FEDERAL RESERVE BANK OF NEW YORK

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Contents

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The Business Situation

Substantial economic gains during the past two months suggest that the underlying forces of business expansion continue to be strong and that the September slippage in output and sales was merely temporary. Despite strikes in the auto industry during the first half of October, industrial production rose markedly during the month, completely offsetting the previous month's decline. Early reports for November, moreover, point to further strength in steel and automobile output. Retail sales, propelled largely by a sharp advance in automobile sales, have recently shown their first strong upward movement since the spring turn-around in general business activity. The 2½ per cent rise in October retail sales and further increases in auto and department store sales in November suggest that the business expansion is now receiving new impetus from the consumer sector. The scheduled build-up in defense orders and outlays should also continue to provide stimulus to the economy in the months ahead.

Even before the first significant October figures had reached the public, business sentiment had turned more buoyant. This was reflected, among other things, in a Dun and Bradstreet survey taken during the month, which indicated that businessmen expected sales to reach an all-time peak in the first quarter of 1962 and thought that profits would rise well above present levels—adding up to a more optimistic short-range outlook than reported by this survey at any time since the second quarter of 1959.

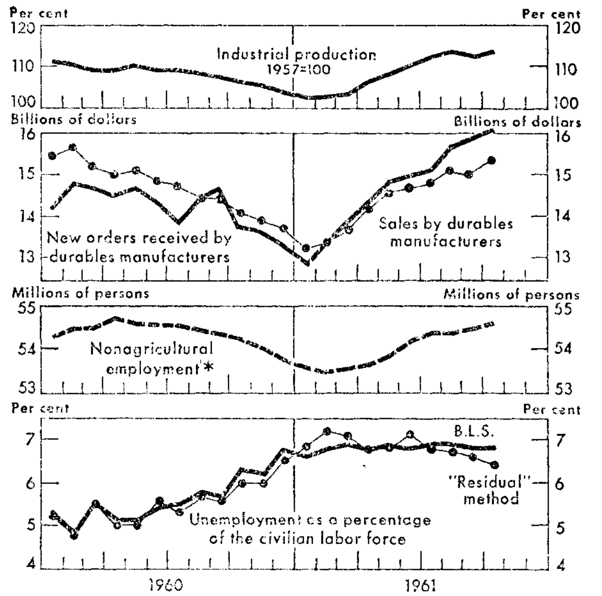
PRODUCTION AND CONSTRUCTION

With the end of the strikes in the auto industry in mid-October and the disappearance of the other special circumstances that had brought a hesitation in the economic advance during September, the index of industrial production returned in October to the record high of 113 per cent of the 1957 average attained in August (see Chart I). All major groupings of the index increased, with the largest gain occurring in the automotive sector. Auto manufacturers that had suffered from strikes strove to provide dealers with adequate supplies of 1962 models, and other automotive firms stepped up production in response to a general strengthening of consumer demand. In November, automobile production continued to rise strongly and steel output declined less than seasonally.

The rebound in auto production was also the major factor underlying the sharp gain in sales by manufacturers of durables in October, after the mild dip in September. In addition, a number of other industries, including those engaged in defense work, showed sales increases. This helped to push up total sales by manufacturers of durables by more than 2 per cent, to a 1961 high that was 16 per cent above the low reached last January. New orders received by manufacturers of durables also rose in October, the ninth consecutive monthly advance, and the ninth month in a row in which new orders have exceeded sales. This gap, noticeably large since August (see Chart I), has led to an appreciable rise in unfilled orders.

Total construction activity moved up in November, following a slight dip in October. The gain was attributable almost entirely to a 3 per cent rise in private residential construction, the largest increase since the series turned up in March. The improvement in housing outlays more than offset the declines that occurred in most other sectors,

Chart I
CURRENT BUSINESS INDICATORS
Seasonally adjusted



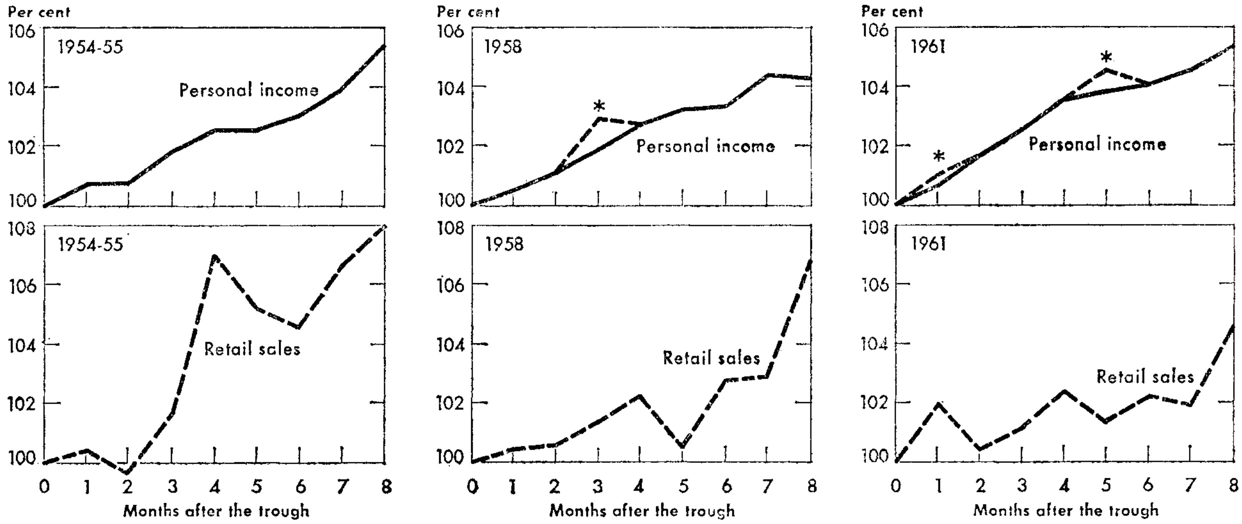
*Payroll survey.

Sources: Board of Governors of the Federal Reserve System; United States Departments of Commerce and Labor.

Chart II

PERSONAL INCOME AND RETAIL SALES IN THREE RECENT RECOVERIES

Seasonally adjusted



Note: Trough month=100 in each case. Trough months are those indicated by the National Bureau of Economic Research chronology: August 1954, April 1958, and February 1961.

*Reflects special one-time payments: July 1958, retroactive salary increases for Federal employees; March 1961, prepaid dividends on National Service Life Insurance policies; and July 1961, special dividend on such policies.

Source: United States Department of Commerce.

with military construction the major exception. It is noteworthy that rental vacancies edged off during the third quarter, after almost two years of uninterrupted rise, a sign favorable to the housing outlook.

Perhaps of more importance for the immediate prospects of the housing industry, however, are conditions in the mortgage market; these have been responsible for much of the cyclical fluctuation in housing construction during recent years. Despite a moderate tightening during the third quarter associated with the higher yields that developed on other securities, mortgage interest rates remain below the level which prevailed at the beginning of the current recovery. At the same stage in the 1958 cyclical upswing, mortgage rates had risen sharply from the recession lows. Of course, even if mortgage rates show no further tendency to rise in the months ahead, this would not necessarily imply a substantial advance in construction activity. It might mean, however, that residential construction will remain at fairly high levels for a while rather than dropping off sharply as had been the case at comparable stages of earlier periods of economic expansion.

RETAIL SALES REVIVE

Retail sales in October shook off their lethargy of several months' standing and advanced an impressive 2½ per cent. The total of $18.6 billion (seasonally adjusted) fell short only of the record $18.9 billion registered in April 1960. Most of the gain was attributable to an increase in new car sales, but there were also advances in sales of other durables as well as of many nondurables. During November, department store sales apparently moved slightly above their October level, and new car sales jumped about 15 per cent over the October average. The recent surge in auto sales has led some representatives of the auto industry to predict a 7-million-car year in 1962.

It is possible that the strength in retail sales during the last two months was only temporary, reflecting in some measure purchases that had been postponed in the immediately preceding weeks because of hurricanes, unseasonably warm weather, and shortages of the 1962-model automobiles. That this is the complete explanation of the rise, however, seems unlikely. The Federal Reserve Board's latest quarterly survey of consumer buying plans, taken in October, pointed to a small increase in plans to purchase automobiles (although little, if any, rise in plans to purchase houses and major household durables). Moreover, the steady advance in personal income to a new record level in October (see Chart II), together with other evidences of improvement in consumers' financial circumstances, makes it reasonable to expect that consumers should at this stage of the cycle be ready to step up the pace of their purchases. As Chart II shows, retail sales had through September been slower to respond to the gain in income in the current upswing than in comparable periods of either of the two previous recoveries. Thus, the October increase may be regarded as having brought such sales more closely into line with personal income.

EMPLOYMENT AND UNEMPLOYMENT

One factor that may have contributed to the October increase in retail sales is the recent improvement in employment, which in the nonfarm sector (as measured by the Bureau of Labor Statistics payroll survey) rose by 160,000 persons in October to a level about one million persons higher, seasonally adjusted, than last February's low (see Chart I). The October gains were widespread, with only mining employment showing a slight decrease. Total employment (as determined by the Census Bureau's household survey) rose by 380,000, seasonally adjusted, largely owing to a substantial increase in the agricultural sector following the decline in September, when hurricane Carla delayed harvesting in the Southwest.

The increase in the civilian labor force in October was about as large as the advance in total employment. Seasonally adjusted unemployment remained virtually unchanged at 4.8 million and the rate of unemployment also was unchanged at 6.8 per cent of the labor force, only $\frac{1}{10}$ of a point lower than the 1960-61 high of 6.9 per cent. However, an alternative seasonal adjustment technique that differs somewhat from the one employed by the BLS —the so-called "residual" method—did show a decline in the unemployment rate, from 6.6 per cent in September to 6.4 per cent in October.[1]

Although total unemployment, as determined by the BLS seasonal adjustment, has not changed significantly since the recovery began, unemployment in some important categories has recently dropped. Between July and October, the number of unemployed adult males fell about 20 per cent and the number of "hard-core" unemployed (those out of work a half year or more) decreased 30 per cent. In addition, the number of persons working part time in October but wanting full-time work was more than 20 per cent below the July figure. September-to-October changes contributed to all of these movements, and although seasonal factors were partly responsible, the improvement was to a significant extent attributable to the business expansion.

[1] Under the "residual" method, seasonally adjusted unemployment is calculated by subtracting seasonally adjusted employment from the seasonally adjusted labor force. The BLS method is to adjust each of the three series independently. Compared with the BLS method, the residual technique tends to show higher unemployment rates in the first three months of the year and lower rates during the late summer and early fall months. Thus, unemployment, adjusted according to the residual technique, reached 7.2 per cent at the business cycle trough in February, compared with 6.8 per cent in the BLS series. The October figures, on the other hand, show 6.4 per cent by the residual method and 6.8 per cent by the BLS method.

International Economic and Financial Developments

BUSINESS CONDITIONS ABROAD

In many European countries, the rate of increase in output has distinctly slowed in recent months. This slackening—which followed the rapid expansion of 1959 and 1960—has, however, varied in degree from country to country, and can be traced to a number of factors. In some cases, supply limitations—combined, at times, with official restraint measures—appear to be the principal cause of the slowing down, while in others less buoyant demand is of greater importance. Nowhere, however, can the current slackening be regarded as severe. Indeed, consumer expenditures and foreign demand remain relatively strong in the majority of the industrialized countries abroad. Actual declines in production have, moreover, occurred only in a few cases (see Chart I).

In Canada, where economic developments are, of course, closely linked to those in the United States, definite signs of a further acceleration of expansion could be discerned this autumn. Some of the lift has come from the upturn in the United States, and some from the wide range of expansionary measures adopted by the Canadian authorities over the past year.

In Japan the industrial production index in September was some 22 per cent above a year earlier, and was still rising rapidly in October. Some slackening in the rate of growth may, however, be in prospect, for the inflationary overtones of the domestic boom and the widening balance-of-payments deficit have been a growing source of concern.

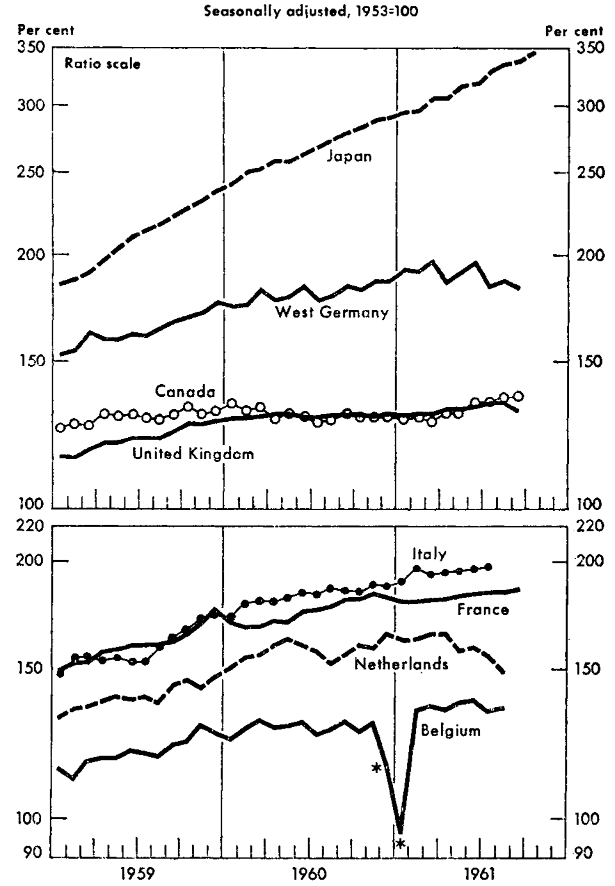
The authorities have sought to attack these problems with monetary measures, including selective restraints on imports of capital equipment, raw materials, and luxury goods; the full impact of these measures on the Japanese economy has yet to make itself felt. (In part, the new restraints are designed to cushion the impact of scheduled progressive reductions in quantitative import restrictions.)

The pattern of output changes in Continental Western Europe has shown considerable variation from one country to another. For the six members of the European Economic Community, according to the estimate made earlier in the year by the Common Market Commission, gross national product will increase by 5 per cent in 1961 and industrial production by 6-7 per cent, as against 7 and 12 per cent for 1960. In Germany the Economic Research Institute predicted at the end of October that, during the third and fourth quarters, GNP would be some 5 per cent higher (in real terms) than a year earlier; this would make for the smallest quarterly increases (on a year-to-year basis) since the spring of 1959, but is of course still in line with the current Common Market average. German industrial output in the third quarter was less than 4 per cent higher than a year earlier. In Italy, by contrast, the expansion that resumed after a short pause at the end of 1960 has lost only a little of its momentum, although the rise in Italy's industrial output in 1961 will undoubtedly fall short of the exceptional 12 per cent gain achieved in the course of 1960. Industrial output in Belgium, which was severely curtailed by strikes last January, has more than regained its loss since then. France's third-quarter industrial production did not rise so rapidly as it had a year earlier, but it is still possible that the official growth target for 1961 will be reached. In the Netherlands, the seasonally adjusted production index dropped 9 per cent below the end-of-1960 level by August, mainly because of a cut in the workweek, but turned up again in September.

Chart I

INDUSTRIAL PRODUCTION IN SELECTED COUNTRIES

Seasonally adjusted, 1953=100



Note: Latest 1961 data partially estimated.

*Belgian indexes for December 1960 and January 1961 affected by nation-wide strikes.

Sources: Organization for Economic Cooperation and Development, General Statistics; national statistics.

As far as any generalizations can be made, three factors seem to be of major importance in the current slackening of the rate of growth in Western Europe: labor shortages and other limitations on productive capacity; official restraint measures, generally taken against this "full employment" background; and slackening in investment demand, both for plant and equipment and for inventories. The relative roles played by these factors varied greatly from country to country, however, and only in some have all three factors been at work simultaneously.

In a number of countries—including Austria, Denmark, the Netherlands, Sweden, and the United Kingdom—extremely strong demand pressures against limited resources have increased the dangers of inflation. For these nations, the problem in the past year has been to contain, rather than sustain, the domestic boom and to repair its effects on the balance of payments, particularly in the United Kingdom. Thus, the Netherlands and, to a greater extent, the United Kingdom have taken various and often stringent measures to curtail domestic demand, while some other countries have attempted to ease the strain on resources by liberalizing imports, even at the risk of a deterioration in their external positions.

The slackening in investment demand has in many instances been attributable to various governmental measures. This appears to be notably true in Britain, where fixed-capital formation in manufacturing industries is likely to rise less rapidly from now on, partly because of reduced investment outlays by the steel industry. Such capital formation, to be sure, was 28 per cent higher in the first half of this year than a year earlier, but its average level in 1962 is expected to be no higher than the 1961 average. The current British housing boom also appears to have reached its peak, and any further rise in public investment will probably be very slow as a result of the austerity measures adopted since April. The British distributive trades, on the other hand, expect to increase their investment by about 8 per cent. In Japan, average expenditures on capital goods during the fiscal year ending March 1962 are expected to be about one-third above the previous twelve months' level, but they are likely to turn down later in the fiscal year as a result of the government's restraint policy.

In some other countries, there has been a lessening in the underlying demand for capital expansion, as in Denmark, the Netherlands, and Norway, where the growth of fixed investment seems to have slowed down and inventory accumulation has become more restrained. Canadian expenditures on plant and equipment and on business inventories have not yet turned appreciably upward, although housing outlays have revived. In Italy, Sweden, and Switzerland, on the other hand, the investment boom has lost very little force and housing construction activity continues to rise.

In contrast to investment, consumer demand has continued to grow at a high rate in the majority of foreign industrial countries, and currently is the most important factor of expansion. In Germany, for example, retail sales in the third quarter were 9 per cent above a year earlier, while in Sweden the National Institute of Economic Research has forecast that consumption will rise again in the second half of 1961 after having leveled off in the first half. In Italy, the steady expansion of consumer expenditures—especially for durable goods—quickened after the summer holidays, and has helped offset the effects, in a few industries, of reduced exports and a moderate slackening of investment. Consumer expenditures have also continued high in Denmark, Norway, and Japan.

Rising consumer demand has tended to be bolstered by the pronounced increases in industrial wages that have occurred so far in 1961, largely as a result of labor shortages. Gross hourly earnings of German industrial workers at midyear had soared as much as 12.5 per cent over a year earlier, while French industrial wages rose almost 4 per cent in the first half of 1961 and are expected to rise by an additional 3 per cent in December as the result of an increase in the minimum wage. The wage agreement concluded in Denmark early in the year resulted in an average increase of wages and salaries of about 10 per cent. The steady emigration of Italian workers to Germany, Switzerland, and other European countries has tightened the Italian labor supply, and has begun to exert pressure on wages; wage increases in Italy during recent months have accordingly been more frequent than in the last few years. British industrial wage rates rose by about 3 per cent in the first nine months of 1961, most of the gain taking place before the recent wage and salary "pause".

Consumer prices in many industrial countries have shown a greater tendency to rise thus far in 1961 than during the same period last year. However, only in Austria, Germany, Norway, and the United Kingdom did consumer prices rise more than 2 per cent during the first three quarters. Only in Canada, France, Sweden, and Switzerland has the advance in consumer prices been somewhat smaller than in 1960. Due largely to seasonal factors, moreover, food prices have recently risen in most countries. The advance has in fact been greatest in France, where it is possible that government measures to aid the farm sector may lead to further price increases. The March revaluation of the Deutsche mark has helped to dampen the strong upward pressure on consumer prices in Germany, while the Swiss authorities have been aided in their stabilization efforts by an exceptional expansion of imports. In the United Kingdom, the wage and salary "pause" and other austerity measures have apparently led to a stabilization of consumer incomes and expenditures, and thus to an abatement of some of the factors that had raised consumer prices by more than 3 per cent between January and September.

THE INTERNATIONAL FINANCIAL SCENE

Continuing efforts to deal with the world's payments problems have highlighted the international scene in recent months. In the United States a number of programs were under way to help reduce the country's balance-of-payments deficit, and the United States Government also announced new measures to maintain the strength of the dollar in foreign exchange markets abroad. Britain reaped the first fruits of its summer emergency measures: the speculative pressure against sterling was reversed, and the government promptly reduced the bank rate from the crisis level to which it had been raised, and repaid a significant part of its August drawing from the International Monetary Fund (IMF). Other major European countries took new steps to discourage inflows of short-term funds and to facilitate the continued growth of domestic economic activity and of trade.

The United States over-all balance-of-payments deficit rose to a seasonally adjusted annual rate of somewhat over $3 billion in the third quarter. This compared with a $1.9 billion deficit in the second quarter (exclusive of nonrecurring debt-payment receipts). The chief cause of the increased deficit in the third quarter was a significant expansion of imports, along with a reduction in investments by foreigners in the United States. While the increase in imports stemmed essentially from the continuing rise in demand associated with the domestic recovery, it also reflected the settlement of the June dock strikes and the delayed response of imports to improved business conditions in earlier months. Noting that a further increase in imports could be expected during the expansionary phase of the domestic business cycle, Secretary Dillon recently stated that "we face the probability of a reduction in our commercial trade surplus over the coming year".

As a part of the longer run program to bring the United States international accounts into balance, the Treasury has under study liberalized depreciation allowances and tax credits on new investments, which would be designed to stimulate investment and thereby improve the international competitive position of United States industry. An important step along these lines was taken in October, when the textile industry was granted a general reduction of 40 per cent in the "life" of textile equipment for tax purposes. The United States Government has also announced that it will ask Congress for broader authority to negotiate reductions in tariffs and other restrictions in order that United States exporters may be in a position to take full advantage of the opportunities emerging in Western Europe and other markets. Important benefits for the balance of payments should also flow from the Administration's announced determination to bring the Federal budget into balance in fiscal 1963 and to impress both industry and labor with the need to avoid undue advances in prices and wages.

In the meantime, other more immediate steps have been taken to relieve the pressure on the balance of payments. A new line of export credit insurance has been established, and the Export-Import Bank's system of guaranteeing commercial bank loans to exporters has been broadened. The United States and Germany are negotiating for German purchases of United States military equipment, supplies, and facilities, so as to offset some of the outflow resulting from our heavy military commitments in Europe. Actions taken simultaneously by the Board of Governors of the Federal Reserve System and the Federal Deposit Insurance Corporation on December 1 to increase the maximum interest rates that United States commercial banks may pay on savings and time deposits were designed in part to enable the banks "to compete more vigorously to retain foreign deposits that might otherwise move abroad in search of higher returns".

Moreover, the Stabilization Fund of the Treasury, operated by the Federal Reserve Bank of New York as fiscal agent of the United States, has broadened its exchange operations, which it had begun last March in close consultation with the German central bank to combat speculation against the dollar in the forward market for Deutsche marks. Thus, in October the Treasury borrowed $46.3 million worth of Swiss francs from the Banque Nationale Suisse, acting as fiscal agent of the Swiss Confederation, so as to increase its Swiss franc balances to support forward sales of Swiss francs and thus provide itself with a desirable degree of operating flexibility. The result of the operations was a strengthening of the dollar vis-à-vis the Swiss franc in the spot as well as the forward market.

Until late November, the dollar had also shown some strength against other Continental currencies but had weakened considerably vis-à-vis the pound. This weakness represented a reversal of the situation that existed earlier this year when funds were leaving London en masse for the Continent by way of conversions into and out of the dollar. Since August, in fact, funds had been returning to London in reaction to the July 25 announcement by the British Government of a new "austerity" program and the assistance received by that government from the IMF.[1]

At first, the return flow of funds to London represented mainly the liquidation of short sterling positions that had been built up before August. By October, however, investment funds were being increasingly attracted by the high short-term British interest rates that obtained following the July increase in the Bank of England discount rate to 7 from 5 per cent. The return flow of funds, together with the drawing of $1.5 billion from the IMF, and the improvement in Britain's balance of payments on current account swelled British reserves which permitted the British government to make substantial debt repayments. It voluntarily repaid during October-November $420 million equivalent of its IMF drawing and, during August-October, liquidated the bulk of the $910 million of short-term credits extended by various central banks under the March Basle arrangements.[2] Despite these special payments Britain's reserves increased $1,103 million in the four months ended November (see Chart II). Availing itself of the long-standing United States policy of selling gold to foreign monetary authorities at $35 per ounce plus handling charges, the British government (which

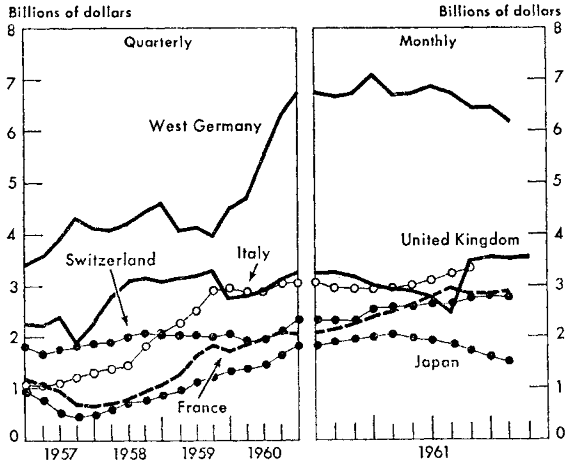
[1] For details, see *Monthly Review*, September 1961, pp. 152-53.

[2] By the end of October, all of the Basle credits reportedly had been repaid, except $50 million due to Switzerland. This amount is to be funded by the year end into a 3 per cent loan, repayable no later than in December 1964.

Chart II

OFFICIAL GOLD AND CONVERTIBLE FOREIGN EXCHANGE RESERVES

End of period



Sources: International Monetary Fund; national statistics.

traditionally holds only a small proportion of its international reserves in foreign exchange) converted some of its accumulated dollar balances into gold. This conversion accounted for the bulk of the $300 million dip in United States gold reserves during the week ended November 22.

In view of the restored confidence in sterling, the British monetary authorities on October 5, and again on November 2, reduced the discount rate by ½ per cent to 6 per cent. The rate thus had remained at the 7 per cent "crisis" level for less than three months. According to the Bank of England's governor, however, the reduction did not imply any less resolution in the application of the government's declared economic policy over the longer run or of the other measures of monetary restraint. The "credit squeeze" in particular, is still on. The Bank of England has not lowered the special bank reserve requirements, which had been raised as part of the austerity program announced in July, nor has it rescinded its request to the banks for credit restraint. Moreover, the government has refused to commit itself to a date when it will lift its appeal to labor and management for a pause in new wage concessions. Full-scale wage negotiations are currently under way in many important sectors of Britain's industry and civil service, but it is not clear how long the unions will want to wait for the wage increases finally agreed upon. The electric power unions have, in fact, already obtained wage increases effective early next year.

The British authorities have also been devoting careful attention to possible long-range programs to improve Britain's competitive position. Thus, the government has announced that it is examining the possibility of an acceleration of depreciation allowances—a step that would provide new incentives to exporters—as well as further measures to improve export credit facilities. At the same time, the government is seeking to establish a National Economic Development Council, in which government, labor, and management would participate. The Chancellor of the Exchequer recently stated that the council will be important in formulating economic policy in its early stages, particularly as far as investment is concerned. However, no decision seems to have been reached as to whether the council should also concern itself with wage policy.

While Britain's foreign exchange reserves have been increasing in recent months, German official reserves have continued the decline that began earlier this year. The $750 million decrease between June 30 and mid-November was associated in good part with Britain's August drawing of marks from the IMF. In addition, there have been increased government capital exports, as well as sizable private capital exports, some of which reflected uncertainty in August and September in the face of the Berlin crisis. Moreover, speculation regarding a possible new revaluation of the mark has disappeared, and conversions of foreign exchange into marks in excess of normal commercial considerations have consequently ceased.

The recent outflow of German short-term funds, together with a large government budget surplus and increased note circulation, has tended to tighten German financial markets. Had no official action been taken to counter this tendency, German banks and industry would probably have increased their foreign borrowing or would have drawn down their overseas balances more rapidly. The resulting inflow of foreign exchange, in conjunction with Germany's basic external-surplus position, would have led to a renewed rise in Germany's still very large holdings of gold and foreign exchange. To avoid such a rise, the German authorities have in recent months sought to ease the financial markets by reducing the banks' minimum reserve requirements. These requirements, which had already been reduced four times earlier this year, were again lowered in five successive stages between July 1 and December 1. Thus, reserve requirements for domestic sight, time, and savings deposits are back to the levels of October 1959. Moreover, the Federal Bank, in order to reduce the incentive for exports of short-term funds, announced in mid-August that cover on forward dollar operations would henceforth be made available at a discount of ¼ per cent per annum. This was the second change this year in German policy regarding forward operations, the first having occurred in February when the practice of furnishing forward cover at a premium was dropped in favor of providing cover at par.

Japan, too, has been experiencing a loss of international reserves this year but, in contrast to the German experience, this loss has essentially been due to heavy internal demand. The decline in Japanese reserves, which began last April, totaled $424 million between mid year and the end of November, largely reflecting a record level of imports and a cessation of short-term capital inflows. Lately, moreover, there have been net capital outflows, due primarily to repayments of Euro-dollar deposits. To moderate internal demand pressures and halt the loss of international reserves, the Bank of Japan on July 22 raised its discount rate from 6.57 to 6.935 per cent, and on September 29 to 7.3 per cent. In addition, the penalty rate above the regular rate that banks must pay for borrowings in excess of their discount ceilings was doubled in September, so that borrowings in excess of the ceilings now cost 9.5 per cent. Also in September, importers' predeposit requirements for many products were sharply increased from earlier maximum levels of 1 per cent, to as much as 35 per cent for some commodities. Finally, the authorities raised the banks' reserve requirements for the first time since their imposition in September 1959, thereby adding to the pressure being exerted on bank reserves by the loss of foreign exchange. Effective October 1, requirements were set at 1 and 3 per cent on large time and sight deposits. In the meantime, Japan has obtained $200 million of assistance from United States commercial banks to ease its reserve position. Japanese officials now hope that equilibrium in the nation's balance of payments on current account will be achieved by next September. They express confidence that, despite current difficulties, they will by then also have completed the recently announced program of progressive removal of import quotas, under which quota-free imports are to be raised from 65 per cent to 90 per cent of total imports.

Two Western European countries likewise have recently taken measures to counter inflationary pressures. Last August the Swiss National Bank, in continuation of its policy of preventing an undue increase in the liquidity of the Swiss monetary system, renewed a 1960 agreement with the Swiss commercial banks directed at discouraging the inflow of foreign funds into Switzerland.[3] In France, the authorities in September accelerated the tariff cuts that Common Market members are committed to make by the end of 1961 on their trade with each other. This move, like a similar one in April, was designed to hasten the exposure of French industry to foreign competition and thus parry mounting inflationary pressures at home. The September cut lowered French tariffs on industrial imports from Common Market members by 5 per cent, and the reduction was also extended to non-Common Market members except where the cut would have reduced the rate below the agreed level of the Common Market's future external tariff. These tariff reductions further confirmed France's strong external position, as witnessed by a virtually uninterrupted increase in reserves this year and the prepayment in August of France's remaining $303 million of debt to the European Payments Union.

While individual countries were taking measures to deal with their payments problems, many of them, acting collectively, took longer range steps to strengthen the international payments system. Agreement in principle was reached at the annual meeting of the IMF in Vienna to strengthen the gold-exchange standard through individual stand-by credits to the Fund.[4] Moreover, on September 30 the Organization for Economic Cooperation and Development (OECD) came into being. The OECD is the successor to the Organization for European Economic Cooperation, which since its inception in 1948 has been a vital force in the development of intra-European cooperation. The United States and Canada have now joined as full members with eighteen European powers to form the new organization, which will serve as a forum for regular discussion of the international payments mechanism, aid to the underdeveloped areas of the world, and the problems of growth and stability in the industrialized countries.

[3] For details of the agreement, see *Monthly Review*, September 1960, p. 162.

[4] For details, see *Monthly Review*, October 1961, pp. 167-69.

The Money Market in November

The money market was moderately firm through most of November. Reserve availability was concentrated largely at country banks, while pressures generated by the large Treasury refunding operation—through market churning in the early part of the month and a continuing heavy volume of dealer loans at the money market banks thereafter—subsided only in the closing days of the period. Federal funds consequently traded predominantly in a 2½ to 3 per cent range until late in the month, when they traded as low as ¼ per cent. Rates posted by the major New York banks on loans to dealers moved up early in the month to a 3 to 3½ per cent range, and declined in the final days to a 1½ to 2½ per cent level.

In the Government securities market, interest centered on the Treasury's successful refunding operation in which holders of $6.5 billion maturing 2½ per cent bonds exchanged their holdings for $3.6 billion of new 3¼ per cent fifteen-month notes, $2.4 billion of reopened 3¾ per cent bonds of May 15, 1966, and $517 million of reopened 3⅞ per cent bonds of November 15, 1974. In addition, the Treasury sold $800 million in strips containing equal amounts of eight bills maturing in December and January, which more than covered attrition on the exchange of bonds, as the latter amounted to only $421 million.

The market for Treasury notes and bonds had a generally firm tone through November 8. In the following week, prices declined sharply on news of favorable business developments and a large balance-of-payments deficit in the third quarter, market talk of a tightening of credit policy, and sales by some weak holders of the reopened 3⅞ per cent bonds of 1974. The market gained confidence soon after midmonth, however, and prices rose moderately until the last few days of the month when announcement of a large gold outflow again caused some weakness in the market. In the Treasury bill market, rates rose steeply over the first half of the month, as the large investment demand expected to arise out of the refunding did not materialize and the auction of strip bills added to substantial inventories carried by dealers at relatively high financing rates. Over the second half of the month, the appearance of moderate bank and nonbank demand brought a steadier trend in rates and permitted some reduction of dealers' heavy inventories. Three-month bills closed at 2.55 per cent bid, up 26 basis points for the month.

BANK RESERVES

Market factors absorbed some $1.1 billion reserves during four of the five statement weeks ended in November, the total net absorption for the entire period amounting to some $1.0 billion. Reserve losses during the first two statement weeks were due primarily to the unseasonally large drop in float and outflow in currency. The drain over the final two weeks resulted largely from the sizable gold outflow, stemming primarily from Britain's large gold purchase.

System open market operations more than offset these drains from market factors, supplying some $1,055 million in reserves over the five-week period. On a Wednesday-to-Wednesday basis, outright System holdings increased by $818 million between October 25 and November 29, reflecting an increase of $3,893 million in Government securities maturing within one year, and decreases of $3,014 million in issues in the one- to five-year range and of $61 million in issues maturing in over five years. In addition to open market operations, this reflected the movement of some holdings into shorter maturity categories. System holdings of securities under repurchase agreements declined by $52 million over the period, but substantial use was made of short-term repurchase agreements within the month to relieve some of the pressure concentrated at the central money market.

Borrowings from the Federal Reserve Banks increased in each of the first three statement weeks, on a daily average basis, but leveled off thereafter to average $96 million, compared with a $66 million average for the four statement weeks ended October 25. Excess reserves averaged $575 million for the five statement weeks ended November 29, $53 million higher than during the previous four statement weeks, while free reserves averaged $479 million, up $23 million from the four weeks ended October 25.

GOVERNMENT SECURITIES MARKET

Attention in the Government securities market during November focused on the Treasury's refunding operation, in which holders of almost $7 billion in 2½ per cent bonds maturing November 15 were offered a choice of three issues: a new 3¼ per cent note, maturing February 15, 1963 offered at par, a reopened 3¾ per cent bond maturing May 15, 1966 offered at 99¾, and a reopened 3⅞ per cent bond maturing November 15, 1974 offered at 99. The refunding offer, announced on November 2 when the market was buoyed by news of the ½ per cent reduction in the British bank rate, met an enthusiastic response. After an initial downward price adjustment on outstanding securities to levels in line with rates on the new offerings, market prices firmed and held steady through most of the November 6-9 period that books were open for the exchange.

Beginning on the last day of the subscription period and extending through midmonth, however, market sentiment shifted under the influence of favorable business news, a rise in stock market prices, press discussion of a possible advance refunding in December, and some suggestions in the press that a tightening of System policy was in progress. This reportedly brought some shift in subscriptions away from the longest offering (the 3⅞ per cent bond) so that, while the total amount exchanged in the refunding was quite high, with attrition at only 6 per cent of the public holdings, subscriptions for the 3⅞ per cent issue amounted to only $517 million, of which $136 million came from Government Investment Accounts. Some $3.6 billion was exchanged for the fifteen-month note and $2.4 billion for the 4½-year bond.

The heavy tone of the market was intensified after November 13 by news of the third-quarter increase in the balance-of-payments deficit and announcement of a $225 million new-money offering by the Federal National Mortgage Association ($100 million in 10½-year obligations and $125 million in three-year obligations). In this heavy atmosphere, sales of shorter and intermediate issues by investors preparing to switch into the new Treasury issues, and a moderate volume of small-lot sales by weak holders of the reopened 3⅞ per cent bonds, caused a sharp price reduction. The largest declines were in the reopened 3⅞ per cent bonds of 1974, which fell $^{20}/_{32}$ during November 13-15 to close at $98^{14}/_{32}$ on the 15th. These declines were extended on the morning of November 16, when a press report indicated that the Treasury was concerned that sizable speculative holdings of the new issues had been built up and that distress selling was under way. Prices fell sharply, particularly for the 3⅞ per cent bonds, but professional and retail buying soon appeared and the market turned around, bolstered by a Treasury statement denying the report of concern over speculative interest, so that the 3⅞ per cent bonds closed with a gain of $^{2}/_{32}$ for the day.

Thereafter, through most of the balance of the month, prices moved upward as confidence was regained—partly on the strength of higher free reserves figures for the November 15 statement week—and moderate investment demand appeared. The Treasury's November 17 exchange offer of 3⅞ per cent bonds of May 15, 1968 to holders of $970 million Series F and G Savings bonds maturing in 1962 had little market impact, the reopened issue rising in price over the second half of the month to close at $99^{26}/_{32}$, compared with $99^{24}/_{32}$ before the announcement. In the final days of the month, however, the market weakened once more, influenced in part by announcement of the large gold outflow and by the favorable business outlook. At the month's close, prices of most short and intermediate issues were down $^{1}/_{16}$ to $^{3}/_{8}$ for the month, while longer bonds generally showed losses of

Changes in Factors Tending to Increase or Decrease Member Bank Reserves, November 1961

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

Factor	Daily averages—week ended: Nov. 1	Nov. 8	Nov. 15	Nov. 22	Nov. 29	Net changes
Operating transactions						
Treasury operations*	+ 2	+ 8	+ 24	— 40	+ 50	+ 44
Federal Reserve float	— 392	— 108	+ 56	+ 557	— 251	— 138
Currency in circulation	+ 48	— 167	— 255	— 128	— 153	— 655
Gold and foreign account	+ 8	— 43	+ 11	— 148	— 116	— 288
Other deposits, etc.	— 34	+ 43	+ 5	— 150	+ 39	— 97
Total	— 369	— 268	— 158	+ 90	— 429	— 1,134
Direct Federal Reserve credit transactions						
Government securities:						
Direct market purchases or sales	+ 248	+ 427	— 86	+ 81	+ 299	+ 969
Held under repurchase agreements	— 15	+ 16	+ 57	+ 41	— 13	+ 86
Loans, discounts, and advances:						
Member bank borrowings	+ 19	+ 17	+ 31	— 32	+ 11	+ 46
Other	—	—	+ 1	— 1	—	—
Bankers' acceptances:						
Bought outright	—	+ 4	— 2	+ 1	— 1	+ 2
Under repurchase agreements	—	—	—	—	—	—
Total	+ 252	+ 464	+ 1	+ 91	+ 296	+ 1,104
Member bank reserves						
With Federal Reserve Banks	— 117	+ 196	— 157	+ 181	— 133	— 30
Cash allowed as reserves†	+ 43	— 274	+ 224	— 26	+ 117	+ 84
Total reserves†	— 74	— 78	+ 67	+ 155	— 16	+ 54
Effect of change in required reserves†	+ 69	+ 11	+ 43	— 143	+ 88	+ 68
Excess reserves†	— 5	— 67	+ 110	+ 12	+ 72	+ 122
Daily average level of member bank:						
Borrowings from Reserve Banks	74	91	122	90	101	96‡
Excess reserves†	543	476	586	598	670	575‡
Free reserves†	469	385	464	508	569	479‡

Note: Because of rounding, figures do not necessarily add to totals.
* Includes changes in Treasury currency and cash.
† These figures are estimated.
‡ Average for five weeks ended November 29, 1961.

$\frac{5}{16}$ to $\frac{3}{4}$. Of the three securities offered in the refunding, the 3¼ per cent notes of February 1963, issued at par, closed at $100\frac{1}{32}$ bid; the 3¾ per cent notes of May 1966, issued at $99\frac{24}{32}$, closed at $99\frac{23}{32}$ bid; and the 3⅞ per cent bonds of November 1974, issued at 99, closed at $98\frac{8}{32}$ bid.

In the Treasury bill market, rates continued their late October decline during the first few days of November, as seasonal demands, strengthened by the effects of the ½ per cent cut in the British bank rate, met scarcities in the shorter maturities and spilled out to the three-month area. This demand was supplemented by stockpiling purchases from dealers, who anticipated that a substantial demand would arise out of the approaching Treasury refinancing operation.

The rate decline was first slowed and then reversed, however, by Treasury announcements that it would transfer \$100 million from the six-month to the three-month bill offering in the following weekly auction, and would auction \$800 million in strips combining equal amounts of eight bills maturing December 7, 1961 to January 25, 1962. Additional upward pressure on rates subsequently developed from the market churning arising from the large refunding operation. This churning generated substantial money market strains, which kept the Federal funds rate close to 3 per cent, prompting commercial bank sales of bills and raising the dealers' cost of carrying their swollen inventories. The anticipated demand for bills from holders of the maturing issues did not materialize, moreover, as expectations of higher rates and talk of imminent credit tightening led many potential bill purchasers to invest in repurchase agreements bearing substantially higher yields and some sellers of rights bought other short-term issues. In the November 9 auction of strip bills, consequently, bidding was light and mainly professional. The average issuing rate was 2.277 per cent, compared with a 2.08 per cent average bid rate for the eight reopened bills at the close the previous day. Later, with a substantial amount (over \$500 million) of the strip bills added to their already large inventories and with carrying costs remaining high, dealers sought to lighten their holdings, adjusting rates upward as offerings appeared. By midmonth, the three-month bill rate was at 2.58 per cent bid, 29-basis-points higher than at the month's start.

At these higher rate levels, some investor demand appeared, reinforced by some easing in the money market and a calming of market apprehensions about a tightening of credit policy. In the face of continuing dealer offerings, however, and influenced by news of the gold outflow and favorable business performance, rates moved irregularly after midmonth. Average issuing rates on the three- and six-month bills rose to 2.606 and 2.806 per cent, respectively, in the November 27 weekly auction, the highest levels in a year. Reflecting a more pronounced easing in the money market in the final days of the month, the three-month bill closed at 2.55 per cent bid and the six-month bill at 2.79 per cent; the 24-basis-point spread, compared with a 31-basis-point spread at the beginning of the month, reflected the substantial addition to the supply of bills in the three-month area.

OTHER SECURITIES MARKETS

The markets for corporate and tax-exempt bonds opened November on a firm note but soon weakened and remained cautious over most of the month. Mixed receptions were accorded most of the \$400 million in new public offerings of corporate bonds, which were greater than the \$330 million October total but less than the \$460 million of November 1960. New issues came at rising rate levels, and some high-grade corporate offerings met considerable investor resistance. Prices of seasoned bonds were mixed, and at the month's close Moody's average of yields on seasoned Aaa-rated corporates stood at 4.38 per cent, down 2 basis points for the month.

In the market for tax-exempt bonds, the rising price trend of the previous two months continued into early November. This trend was subsequently reversed, however, as the heavy calendar of new offerings—\$725 million for the month, compared with \$600 million in October and \$435 million a year before—and the poor receptions accorded some issues brought the Blue List of advertised dealer offerings to a record \$553 million around midmonth. This led to some price cutting, and several syndicate agreements on recent offerings were terminated. By the end of the month Moody's average yield on seasoned Aaa-rated tax-exempts was at 3.31 per cent, up 6 basis points for the month.

Compensating Balances*

Many banks expect business customers to hold minimum average balances as a condition for extending loans or lines of credit. There are indications, moreover, that the practice of requiring such "compensating" balances has become increasingly widespread during the past decade. One result of this trend has been an increased interest in the effects of compensating balance requirements on the loan volume and interest earnings of individual banks as well as on the general cost and availability of credit throughout the banking system. Another result has been the growth of a relatively new financial device, known as "link financing".

CHARACTERISTICS AND IMPORTANCE OF BALANCE REQUIREMENTS

Compensating balance requirements are usually expressed as a percentage of the line of credit extended. In a survey of 100 large banks taken in 1958 by the Robert Morris Associates, the great majority of banks requiring compensating balances reported requirements in 1958 of 10-20 per cent of the line of credit.[1] The specific percentage varied from bank to bank, and often from borrower to borrower. In almost all cases the required volume of deposits is defined in terms of average balances held over a period, so that required balances may also serve to meet customer working balance needs.[2]

While it is impossible to estimate the dollar volume of deposits held by business borrowers as compensating balances, the 1958 survey indicated that over 70 per cent of the banks covered made such balances a condition for extending lines of credit to all business borrowers. Other banks required them against lines of credit in most, but not all, cases and for a few banks balances were required on lines of credit granted only to particular types of borrowers, such as sales finance companies. Compensating balance requirements do, however, tend to be considerably more common among large banks than among small ones, and among large rather than small borrowers.

Sometimes balance requirements against lines of credit are raised when the line is in use, while in other cases the balance requirement does not change when the line is activated. Actual balances in such cases may, indeed, be at their *lowest* level when the credit line is being used most fully, the small balances at such times being offset by higher balances during periods when the line is being used less intensively or not at all. Where loans are made to borrowers who had not previously been required to hold a balance against their line of credit, or who had not previously had a line of credit at all, balance requirements frequently become effective at the time the loan is made. The lending bank may, however, not ask for a compensating balance if the borrower had voluntarily carried balances with it in the past—or gives strong promise of doing so in the future.

This underscores the important fact that compensating balance requirements often reflect an informal understanding in which exact percentages are not discussed, rather than a hard and fast agreement that spells out the obligation of the borrower in precise detail. If the customer, for example, voluntarily holds balances in excess of those the bank would ordinarily require, the subject of a compensating balance is not likely to be brought up.

Informal and flexible arrangements are common where there is a continuing relationship between the bank and its customer. Compensating balances and credit lines may be merely one aspect of such a relationship; the bank often performs various services for the customer, in addition to extending credit, and perhaps the customer will steer other business (that of its own customers or subsidiaries, for example) to the bank. Where such relationships are mutually satisfactory over the long pull, the exact nature of the customer's obligation with respect to the level of his balance may never be explicitly spelled out.

From the standpoint of the borrower, compensating balances may be viewed as something of an informal "commitment fee", i.e., as the price he pays for the bank's

* Jack M. Guttentag, Chief, Domestic Research Division, and Richard G. Davis, Economist, Domestic Research Division, had primary responsibility for the preparation of this article.

[1] F. P. Gallot, "Why Compensating Balances? Part II", *Bulletin of the Robert Morris Associates*, August 1958, pp. 309-19.

[2] See George Garvy, *Deposit Velocity and Its Significance*, Federal Reserve Bank of New York, November 1959, pp. 29-37.

commitment under the line of credit to extend a loan when needed. At the same time these balances may also serve to compensate the bank for other services. The cost to the borrower of maintaining balances for these purposes largely depends on whether the balances needed exceed those the customer would voluntarily hold to carry on his business, even in the absence of any requirement.

Comparison of the 1958 Robert Morris survey with a similar survey taken by that organization in 1954 suggests that banks were tending to extend compensating balance requirements to a wider group of business borrowers. There are indications that the practice has become even more widespread since 1958. The 1958 survey indicated, moreover, that the requirements had been raised since 1954 and were being enforced more vigorously. Customer failure to fulfill requirements is usually met, in the first instance, with persuasion. If this does not work, the bank may have recourse to higher interest rates, reduction of credit lines, or even outright cancellation of borrowing privileges, depending upon the persistence of the deficiency, the customer's current and potential value to the bank, and the general state of credit conditions.

Balance Sheet of Individual Bank

NO COMPENSATING BALANCES REQUIRED

Assets		*Liabilities*	
Required reserves	$ 210	Initial deposits	$1,050
Credit	840		
	$1,050		$1,050

COMPENSATING BALANCES REQUIRED

Assets		*Liabilities*	
Required reserves	$ 250	Initial deposits	$1,050
Credit	1,000	Deposits held as compensating balances	200
	$1,250		$1,250

EFFECT ON DEPOSITS AND CREDIT

Banks generally look at compensating balances as an aspect of bank-customer relations—indeed, as one means of fostering such relationships and thereby encouraging borrowers to use various banking services. Some banks also feel that compensating balances can moderate fluctuations in deposit balances and that, in the event a loan goes into default, such balances might offset part of the loss.

Much of the recent interest in the effects of compensating balance requirements, however, has centered on their influence over the volume of deposits, lending capacity, and the effective interest rate on loans. From the standpoint of the individual bank, compensating balance requirements can increase both deposits and loans, and thereby swell interest earnings. These requirements, however, actually reduce the volume of withdrawable funds which the bank can make available to borrowers because part of the bank's funds are tied up as required reserves held against borrowers' compensatory deposits.

These points are illustrated by the example in the table.[3] Assume that a bank obtains a deposit of $1,050 from the public and that it must hold 20 per cent of this amount, or $210, as required reserves. The remaining $840 can be made available as loans to borrowers who, we assume, immediately withdraw these funds to make payments. But if the bank requires compensating balances of 20 per cent it can, based on the same $840, extend $1,000 in loans because the balance requirement assures the bank that only $800 will actually be withdrawn. (The bank must hold the rest of the $840, or $40, as required reserves against the $200 in deposits maintained by the borrower as a compensating balance.) The $1,000 in loans represents a $160 increase, compared with the case where no compensating balances are required, and interest earnings are correspondingly higher. At the same time, however, the amount of withdrawable funds is reduced from $840 in the no-requirements case to $800 when balances are required, the difference being equal to the additional required reserves that must be held against the compensating balance.

Although the individual bank can increase its deposits by requiring compensating balances, the ability of the banking system as a whole to create deposits is limited by total reserves, which are not influenced by balance requirements. However, to the extent that compensating balance requirements tend to concentrate deposits in city banks, which have higher required reserve ratios, total deposits may tend to be somewhat reduced. On the other hand, in so far as balance requirements reduce the day-to-day volatility of deposits, they may make some banks

[3] For simplicity, the example assumes that requirements are based on the loan amount rather than the line of credit. The alternative assumption leads to the same results.

willing to remain more fully invested than otherwise, thereby tending to increase deposits.

Aside from these possibly minor influences, compensating balance requirements have no effect on total deposits. A bank that increases its own deposits by requiring compensating balances reduces deposits of other banks by the same amount. This is obviously the case where the borrower obtains the compensating balance by withdrawing funds deposited in other banks. But it is also the case where the compensating balance is obtained directly from the lending bank as part of the loan, as illustrated in the table. In the example, the $200 compensating balance absorbs $40 of reserves that otherwise would have been available to support $200 of deposits by credit expansion elsewhere in the banking system.

RELATION TO WORKING BALANCE NEEDS

Where the borrower must hold balances that cannot be withdrawn, it might be concluded that the loan amount (or line of credit) overstates the actual volume of funds that can effectively be used. By the same token, it may seem that the effective interest rate (i.e., the interest payment figured as a proportion of usable funds) is higher than the contract rate. Even in cases where such conclusions do hold, the higher cost would have to be set against the value to the customer of the informal guarantee of loan accommodation under the line of credit, as well as the value of any other bank services rendered to him.

But even aside from these collateral benefits, the compensating balance requirement may not increase the effective cost of credit to the borrower. Most business borrowers have substantial working balance needs. They must maintain an average level of deposits sufficient to bridge day-to-day gaps between payments and receipts as well as to meet those special contingencies (emergencies and opportunities) that require immediate cash. Actual balances held for this purpose may fluctuate markedly, but since compensating balance requirements are usually stated in terms of average balances over a period, they serve in part, at least, to satisfy working balance needs. Where required balances are equal to or less than the average balances borrowers would hold to meet working balance needs, the requirement does not reduce the effective availability of funds to the borrower, nor does it mean that the effective interest cost of credit to him is higher than the contract rate.

Thus, in the example cited above, a borrower who seeks to hold working balances of $200 is not adversely affected by the $200 balance requirement. The balance requirement merely obliges him to hold his working balance at the lending bank rather than elsewhere. From the point of view of the lending bank, the arrangement assures a continuing bank-customer relationship. The customer's deposits add to bank earnings, and may encourage the bank to offer him a larger loan or lower contract rate than it offers to nondepositors. (The latter, in fact, may not obtain accommodation at all.) Indeed, where a potential borrower with heavy working balance needs does not already have a compensating balance arrangement with his bank, another bank might be able to solicit his business by offering a relatively low contract rate of interest on condition that the borrower transfer a balance large enough to meet that bank's balance requirement. Where borrowers already have a compensating balance arrangement that is reflected in loan rates lower than those charged to nondepositors, the scope for this inducement is of course limited.[4]

When balance requirements exceed the borrower's working balance needs, however, the requirement does force him to pay interest on balances he does not need. Thus, if the borrower in the example above has working balance needs of only $100 but is nevertheless obliged to hold $200 of his $1000 loan as a compensating balance, he is provided with only $900 of effective funds, and the effective rate of interest he pays rises correspondingly. (If the borrower uses his line of credit only part of the time but must hold average balances that are $100 higher than those he needs over the full year, the effective rate he pays is still higher.)

In cases of this type, the effective yield to the bank theoretically could be raised and, at the same time, the effective cost to the borrower reduced by an appropriate combination of reduced balance requirements and increased contract rates of interest. The potential benefit arises from the elimination or reduction of the required reserves that must be held against the compensating balance. The customer may of course feel that he receives full value for these balances in the form of "commitment insurance" and other bank services. Nevertheless, in principle, direct payment for these services could be beneficial to both parties, since it would eliminate the reserve requirement against the compensating balance.

For example, if the recipient of the $1,000 loan in the compensating balance case shown on the table needs no working balances at all so that the loan provides him with only $800 of funds that he can use effectively, he would be just as well off with a loan of $800 at a contract interest rate one-fourth higher and no required balance. The

[4] See Donald R. Hodgman, "The Deposit Relationship and Commercial Bank Investment Behavior", *Review of Economics and Statistics*, August 1961, p. 262.

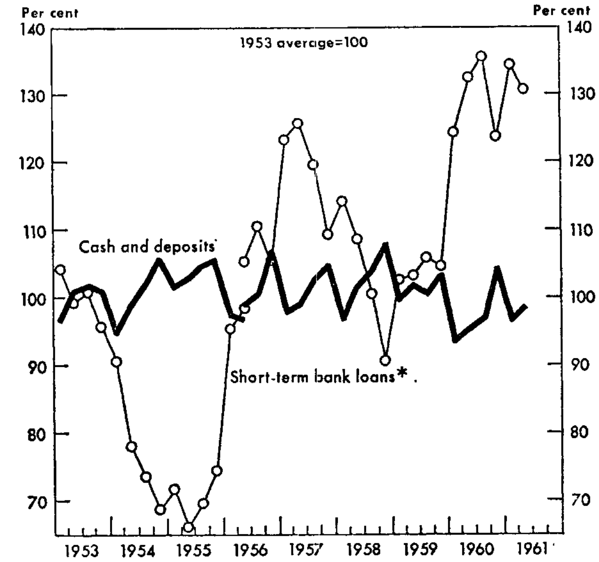
bank, however, would be better off in the latter case, because its interest earnings on this specific loan transaction would remain the same while $40 of required reserves would be "freed" and could be used to make additional loans. In principle, this benefit could be shared between borrower and lender, although in practice much depends on the relative bargaining positions of the two parties.

The burdensomeness of compensating balance requirements where they exceed borrower working balance needs may account for the fact that balance requirements are sometimes waived or set at comparatively low levels for certain types of borrowers, such as builders, whose normal balance needs are small; in such cases, the lower requirements may be offset by higher contract rates of interest. Indeed competition may exert pressure toward keeping requirements low in cases where working balance needs are relatively small just as it encourages the development of compensating balance arrangements where such needs are heavy.

Nevertheless, in some cases, compensating balance requirements in excess of customer working balance needs do, for various reasons, persist. Banks may have a special incentive to maintain compensating balances in order to solidify bank-customer relations, from which they often obtain collateral advantages. Compensating balances, moreover, may be administratively the most convenient way of compensating the bank for services, despite the added cost to the bank of holding reserves against idle deposits. Some banks, furthermore, may strive to make their deposits as large as possible, even if this causes some reduction in earnings—especially when the impact on earnings is not clearly visible. In addition, balance requirements may be rendered inflexible by the bank's desire to maintain uniformity of requirements or contract rates of interest among different borrowers of the same general type. Finally, the upward adjustments in the contract rate needed to offset any reduction or elimination of compensating balances may be restrained in some cases by legal or traditional ceilings on contract interest rates. If borrowers are generally satisfied with their banking relationship, competitive pressures that might otherwise overcome some of these obstacles and spark downward adjustments in requirements may not develop.

How important are cases where compensating balance requirements exceed borrower working balance needs? The necessity felt by many banks to educate their customers to an acceptance of compensating balances, as well as the problems sometimes encountered in enforcing the requirements, strongly suggests that it is more than an occasional and isolated phenomenon. There are indications, moreover, that such cases may have grown increasingly important in recent years. Since 1952, for example, cash holdings of manufacturing corporations (consisting very largely of demand deposits) have hardly changed at all while short-term bank loans to such corporations, although subject to sharp cyclical fluctuations, have nevertheless tended upward (see chart). If it is assumed that deposits subject to compensating balance requirements have risen in line with loans (a reasonable assumption in view of the fact that lines of credit, against which compensating balances are usually set, tend to move in the same direction as loans), it would appear that such deposits now comprise a large proportion of total deposits, and may therefore exceed working balance needs in a proportionately larger number of individual cases.[5]

SHORT-TERM LOANS FROM BANKS AND CASH PLUS DEPOSITS OF ALL MANUFACTURING CORPORATIONS



*Loans with original maturity of one year or less.

Sources: Federal Trade Commission; Securities and Exchange Commission.

[5] Some observers have concluded that, because the ratio of cash holdings to short-term bank loans for manufacturers has generally been well in excess of typical required balance ratios, the requirements have not been burdensome for this group of firms as a whole. This evidence is far from satisfactory, however, since compensating balances are most often required, not against loans themselves, but against lines of credit. Since at any given time many lines of credit are not being used, or not very fully used, total credit lines greatly exceed outstanding loans. The ratio of deposits to lines of credit is thus smaller, and perhaps considerably smaller, than the ratio of deposits to loans. Even aside from this consideration, moreover, the totals for manufacturing borrowers as a whole may conceal a significant number of individual firms for which a burden does exist.

This, along with the increased prevalance of compensating balance requirements, may explain the recent development and growth of a new financing device known as "link financing". Although this device is not yet widespread, it has been used by some firms for which required balances exceed working balance needs.

LINK FINANCING

While many variants of link financing exist, the general nature of this technique may be illustrated by the following example: A borrower receiving a $100,000 loan is required by the bank to keep a compensating balance of 20 per cent (or $20,000) but wishes to withdraw the full amount of the loan to make payments. Both the borrower and the bank may be satisfied if the borrower can find a supplier of funds, such as an insurance company, mutual fund, or pension fund, that will deposit $20,000 of its own money in the borrower's bank—such deposits typically taking the form of time certificates of deposit. In this way, the lending bank obtains the compensating balance of $20,000, the borrower gets the use of the entire $100,000 loan, and the supplier of deposits receives a certificate of deposit on which it receives interest paid by the borrower.[6] In some cases, the supplier may subsequently sell part or all of his time certificates to other investors. Finance companies are important users of link financing, but the technique has been employed by construction and manufacturing firms as well. Some link financing deals are arranged by middlemen who have been quick to discover a profitable brokerage opportunity. These brokers may sometimes obtain funds for an individual borrower from several participating suppliers (frequently in units of $5,000).

The supplier of deposits in a link financing deal is paid by the borrower, but he may, in addition, receive interest on the certificate of deposit directly from the lending bank. The fact that the total return from both sources has generally exceeded the legal maximum that banks are permitted to pay on time deposits has perhaps been the major inducement to the flow of funds into this market. In cases where the deposit is noninterest bearing, the payment by the borrower normally exceeds the legal maximum rate on time deposits.

Although link financing requires the borrower to make a supplemental payment to the supplier of the compensating balance, it may nevertheless be the least expensive means for the borrower to obtain use of the full amount of funds he requires. Even if the bank is willing to increase the size of the loan by an amount sufficient to cover the balance requirement, the added charge could exceed the cost to the borrower of obtaining the deposit through a link financing arrangement. Where the bank is unwilling to increase the size of the loan, the only alternative to link financing may be even more costly borrowing from other nonbank sources. Link financing can thus reduce, but cannot eliminate, the cost imposed by compensating balance requirements in excess of working balance needs.

From the standpoint of the lending bank, a compensating balance in the form of a time certificate has the advantage of reducing the volume of required reserves that must be held against the deposit. On the other hand, some banks express opposition to link financing on the ground that it does not encourage close bank-customer relations.

COMPENSATING BALANCES DURING THE BUSINESS CYCLE

There is considerable evidence that compensating balance requirements are responsive to cyclical changes in general monetary conditions. Thus in periods of declining interest rates, when money is plentiful and banks are seeking to expand loans, banks often reduce compensating balance requirements as one more way of making borrowing more attractive and meeting competition. Similarly, during periods of stringency, pressures may be generated to raise balance requirements. In the 1958 study referred to above, slightly over half the bankers interviewed stated that they adjusted their policies in the light of general monetary conditions, and effective flexibility may be even more widespread. Even a bank which aims at a fixed ratio of compensating balances to lines of credit, regardless of monetary conditions, may enforce the policy more vigorously in periods of rising interest rates and loan demand than in periods of comparative slack. Such variations in the vigor of enforcement may indeed provide a more flexible means of adjusting to changing market conditions than changes in nominal requirements or in contract rates.

Cyclical flexibility in the application of compensating balance requirements thus can be a mechanism through which changes in the cost and availability of credit are transmitted to the market for business loans. On the availability side, increases in balance requirements or in the vigor of enforcement tend to immobilize a larger part of loans and deposits in cases where required balances already equal or exceed working balance needs. On the cost side, increases in the required balance ratio will raise effective interest rates, over and beyond increases in contract rates, to borrowers with small working balance

[6] Some cases have been reported where the supplier has provided deposits equal to the full amount of the loan, rather than merely the compensating balance.

needs. It is impossible to estimate the quantitative significance of the cost and availability effects of cyclical shifts in compensating balance policies, but they may have a definite importance. One study of finance company borrowing suggests that decreases in compensating balance requirements between 1953 and 1954 may have reduced borrowing costs by about as much as reductions due to declines in the contract rate of interest itself.[7]

CONCLUDING COMMENT

When the effects of compensating balance requirements are taken into account, cyclical swings in effective bank interest rates and credit availability are larger than is indicated by conventional statistical measures. This does not imply, however, that these swings in effective rates and availability have been larger than they would have been in the absence of compensating balance requirements. In its conduct of monetary policy, the Federal Reserve System takes into account all influences bearing on the supply of credit that are outside the System's immediate control, of which compensating balance requirements is one. Changes in the supply of credit from this and other sources that are inappropriate to the prevailing economic situation may therefore be neutralized by offsetting adjustments in monetary policy.

[7] See Robert C. Holland, *Bank Lending to Finance Companies, December 1951-June 1956*, unpublished doctoral dissertation, University of Pennsylvania, 1959.