the currency return flow. Working

balances had risen substantially above normal levels by the end of that week, and, as a rapid contraction in float was then getting under way, the Treasury arranged to redeposit in Class C depositories on September 22 and 23 a total of 192 million dollars, an amount equivalent to the special calls made earlier in the month. Still another redeposit of 105 million dollars in these depositories on September 27 lowered the Treasury's balances at the Reserve Banks to more usual levels by the close of the week ended September 28.

As a result of the Federal Reserve security transactions and the Treasury's operations, the actual fluctuations in reserve positions from week to week were held within moderate bounds. The smallest average volume of member bank borrowings during September was 741 million dollars, in the week ended September 21. At that level, borrowings were 116 million dollars above excess reserves. The largest amounts of borrowing were in the weeks ended September 14 and 28 when indebtedness to the Federal Reserve Banks averaged about 890 million dollars. Reflecting the steady reserve pressures, Federal funds were seldom traded at a rate more than $\frac{1}{16}$ per cent below the discount rate at the Federal Reserve Bank of New York and were frequently available only at a rate equal to the discount rate, if at all. The exceptions were isolated periods at the close of several statement weeks, when some banks employed accumulated reserve surpluses in the Federal funds market.

GOVERNMENT SECURITIES MARKET

Trading activity in the Government securities market tended to increase during September. Until the last week of the month, however, when reactions to the President's sudden illness spread through all the capital markets, prices were generally less volatile than in July or August. While day-to-day price fluctuations were usually moderate, the firm tone that prevailed in the market over most of the month resulted in a substantial, but irregular, price advance. Between the end of August and the close on September 30, most longer-term bond prices were up by $\frac{3}{4}$ of a point to a point, with somewhat smaller increases for intermediate issues. Yield quotations for the longest-dated Treasury bill issue outstanding had declined 11 basis-points through September 19, but were above the August 31 level by the end of the month.

The resumption of a strong demand for short-term Treasury issues by nonbank investors, which had temporarily slackened late in August, was related to a number of factors. To some extent, buying interest was encouraged by the higher structure of yields established late in August and during the first few days of September. Furthermore, cash redemptions of Savings notes on September 15, aggregating over 750 million dollars, led to a sizable reinvestment demand around that time. This demand was further supplemented by the investment of the proceeds of recent new security issues by large corporations and public bodies. Meanwhile, commercial bank liquidation

of bills in the market remained sporadic, particularly in the first half of the month, although substantial sales of short-term notes and bonds were undertaken as a means of adjusting reserve positions.

Treasury bill yields showed little change during the first few days of September. Shortly after the Labor Day week end, however, market rates for the longer-dated bills turned downward, as only a limited supply reached the market to offset the resumed nonbank demand. Under these conditions, dealers were able to dispose readily of their heavy awards of the bills dated September 8. Bidding in the following auction, on Monday, September 12, was very aggressive, reflecting the firm tone in the market, the fact that the issue date for the bill (September 15) coincided with the redemption date for the Savings notes, and the convenience of the maturity date (December 15) for corporations anticipating dividend or tax payments at that time. Aggregate tenders were the largest for any regular bill auction in eight years, and the average issuing rate declined to 2.104 per cent. A brisk demand for the issue in the secondary market resulted in a decline in the market bid quotations for the longer issues to below 2 per cent by September 19. In this atmosphere, the average issuing rate again declined (to 1.981 per cent) in the auction on that day. Market yields temporarily stabilized at about that level, but rose toward the end of the month partly because commercial bank selling increased. Also, nonbank demand tapered off, a characteristic development of recent month-end periods. The longest-dated Treasury bill closed the month at 2.15 per cent (bid), 6 basis-points more than at the end of August. Price increases in other short-term issues were limited by bank liquidation, but gains ranged up to $\frac{1}{2}$ of a point or more for certain issues maturing in 1959 or before.

Switching for tax purposes continued to be responsible for most of the activity in the intermediate and long-term areas of the market. To some degree, the price rises during the month seemed to stem from suggestions from various quarters that the pace of the current economic expansion showed signs of slowing down, that credit demands over the remainder of the year might not prove to be so large as had previously been expected, and that further intensification of quantitative restrictions on credit expansion therefore might not prove necessary. Confidence in the level of bond prices was also stimulated by the firm tone of the short-term market. In addition, occasional sizable purchases of the 3 per cent bond of 1995 by insurance companies or public funds led to fairly steady price increases for that issue; however, some selling interest developed at the higher price level, particularly around par.

Prices throughout the bond list fluctuated sharply late in the month, reflecting the uncertainty generated in all securities markets by the announcement of the President's illness. Although investment activity was limited, sharp increases ranging up to $\frac{3}{8}$ of a point for longer-term issues were recorded on September 26 and 27. Roughly half of these gains were

lost on the following day, but the market then stabilized. Previous to these fluctuations, prices of long-term issues were quoted $\frac{1}{4}$ to $\frac{3}{8}$ of a point over their end-of-August levels.

OTHER MARKETS

The markets for both corporate and municipal securities were steadier during September than they have been for several months past. Although a few less attractively priced issues initially encountered buying resistance, investors were generally receptive to the terms on the moderately increased volume of new offerings. Yields for outstanding municipal issues generally declined. Prices of corporate bonds moved within a narrow range, except for convertible issues which dropped with stock prices late in the month.

Total new public bond offerings were about evenly divided between municipals and corporates and amounted to 640 million dollars in September, 150 million more than in August. The largest single offering was a 100 million dollar issue by a finance company, priced to yield 3.75 per cent with a maturity of 1970. The issue was oversubscribed on the September 15 offering date and soon went to a premium in the secondary market. Similarly, the largest new tax-exempt offering, a 69 million dollar issue of forty-year turnpike authority bonds, was reported as "all sold" on the offering date, with a premium bid thereafter.

The sharpest rate adjustment among money market instruments during the month took place in the bankers' acceptance market. Buyers largely withdrew from the market at the beginning of September, in anticipation of an imminent rate increase and because of the relative attractiveness of Treasury bill yields. Consequently, dealers' portfolios rose sharply, although the supply coming into the market also diminished. In this situation, dealers' rates were raised by $\frac{1}{4}$ per cent on September 8, accompanying the increase in the discount rates at six Federal Reserve Banks announced on that day. Subsequently, demand recovered and, with the supply remaining limited at the higher rate to borrowers, dealers' inventories declined temporarily. Federal Reserve participation in the acceptance market was limited largely to the extension of small amounts of repurchase agreements at times when funds were also being supplied through System transactions in Government securities.

MEMBER BANK CREDIT

The most recent data for loans of weekly reporting member banks reflect the seasonal demands for business credit that normally arise at this time of the year. The total expansion in commercial, industrial, and agricultural loans over the four weeks ended September 21, however, was considerably greater than has been typical of similar periods in other years. Moreover, both real estate and "all other" (mostly consumer) loans continued to rise at rates close to the pace established earlier in 1955 (see Table II). As a result, total loans of the weekly

reporting member banks (exclusive of loans to banks) increased by 798 million dollars during the last week of August and the first three weeks of September, bringing the net increase for the year thus far to 4,261 million, a record expansion for the first nine months.

Loans to commodity dealers, wholesalers and retailers, and food, liquor, and tobacco concerns, which together account for most of the seasonal increases in business loans toward the end of each year, rose by a total of 232 million dollars over the four-week period, a figure roughly in line with that for the equivalent weeks of 1954 and 1953. Every other category of business borrower, with the single exception of sales finance companies (which in the aggregate replaced some of their bank loans with other forms of financing), also increased their indebtedness to the reporting banks. In the two previous years, by way of contrast, loans to those borrowers showed a net decline. As a result, the total increase in business loans over the four weeks amounted to 520 million dollars this year, as against only 232 million in 1954 and 144 million in 1953.

Meanwhile, the aggregate investment portfolios of the weekly reporting banks decreased by 380 million dollars. Total Government security holdings continued to decline, reflecting principally the liquidation of notes, shorter-term bond issues, and to a lesser extent certificates. This decrease was offset only

Table II
Weekly Changes in Principal Assets and Liabilities of the
Weekly Reporting Member Banks
(In millions of dollars)

Item	Statement weeks ended				Change from Dec. 29, 1954 to Sept. 21, 1955
	August 31	Sept. 7	Sept. 14	Sept. 21	
<i>Assets</i>					
Loans and investments:					
Loans:					
Commercial, industrial, and agricultural loans.....	+121	- 91	+320	+170	+2,147
Security loans.....	+ 49	- 71	+ 24	- 7	- 204
Real estate loans.....	+ 20	+ 15	+ 53	+ 28	+1,040
All other loans (largely consumer).....	+ 64	+ 21	+ 62	+ 20	+1,355
Total loans adjusted*....	+253	-126	+459	+212	+4,261
Investments:					
U. S. Government securities:					
Treasury bills.....	+ 69	- 95	+260	-141	-1,534
Other.....	- 93	- 62	-111	-253	-4,822
Total.....	- 24	-157	+149	-394	-6,356
Other securities.....	+ 85	+ 21	- 23	- 37	+ 105
Total investments.....	+ 61	-136	+126	-431	-6,251
Total loans and investments adjusted*.....	+314	-262	+585	-219	-1,990
Loans to banks.....	- 28	- 27	+ 50	-287	+ 59
Loans adjusted* and "other" securities.....	+338	-105	+436	+175	+4,366
<i>Liabilities</i>					
Demand deposits adjusted.....	+262	-376	+555	+153	-2,182
Time deposits except Government.....	+ 45	- 13	+ 42	+ 34	+ 233
U. S. Government deposits.....	+ 91	-734	-425	+117	- 385
Interbank demand deposits:					
Domestic.....	+132	+502	+736	-877	- 835
Foreign.....	+ 2	+ 5	+ 19	- 6	- 34

* Exclusive of loans to banks and after deduction of valuation reserves; figures for the individual loan classifications are shown gross and may not, therefore, add to the total shown.

in small part by a 46 million dollar rise in "Other securities". Holdings of Treasury bills increased slightly over the period, apparently reflecting some absorption of bills from corporations raising funds for tax payments prior to September 15.

Bill portfolios, however, have fluctuated around 1 billion dollars since July of this year, only about one third of the amount held during the summer of 1954, when reserves were in abundant supply.

INTERNATIONAL MONETARY DEVELOPMENTS

MONETARY TRENDS AND POLICIES

The policies of monetary restraint that many foreign countries had begun to pursue earlier this year were continued or further emphasized during September. In the United Kingdom, the authorities for the fourth time this year increased the rates charged by the Public Works Loan Board on new loans to local governments. This increase to the highest level since the early thirties brought the rates more in line with market yields, and is expected to have a significant effect on housing and certain other capital expenditures by local governments. The government also raised the rate on tax reserve certificates; this was the fourth rise this year and carried the rate to the highest level since the introduction of the certificates in 1941. Market rates, however, did not increase further after the first few days of the month. The average Treasury bill tender rate, which had risen to 4.07 per cent on September 2 from 4.00 per cent where it had been maintained throughout August, remained unchanged at the next three tenders in September. Most government bond yields reached new highs for the year in early September, the yield of 2½ per cent Consols even rising to a new postwar high of 4.56 per cent on September 2; subsequently, however, most bond prices staged a good recovery. Bank advances declined further in the five weeks to mid-September, continuing the downtrend that had begun in July; this decrease reflected a reduction of loans to the private sector of the economy and also repayments by the nationalized gas and electricity industries. On the other hand, bank holdings of Treasury bills continued to rise. Instalment sales of private cars and certain other consumer durables fell in August, partly as a result of the end-of-July tightening of controls on instalment buying.

In the Netherlands, which is one of the few Western European countries where monetary restraint measures have not been adopted this year, bank credit expansion during recent months has been more rapid than in the corresponding period of 1954. The president of the central bank has suggested that it would be advisable for the commercial banks to slow down their lending, especially the financing of instalment credit and fixed capital expenditures.

In the Union of South Africa, the central bank raised its discount rate from 4 to 4½ per cent effective September 29; the earlier level had been maintained since March 27, 1952. This change brought to eleven the number of foreign central banks that have increased their discount rates since the beginning of 1955. In addition, the Treasury announced an increase in tap rates of three and six months' Treasury bills

from 2½ to 3 and 2⅝ to 3⅛ per cent, respectively. The Treasury bill tap rates had been raised earlier this year, following the increases in money market rates in the United Kingdom, primarily in order to prevent an unduly broad disparity in rates from developing with consequent adverse effects on the flow of funds between the two countries. In the event, the attraction of higher London rates has been only a small factor in the reduction in net capital inflow that, with the rise in imports, led to a moderate balance-of-payments deficit in the first half of 1955. During the first seven months of this year bank loans and advances rose 11 per cent, and in August the central bank accordingly requested the commercial banks to avoid a further net increase in their lending and, in particular, to restrict their commitments for the financing of consumer credit and of fixed capital expenditures. The reduced liquidity of the banking system, stemming primarily from the loss of official gold and foreign exchange assets, led to an increase in commercial bank borrowing from the central bank during the first half of 1955, and has reportedly already resulted in a more restrictive lending policy.

In New Zealand, the central bank discount rate was increased from 5 to 6 per cent effective September 5. This rise, the second this year and the fourth since April 1954, was the latest step in the policy of monetary restraint that was begun at that time; other measures have included increases in the cash reserve requirements of the commercial banks and the imposition of controls on instalment buying. Meanwhile, in the three months ended August 30, bank advances declined by 3 per cent, against a 6 per cent increase in the corresponding period of 1954, and the fall in net overseas assets in July and August was apparently no larger than would be expected for purely seasonal reasons.

In Australia, where import restrictions are being tightened to counter the continuing balance-of-payments difficulties, the governor of the central bank requested the commercial banks to exercise restraint in new lending, especially for financing imports and capital expenditures, and to reduce outstanding loans. Businesses were asked to revise their expansion plans in order to reduce their dependence on the banking system. In addition, "hire-purchase" companies have agreed to tighten the terms of their instalment-sales financing and to limit the volume of their operations.

EXCHANGE RATES

During September, the New York foreign exchange market continued rather quiet without much change in the rates for

various currencies. The Canadian dollar moved to moderately lower quotations, while sterling, after an initial period of weakness, tended to firm and to command higher rates in the latter part of the month.

The slackening demand for sterling evident in the two preceding months continued through the first part of September; rates tended to move lower, with the quotation for American Account sterling easing slightly to around \$2.78½ and transferable sterling moving downward from \$2.76¼ to as low as \$2.75¼. At the same time, the discounts on sterling for forward delivery increased; the discount on three months' sterling, for example, rose from 1½ cents on September 1 to 1¾ cents on September 7. Owing to a modification of British exchange regulations, the rate for securities sterling dropped sharply on September 6 from \$2.78⅝ to \$2.76¼. Under the new regulations, sterling bearer securities owned by nonresidents may be freely exported from the United Kingdom; funds eligible for credit to a blocked sterling account may be invested in a security payable in the currency of any sterling area country and with a minimum maturity of five years rather than the ten years previously required; and balances in blocked sterling accounts may be freely transferred among nonresidents.

Securities sterling has subsequently been quoted at about the rate for transferable sterling.

Since about mid-September, however, commercial demand for sterling has increased noticeably and rates have strengthened, while official support operations have reportedly declined. Thus, American Account moved upward to as high as \$2.78⅞ on September 27, while the discount on three months' sterling declined to 1⅝ cents. An important factor in sterling's improved position was Chancellor Butler's September 14 address to the Istanbul meeting of the International Monetary Fund. In his statement, Mr. Butler said that the British Government does "not contemplate any early move on any . . . aspects of the exchange front", and that "all discussions and rumors about impending changes of the parity for, or margins for, sterling are unrealistic and irrelevant".

The market for the Canadian dollar had a generally easy undertone during the period, with quotations moving downward from \$1.017½ on September 1 to \$1.01½ on September 30. While the turnover was reportedly small, there was a rather persistent demand for United States dollars on the part of investment interests in Canada, as well as a demand for United States dollars for commercial payments.

A YEAR OF EXPANSION

During the past year the United States economy has staged a truly impressive recovery and expansion of business activity. Earlier records have been surpassed by a considerable margin, and, while the pace of expansion slowed perceptibly during the quarter just ended, the immediate outlook generally appears good. Gross national product (GNP) rose from a seasonally adjusted annual rate of 359 billion dollars in the third quarter of 1954 to 385 billion in the second quarter of 1955 and probably rose further, perhaps to about 390 billion, during the third quarter. The level attained during the second quarter of this year was 7 per cent above that of the July-to-September quarter last year and 4 per cent higher than in the peak second quarter of 1953. On the other hand, the recent advances are somewhat less striking when viewed in the perspective of population growth. The country's population has increased by about 3.5 per cent in the past two years, and the Department of Commerce has estimated that the increase in total output in physical terms, after correction for price increases from the second quarter of 1953 to the second quarter of 1955, may have been somewhat less than this amount.

With the notable exception of agriculture, the economy's year-long expansion seems to have proceeded in a fairly well-balanced fashion; increases have been recorded for all major categories of consumer and business spending. There have been differences in the timing and extent of gains in various parts of the economy, however, and certain industries and geographical areas have shown considerably greater improvement than others. There have been price increases for

industrial materials and finished goods, particularly in recent months, mainly reflecting higher costs in some cases and larger demand in others. For the most part, increases so far have been moderate, suggesting that the economy's expansion, except for a few areas of sharply increased demand, has been within its capacity. The larger and more widespread price increases since June perhaps indicate that output in a number of industries may be approaching capacity, but it also seems clear from the high and rising level of capital outlays that productive capacity is continuing to grow. The level of unemployment (between 3 and 4 per cent of the labor force), while down sharply from a year ago and somewhat below the postwar average, also indicates that there is some room for further expansion.

In contrast to the moderately rising price trend for industrial commodities, prices received by farmers declined further by about 5 per cent from the summer of 1954 to the summer of 1955. Mainly as a result of lower prices, farm income this year has been running somewhat below last year and, in fact, lower than in any postwar year. While total farm income has been falling during the past few years, the individual farmer, on the average, has not fared so badly as might seem indicated, since the exodus of the farm population to cities and the consolidation of farms has resulted in considerably smaller declines on a per capita basis. Falling prices and income appear to be part of a long-term adjustment process which has, along with expanding opportunities for industrial employment, encouraged migration from the farms. The symp-

toms of this adjustment process are, of course, particularly conspicuous at a time when the rest of the country is enjoying high and increasing income.

BROAD PRODUCTION GAINS

The pervasiveness of expansion in the economy during the past year is revealed clearly by the Federal Reserve Board's index of industrial production and its major components. During the year ended in August, the total index rose by 17 points (14 per cent) to 140 per cent of the 1947-49 average, advancing most rapidly in the last quarter of 1954, somewhat more slowly during the first several months of 1955, and slower still during the summer months. Rising output of primary metals and transportation equipment led the way in the early stages of recovery, but, as may be seen in the accompanying chart, there also have been substantial increases during the year in output of nondurables, such as chemicals and allied products and textiles and apparel (the latter lost ground after May, however). Much of the continued upward push in the index since last spring has come from rising machinery output, which had tended to lag earlier in the recovery. Primary metal and transportation equipment output, although continuing to show strength, have tended since early this year to increase parallel to the rise in total production, rather than at a greater rate. No major group in the index has failed to rise during the past year, and increases among major components have ranged from 4 per cent for food production to more than 30 per cent for primary metals and lumber. On the whole, output of durable goods has risen at a more rapid rate than

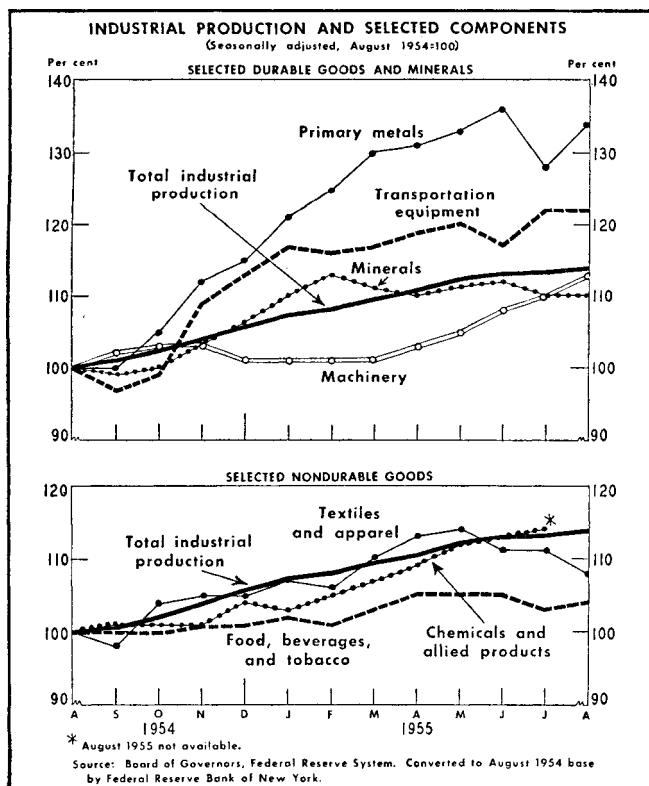
total production during the year ended August, while nondurables and minerals have each increased by less than the average.

Output of minerals rose rapidly in late 1954 and early this year to a peak in February but has declined somewhat since then, mainly because of smaller crude oil and natural gas production. Nondurable goods production also receded slightly during the summer from the record spring level, principally because of declines in textile and apparel output. Durable goods production failed to rise in July, after seasonal adjustment, owing in part to a brief work stoppage in the steel mills and a more extended one in the copper refineries, but advanced again in August to a record level. As a result of these developments in the principal components of industrial production, the total index has shown comparatively small gains since May.

The broad extent of the gains throughout the economy is also revealed in the national product accounts. Higher consumption and increased domestic investment contributed roughly equal amounts to the 26 billion rise in GNP (at a seasonally adjusted annual rate) from the third quarter of 1954 to the second quarter of 1955, although the relative increase in investment was much larger. Total government spending for goods and services showed little net change over this period, as the further increases in State and local outlays were counterbalanced by lower Federal expenditures.

At different stages of the expansion during the past year, one and then another type of spending has shown particular strength. Early in the recovery, in the fourth quarter of 1954, the rise in investment outlays outweighed increases in consumer spending in contributing to recovery, mainly because of the cessation of inventory liquidation. During the first quarter of this year the principal factor in the expansion was consumer spending, particularly for automobiles and other durable goods. Construction expenditures also rose significantly under the impact of sharply increased residential building, and a small amount of inventory rebuilding took place. Consumer spending continued to increase during the second quarter, with most of the rise occurring in outlays for nondurable goods, but increases in investment expenditures again exceeded the rise in consumption. Inventory accumulation during the second quarter accelerated to an estimated annual rate of 4.3 billion dollars from 1.5 billion in the first quarter, business equipment outlays rose by about 10 per cent (the first increase since 1953), and construction spending also advanced.

During the third quarter, higher consumption and investment have both appeared to contribute to a further rise in total GNP, but it is still too early to estimate their relative strength. Business spending for new plant and equipment rose substantially, according to a survey by the Department of Commerce and the Securities and Exchange Commission (SEC). Business inventories continued to build up during July at about the same monthly average rate as in the second quarter. Residential construction outlays, seasonally adjusted, increased in July but declined in August. The decline in the number



of housing starts and in the value of contract awards for home building during the summer suggested that residential construction outlays may have dropped slightly on an adjusted basis from the second to the third quarter. At the same time, increased strength was indicated for consumer buying as retail sales rose, after seasonal adjustment, to a record 15.5 billion dollars in July and were maintained at about this rate during August.

EXPANSION IN EMPLOYMENT

Gains in employment tended to lag behind the rapid advances in production during the earlier stages of recovery last autumn and winter, and only small inroads were made into the number of unemployed persons. In part, this reflected the fact that the increased demand for labor was met to some extent by a lengthening in the workweek. In addition, gains in productivity seemed to be especially large—a development that frequently accompanies the early phase of business recovery. In the spring and early summer, employment expanded rapidly along with continued substantial production gains, while unemployment declined sharply and the length of the workweek underwent only small (mainly seasonal) changes. More recently, during the midsummer months, both production and employment expanded more slowly and the number out of work changed primarily in response to seasonal influences.

The largest increases in employment occurred between March and July when seasonal gains strongly reinforced the business expansion; total employment rose by 4.5 million persons during this interval, according to the Bureau of the Census estimates. Nearly half of this rise was in agricultural employment and was mainly seasonal in nature. There was a further employment rise of half a million persons in August, which brought the total number at work to 65.5 million, a record that exceeded the year-earlier figure by 3.2 million persons.

Seasonally adjusted nonfarm employment, reported by the Bureau of Labor Statistics, showed its largest gains in the February-to-June period, rising by more than one million persons in four months. Most of the increase occurred in manufacturing, especially durable goods production. From June to August, seasonally adjusted nonfarm employment rose more slowly, with gains concentrated in various service occupations (including government), while factory payrolls showed a slight decline. Compared with a year previous, total nonfarm employment in August was larger by about 1,650,000 persons, but it was still more than 200,000 persons short of the July 1953 peak, mainly because of the smaller number of factory workers employed.

Along with employment gains this year, there have been steady increases in average wage rates. The average hourly wage in manufacturing, for example, rose by more than 5 per cent from August 1954 to August 1955; gains in most other occupations appear to have been somewhat smaller. As a result of increases in employment, hours of work, and wage rates, total wage and salary payments, at seasonally adjusted annual

rates, advanced from 196 billion dollars in August 1954 to about 212 billion a year later.

Seasonally adjusted unemployment, as reported by the Bureau of the Census, declined steadily throughout the spring and early summer. In August the estimated number actually out of work dropped to 2.2 million persons, or 3.3 per cent of the civilian labor force. The decline in August was, however, slightly less than seasonal. August unemployment was about 30 per cent less than a year ago, but was approximately one million above the unusually low level estimated for August 1953. The decline from a year ago in the number out of work has been achieved despite large additions to the labor force. The year-to-year increments in the civilian labor force reported for July and August averaged more than 2 million persons, substantially larger than the average annual increase during the postwar decade.

The declines in unemployment have also been reflected in the Department of Labor's classification of labor market areas throughout the country. The report for this July characterized only 31 of the nation's 149 major labor market areas as having fairly substantial unemployment, while a year earlier there were 53 major areas in this group. To a considerable extent, the major areas that still had substantial unemployment in July this year (as well as the smaller labor markets in this classification) were concentrated in the textile-producing regions of New England and the coal-mining regions of Pennsylvania, West Virginia, and Kentucky. A significant portion of the nation's unemployment thus seems to be centered in a few areas where the major industry is in the process of long-term adjustment to fundamental changes in market conditions, rather than being subject merely to the shorter-run fluctuations of general business conditions.

AREA PATTERNS

Recovery and expansion in output and employment has been most pronounced in those sections of the country with large concentrations of "heavy" industry (which has shown particular strength during the past year), and in those favored with rapid growth of population and industrial development. Thus, business activity has displayed particularly marked improvement in the Great Lakes region, a center of durable goods production, in the rapidly industrializing South, and in the southwestern and far western portions of the country. In contrast, the northeastern States and midwestern agricultural areas have tended to show much smaller gains than the nation as a whole.

The Second Federal Reserve District has made definite progress but perceptibly less than the national average. Seasonally adjusted nonfarm employment in this District, for example, declined throughout 1954 and did not turn upward until early this year, while nonfarm employment in the country as a whole began to rise a year ago. By July, nonfarm employment in the Second District was 1.1 per cent above the first-quarter level, but for the country at large the gain during this period was 2.4 per cent. A variety of other indicators, such as depart-

ment store sales and construction contract awards also point to greater gains in the nation than in the District. Only in the case of agriculture does this year's record for the District compare favorably with the country at large. Farmers' income seems to have held steady here for the past year, in contrast to declines reported on a national basis, reflecting the lesser importance of major field crops in the agriculture of this District.

POTENTIAL WEAK SPOTS IN THE OUTLOOK

As the recovery has matured into an expansion that has topped previous records of production and economic activity, business analysts have pointed to several areas in which developments might interfere with the economy's course of generally balanced growth. Earlier in the year, for example, the market for automobiles was frequently singled out as one that might weaken during the second half, with possible unsettling effects for the entire economy. Retail sales of automobiles and accessories during the first half of the year were larger than in any previous six-month period and 18 per cent greater than during the first half of 1954, accounting for a substantial part of the rise in retail sales. Sales of new cars alone totaled 3,850,000, as against 2,825,000 a year earlier, an increase of 36 per cent. The increase was supported by a record half-year growth in outstanding automobile instalment credit of 2.2 billion dollars, which accounted for most of the 2.4 billion rise in total instalment credit outstanding during the first half of the year. Of particular concern to some observers was the evidence of easier credit terms—especially a considerable lengthening of maturities—on automobile loans, since this supported the view that there might be "borrowing" from future sales. In addition, production of new cars was much greater than sales and record inventories built up in dealers' hands during the spring.

New car sales continued very high during the third quarter, and inventories were reduced somewhat in August and more substantially during September as production was cut back to permit retooling for new models. Sales during the summer months also have been financed to a large extent by instalment credit, and have been fostered by intensely competitive selling. These factors, as well as the indications that model changes are not so great as last year and that prices may be higher, have led a number of analysts to question whether next year's sales will match the high rate achieved this year.

The increasing volume of residential construction earlier in the year also received special attention as a potential weak spot in the economy's armor. Some observers had felt that certainly the rate of increase and perhaps even the current level of building were not sustainable. Encouraged by a ready availability of mortgage commitments early this year and a marked easing of maturity and downpayment terms, particularly for loans guaranteed or insured by the Federal Government, outlays for residential construction rose to record levels during the first half of the year, surpassing the like period of 1954 by 31 per cent. The rising trend in expenditures leveled off and seasonally adjusted housing starts declined slightly during

the spring, as the initial stimulus of the easy borrowing terms then available wore off. There appeared to be a further decline in the rate of new housing starts during the third quarter, although August showed an increase over July.

At the end of July, the Federal Housing Administration and the Veterans Administration acted to tighten slightly the maturity and downpayment terms on loans that they insure or guarantee; meanwhile, the availability of funds for mortgage commitments has been reduced somewhat, owing to the large volume already committed and the competing demands on the long-term capital market from other borrowers. Since early August, a number of the Federal Home Loan Banks have raised their interest charges for loans to member savings and loan associations, and last month the Loan Banks cautioned member associations against acquiring mortgages at a faster rate than the increase in their available funds. These developments have caused many observers to expect some declines in residential construction, at least in the short run.

ELEMENTS OF STRENGTH

The areas of potential weakness in the economy that have been noted above have received a great deal of attention, particularly because those factors had made such important contributions to the earlier stages of recovery. Nevertheless, because of the significant broadening of recovery, the over-all picture contains many elements of current and prospective strength. This strength is manifested, for example, by the plans for an increased rate of investment in plant and equipment during the final quarter of this year, as indicated by the recent Department of Commerce and SEC survey referred to earlier. According to this survey, businessmen are planning fourth-quarter expenditures at an adjusted annual rate of 29.7 billion dollars, or 0.7 billion higher than the record rate indicated for the third quarter. Capital outlay by State and local governments is another area where increases are widely anticipated, especially if a comprehensive highway program can be agreed upon. But perhaps the most impressive indications of underlying strength are given by the continued rising trends in personal income, employment, and retail sales, and by the surveys that show consumer and business confidence to be at high levels. To be sure, some concern has been expressed over the fact that consumer instalment debt repayments, which have risen much less than new extensions during the year, may tend to catch up with extensions, with a corollary reduction in the stream of consumer spending. Nevertheless, it is noteworthy that disposable personal income has risen steadily throughout the year and has made the required debt payments relatively less burdensome.

Prospects for a further build-up of inventories also constitute an important area of strength in the immediate outlook, so long as too rapid or speculative accumulation, which would lead to unbalanced, unsustainable expansion for the economy, is avoided. Developments so far are partially reassuring. Some

rebuilding of stocks was to be expected after the fifteen-month period of liquidation that ended last December. Moreover, with accumulation proceeding quite moderately during the first half of this year and total business sales rising rapidly to new peaks during the spring, the ratio of total business stocks to sales declined to the lowest point in several years. These declines earlier in the year probably were "involuntary" for a number of firms, in the sense that businessmen might have preferred to hold larger stocks but rapid sales increases delayed accumulation.

This is not to say that the relationship between stocks and sales is tending to return to the much higher ratio that prevailed during the preceding few years. The inventory-sales ratio has been considerably below the 1951-54 average mainly because of changes in the manufacturing component; manufacturers are now holding smaller stocks of purchased materials in relation to sales. This, in turn, has seemed to reflect the transition to a prompt-delivery economy rather than a deviation from a "normal" relationship; manufacturers apparently have not found it necessary to carry the large supplies that they carried during the Korean war period. At the same time, there also are reasons for not expecting the ratio of total business stocks to sales to fall to the low levels of the immediate post-World War II years. That period was marked by shortages in many lines, especially durable goods, and it is not surprising to find that sales were high in relation to inventories. For the current period, some rise in businessmen's stocks along with improving sales might be considered "normal".

PRICE DEVELOPMENTS

The evident strength and momentum of the expansion has, in fact, been so great that some concern has developed over the inflationary potentialities in the current business situation. Concern with prices has been stimulated also by the continued upward pressure from higher wage and other costs, as the rate of use of the labor force and of industrial capacity mounts.

Thus far, the average increase for industrial goods has been moderate, and for the most part the advance in these prices has been offset by declines in costs of farm products and processed foods, so that the index for all wholesale prices has changed little. But the increases for other than farm and food products have been persistent, and recently (since mid-August) farm and processed-food prices have also edged up. As a result, the wholesale price index advanced from 110.5 in July to 110.8 in August and to more than 111.0 in September. Prior to

September the index had remained in the range between 109.4 and 111.0 since October 1952. The wholesale price index for other than farm and food products reached 117.4 in August and about 118 in September, a record level that was 2 per cent above last June and 3 per cent higher than a year ago. The over-all increase since the start of the general business upturn in 1954 has not been large, especially when compared with other periods of rising prices since World War II, but the rate of increase since June clearly has been significant. While the largest increases have been in metals and rubber, nearly all the major nonfarm commodity groups have shown some rise in the past few months. There have been substantial price increases for lumber and other structural materials during the past year, as might be expected in a period of greatly increased construction activity.

Price increases have resulted both from higher costs (especially labor costs) and enlarged domestic and foreign demand. In a few instances, such as copper prices, tighter supply situations, accentuated by work stoppages here and abroad, seemed to be among the leading causes for increases. While continued upward pressure on prices of industrial goods may be anticipated as a result of further wage increases and expanding demand, there are still stabilizing forces in evidence. Most notably, there are wide market areas of keen competition that may induce many businessmen to absorb some of the cost increases that confront them. Moreover, there have been gains in productivity that should help to offset the effects of higher costs for labor and materials.

Retail prices, which characteristically are slower to change than those at the wholesale level, have risen only slightly in recent months and in August were a little below the average level one year earlier. Costs of food, apparel, and most other goods have been lower recently than they were last year, while rent and prices of other services have risen.

CONCLUSION

In summary, the economy achieved a further expansion during the third quarter, although the rate of advance appeared to be somewhat slower than it was earlier in the year. But earlier fears of an actual weakening of economic activity during the second half of this year seem to have been largely set aside. Present indications are that business and consumer confidence are at high levels, and total economic activity this year promises to exceed the 1953 record by a wide margin.

COMMERCIAL BANK RESERVE REQUIREMENTS ABROAD

With the revival in recent years of monetary policy abroad,¹ commercial bank reserve requirements in foreign countries have been assuming increasing importance as a credit control

instrument. New reserve requirements have been established, or existing requirements recast, in many foreign countries, and changes in required reserves have been made with increased frequency. Today only a few countries do not have some form of reserve requirements against commercial bank deposit liabilities.

¹ For a discussion of recent monetary trends and policies abroad, see this Bank's *Monthly Review* of October 1954, June 1955, and subsequent months.

RECENT TRENDS IN THE ESTABLISHING OF RESERVE REQUIREMENTS

Until some twenty years ago only the United States, South Africa, New Zealand, India, and certain Latin American countries had legislation requiring the commercial banks to maintain minimum balances with the central bank. Elsewhere, the commercial banks frequently maintained such balances voluntarily; furthermore, in certain countries they were subject to minimum cash reserve requirements, which included vault cash as well as balances with the central bank. Originally these reserve requirements were regarded almost exclusively as a means of ensuring that funds would be available, when needed, for depositors' drawings; they were thus intended primarily to help safeguard the liquidity of the commercial banking system and to protect depositors.

It was not until the mid-thirties that commercial bank cash reserve requirements (as a rule, in the form of balances held with the central bank) began to be regarded as a general monetary policy instrument for influencing the availability of funds for new bank loans and investments and hence the aggregate money supply. A clear indication of this new concept was the granting to the central bank of statutory authority to vary the requirements in accordance with its general monetary policy. Such authority was given to the Federal Reserve System in limited form in 1933, and on a broader basis in 1935, to the Reserve Bank of New Zealand in 1936, and the central banks of Ecuador in 1937 and Venezuela in 1939.

Since the early forties, however, statutory authority for the central bank to establish and vary cash reserve requirements has become a common feature of central banking legislation. Such provisions were incorporated during the war and early postwar years in the monetary laws of many Latin American and Asian countries. The West German central banking system likewise was given such statutory powers when it was established in 1948.

During the last two years, this trend toward variable cash reserve requirements appears to have become even more pronounced. Canada and Norway have introduced such requirements by statute, while in Finland, the Netherlands, and Switzerland gentlemen's agreements to this effect have been negotiated between the central bank and the commercial and other banks. In Denmark, a bill to make the existing cash reserve requirements variable has been presented to Parliament.

Altogether apart from the spread of variable cash reserve requirements, various types of special requirements—combining, as a rule, cash and government securities or certain other bank assets—were established in a number of countries in the early postwar years. In Belgium, France, and Italy such special requirements were introduced soon after the war to reduce the excess liquidity of the banking system; in Sweden somewhat similar requirements were temporarily put into force by statute during the post-Korea inflationary outburst. On the other hand, certain countries in Latin America and Asia, such as Mexico and the Philippines, presumably had recourse to such

special reserve requirements as a part of selective credit controls; in these countries, the assets required to be held as reserves include specific types of loans and investments that the authorities wish to promote. The inclusion of government securities in such reserves, which in effect results in the lodging of a portion of the government debt in commercial bank portfolios, is sometimes regarded as a means of helping develop a market for government securities.

PRESENT STATUS

Variable cash reserve requirements—the most important type of commercial bank reserve requirements—are in force in twenty-six foreign countries, either by statute or by agreement between the monetary authorities and the commercial banks.² Of these countries, seven are in North America and Europe (Canada, Finland, West Germany, Greece, the Netherlands, Norway, and Switzerland);³ nine in Latin America (Bolivia, Brazil, Colombia, Ecuador, Guatemala, Honduras, Paraguay, Peru, and Venezuela); and ten elsewhere (Australia, Burma, Ceylon, Egypt, Korea, New Zealand, Pakistan, Thailand, the Union of South Africa, and Vietnam).

Special reserve requirements that include government securities and other earning assets, as well as balances with the central bank and vault cash, have been established or may be imposed in four European countries (Austria, Belgium, Italy, and Sweden), six Latin American countries (Chile, Costa Rica, Cuba, the Dominican Republic, Mexico, and Uruguay), and three Middle and Far Eastern countries (Iraq, Israel, and the Philippines). In France, such requirements consist entirely of government securities; in the Netherlands, which maintains variable cash reserve requirements, there are also, on a stand-by basis, variable special reserve requirements that include short-term government securities and other liquid assets.

The United Kingdom is a case apart. In that country, there are no requirements established by law or by formal agreement between the authorities and the commercial banks, but the latter are in general guided by custom regarding minimum ratios of both cash and liquid assets (including Treasury bills) to deposits. Presumably because of the small number of banks and the tradition of close cooperation between the authorities and the banks, it has not been found necessary to formalize these arrangements.

Statutory reserve requirements exist also in Denmark, India, Portugal, Turkey, and certain Central American republics, but they cannot be varied except by legislation and are designed primarily for the protection of depositors. Such fixed requirements, which generally include, besides cash, other liquid assets

² The present status of reserve requirements in foreign countries is necessarily discussed here in the light of available documentation which, of course, may not in all cases be complete.

³ In Finland and Switzerland, the agreements under which the reserve requirements were established earlier this year are temporary; in Finland the required reserves are to be gradually freed after the end of September 1955, and in Switzerland the requirements are to expire in mid-1956. These agreements have not specifically provided for variations in the reserve ratios, but they could presumably be altered to set new ratios.

such as short-term government securities, have continued in force in several other countries that also have variable cash reserve requirements.

In about a dozen countries, there are no commercial bank reserve requirements. With the exception of Argentina, Japan, and Spain, most of these are countries with relatively undeveloped banking systems; in Japan, however, the central bank does have the power, which it has so far not exercised, to establish and change reserve requirements, while in Argentina the commercial banks may accept deposits only on behalf of the central bank.

PRINCIPAL FEATURES

The principal features of reserve requirements of course vary from country to country, but certain common traits can be discerned. Most foreign countries have legislation, as in the United States, requiring higher reserves against demand than against time deposits; under the laws in a few countries, unused overdrafts are counted with demand deposits. No existing statute appears to provide for special reserve requirements against interbank deposits, although proposed legislation in Denmark would establish such requirements.

A single ratio for all types of deposits exists in the reserve requirements of a number of countries, particularly in those that have established reserve requirements in the last two years. The distinction between demand and time deposits usually had its roots in the earlier legislation aimed at protecting bank depositors; however, it may now be based more largely, in some instances, on the use of reserve requirements to limit credit expansion and the fact that extensions of bank credit usually result in a growth of demand deposits, rather than time deposits.

Cash reserve requirements against *increases* in deposits alone, rather than against total deposits, are in force in Australia and in Finland. Supplementary reserve requirements against increases in deposits—consisting as a rule, in addition to cash, of securities or other earning assets—exist, or under current legislation may be imposed, in France and several Asian and Latin American countries.

Most foreign countries have not established special classes of banks for reserve requirement purposes, unlike the United States whose geographical classification owes its origin to the banking structure existing at the time that nation-wide reserve requirements were first introduced. Mexico and West Germany are the only foreign countries that have adopted special geographical classifications. West Germany in addition provides for different reserve ratios for banks of different size, as in various ways do Belgium, Finland, the Netherlands, Norway, Sweden, and Switzerland.

In some countries vault cash may be included in required cash reserves, but in most countries these must consist entirely

of interest-free deposits with the central bank. This more particularly is the case in those countries like Canada and certain Western European countries which have established reserve requirements during the last two years. Although the exclusion of vault cash in a country that has unit banks discriminates against those banks which have to keep relatively large amounts of vault cash because of their distant location, in most foreign countries this problem does not seem serious.

While in a few countries there is no limitation on the range within which reserve requirements may be varied, in the majority the range is limited, depending in part on the structure of the banking system and the likely fluctuations in its cash base. In addition, legislation in several countries provides that changes in the requirements must be gradual and that advance notice has to be given. The lower and upper limits for permitted variations of cash reserve requirements differ widely. The minimum level is as low as zero in the Netherlands and as high as 12½ per cent in Cuba; the permitted maximum is lowest in Canada (12 per cent) and reaches its highest (50 per cent) in a number of countries in Latin America and Asia. Supplementary cash requirements against increases in deposits may, as a rule, be set as high as 100 per cent.

Requirements currently in force likewise vary greatly. Cash reserve requirements are as low as 2½ per cent for some banks in Switzerland and as high as 35 per cent for demand deposits in Honduras. Within these extremes, ratios are currently set, for example, at 8 per cent of total deposits in Canada and at 10 per cent in the Netherlands; they range between 9 and 12 per cent for demand deposits in West Germany, and are at 21½ per cent in New Zealand.

In most countries, the authority to vary the reserve requirements is given to the central bank. In a few countries, for example Colombia, the government, or one of its representatives on the central bank's governing board, has the power to veto the decision of the central bank or to determine the changes. In some countries the power to make changes is vested in special bodies like the Banking Commission in Belgium and the Currency Committee in Greece.

Various methods are used for administering the reserve requirements. In most countries, reserve balances and deposit liabilities for each day are averaged over periods that range from one week to one month. Special averaging rules are provided for in Canada, the Netherlands, and Sweden, under which reserve balances or deposit liabilities on only certain days in the month are taken into account. However, a few countries, including New Zealand, permit no averaging of reserves, generally specifying that the reserve requirements have to be observed daily. Most countries provide for penalties for reserve deficiencies determined on the basis of these computations, but the severity of these penalties varies greatly from country to country.

CHANGES IN RESERVE REQUIREMENTS

The trend in cash reserve requirement changes reveals the increasing recourse in recent years to this monetary instrument as a part of flexible policies designed to ease or tighten general credit conditions. Variations in reserve ratios have become more frequent not only in countries that have established variable reserve requirements in recent years, but also in those that have had such statutory power for some time but had not exercised it. Among the countries that have varied the ratios most frequently are West Germany, the Netherlands, Colombia, Mexico, Australia, and New Zealand. In Germany, ratios have been changed eight times since they were established in July 1948, and in the Netherlands seven times since their introduction in March 1954. In Colombia, ordinary reserve requirements have been changed and supplementary reserve requirements imposed and removed many times since 1951 when the present legislation came into effect, while in Mexico frequent changes have been made in both the ratios and the composition of the requirements. Reserve requirements in Australia—the so-called “special account” system—have been adjusted periodically since their establishment in 1941; and the New Zealand requirements have been altered nine times in the three years since August 1952 when they were first raised from their original 1933 level.

Most countries, however, either have so far changed their requirements only infrequently or have left them at their initial levels. In the first place, a number of countries with developed banking systems, such as Canada and Norway, have introduced variable cash reserve requirements only recently. Secondly, in a number of Latin American and Asian countries that have variable cash reserve requirements, the role of a flexible monetary policy, and thus the scope for reserve ratio changes, may well be limited because the monetary systems are as yet relatively undeveloped. Finally, the varying of reserve requirements is regarded in some countries as appropriate mainly for effecting major adjustments in the volume of available bank reserves in response to fundamental changes in the reserve position of the banking system or in monetary policy.

Nevertheless, reserve requirements have often served a useful purpose also in countries that have not actually had recourse to such variations. A given level of reserve requirements provides an effective basis for the regulation of the credit and money supply through open market operations, since it imposes a limit on the potential growth of bank deposits that could be supported by any given amount of reserves. When outside factors, such as changes in gold and foreign exchange holdings, are not enlarging or are actually reducing the reserve base, the unchanged requirements may have an important restraining influence by themselves if not offset by central bank operations.

RECENT EXPERIENCE WITH VARIABLE
RESERVE REQUIREMENTS

The experience of foreign countries with reserve requirements necessarily differs from that of the United States, since the structure of their banking system and their money and capital markets vary greatly and many of the problems they have faced are dissimilar. A brief survey of the use of reserve requirements in a few selected countries throws some light on the role of this instrument abroad.

In Colombia, variations in primary reserve requirements, and the imposition and removal of supplementary requirements against increases in deposits, have until recently been mainly motivated by changes in the country's external position, with higher requirements intended to offset the expansionary effects of gold and foreign exchange accretions upon the money supply, and vice versa. However, last April, following a sharp decline in gold and foreign exchange holdings, reserve requirements were increased. Domestic credit had continued to expand, and the authorities apparently decided to restrain credit in order to reduce the need for stringent import controls as well as to alleviate the risk of exchange depreciation.

In Mexico, changes in cash reserve requirements were utilized during the war years mainly to offset the expansionary impact of a gold and foreign exchange inflow. After the war, the requirements were altered, and various government securities and specified types of bank loans were included in the required reserves. The requirements thus became largely a tool of selective credit control designed to encourage the extension of bank credit for purposes regarded as being in the national interest; they appear to have been used less as a quantitative instrument to prevent a rise in total bank credit. As a qualitative instrument, the requirements appear to have had the usual weaknesses of selective credit controls, especially in so far as the end-use of various bank loans cannot always be clearly determined. Recently, however, these requirements have been used to restrain an over-all credit expansion by including in the required reserves certain assets that are available only from the central bank.

In Australia, special cash reserve requirements called “special accounts” are the main instrument of central banking control. This system is a variant of the usual cash reserve requirements against increases in deposits, in that no over-all ratios are established but the ratios instead may differ from bank to bank. The system was established in 1941 to lessen the wartime increases in bank liquidity consequent upon the Treasury's deficit financing and balance-of-payments surpluses. After the war, during periods of declining foreign exchange holdings, the special accounts were used mainly to help offset the effects of foreign exchange losses upon bank liquidity, rather than as a means of credit restraint to correct balance-of-payments deficits. However, since the beginning of 1955, a year during which foreign exchange reserves have been falling, the special

accounts have been reduced by less than the decline in foreign exchange holdings, with the result that bank liquidity has been diminished; this restraining effect has in part been offset by a reduction in the commercial banks' government security holdings. Earlier, the selling of government securities by the banks, in order to meet the required reserves and to continue increasing their advances, had already prompted the central bank in 1954 to propose that the banks observe a ratio of 25 per cent between their liquid assets and government securities and their total deposits. The central bank's conduct of an appropriate monetary policy, the bank had added, would thereby be made easier.

New Zealand provides an illustration of the use of variations in reserve requirements as a substitute for open market operations in a country where the banking system is well developed, but where the market for government securities is very narrow. Although reserve requirements had been made variable as early as 1936, it was not until 1952 that the first change was made. The cash reserves of the New Zealand banks are chiefly influenced by the country's balance of payments and by changes in the government accounts at the central bank, and are subject to marked seasonal fluctuations. In 1952 and 1953, the central bank's stated policy had been to raise the reserve ratios whenever necessary to offset increases in bank balances at the central bank. With the recent reappearance of excess demand in the New Zealand economy and the continuing growth of bank loans, monetary policy, however, has been assigned a more important role.

The present policy of the New Zealand authorities, according to an official statement, is to make frequent small changes in the reserve requirements, depending on the movements in the banks' balances at the central bank, the movements in their loans, and general economic conditions. After long years of inaction the discount rate has been brought into play, increases in reserve requirements have been used to exert pressure on bank reserves, and the banks have found it necessary to increase their borrowing at the central bank to obtain the needed reserves. Some banks have reportedly also acquired reserves at the central bank through sales of London balances, since they hold only very small amounts of government securities and the liquidation of such securities could not provide them with the needed reserves. To what extent the sale of foreign exchange balances has limited the effectiveness of the reserve requirement increases in New Zealand is as yet difficult to say. The pressure on bank reserves seems already to have been reflected in the recent movement of bank advances.

West Germany and the Netherlands are the two countries with variable cash reserve requirements that most resemble the United States, both in having well-developed banking systems and money and capital markets, and in having central banks that can carry out relatively effective open market operations. The central banking authorities of the two countries, however, have defined the purpose of reserve requirement changes in somewhat differing ways.

In West Germany, as already noted, variable reserve requirements were established in 1948 by the legislation that created the present central banking system; furthermore, the Bank deutscher Länder in 1951 requested the commercial banks to observe a liquidity ratio of 20 per cent, including Treasury bills. Large-scale open market operations, however, did not become possible until the recent arrangements under which the Bank deutscher Länder obtained a large portfolio of marketable government securities. The reserve requirements in West Germany were varied frequently during the first years after their establishment, but after February 1953 no change was made until September 1955, when they were raised following an increase in the discount rate. As was officially stated earlier this year, the role that the authorities envisage for variable reserve requirements calls for only rare changes, intended as a rule to correct structural changes in the liquidity of the banking system.

In the Netherlands, on the other hand, the reserve requirements seem to have been assigned a somewhat more flexible function. Cash reserve requirements were established in 1954, primarily in order to offset the increased liquidity of the banking system that had resulted from a sizable gold and foreign exchange inflow, and to give the central bank leverage for its open market operations. Later, the central bank stated that changes in the country's official gold and foreign exchange reserves would not always call for similar changes in the reserve requirements. It added, however, that it might find it desirable to change the reserve ratios in preference to undertaking open market operations even if the country's gold and foreign exchange reserves remained unchanged. In effect, the central bank has used open market operations and changes in reserve ratios both together and separately.

The Nederlandsche Bank, in addition, has stand-by powers to supplement cash reserve requirements by imposing, within a range of 30 to 45 per cent of deposit liabilities, liquidity requirements including specific government securities. This provision is generally considered in the Netherlands as of great potential importance, since the commercial banks hold large portfolios of short and medium-term government securities with well-spaced maturities. It seems to have been motivated by the desire of the monetary authorities to be able, if the need arises, to make the discount rate effective and to prevent the commercial banks from offsetting the effects of a policy of credit restraint by liquidating government security holdings.

CONCLUDING REMARKS

Certain trends and typical problems emerge from the experience with commercial bank reserve requirements abroad. In the first place, it is worth noting that many foreign countries have introduced or strengthened variable cash reserve requirements during recent years, in preference to adopting the type of requirements that includes holdings of government securities or other earning assets as well as cash. This development reflects a world-wide trend from selective credit controls

toward primary reliance on monetary controls of a general character; it is also indicative of the growing importance of monetary policy.

Variations in cash reserve requirements are a powerful tool for increasing or decreasing the available supply of bank reserves when monetary policy is called upon to help keep the economy on an even keel. However, unlike the United States where commercial bank reserve requirements are altered primarily to make major changes in the volume of available bank reserves, a number of foreign countries seem to regard this instrument as a relatively flexible one, and have accordingly varied requirements fairly often. In countries where open market operations are not feasible because of the narrowness of the government security market, changes in reserve requirements appear to be the principal way of making the official discount rate effective. On the other hand, in a number of foreign countries where open market operations are possible, reserve requirements are altered in conjunction with such operations, thereby increasing both the force and the flexibility of monetary policy. Even in countries where cash reserve requirements have been kept unchanged, or have been changed only infrequently, the requirements can and, indeed, often do serve a useful purpose by providing a fulcrum upon which central bank discount and open market operations can secure the necessary leverage.

The employment of commercial bank reserve requirements gives rise to some difficult problems. The impact of a general increase in reserve requirements on individual banks may well be uneven since excess reserves are often unevenly distributed, especially in countries without nation-wide branch banking

systems. For this reason, many of the present arrangements provide for advance notice of changes in requirements, and permit changes to be made only gradually. A related problem exists in certain countries greatly dependent on foreign trade, where large seasonal swings in the cash balances of the banking system may well necessitate frequent changes in reserve requirements even during a neutral phase of monetary policy. Still another common problem arises in countries where banks hold large amounts of government securities and, by selling them or letting them run off, may be able to obtain additional reserves. However, in many countries this has been less of a problem during recent years when the banks have not been able to count, as in the earlier postwar period, on a ready market at virtually unchanged prices for government securities that they might wish to sell. The abandonment of central bank support of government security prices has thus greatly contributed to the efficacy of changes in reserve requirements as an instrument of credit policy.

By and large, the commercial bank cash reserve requirements and the changes in the reserve ratios, along with discount rate and open market operations, have played an important part in the conduct of effective monetary policy in countries with developed money markets and banking systems. In countries with less developed monetary arrangements, they have also contributed significantly to the effectiveness of monetary controls. Altogether, therefore, this particular instrument of monetary policy has proved of much value to the monetary authorities of many countries in their endeavor to help preserve a workable economic and financial balance, both domestically and externally.

DEPARTMENT STORE TRADE

Daily average department store sales in the Second District during September reached the highest level on record for that month, according to preliminary estimates. After adjustment for seasonal variation, sales were 2 per cent higher than in August and also 2 per cent higher than in September 1954. This Bank's sales index is expected to equal 107 per cent of the 1947-49 average.

For the first eight months this year, department store sales in the Second District exceeded January-August 1954 sales by 2 per cent. This compares with a country-wide, year-to-year gain of 7 per cent in net sales and gains in other Districts, ranging from 4 per cent for the Minneapolis and Boston Districts to 11 per cent in the Dallas and Atlanta Districts. In comparison with 1954, therefore, Second District department store sales have lagged behind the rest of the country. In 1954, however, sales in this District held up better than those in most other parts of the country. Cumulative sales figures for the first eight months of that year were the same as in 1953 in this District, while in every other District but Boston they

were lower, averaging 3 per cent below for the United States as a whole.

CONTINUING RISE IN CREDIT SALES

As the accompanying table indicates, credit sales accounted for a somewhat higher proportion of total department store sales in the first eight months of 1955 than they did in 1954.

**Department Store Sales by Type of Transaction
in the Second Federal Reserve District
January-August, 1955 and 1954**
(As a percentage of total sales)

Month	Cash sales		Credit sales					
			Charge account		Instalment		Total	
	1955	1954	1955	1954	1955	1954	1955	1954
January.....	56	56	31	32	13	12	44	44
February.....	55	56	31	32	14	12	45	44
March.....	55	57	31	31	14	12	45	43
April.....	55	56	33	33	12	11	45	44
May.....	54	56	33	32	13	12	46	44
June.....	55	55	33	33	12	12	45	45
July.....	55	57	30	30	15	13	45	43
August.....	55	55	30	31	15	14	45	45
8-month total...	55	56	32	32	13	12	45	44

This is a continuation of a trend evident in both the Second District and the country as a whole since 1947. Instalment sales accounted for 13 per cent of total sales in this District during these months, compared with 12 per cent in the same months of 1954, while charge account transactions continued to account for about 32 per cent of the total. Since there is an observable seasonal pattern in the use of credit (with charge account sales falling off in the summer months, while instalment sales increase), the table should be used mainly to compare the same months from year to year.

Indexes of Department Store Sales and Stocks
Second Federal Reserve District*
(1947-49 average=100 per cent)

Item	1955			1954
	Aug.	July	June	Aug.
Sales (average daily), unadjusted.....	81	78 _r	100	81
Sales (average daily), seasonally adjusted..	105	108	104	105
Stocks, unadjusted.....	114	105	108	113 _r
Stocks, seasonally adjusted.....	117	116	115	115

* As noted last month, sales and stock indexes have been revised to improve coverage by including several additional stores. Revised tabulations of the sales index from 1947 and the stock index from 1952 to date and the revised seasonal factors are available upon request from the Financial and Trade Statistics Division of this Bank.
r Revised.

Department and Apparel Store Sales and Stocks, Second Federal Reserve District, Percentage Change from the Preceding Year

Area	Net sales			Stocks on hand Aug. 31, 1955
	Aug. 1955	Jan. through Aug. 1955	Feb. through Aug. 1955	
Department stores, Second District.....	+ 5	+ 2	+ 2	0
New York-Northeastern New Jersey				
Metropolitan Area.....	+ 5	+ 2	+ 2	0
New York City.....	+ 3	0	0	+ 5
Nassau County.....	—	—	—	—
Westchester County.....	+23	+15	+14	+17
Northern New Jersey.....	+ 4	+ 2	+ 2	+ 2
Newark.....	- 2	- 1	- 2	—
Fairfield County.....	+11	+ 6	+ 6	+ 2
Bridgeport.....	+ 9	+ 4	+ 4	—
Lower Hudson River Valley.....	+ 6	+ 8	+ 8	+ 8
Poughkeepsie.....	+ 7	+ 9	+ 8	+ 7
Upper Hudson River Valley.....	+ 7	+ 1	+ 1	+ 7
Albany-Schenectady-Troy				
Metropolitan Area.....	+ 6	+ 1	+ 1	+ 7
Albany.....	+ 7	+ 4	+ 4	+ 9
Schenectady.....	+ 5	- 4	- 3	+ 4
Central New York State.....	+ 4	+ 3	+ 2	0
Utica-Rome Metropolitan Area.....	+ 3	+ 2	+ 1	+ 6
Utica.....	+ 5	+ 5	+ 4	+14
Syracuse Metropolitan Area.....	+ 5	+ 3	+ 3	- 3
Northern New York State.....	+14	+ 9	+ 8	+12
Southern New York State.....	+ 3	+ 1	+ 1	0
Binghamton Metropolitan Area.....	+ 3	+ 3	+ 3	0
Western New York State.....	+ 3	+ 1	+ 1	+ 2
Buffalo Metropolitan Area.....	+ 4	+ 1	+ 1	+ 2
Buffalo.....	+ 3	+ 1	+ 1	+ 2
Niagara Falls.....	+ 5	+ 2	+ 2	—
Rochester Metropolitan Area.....	+ 2	+ 1	+ 1	+ 3
Apparel stores (chiefly New York City).....	- 2	+ 3	+ 2	+ 9

SELECTED ECONOMIC INDICATORS
United States and Second Federal Reserve District

Item	Unit	1955			1954	Percentage change	
		August	July	June	August	Latest month	Latest month
						from previous month	from year earlier
UNITED STATES							
<i>Production and trade</i>							
Industrial production*	1947-49 = 100	140 _p	139	139	123	+ 1	+14
Electric power output*	1947-49 = 100	208	208	197	176	#	+18
Ton-miles of railway freight*	1947-49 = 100	—	108 _p	103	90 _r	+ 5	+21
Manufacturers' sales*	billions of \$	27.4 _p	26.7	27.1	23.1	+ 3	+19
Manufacturers' inventories*	billions of \$	44.3 _p	43.9	43.8	43.1	+ 1	+ 3
Manufacturers' new orders, total*	billions of \$	29.0 _p	27.0	27.8	21.9	+ 7	+32
Manufacturers' new orders, durable goods*	billions of \$	15.4 _p	13.6	14.0	9.8	+13	+57
Retail sales*	billions of \$	—	15.5 _p	15.3	14.2	+ 1	+ 8
Residential construction contracts*	1947-49 = 100	283 _p	296	290	244	- 4	+16
Nonresidential construction contracts*	1947-49 = 100	246 _p	231	228	202	+ 6	+22
<i>Prices, wages, and employment</i>							
Basic commodity prices†	1947-49 = 100	89.5	90.8	90.2	91.2	- 1	- 2
Wholesale prices†	1947-49 = 100	110.8 _p	110.5	110.3	110.5	#	#
Consumer prices†	1947-49 = 100	114.5	114.7	114.4	115.0	#	#
Personal income (annual rate)*†	billions of \$	—	304.7 _p	301.6	286.7	+ 1	+ 6
Composite index of wages and salaries*‡	1947-49 = 100	—	142 _p	141	137	+ 1	+ 4
Nonagricultural employment*	thousands	49,678 _p	49,654 _p	49,505	48,029	#	+ 3
Manufacturing employment*	thousands	16,637 _p	16,651 _p	16,688	15,688	#	+ 6
Average hours worked per week, manufacturing†	hours	40.8 _p	40.4	40.7	39.7	+ 1	+ 3
Unemployment.....	thousands	2,237	2,471	2,679	3,245	- 9	-31
<i>Banking and finance</i>							
Total investments of all commercial banks.....	millions of \$	79,340 _p	80,420 _p	80,080 _p	83,040	- 1	- 4
Total loans of all commercial banks.....	millions of \$	77,340 _p	76,570 _p	75,183 _p	66,450	+ 1	+16
Total demand deposits adjusted.....	millions of \$	103,890 _p	103,940 _p	103,234 _p	99,400	#	+ 5
Currency outside the Treasury and Federal Reserve Banks*	millions of \$	30,380 _p	30,345	30,201	29,986	#	+ 1
Bank debits (337 centers)*.....	millions of \$	74,758	70,116	72,344	63,569 _r	+ 7	+18
Velocity of demand deposits (337 centers)*.....	1947-49 = 100	132.5 _p	129.4	130.0	123.1	+ 2	+ 8
Consumer instalment credit outstanding†.....	millions of \$	26,155	25,476	24,914	21,901	+ 3	+19
<i>United States Government finance (other than borrowing)</i>							
Cash income.....	millions of \$	6,333	2,994	11,045	5,375	+112	+18
Cash outgo.....	millions of \$	7,256	5,352	6,677	7,788	+ 36	- 7
National defense expenditures.....	millions of \$	3,777	3,350 _r	3,694 _r	3,761	+ 13	#
SECOND FEDERAL RESERVE DISTRICT							
Electric power output (New York and New Jersey)*.....	1947-49 = 100	158	157	149	137	#	+15
Residential construction contracts*	1947-49 = 100	—	210 _p	215	159	- 2	+17
Nonresidential construction contracts*	1947-49 = 100	—	287 _p	277	188	+ 4	+60
Consumer prices (New York City)†.....	1947-49 = 100	111.9	111.9	111.8	113.0	#	- 1
Nonagricultural employment*	thousands	—	7,528.7 _p	7,520.0	7,463.2 _r	#	+ 1
Manufacturing employment*	thousands	2,618.9 _p	2,629.6	2,642.9	2,620.8 _r	#	#
Bank debits (New York City)*.....	millions of \$	67,793	60,726	62,624	67,030	+ 12	+ 1
Bank debits (Second District excluding New York City)*.....	millions of \$	4,797	4,695	4,800	4,177	+ 2	+15
Velocity of demand deposits (New York City)*.....	1947-49 = 100	168.7	159.2 _r	158.0	176.3	+ 6	- 4

Note: Latest data available as of noon, September 30, 1955.

p Preliminary.

r Revised.

* Adjusted for seasonal variation.

† Seasonal variations believed to be minor; no adjustment made.

Change of less than 0.5 per cent.

† Revised series. Back data available from U. S. Department of Commerce.

* Revised series. Back data available from Financial and Trade Statistics Division, Federal Reserve Bank of New York.

Source: A description of these series and their sources is available from the Domestic Research Division, Federal Reserve Bank of New York, on request.