

International Economic Comparisons

The economic reconstruction of Europe and Japan after World War II has made international economic developments of considerable interest to U.S. and other economists and public policymakers. Large exchanges of financial assets and goods occur continuously between residents and firms of the United States and of nearly every other country. Therefore, economic events in the United States have important effects on those in other countries, and, to a lesser extent, vice versa. International trade and financial flows link the economies of the world more closely now than at any time in history.

During 1974 and 1975, the major industrialized countries experienced economic recession. Not since the 1930's had an economic recession occurred in so many countries during the same time. The continued growth of international trade had virtually assured that contractions of business activity would be widespread among nations, as recession in one country spread to others.

With the increased interest in international economics, we believe that a presentation of some comparative economic data for the major industrialized nations might be useful to our readers. This report contains such data for Canada, France, Great Britain, Japan, the United States, and West Germany.

Comparative Sizes of These Nations

Data for eight economic aspects of these countries are shown in Table I. We have selected data at the end of 1974 because that is the latest year for which data are available for all these countries. We shall point out some observations that we have made from these data.

Note that the GNP (gross national product) of the United States during 1974 was more than three times as large as that of Japan, which had the next largest GNP. Furthermore, the GNP's of the five other countries totaled only \$30 billion (about 2 percent) more than the GNP of the United States. Thus, because of its size alone, economic developments in the United States have great impact on free-world economic activity. Moreover, the source of U.S. influence on other free-world activities, such as politics and defense, seems attributable primarily to its economic position.

During 1974 the real GNP of Japan was 260 percent more than that during 1960. (Real GNP is current-dollar GNP adjusted for price increases; it is not shown in Table I.) This increase involved an average annual rate of increase of about 7 percent, which was by far the largest rate of increase in real GNP in the six countries. Real GNP in two other countries, France and Canada, more than doubled from 1960 to 1974. Great Britain had the smallest increase in real GNP (50 percent). The increases in real GNP for the United States and West Germany from 1960 to 1974 were 64 percent and 82 percent, respectively.

In proportion to its total output, the United States exported very little of its production (about 7 percent) during 1974. West Germany, which had a total GNP of about one-quarter of that of the United States, exported nearly as much in dollar amount (about 23 percent of its GNP) then.

These relative amounts of exports reveal why officials of European countries and Japan have had a vital interest in international economic developments, whereas the attitude of U.S. officials toward such matters largely has been that of "benign neglect."

Except for Great Britain, the differences between the exports and imports of each country during 1974 were small. Imports into Great Britain exceeded exports from there by \$12.2 billion then, or by approximately one-third of such exports.

The data for government expenditures were derived from the national income and product accounts; thus, they do not include estimates of so-called transfer payments made by the respective governments. In the United States, Canada, France, and West Germany, the respective governments purchased approximately 20 percent of total GNP during 1974. In Japan, however, such purchases accounted for only 11 percent of GNP then. Government purchases in Great Britain accounted for a marked 36 percent of total GNP during 1974.

So-called international monetary reserve assets of West Germany, including SDR's (special drawing rights), gold, and foreign exchange, were more than double those of any other country at the end of 1974. Such assets of

TABLE I
 SELECTED ECONOMIC DATA FOR 6 MAJOR INDUSTRIAL COUNTRIES
 (1974)*

Country	Total GNP**	Exports**	Gov't. Expend.**	Money Supply**	Int'l. Reserves**	Discount Rates††	Total Employ.†	Popul.†
United States	1,406.9	97.9	268.4	287.4	16.1	7.8	85.9	211.9
Japan	446.3	55.6	47.2	149.4	13.5	9.0	52.0	109.7
W. Germany	383.5	89.3	75.7	83.7	32.4	6.0	25.7	62.0
France	275.4	46.6	57.3	85.5	8.9	13.0	21.2	52.5
Great Britain	192.7	37.2	68.7	29.8	6.9	11.5	25.1‡	56.0
Canada	138.5	32.8	26.9	20.3	5.8	8.8	9.1	22.5

*Total GNP, exports, and government expenditures are yearly totals. Money supply, international reserves, and discount rates are yearend data. Total employment data are yearly averages. Population data are mid-year estimates. **Billions of U.S. dollars. †Millions of people. ‡Second quarter. ††Percent.

West Germany increased from the equivalent of \$0.2 billion at the end of 1950, to \$7 billion at the end of 1960, and to \$32.4 billion at the end of 1974. The great competitiveness of West Germany's economy and its relatively sound currency apparently accounted for this large accumulation of so-called monetary reserves.

With reference to such reserves, the United States has had and continues to have a unique advantage. U.S. fiat dollars comprise by far the largest portion of foreign exchange reserves, and increases in that portion accounted for most of the increase in the total of such reserves during the past two and one-half decades. As long as officials of other countries accept U.S. fiat dollars in settlements of claims, U.S. officials can continue to create more fiat dollars to make such settlements. As far as we are aware, officials of other countries have not taken any effective action to end this advantage of the United States.

The central bank discount rates shown in Table I were those in effect at the end of 1974. At that time the economies of the six countries were at different phases of their business and credit cycles. The discount rate of each nation reflected the phase of these cycles as well as other important influences. As the table indicates, the discount rates in the various countries differed widely at the end of 1974.

Total employment and population data are included to enable the reader to study these measures of the comparative sizes of the economies.

Recent Trends

The accompanying charts show indexes of industrial production, consumer prices, and output per man-hour (productivity) for the six major industrialized countries under discussion. The base of these indexes is 1967, that is, 1967=100. Indexes reflect changes since the base year in each series; they do not reveal comparative levels of the series among the countries shown. Thus, that the consumer price index for France in 1975 was higher than that for Canada then does *not* indicate that the level of consumer prices in France was higher than that in Canada then.

Readers are invited to note that industrial production decreased in four of the six countries during 1974 and in all

six countries during 1975. These data reveal how widespread was the economic recession that took place during those years. Recent additional data (not shown) reveal that production in all six countries increased during recent months and suggest that the recessions ended in those countries sometime during 1975 or early 1976.

Since 1967 the largest rate of increase in industrial production among the countries involved has occurred in Japan. During 1973 such production in that country was nearly double that during 1967. Great Britain had the smallest rate of increase since 1967, and the rate in the United States was only slightly larger. The rates of increase in industrial production in West Germany, France, and Canada were substantially more than the rate in the United States but less than the rate in Japan.

The large increases in consumer prices in the United States during recent years also occurred to a greater or lesser degree in the other five countries. The largest increases in such prices were in Great Britain, where during 1975 they were more than double such prices during 1967. The rate of increase in consumer prices in Japan was only slightly less than that in Great Britain. In those two countries the purchasing power of the currencies was more than halved in only 8 years. The implications of that for holders of fixed-return, currency-denominated assets are obvious. Consumer prices in France increased approximately 80 percent during that period, and those in the United States and Canada increased about 60 percent. Even at this rate the purchasing power of currency would be halved in less than 12 years.

The smallest rate of increase in consumer prices, about 44 percent, was in West Germany. Compared with price increases in other countries the German experience was superior, and the increase in the exchange value of the deutsche mark in terms of other currencies during the past few years reflected this experience. However, that the purchasing power of the consumer deutsche mark would be halved in about 15 years at the rate of price increases in West Germany from 1967 to 1975 indicates that even that currency was a poor store of value.

Output per man-hour (productivity) in Japan during 1974 was 90 percent greater than it was during 1967. Productivity in Great Britain increased less than 30 percent

SELECTED INDEXES FOR 6 MAJOR INDUSTRIAL COUNTRIES

(Annual averages of quarterly indexes, 1967=100)

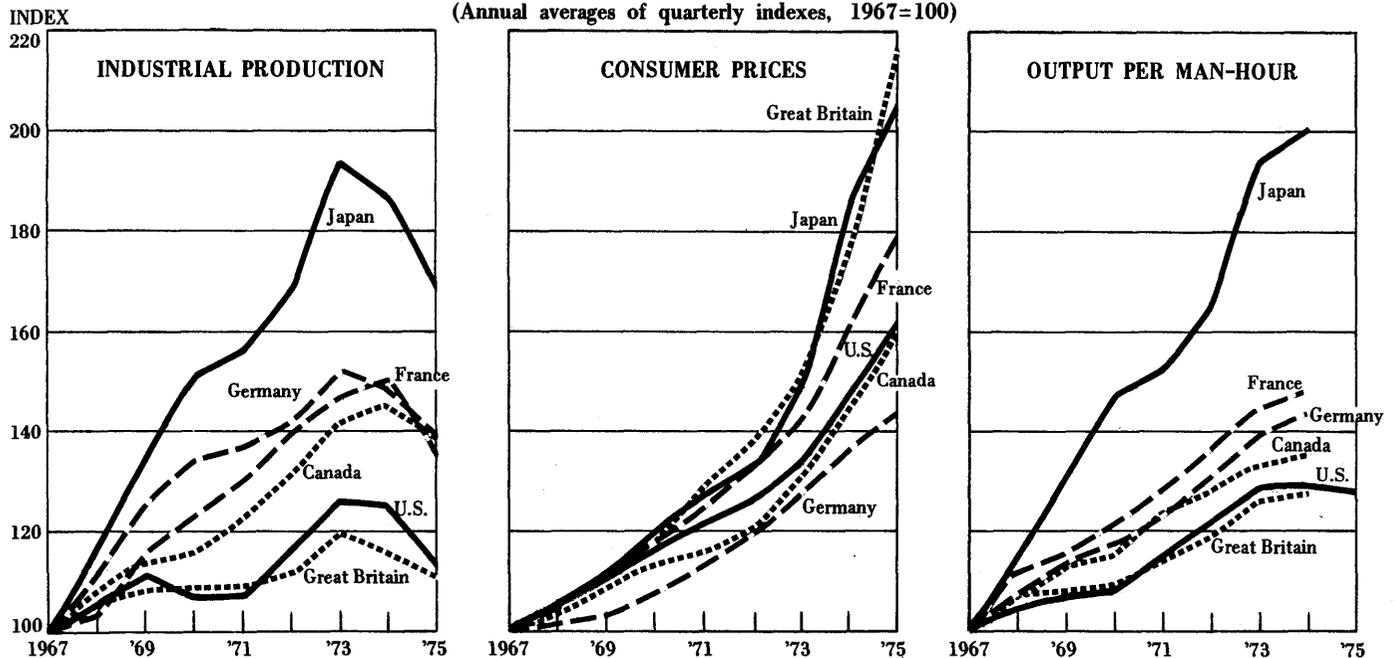


TABLE II
FIXED CAPITAL FORMATION/GNP DURING 1974

Country	Percentage
Japan	34.2
France	25.1
Canada	23.4
W. Germany	22.7
Great Britain	20.0
United States	19.2

*1973 data

during that period, and productivity in the United States increased only slightly more than. Since these data reflect only changes since 1967 within each country, readers should not make intercountry comparisons of productivity levels from these data. Perhaps the larger increases in productivity in Japan during the years shown simply brought its level closer to, but still less than, that in the United States. Or, perhaps productivity in Japan now exceeds that in this Nation. We are unaware of any data that would enable one to make such comparisons of productivity levels.

Fixed Capital Formation

Results of some studies have suggested that productivity and economic growth are related in part to the quantity of plant and equipment available per worker. Therefore, one measure of potential future production is the quantity of past production that comprised things used for processing (called capital goods). Fixed capital formation includes buildings, machinery, and equipment and the maintenance of animal stocks for breeding purposes. The ratio of fixed capital formation to total GNP indicates the portion of total output that was allocated to future processing instead of to final consumption.

The quantities of fixed capital formation that have been related to economic growth have differed among countries. What is sufficient for one country may be more than enough for another but not sufficient for a third. Many factors influence the volume of things that will be produced from a given amount of capital. Such factors include the skills and attitudes of workers, the availability of natural resources, the level of productivity, and the ability of managers to allocate and use capital efficiently.

Table II shows the ratio of fixed capital formation to GNP during 1974 for the six major industrialized countries. Of the six countries, Japan had by far the highest ratio, and the United States had the lowest ratio. The ratio for Japan during 1974 was more than one-third larger than that for the nation with the next largest such ratio (France).

What do the data presented in this report reveal about the future? Very little, if anything. Past trends often have been reversed in a short time; therefore, to assume continuation of the past trends reflected here is not warranted. What we hope the reader has gained from this report is a clearer perspective of the relative sizes of the major industrialized economies. This should enable him to assess better the relative importance of economic data that are reported in the news media for these six nations.

STATISTICAL INDICATORS

Among the primary leading indicators of business-cycle changes, the index of common stock prices increased during April and continued to expand cyclically then. The percent change in total liquid assets decreased during March for the third consecutive month, and the status of this series has become indeterminate. This change reduced the percentage of leading indicators appraised as expanding cyclically from 83 to 75.

No new data were received for any primary roughly

coincident or lagging series. The percentages of these groups apparently expanding cyclically are 100 and 33, respectively.

That nine of the twelve primary indicators of business-cycle changes are appraised as expanding cyclically suggests that general business activity will continue to expand during the next few months.

DEMAND RETAIL SALES

Estimates of retail sales during the most recent week and 4 weeks compare with such sales during the corresponding periods a year earlier as follows:

Period	Percent change
Week ended April 30	+13
Four weeks ended April 30	+15

SUPPLY INDUSTRIAL PRODUCTION

The Federal Reserve Board estimated that the seasonally adjusted index of industrial production for March was 120.9 (1967=100). This estimate is 0.6 percent more than the upward-revised index for February and nearly 10 percent more than the index for March 1975. During the first quarter of 1976, industrial production increased at a seasonally adjusted annual rate of almost 9 percent. That rate of increase was slightly greater than the nearly 8-percent rate during the fourth quarter of 1975 but was less than half the almost 20-percent rate during the third quarter of 1975. Such high rates of increase have been common during early months of cyclical expansions, but they are unsustainable in the long run. Since 1948, industrial production has increased at a compound annual rate of about 4.5 percent.

The index of industrial production, which is a primary roughly coincident indicator of business-cycle changes, increased during each of the 11 months ended in March and clearly is expanding cyclically.

Increases were reported for all of the major groups of industrial production during the first quarter of 1976. The percent changes in the seasonally adjusted indexes of these groups from those at the end of the preceding quarter and the year-earlier quarter are shown in the following table.

Group	Percent Change from	
	Preceding Quarter	Year-Earlier Month
Industry		
Manufacturing, total	+2.5	+11.3
Durable goods	+2.9	+7.4
Nondurable goods	+2.0	+16.6
Mining	+1.7	-1.6
Utilities	+2.4	+3.6
Market		
Consumer goods	+1.5	+11.8
Business equipment	+2.7	+3.8
Materials	+2.9	+3.5

Durable goods production, which accounts for about one-half of the total volume of industrial production, increased nearly 3 percent during the first quarter of this year. Although such production increased 8.5 percent from a trough volume during May 1975 through March 1976, durable goods production during March was 10.5 percent less than the peak volume during November 1973. Recent increases in new orders for durable goods in constant dollars and in the sales of such goods suggest that manufacturers will continue to increase production of durable goods.

Among durable manufactured goods, production of primary and fabricated metals increased a marked 6

percent during the first quarter. Production of lumber, clay, and glass increased 3.9 percent, and that of furniture and miscellaneous durable goods increased 3.4 percent then.

Production of nondurable goods increased 2 percent during the first quarter. Such production accounts for about one-third of the total volume of industrial production. During the 12 months ended in February 1975, production of nondurable goods decreased 13.5 percent. Since then the rate of nondurable goods production has recovered, and such production during March exceeded the pre-recession peak volume during February 1974. Among nondurable goods, paper and printing output increased the most (3.3 percent) during the first quarter.

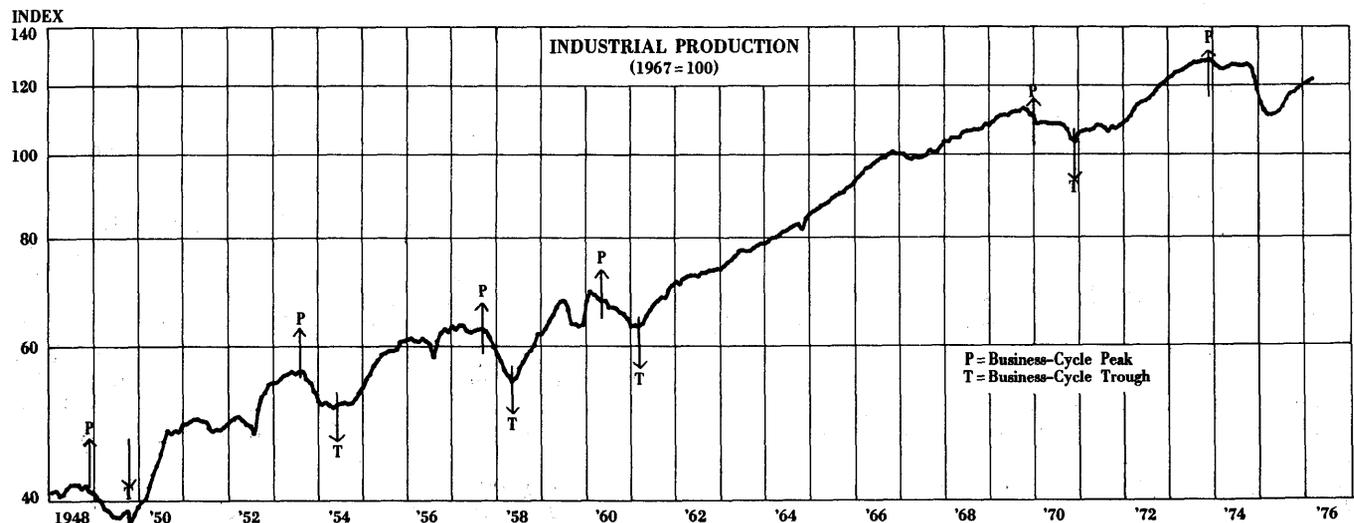
Mining output decreased during February to the smallest volume since November 1971. Such production, however, increased 4.2 percent during March. Mining was the only major component of industrial production for which the March volume was less than that a year earlier. Utilities production increased 2.4 percent during the first quarter.

Among the market groups of industrial production, the output of consumer goods, of business equipment, and of materials continued to increase during the first quarter from troughs reached during the spring of 1975. Production of consumer goods during March was only slightly less than the peak volume of such production during November 1973. However, production of business equipment during March was 8.3 percent less than the October 1974 peak, and materials output during March was 8.6 percent below the November 1973 peak.

The more volatile component of manufactured goods production is that of durable goods. Nondurable goods include such major items as food and clothing, which must be produced and purchased more or less regularly. Durable goods, however, include items such as machinery, furniture, appliances, and automobiles. During "hard times," some consumers have delayed purchases of these goods. Consequently, production of durable goods usually has decreased more than that of nondurable goods during business contractions. Conversely, production of durable goods usually has increased at a faster rate than that of nondurable goods during periods of economic recovery.

As we reported in *Research Reports* for April 25, 1976, recent trends of orders, sales, and inventories of durable goods manufacturers have favorable implications for the future production of such goods.

Further increases in industrial production seem probable during the next few months.



Latest Weekly Data: Selected Items

Production of steel, automobiles, and electric power (1) in the 1- and 4-week periods ended on the indicated dates in the current year and (2) in the corresponding periods of earlier years was as follows:

	1929	1932	1973	1974	1975	1976
Steel						
Ingots (million tons)						
1 week: May 1	1.39	0.36	2.99	2.91	2.44	2.70
4 weeks: May 1	5.37	1.38	11.96	11.62	9.96	10.70
Automobiles						
Vehicles (thousands)						
1 week: May 1	113	29	215	155	145	186p
4 weeks: May 1	460	119	803	621	554	728p
Electric Power						
Kilowatt-hours (billions)						
1 week: May 1	1.7	1.5	32.8	33.5	33.7	35.8
4 weeks: May 1	6.8	5.9	132.7	132.7	134.9	142.1

Percent change from 4 weeks a year earlier: +5.4

p Preliminary.

PRICES COMMODITIES PRICES

Index	1975		1976
	Apr. 26	Apr. 19	Apr. 26
Spot-market, 22 commodities*	529	526	534
Commodity-futures	586	661	669
Steel-scrap	\$86.50	\$90.83	\$89.17

*For the preceding Tuesday.

Note: The indexes are, respectively, those of the U.S. Bureau of Labor Statistics, Dow-Jones, and *Iron Age*. The spot-market and futures indexes are converted so that their August 1939 daily averages equal 100. The steel-scrap index is a composite price for No. 1 heavy melting scrap.

PRICE OF GOLD

	1975		1976
	May 8	Apr. 29	May 6
Final fixing in London	\$166.25	\$127.90	\$126.90

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