FEDERAL RESERVE BANK OF NEW YORK

MONTHLY REVIEW

MARCH 1961

Contents

Volume 43 No. 3

The Money Market in February

Highlighting the money market in February was the Federal Reserve System announcement that open market operations were being broadened to include transactions in Government securities outside the short-term area. Announcement of this broadening of System operating policies on February 20 accentuated the decline in intermediate and longer term rates and the rise in short-term rates already in progress as a result of the Treasury's refunding operation and the Administration's announced views that firm short-term and lower long-term rates are desirable. The announcement made by the Manager of the System Open Market Account on February 20 at the direction of the Chairman of the Federal Open Market Committee read as follows:

> The System Open Market Account is purchasing in the open market U. S. Government notes and bonds of varying maturities, some of which will exceed five years.
>
> Price quotations and offerings are being requested of all primary dealers in U. S. Government securities. Determination as to which offerings to purchase is being governed by the prices that appear most advantageous, i.e., the lowest prices. Net amounts of all transactions for System account will be shown as usual in the condition statements issued every Thursday.
>
> During recent years transactions for the System Account, except in correction of disorderly markets, have been made in short-term U. S. Government securities. Authority for transactions in securities of longer maturity has been granted by the Open Market Committee of the Federal Reserve System in the light of conditions that have developed in the domestic economy and in the U. S. balance of payments with other countries.

Over the month as a whole, prices of longer term Treasuries rose by as much as 2¾ points, while the markets in corporate and tax-exempt securities also exhibited a stronger tone. Rates on Treasury bills, in contrast, rose significantly over the month, with the three-month bill up 27 basis points to 2.59 per cent, while rates on other short-term instruments also increased.

SHORT-TERM MONEY MARKET AND BANK RESERVE POSITIONS

Member bank reserve positions remained comfortable in the aggregate during February, but to a lesser extent than in January, and reserves tended to be concentrated at the country banks, so that the money market banks were more dependent upon the market for Federal funds. The short-term money market turned somewhat firmer, therefore, and the rate on Federal funds was generally in a 1¾ to 3 per cent range over the month, with the effective rate at 2½ per cent or higher on most days. Rates on loans to Government securities dealers at the major New York City banks varied from 2½ to 3½ per cent but were most often at 3 per cent or above.

Operating factors absorbed $785 million of member bank reserves during the first three statement weeks ended in February but released over $500 million in the final statement week as the earlier decline in average float was sharply reversed by a seasonal rise, swollen by the effects of the airline strike (see Table I).

Partially counterbalancing the reserves absorbed by operating factors was the further seasonal decline in required reserves, which released $165 million over the month. This occurred despite a fairly substantial, and contra-seasonal, rise in total bank credit during February and was partly attributable to the fact that much of the loan increase reflected the purchase, by a group of banks, of a large mail order firm's consumer receivables with payment primarily in time deposits (for which reserve requirements are much lower than for demand deposits).

System open market operations absorbed reserves in the first statement week of the month, withdrawing some of the reserves provided unexpectedly in the latter part of January by an unusual bulge in float caused by snowstorms. Then, through mid-February, the System added to member bank reserves, almost offsetting the drain resulting from market factors. In the final week ended in the month the System Account again absorbed reserves, partly offsetting the effects of market factors. In the four weeks ended February 22, System holdings declined by $81 million on a daily average basis, as outright holdings were reduced by $232 million and holdings under repurchase agreements were increased by $151 million.

Table I
Changes in Factors Tending to Increase or Decrease Member Bank Reserves, February 1961
In millions of dollars; (+) denotes increase, (—) decrease in excess reserves

Factor	Daily averages—week ended				Net changes
	Feb. 1	Feb. 8	Feb. 15	Feb. 22	
Operating transactions					
Treasury operations*	— 10	— 1	— 6	+ 24	+ 7
Federal Reserve float	— 392	— 78	— 224	+ 497	— 197
Currency in circulation	+ 190	— 31	— 125	+ 73	+ 107
Gold and foreign account	— 31	+ 19	— 8	— 12	— 32
Other deposits, etc.	— 10	— 57	— 22	— 62	— 151
Total	— 253	— 149	— 383	+ 518	— 267
Direct Federal Reserve credit transactions					
Government securities:					
Direct market purchases or sales	— 239	+ 90	— 19	— 64	— 232
Held under repurchase agreements	+ 18	+ 170	+ 166	— 203	+ 151
Loans, discounts, and advances:					
Member bank borrowings	+ 19	+ 113	+ 14	— 86	+ 60
Other	— 1	—	—	—	— 1
Bankers' acceptances:					
Bought outright	— 1	— 1	+ 1	— 2	— 3
Under repurchase agreements	—	—	+ 1	+ 3	+ 4
Total	— 205	+ 373	+ 162	— 351	— 21
Member bank reserves					
With Federal Reserve Banks	— 458	+ 224	— 221	+ 167	— 288
Cash allowed as reserves†	— 46	— 239	+ 129	+ 51	— 105
Total reserves†	— 504	— 15	— 92	+ 218	— 393
Effect of change in required reserves†	+ 47	+ 38	+ 177	— 97	+ 165
Excess reserves†	— 457	+ 23	+ 85	+ 121	— 228
Daily average level of member bank:					
Borrowings from Reserve Banks	66	179	193	107	136‡
Excess reserves†	546	569	654	775	636‡
Free reserves†	480	390	461	668	500‡

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 February 22, 1961.

Total member bank reserves in the four weeks ended February 22 registered a somewhat smaller-than-usual decline from the previous month. Excess reserves declined by $208 million, on a daily average basis, while average borrowings from the Reserve Banks increased by $59 million, so that free reserves averaged $500 million for the period, compared with $767 million the month before.

GOVERNMENT SECURITIES MARKETS

Yields on intermediate and longer term Treasury issues moved down significantly over the month while short-term rates, in contrast, edged progressively upward. Behind these developments was a combination of influences upon market psychology, including the Treasury's February refunding (the first under the new Administration), the Administration's announced desire for lower long-term interest rates, as well as its stress on the importance of keeping short-term rates firm, and the announcement that System open market operations now would include Government securities outside the short-term area. By the month end, bill rates had risen by 18 to 50 basis points to the highest levels since early last October. Yields on intermediate and longer term issues, after fluctuating rather widely at times, were down by 5 to 18 basis points, to make the highest yield obtainable on a Treasury issue about 3.84 per cent.

The Treasury's refunding of $6.9 billion of 4⅞ per cent certificates due February 15, through a cash offering of 3¼ per cent eighteen-month notes, was an outstanding success. Total subscriptions were $19 billion, so that allotments were only 20 per cent except for a designated group of subscribers (including Treasury investment accounts and the Federal Reserve System, and official foreign accounts) which received 100 per cent allotments. Total allotments of $7.3 billion provided $400 million new cash to the Treasury. The new note moved to a premium of $\frac{7}{32}$ in "when-issued" trading and closed the month at $100\frac{6}{32}$ bid.

The refunding offer, confined to an eighteen-month obligation, had its principal impact on the short-term area of the market. The method of refunding — i.e., cash instead of exchange—eliminated pre-emptive rights and, consequently, produced less switching out of the maturing issue into bills and other short-term issues than might have occurred in a traditional exchange operation. Moreover, the Treasury's $400 million overallotment of new notes limited the potential reinvestment demand by holders of the maturing issue on February 15, and stimulated additional selling of outstanding issues by investors preparing to pay for the new notes. Short-term rates, therefore, moved gradually higher, a helpful development in the light of the balance-of-payments situation. The market was also influenced by the possibility of Congressional action to permit the payment of higher interest rates on official foreign time deposits and the possible issuance by the Treasury of special securities at attractive rates to foreign Governments and monetary authorities.

Two specific developments tended to accelerate the rise in short-term rates after midmonth. One was the announcement, on February 20, that the scope of System open market operations was being expanded to include issues outside the short-term area. The second was the offering of negotiable time certificates of deposit to corporations by major New York City banks. The new certificates were offered in multiples of $1 million. Rates were established at 2½ per cent for 90-day deposits and at 3 per cent for deposits of 180 days to one year, the maximum rates permissible under Regulation Q. As a result of the introduction of the new obligations, some concern developed in the Treasury bill market over the potential competition for short-term funds and most

Treasury bill rates rose to levels approximating the maximum rates on certificates of deposit of comparable term. The steady rise in short-term rates during the month was reflected in progressively higher average issuing rates for new 91- and 182-day Treasury bills, which reached 2.594 and 2.779 per cent in the February 27 auction, compared with 2.299 and 2.497 per cent in the January 30 auction. Rates on other types of short-term obligations, such as finance company paper and bankers' acceptances, also rose by ⅛ to ⅜ per cent over the month.

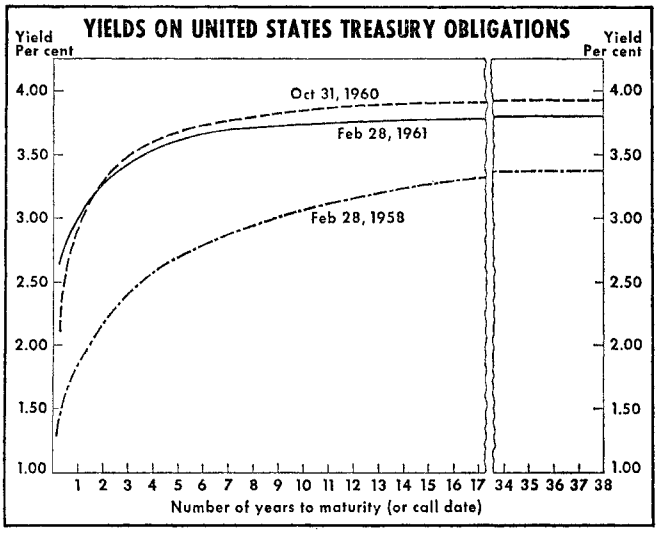
In contrast to the rise in short-term rates, yields on intermediate and longer term Treasury securities moved down significantly during the month. While the market continued to be influenced by the persistent slack in the economy, the shift from January's atmosphere of irresolute caution appeared to be largely a psychological response to official pronouncements and actions. Thus an early February rally, which carried prices on some issues 1¼ points higher, was attributable to the absence of an intermediate issue in the Treasury's refunding, statements by the President that a lowering of long-term rates would be desirable as a stimulant to the economy, announcements of a ¼ per cent reduction in the maximum rate on Federal Housing Administration-insured mortgages, and an increase of ½ point in the prices at which the Federal National Mortgage Association purchases mortgages. Following the early-month rally, prices of Treasury issues fluctuated narrowly for a week, with fairly active trading in the intermediate range related for the most part either directly or indirectly to the Treasury's refunding operations.

Following the February 20 announcement, there was a temporary sharp markup of as much as a full point in prices of intermediate- and long-term issues. Professional activity increased during the remainder of the month, as the market sought clues regarding the probable size, frequency, and objectives of System operations outside the short-term area. Beginning February 23, prices receded from the peaks established as an initial reaction to the new operating policies, but at the close of the month prices were still about ¼ to ⅝ point above the levels prevailing before the announcement, and some further gains were made after the end of the month in early March.

By the end of February (as shown on the chart), short-term rates had risen considerably from their end-of-October lows, while rates on longer term securities had declined. Long-term, as well as short-term, rates were still considerably higher, however, than in the easy money market period three years ago, as the chart and Table II illustrate.

Table II
Free Reserves and Interest Rates
Daily averages

Item	February 1958	February 1961
	In millions of dollars	
Free reserves	324	534
	In per cent	
Market yields on:		
Governments:		
3-month bills	1.54	2.42
3- to 5-year issues	2.67	3.54
Long-term bonds	3.26	3.81
Municipals (Aaa)	2.72	3.14
Corporates (Aaa)	3.59	4.27



OTHER SECURITIES MARKETS

In the corporate and tax-exempt bond markets prices also rose over the month, with yields on new tax-exempt offerings reaching the lowest levels since last summer and those for corporates the lowest levels since early 1959. Corporates showed the greater strength, as reduced business needs were reflected in a continued low volume of new issues—$310 million for the month, following January's meager $170 million total, although well over the $240 million of a year ago. The decline in corporate yields spurred several announcements of plans for refunding callable issues and led to some concentration of demand upon higher yielding, lower rated bonds early in the month. Later, with the successful flotation of a $20 million Aaa-rated callable utility debenture at a yield of only 4.30 per cent—the lowest since March 1959—de-

mand spread to other high-rated issues as well. By the month end, yields on seasoned Aaa-rated corporates, as measured by Moody's, had receded to 4.22 per cent, from 4.30 per cent at the end of January.

In the market for tax-exempt bonds, in contrast, the more substantial volume of new offerings—$620 million for the month, following $650 million in January—and the heavy calendar ahead brought mixed receptions on several new issues and a further build-up in the advertised inventory of dealer offerings. Strength in the corporate and Government bond markets was imparted to this market as well, however, and Moody's average of yields on Aaa-rated tax exempts showed a 4 basis point decline for the month, to close at 3.12 per cent.

The Business Situation

Business activity has continued to decline since the turn of the year. The downtrend in some of the major indicators seems to be moderating, and recent business news has had a slightly more mixed tone than in previous months. But it is too early to say that the recession—so far the mildest of those in the postwar period—is bottoming out. The pace of inventory liquidation has slowed at the manufacturing level, but total inventories may decline further, as both manufacturers' and distributors' stocks of finished goods are drawn down. At the same time, the mildness of the current decline in business fixed capital outlays was underscored by the official report in early March that 1961 expenditures are expected to decline only slightly. In some lines, declines in consumer spending have recently shown signs of leveling out or turning into advances, and government spending has been exerting a moderate upward thrust which is likely to continue under the stimulus of anti-recessionary programs. Weather conditions have been an important factor in recent months, making the distinction between shifts in timing of sales and genuine improvements in final takings particularly difficult.

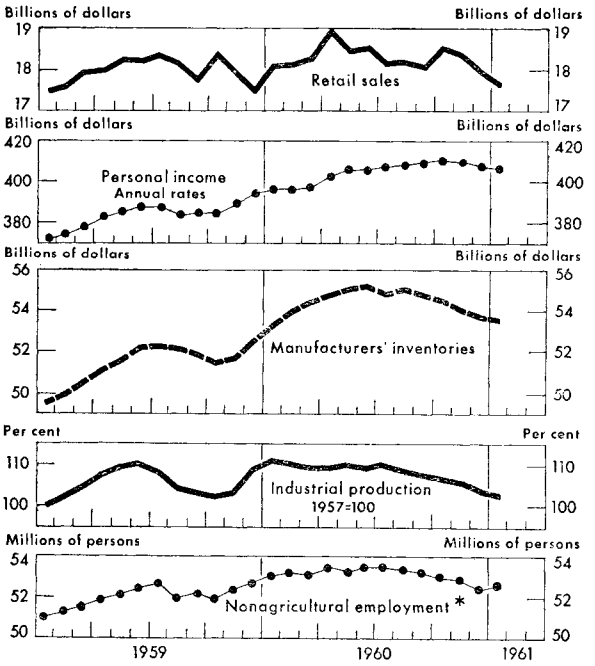
Despite the moderate pace of the general business decline, unemployment has reached near-record levels for the postwar period; in part, this is the result of considerable unemployment even at the start of the current business downturn. In January, unemployment rose a little less than seasonally, but it is disquieting that there was a substantial rise in longer term unemployment and in unemployment of heads of families. This is significant not only from a welfare standpoint, but also because it implies further cuts in family spending which would constitute a restraining force on the general course of business.

CURRENT DEVELOPMENTS

In assessing the current business situation, a good deal of attention has been focused on trends in consumer spending—not only because this is the largest sector of final demand in dollar terms but also because such spending has been widely looked to as a cushion for the overall decline. As shown in Chart I, retail buying weakened substantially following a brief upturn in October, but the decline in January was not quite so sharp as in the preceding month. Like the October rise, the recent decline

Chart I

CURRENT BUSINESS INDICATORS
Seasonally adjusted



Note: Alaska and Hawaii included in retail sales and in employment since January 1960.

*Payroll survey.

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

in sales resulted mainly from marked fluctuations in the pace of new car deliveries, although sales of other durable goods and of nondurables also moved somewhat lower. New car sales slipped further in early February—in contrast to the usual seasonal advance and despite the special efforts of dealers competing in sales contests—but turned up sharply later in the month. Department store sales, after weakening in January, also strengthened in February.

The decline in consumers' incomes was undoubtedly a major reason for the slackening in consumer spending. Personal income in January declined for the third consecutive month (see Chart I), although by only $0.6 billion (seasonally adjusted annual rate) compared with the $2.1 billion drop in December. On the other hand, results of the latest surveys conducted by the National Industrial Conference Board for *Newsweek* and by the Census Bureau for the Federal Reserve System do not suggest any marked deterioration in consumers' confidence.

Residential construction, a sector ultimately dependent on final consumer demand, has also continued to be sluggish despite some increase in the availability of credit. Private nonfarm housing starts (seasonally adjusted) rose slightly in January, but outlays for residential construction continued to decline through February. Various steps have been taken recently to increase further the availability of mortgage credit and reduce its cost, including a cut in the maximum allowable interest rate on FHA mortgages and an expansion of the potential supply of funds to savings and loan associations by the Federal Home Loan Bank System. The extension of Federal Reserve open market operations to longer term issues may also tend to affect the flow of long-term capital in general which, of course, includes the flow of mortgage funds. It remains to be seen whether the underlying demand is strong enough to permit a quickening of the tempo of residential construction as the availability of credit is stepped up.

According to the recent Commerce Department estimates, the principal downward pressure on business activity in the final quarter of 1960 was exerted by the shift from a low rate of accumulation of business inventories (as measured in the gross national product accounts) to a $3 billion annual rate of liquidation. The rate of liquidation has probably not changed significantly in early 1961; if so, it is providing little or no additional contractionary pressure on the current pace of activity. Indeed, in the case of manufacturers' inventories, liquidation of stocks of materials halted in January, thus reducing the decline in inventory holdings in that month (see Chart I). In contrast, efforts to reduce stocks of finished goods in the hands of manufacturers and distributors appear to have had only limited success due to declines in sales which have paralleled cutbacks in production.

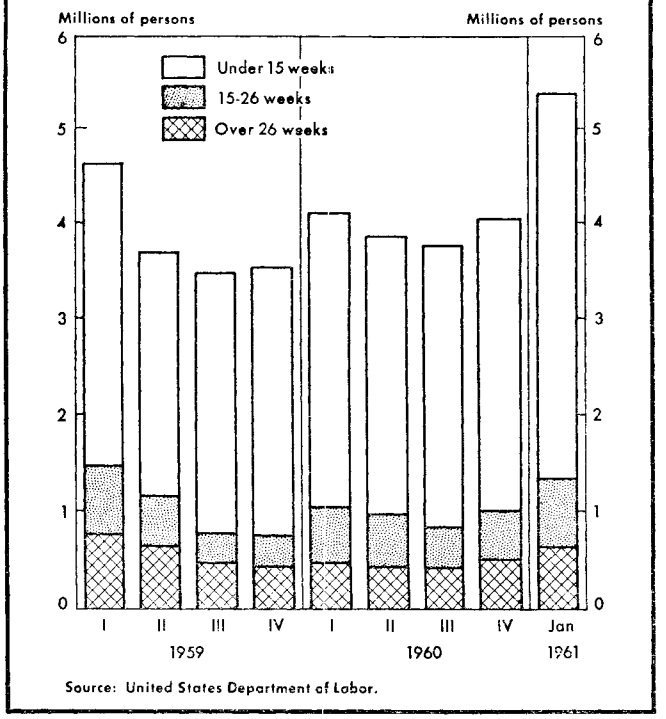
Reflecting the decline in spending in various sectors of the economy, the rate of industrial output has continued to slacken. In January, the Federal Reserve's index edged down by another point (seasonally adjusted) to 102 per cent of the 1957 base, following a two-point decline in the preceding month (see Chart I). A rise in steel output was an important factor underlying the smaller rate of decline, and there appears to have been a further gain in steel production in February despite the reduced volume of orders from automobile producers. On the other hand, the cut in automobile production which contributed heavily to the January decline in total output was carried further in February.

EMPLOYMENT AND UNEMPLOYMENT TRENDS

The lower rate of industrial production led to a continued contraction of manufacturing employment in January, after allowing for seasonal influences. At the same time, increased employment (seasonally adjusted) in other sectors—particularly construction, trade, and government—resulted in a slight rise in total nonagricultural

Chart II

UNEMPLOYMENT BY DURATION



Source: United States Department of Labor.

employment for the first time in six months (see Chart I). The seasonally adjusted unemployment rate edged down from 6.8 per cent to 6.6 per cent of the civilian labor force. Some deterioration, however, appears to have occurred in February.

The volume and composition of unemployment have also been a cause of serious concern. The January level of 5.4 million persons (unadjusted) was the highest since June 1958—the peak for the postwar period—and resulted in a substantial labor surplus in half of the 150 major labor market areas surveyed by the Bureau of Employment Security. The unemployment total included over 1 million persons who have been out of work for more than fifteen weeks (see Chart II) and about 2 million married men with families. Furthermore, the number of persons exhausting their rights to unemployment insurance benefits during the single month of January climbed close to 200,000.

ANNUAL REPORT – 1960

This Bank has just published its forty-sixth *Annual Report,* which reviews economic and financial developments of 1960 in this country and abroad. The *Report* also gives attention to the particularly difficult problems for monetary policy in 1960, when the changes in policy clearly indicated by domestic developments had to be taken with a view to avoiding excessive downward pressure on short-term rates. In addition, the *Report* discusses the longer run developments in the world economy that have created strains in the international payments mechanism and brought the problems of world finance so sharply to the fore. Copies of the *Annual Report* are available, upon request, from the Publications Section, Public Information Division, Federal Reserve Bank of New York, New York 45, N. Y.

Foreign Economic and Financial Developments

During the final quarter of 1960 the economic boom in foreign industrial countries lost some of its earlier vigor, although business activity expanded further in Germany and Japan and remained at a high level in most other countries. In Canada, the mild decline persisted without marked change. Continuing price stability enabled the monetary authorities in several countries to lower interest rates in response to balance-of-payments considerations. On March 4 the German Government announced the revaluation of the Deutsche mark by 5 per cent, and on March 5 the Dutch Government followed with the announcement of a similar revaluation of the Dutch guilder. The German move should help to correct the basic imbalance in international payments and, by dispelling uncertainties as to the future level of the D-mark rate, slow the flow of short-term funds to Germany.

BUSINESS CONDITIONS ABROAD

Despite moderate reductions in output in some countries during the closing months of 1960, foreign industrial nations generally reported rates of growth for 1960 comparing favorably with those of the boom year 1959. In most of these countries, economic activity continued to receive major support from the vigorous investment boom. Although wage levels drifted upward during the second half of the year, owing mainly to continued and widespread labor shortages, prices remained relatively stable in most countries.

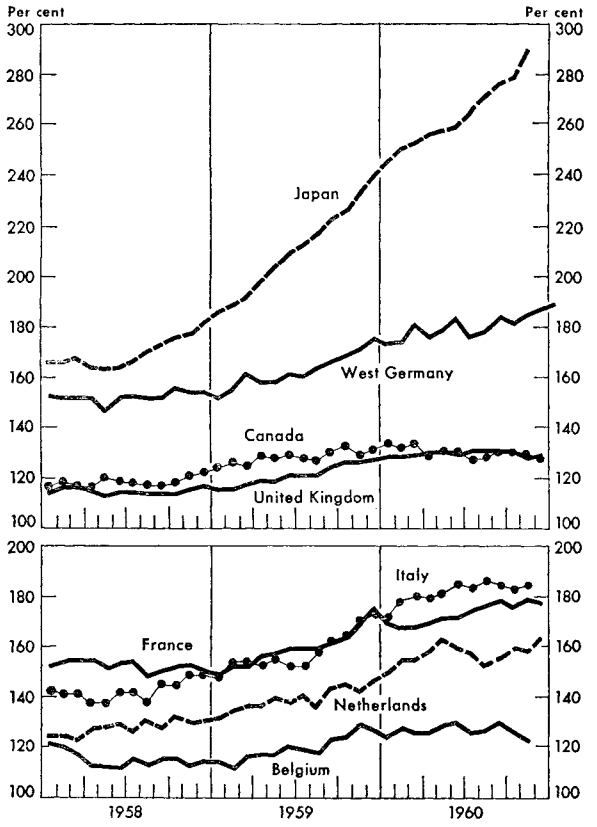
A certain tempering of the pace of economic activity abroad was reflected in industrial production trends in a number of foreign countries (see Chart I). In France, fourth-quarter industrial production increased by less than 1 per cent over the third quarter, following a substantial rise since the spring. Moreover, in the United Kingdom, industrial production declined by about 1 per cent from the preceding quarter, as a reduction in the demand for consumer durables and apparently also for inventories proved more of an influence on total production than the continuing boom in the capital goods industries. In Canada, industrial production continued to fluctuate at 3 to 4 per cent below the all-time peak of January 1960. However, in Germany, industrial production continued to expand at a rapid rate, despite indications that the earlier rapid inventory accumulation and strong export demand were abating somewhat. Japan, finally, remained the fastest growing of all major foreign industrial countries, with industrial production in November 1960 no less than 24 per cent above a year previous.

Although the rapid rise in over-all industrial output has tapered off in a number of countries in recent months, large increases have continued to be registered in certain basic sectors. Nearly everywhere in Western Europe, there has been a further expansion in the capital goods

Chart I

INDUSTRIAL PRODUCTION IN SELECTED COUNTRIES

Seasonally adjusted; 1953=100



Note: Latest 1960 data partially estimated.

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

industries, and many such industries have been operating at or near full capacity. Production in the consumer durable industries of a number of countries, however, continued to slacken during the fourth quarter. Automobile production, in particular, slowed down substantially in most Western European countries, except Germany, as a result of reduced domestic demand and lower exports to the United States. In the United Kingdom, car output in December (seasonally adjusted) was about 45 per cent below the rate in the first half of the year. In the United Kingdom, France, and Sweden, the reduction in automobile output led to layoffs and a shortened workweek, although some automobile manufacturers in the United Kingdom recently recalled some workers in anticipation of a spring pickup. In Japan, production of consumer durables continued to rise sharply, and in October was 12 per cent above a year earlier.

Consumer demand for nondurables, on the other hand, has generally remained high in recent months. In the United Kingdom in the fourth quarter, seasonally adjusted retail sales (which exclude automobile sales) held steady at their second-quarter peak, despite declines in sales of household durables. In France, department store sales remained strong in the fourth quarter of the year and, for 1960 as a whole, were 14 per cent above the previous year. Demand for soft goods also continued to expand in Germany and Scandinavia, as rising wages have stimulated consumer purchases.

The rapid inventory accumulation that had provided a major stimulus to business activity in many countries during most of 1960 appeared to subside somewhat in the fourth quarter. In Germany, inventory declines were notable in the iron and steel industry, as well as in such other primary industries as paper, chemical, and building materials. In the United Kingdom, the earlier high rate of stock building eased in the third quarter and is thought to have subsided further in the fourth quarter. In Japan, on the other hand, inventory demand remained vigorous during all of 1960.

In view of widespread labor shortages, pressures on plant capacity, and keener international competition, the expansion in business investment generally showed no signs of slackening toward the year end. In the United Kingdom, a year-end survey by the Board of Trade indicated that the 1961 capital expenditure plans of private industry have been revised upward since last summer. Fixed investment in 1961 was expected to rise about 20 per cent over last year, with expenditures by manufacturing industry alone increasing by 30 per cent.

A leveling-off in export demand acted as an important check to the expansion of business activity in Western Europe. Following a sharp increase in European exports in 1959 and early 1960, there has been no marked upward trend in recent months. Moreover, in some countries, notably Germany and Italy, new export orders have declined since midyear. Canadian exports, too, experienced a downturn in the fourth quarter, reflecting primarily the declining trend of sales to the United States. In the United Kingdom, however, seasonally adjusted exports in the fourth quarter rose by 2 per cent over the preceding quarter, reversing the downward trend during the second and third quarters of 1960.

Extremely tight labor markets also contributed to the slower rate of expansion in Western Europe. In several countries, notably Germany, the Netherlands, and Sweden, unemployment remained at or near the lowest level for several years. In Canada, by contrast, unemployment increased further, and seasonally adjusted unemployment in December reached 7.9 per cent of the total labor force,

compared with 6.3 per cent a year earlier. As labor shortages continued in most other countries, pressures for higher wages and shorter hours became more intense. In the United Kingdom, employees in the "engineering" industries (machinery and related products) were granted a 4½ per cent increase in wages in December, while agricultural workers recently received an increase of 5½ per cent. In France, wage rates are estimated to have risen about 2 per cent in the fourth quarter alone, while in Germany average wages in industry showed an increase for 1960 over 1959 of 10 per cent. Furthermore, in many countries the renegotiation of expiring labor contracts has brought forth demands for new wage increases in 1961.

Prices remained generally stable in most industrial countries throughout 1960. The continuation of relative price stability was in part attributable to further declines in the prices of imported raw materials and to the often substantial gains in productivity. However, wage increases in many foreign industrial countries have recently begun to outstrip advances in productivity. Prices thus may become subject to increased pressure in 1961.

FINANCIAL TRENDS AND POLICIES

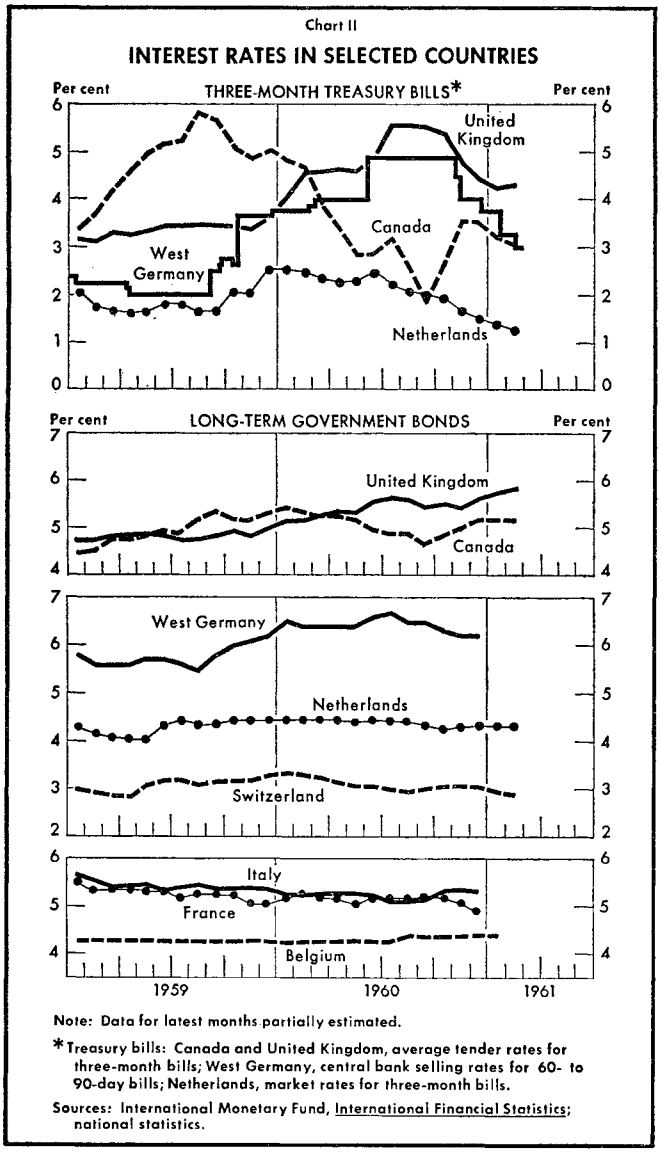
The recent trends in the domestic economic situation in foreign industrial countries have generally not required major shifts in monetary policies. The discount rate reductions announced in December and January in some of the leading industrial countries continued to reflect mainly a desire to bring money rates more closely into line with the rates in other important financial centers, and thus to moderate the movement of short-term funds across national frontiers. In some countries, however, a significant lowering of the interest rate structure and an easing—at least selectively—of the previous credit stringency were being sought in order to promote further expansion at home.

The curbing of the inflow of short-term funds from abroad continued to be the main objective of central bank action in West Germany. In recent months, part of that inflow represented repatriation of foreign short-term assets by German commercial banks and short-term borrowing abroad by banks and business firms—both induced by an attempted tightening of domestic credit conditions. The inflow also reflected speculation on the possibility of a D-mark revaluation. As of March 6, the German Government revalued the Deutsche mark to 4.00 per dollar ($0.25 per mark) from 4.20 ($0.2381), a 5 per cent appreciation of the mark in terms of the dollar. This move should serve to halt further inflows of speculative funds into Germany. (Largely in order to avoid unfavorable repercussions of the mark devaluation on Dutch foreign trade, over 20 per cent of which is with Germany, the Dutch Government revalued the guilder by approximately the same extent, effective March 7.)

As a result of the continuing capital inflow, the German Federal Bank was threatened with a loss of control over the domestic credit supply and the money market. In order to assure such control and to encourage a reversal of the short-term inflows, the bank on November 11 had reduced its discount rate to 4 per cent from 5 per cent and, as of December 1, had removed the 30 per cent reserve requirement against increases in residents' demand deposits that had been in effect since July 1. These moves were followed by a second discount rate reduction to 3½ per cent, effective January 20, as well as by two reductions in commercial bank reserve requirements against domestic sight and time liabilities. (For demand deposits, the requirements now range from 10.15 to 18.85 per cent, depending on the size and location of the bank.) In addition, part of the reductions that had been made in 1959 and 1960 in the commercial banks' rediscount ceilings at the Federal Bank have been rescinded effective March 1. The two discount rate reductions were accompanied by corresponding cuts both in commercial bank lending rates, which are linked to the central bank's discount rate, and in the central bank's selling rates for Treasury securities (see Chart II).

With the narrowing of the differential between German and foreign short-term rates, the German Federal Bank reduced the special inducement it had been offering to stimulate commercial bank short-term investments abroad. Under this arrangement, the Federal Bank had until recently sold spot dollars to the banks and simultaneously repurchased these dollars for up to six months forward at a 1½ per cent annual premium over the spot rate. In this manner, the banks in effect not only had obtained free forward cover for their short-term foreign investments, but also had earned interest over and above that on the investments themselves. Beginning January 20, the Federal Bank gradually reduced and finally abolished (on February 13) the swap premium, but continued to stand ready to buy three months' forward dollars from the banks at the spot rate. Thus, the Federal Bank was still providing free forward exchange cover for the banks' short-term foreign investments.

In the United Kingdom, a cautious policy has been followed, in view of the mixed trends in the domestic economy and continued concern over the external payments position. The authorities therefore have not departed significantly from a general policy of restraint. As



indicated by a Bank of England spokesman, the discount rate reduction to 5 per cent from 5½ per cent on December 8, like the earlier reduction from 6 per cent on October 27, was made largely because the previous rate was judged "unnecessarily high in relation to rates in other financial centers". The authorities thus made it clear that both the October and the December cuts were aimed primarily at curbing the inflow of short-term capital from abroad, and did not imply any relaxation of credit restrictions at home. Furthermore, while short-term rates were allowed to come down, long-term rates had actually risen by early February above their previous highs of the summer of 1960.

The general restraint on credit in Britain was, however, relaxed in two important economic sectors that had been showing signs of weakness during most of last year. First, the government liberalized its controls over instalment credit for automobiles and a wide range of other consumer durables by lengthening the maximum repayment period to three years from two, effective January 19. Secondly, the availability of medium-term export credit financing was increased early in February when the Bank of England offered new facilities for a partial refinancing of the commercial banks' medium-term export credits. Provided such export credits have an original maturity of three years or more and have been insured with the government's Export Credit Guarantee Department, the Bank of England now stands ready to extend short-term loans at any time against those instalments that mature within eighteen months. Designed to reduce the impact of domestic credit restrictions on export financing, the move was also expected to lead immediately to a slight easing in the liquidity positions of the banks. Henceforth, the banks will be able to include the portion of their medium-term export credits that are eligible for refinancing in the traditional 30 per cent minimum of liquid assets held against deposits.

The French economy has remained highly liquid, due in good part to a persistently favorable external payments balance. In recent months, the authorities have vigorously pursued their long-range policy of lowering interest rates to promote investment. On December 22, the Finance Ministry announced a ⅛ per cent cut in the rates on one- and two-year Treasury bills held by banks and other financial institutions. (Rates on Treasury bills held by the nonbank public had been lowered by ¼ per cent last summer.) Simultaneously, the maximum rates of most maturities of commercial bank time deposits were lowered by ¼ per cent. This action followed comparable reductions in the rates paid by a wide range of savings institutions, and corresponding cuts of ¼ to ½ per cent on loans granted to local governments by the Caisse des Dépôts et Consignations, the national institution acting as special depositary of the savings banks' funds.

Since the French Treasury has been one of the major beneficiaries of the prevailing ample liquidity, the monetary authorities also lowered the commercial banks' Treasury bill reserve requirement to 20 from 25 per cent of total deposits, effective January 31. In order to forestall the danger of excessive credit expansion on the basis of the newly freed funds, however, the Bank of France simultaneously put into effect the additional liquidity reserve requirement that had been authorized last October. Under this requirement, banks will have to hold 10 per cent of total deposits in specified liquid assets. Eligible assets comprise Treasury bills that are not already included

within the basic 20 per cent requirement, vault cash, balances at the central bank, and rediscountable medium-term paper. As the banks' actual holdings of these combined assets are more than adequate to meet the new requirement at its present level, the immediate impact of the measure on bank liquidity positions has been negligible.

Outside Western Europe, the Bank of Japan lowered its discount rate to 6.57 per cent from 6.935 per cent on January 26. This reduction, the second in five months, brought the rate to its lowest level in over five years, and was accompanied by corresponding cuts in commercial bank lending rates. Comparable reductions in savings deposit and longer term rates are generally expected in the near future. The Bank of Japan's action was primarily a step in the direction of aligning Japanese interest rates more closely with rates elsewhere, but it was also in line with the government's policy of encouraging a continued rapid rate of expansion.

In Canada, after nearly a year of persistent weakness in business activity, the government recently adopted new economic policies to stimulate domestic investment. These policies are to be carried out mainly through fiscal measures.[1] Both credit availability and short-term rates have tended to ease since December.

[1] For a discussion of the objectives of these Canadian policies, see "Canada's New Economic Measures", *Monthly Review*, February 1961, p. 22.

International Comparability of Unemployment Statistics

The measurement of employment and unemployment has reached a considerable refinement in the United States and other industrial countries. The systematic collection and analysis of statistics of the labor force and of the number of jobless in these countries dates largely from the depression of the thirties when the problem of unemployment assumed unprecedented importance. Since that time, substantial progress has been made in improving the statistical techniques for measuring unemployment levels and in using the data for economic policy purposes. Despite this progress, however, there exist wide differences in the manner in which the statistics are gathered and presented in the various countries. This is true largely because unemployment statistics in most countries were first developed principally as a by-product of social legislation such as unemployment insurance systems and have only gradually come to be used as a tool in domestic economic policy formulation.

Interest in international comparisons of unemployment levels is a relatively recent development. Such comparisons can be meaningful, however, only if differences in concepts and statistical methods are understood and if the varying economic and social significance of particular unemployment levels in diverse institutional settings is recognized. This article discusses some of these differences and suggests the limitations that they impose on comparisons of employment and unemployment statistics in various countries.

THE PROBLEM OF DEFINITION

Differences in the definitions of unemployment constitute a basic difficulty in international comparisons of unemployment statistics. Although it probably would be possible to reach general agreement on a definition of unemployment, the variety of methods used in collecting the statistics in different countries and the resulting differences in coverage limit the extent to which uniform concepts of unemployment can be used in practice. As will be shown later, data may be collected by sample surveys or through other means, such as compilations from registrations at employment exchanges (see table). Unemployment may be total or partial, of indefinite duration or temporary, and may include or exclude new entrants into the labor force. In the United States, for example, a person is classified as unemployed only if he did not work at all for pay during the week in which the statistical survey was conducted and if he actively sought work or would have done so except that he was temporarily laid off, was awaiting the start of a new job, was temporarily ill, or believed that no jobs were available in his area or line of work. This definition does not include partial unemployment and, therefore, results in a measure only

Average Annual Rates of Unemployment in Selected Countries
Per cent of labor force

Country	1953	1954	1955	1956	1957	1958	1959	1960	Source of data
United States	2.9	5.6	4.4	4.2	4.3	6.8	5.5	5.6	Survey
Great Britain	1.6	1.3	1.1	1.2	1.4	2.1	2.2	1.6	Registration
Germany	7.5	7.0	5.1	4.0	3.4	3.5	0.7	1.2	Registration
Japan	1.1	1.4	1.6	1.5	1.2	1.3	0.9	1.1*	Survey
Netherlands	2.8	1.9	1.3	0.9	1.3	2.4	1.9	1.1	Registration
Sweden	2.8	2.6	2.5	1.5	1.9	2.5	2.0	1.5	Registration†
Canada	2.6	4.3	4.1	3.1	4.3	6.6	5.6	7.0	Survey

* Nine months (unadjusted for seasonal variation).
† Trade union returns prior to 1956; registration only of insured workers.
Source: National statistics; International Labor Organization, *International Labor Statistics*.

of the number that are totally unemployed. Where legal or institutional barriers to the dismissal of workers exist, the unemployment figure may be less significant than one that measures employment in terms of the number of hours worked during the survey week. In the United States and Canada, statistics of the length of the workweek are collected as part of the employment survey and the two sets of data have to be analyzed jointly in order to gauge changes in employment and unemployment levels with any accuracy.

The other industrial countries also aim at measuring the number of totally unemployed and, except in France, require total unemployment as a formal prerequisite for registration as unemployed. In some countries, however, no precise definition of what constitutes unemployment exists, and a person may be registered as unemployed and seeking work even if he has worked several hours during the week. In France, partially unemployed workers are eligible for relief benefits, and therefore are registered at the employment exchanges from whose rolls the unemployment statistics are compiled. Both in France and in Italy, moreover, quarterly sample surveys of employment in enterprises with more than ten employees are conducted, in which those workers who have worked less than twenty hours during the survey week are classified as unemployed.

Another difficulty arises with respect to the treatment of temporarily laid-off workers, since any failure to count them understates unemployment. This is a particularly important consideration during the early phases of business declines when temporary unemployment tends to increase fairly rapidly. Since January 1957 the United States has defined as unemployed all persons temporarily laid off, even those with specific orders to return to work on a given date. Canada, on the other hand, adhered until October 1960 to the practice previously followed in the United States of not classifying as unemployed those persons with specific orders to return to work within thirty days. Compared with the United States figures, therefore, the Canadian statistics between January 1957 and October 1960 understated unemployment. Germany, like the United States, treats all temporarily laid-off workers as unemployed. In France, similarly, persons who are temporarily unemployed may register at employment exchanges and, when they do register, are counted as unemployed. In the Netherlands and Italy, on the other hand, temporarily laid-off workers are not classified as unemployed, while in the United Kingdom such workers are considered to be at work as long as their employment cards are kept by the employer. This means that to register as unemployed they must request the return of their cards, something they may be reluctant to do—at least in the early stages of a layoff—when alternative employment opportunities do not seem plentiful.

Definitional inconsistencies also complicate the problem of the treatment of new entrants into the labor force. Under the definition of unemployment used in the United States, any person seeking work or awaiting the start of a new job and not currently employed is counted as unemployed, regardless of whether or not he held a job previously. In Germany, where unemployment data are based on registrations at employment exchanges, new entrants into the labor force are excluded, since only workers who previously held jobs may register. In Sweden, where unemployment statistics are based on claims for unemployment insurance benefits, new entrants into the labor force are not counted either, because they are not yet covered by unemployment insurance. However, in most other countries in which data are derived from registrations—for example, in the United Kingdom and France—new entrants are permitted to register and, therefore, are reflected in the totals to some extent, though often incompletely.

In addition to differences in the definition of unemployment, there are also disparities in the definition of the labor force. In the United States, for example, the labor force figure is the total of all persons fourteen years old and over who are at work or who have been counted as unemployed under the foregoing statistical procedures. In the United Kingdom, on the other hand, the self-employed are not counted as part of the labor force, nor are unpaid workers in family businesses. In the Netherlands, likewise, the labor force is defined as comprising only wage earners and salaried employees. Moreover, to the extent that statistics of employment and unemployment are collected from different sources and by different methods, data showing the percentage of the labor force out of work often have only limited meaning. For example, France compiles no current data of total employment and gives unemployment statistics only in absolute terms, with the result that unemployment percentages must be based on projections of the latest census data.

DIFFERENCES IN TECHNIQUES OF MEASUREMENT

Differences in the techniques of collecting unemployment data in various countries present the most serious obstacle to international comparability. Of the methods available, two (noted above) are most widely used—sample surveys and registrations at employment exchanges. The more comprehensive method, giving both wider coverage and greater detail, is the sample survey.

This technique involves the selection of sampling areas throughout the country on the basis of their economic and demographic characteristics, and the selection of households within each area to give coverage that is representative of the entire population. An obvious advantage of this method is that it does not depend on the worker's taking the initiative in reporting the loss of employment; moreover, unlike unemployment-registration data in which no statistical measure of nonresponse is available, the sampling method allows the use of refined statistical techniques in order to reduce any errors in estimation to a minimum. For example, the data in the United States survey are adjusted to allow for certain types of errors—such as may occur from nonresponse on the part of some of the persons included in the selected sample. In addition, figures are published indicating the range of possible error in the final totals, due to the inclusion in the survey of only a sample rather than the entire population.

Unemployment-registration data vary somewhat from country to country, but basically they consist of a count of the persons registered at employment exchanges as seeking work. The completeness of such coverage depends upon a number of factors, including the incentive that workers have to register, the ease of registration, the length of time for which registration is valid without renewal, and the rules governing the eligibility of persons to register. In most countries such registration is a prerequisite to receiving unemployment-insurance benefits, which means the figures may give a fairly complete count of insured unemployment. Unemployed persons not covered by insurance, however, will have less incentive to register, and thus may be underrepresented in the total. Moreover, even some of the insured unemployed may not be counted, since in a tight labor market workers who leave their jobs voluntarily may still postpone registering in order to avoid having to accept an undesirable job offer (in cases where acceptance of any offer is required). Furthermore, out-of-work self-employed persons, who often are not covered by insurance plans and who do not otherwise register as seeking employment, are not recorded in registration statistics, whereas they are included in surveys. Another shortcoming common to registration data is the failure to account adequately for agricultural unemployment, a problem particularly significant in Italy and France and, to a lesser extent, in the Netherlands. Though not normally encountered where sample surveys are in use, this problem also affects Japanese figures, as noted below. In general, these limitations mean that coverage is less complete in registration data than in sample surveys, thus giving them a downward bias relative to survey data. Where, however, national insurance programs are compulsory for all workers, as in the United Kingdom, omissions in registrations for the reasons cited are probably slight.

Additional differences among national statistics may result from the fact that the reference period for sample surveys is an entire week, whereas in registrations it is one day. The use of a single day subjects the data to greater chances of accidental variations. Moreover, the use of a single day imparts an upward bias to the registration data relative to the survey figures, because for survey purposes any work during the week of the count qualifies a person as "employed" regardless of his status on the given interview day, whereas the registration count does not allow for the fact that within the week of the count a person might lose a job prior to the count day or secure one on the following day. Such a person would be "unemployed" in registration figures and "employed" in the survey. (The upward bias of the registration figures due to this factor is especially pronounced during periods of changing business activity.)

Sample surveys are used to compile monthly labor-force and unemployment data in the United States, Canada, and Japan. This so-called "American system" also was recommended by the Organization for European Economic Cooperation for adoption as a standard technique by all member countries in the interest of accuracy and comparability. In the three countries using such surveys, the sample design and definitions are virtually identical, and the resulting figures should therefore be fully comparable. Errors in applying the design, as in selecting sampling areas, would of course affect the comparability of the data. The Japanese figures, moreover, have been criticized as understating actual unemployment, owing to nonresponse by the farm population. In Italy there is a quarterly sample survey, but the available evidence tends to cast doubt on its reliability, compared with the monthly registration figures.

Registration data are used in most other industrial countries. In the United Kingdom all workers and self-employed persons (except some permitted to remain outside the program) are required to be insured under the Unemployment Insurance Act of 1946, and registration data therefore should be nearly complete. In fact, however, it has been estimated that as many as 2 million people out of 24 million remain uncovered, principally among the self-employed, married women, and the elderly, and these persons therefore are probably underrepresented in registration data. Furthermore, those persons who voluntarily leave jobs to seek new employment are substantially undercounted. Nevertheless, registration figures in the

United Kingdom probably come closer to a full count of the unemployed than in any other major country employing this technique.

In France, on the other hand, unemployment insurance is much less comprehensive and has stringent eligibility rules. As a result, unemployment totals are considered to be generally understated. At least a partial offset to this understatement, however, arises from the fact that persons not out of work, but merely desiring to change employment, may register as job seekers. Further, whereas some individuals may find it difficult to register because no employment office exists in their immediate vicinity, others may register at more than one office. Although it is not possible to evaluate the relative importance of these factors, in general it may be expected to vary with economic conditions. Particularly in the early stages of a recession, unemployment probably tends to be underestimated because registration offices are closed in areas of low unemployment and are reopened only when the need becomes pressing. Moreover, underestimation may result because persons unemployed for long periods may be removed from the rolls in France, since benefits are paid in any year only to persons who worked 150 days or more in the preceding year.

In Germany and Italy, unemployment is measured monthly by the voluntary registrations at employment offices of those out of work. In Italy, chronic agricultural unemployment or underemployment is a fundamental problem not adequately reflected in the data; moreover, the total figures are further reduced by the omission of most white-collar unemployment from registration figures, a gap peculiar to the Italian data. In the Netherlands, unemployment data are gathered from registrations of wholly unemployed wage and salaried workers at employment exchanges; these registrations are voluntary, except for those desiring to qualify for insurance benefits. In Sweden, unemployment statistics represent registrations only by members of unemployment insurance funds, and since not all workers participate in such funds, the data are necessarily incomplete. In April 1959 Sweden conducted an experimental sample survey on the American basis which yielded unemployment totals nearly three times as high as those appearing in the regular registration system. Germany tried a similar experiment and got the opposite result; unemployment appeared lower than in the registration data. Similarly varying results have been obtained elsewhere. Although such tests are of interest in indicating possible bias in the regularly used set of data, it is clear that single-month tests are too much subject to random and sampling errors to permit an accurate assessment of the extent of such bias.

STRUCTURAL FACTORS AFFECTING INTERPRETATION OF THE STATISTICS

In addition to taking account of the differences arising from the varying techniques employed in gathering the data, persons attempting to use comparative unemployment statistics as a basis for economic policy decisions must also bear in mind the numerous structural differences among the economies and labor forces of the various countries. One of the most important of these is the industrial distribution of the labor force. For example, some industries (generally manufacturing) are more subject than others (especially services) to cyclical swings in employment. The relative importance of agriculture in the economy is of interest because of the sharp seasonal swings in agricultural employment and the widespread problem of disguised unemployment in that economic sector. Also significant are variations among countries in the rate of technological advance, since changes in the level of output per man-hour affect employment opportunities independently of changes in the general level of demand.

The relative mobility of the population is another structural factor governing unemployment levels in different countries and affecting the social and economic significance of any given level of reported unemployment. The importance and the particular effects of population mobility on unemployment totals are difficult to measure. High mobility may reflect widespread employment opportunities and thus tend to increase the average level of frictional unemployment. At the same time, however, high mobility helps to redistribute the labor force more quickly when pockets of structural unemployment arise, thus tending to reduce the level of long-term unemployment.[1]

The level of unemployment in any country will also be affected by a variety of other factors, including the age and sex composition of the labor force and the traditional practices relating to the employment of young people, older workers, and women. For example, in the United States teen-agers generally remain in school until seventeen or eighteen years old and during this time are part-time or part-year workers who are frequently unemployed while moving from job to job or into and out of the labor force. In the United Kingdom, on the other hand, fifteen is the typical age for permanent entrance

[1] Whether, on balance, high mobility shifts the unemployment rate up or down at any given time may depend upon the general level of economic activity; in a boom period it may make for higher unemployment than might otherwise be expected (as frictional unemployment increases), and in a recession for lower unemployment, particularly if the recession is localized geographically or in a few industries.

into the labor force, and as a result workers there generally have a lower rate of unemployment during their teens; in addition, the widespread apprentice system helps absorb teen-agers into industry with less friction than in the United States. The proportion of female employment in the labor force also varies among countries, and this affects over-all comparisons because the relative rate of unemployment as between men and women also differs from country to country. There are numerous other structural factors affecting the level of unemployment, including the marital status of workers (labor force participation rates for married women vary from country to country), seniority practices, and local practices affecting the hiring and firing of workers.

Whether the net impact of these structural factors will be to raise or lower the reported levels of unemployment in one country relative to another depends on the importance of each factor in the two countries, and no generalizations are possible. Most of the factors are difficult if not impossible to assess with present techniques, but a careful examination of these factors should at least yield a valuable insight into the general magnitudes involved. The differences among countries as regards the economic and social effects of unemployment caused by these structural factors are real, and not simply statistical distortions of the data, and they must be taken into account in any attempt to evaluate the comparative success of economic policy in the different countries.

CONCLUSIONS

In summary, it thus may be said that unemployment statistics, except in the United States and Canada, are generally not fully comparable among countries. The Japanese figures, although compiled on the same basis as in the United States and Canada, probably are not fully comparable, for the reasons noted earlier. As for the data compiled from registrations in European countries, the statistics of the United Kingdom probably are more complete than those collected by the same method elsewhere and can be more easily compared with United States sample data. The German statistics, though perhaps somewhat less comprehensive than the British, are also relatively comparable with United States data, while the French show wide definitional and coverage disparities. The data for Italy may well be the least comparable of all because of the acute problems of long-term unemployment and disguised unemployment, inadequately reflected in the statistics. Nevertheless, the Italian data seem reliable enough to indicate the general trend of employment and unemployment within Italy itself.

By and large, Western European and Japanese unemployment figures tend to understate the "true" level of unemployment relative to the United States. This bias tends to be greater when unemployment is high than when it is low. The bias is probably greatest, however, when economic activity is declining rather than at its trough, since during declining periods the definitional inconsistencies concerning the temporarily laid off are most important. Nevertheless, it is clear that differences in the officially recorded levels of unemployment, as between the United States and other countries, can be accounted for only in part by these variations in statistical definitions and techniques. In good measure, the differences in unemployment levels shown in the table on page 47 are genuine and reflect both the structural economic factors mentioned earlier and the real differences in labor market conditions at a given time.