

International comparisons of labor productivity and unit labor costs in manufacturing, 2000



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In 2000, U.S. manufacturing output per hour grew by 5.5 percent over the preceding year, the fifth largest increase among the 13 countries for which comparable data are available—the United States, Canada, Japan, Korea, Taiwan, and 8 European countries. Manufacturing labor productivity grew in all of the countries; increases ranged from 1.1 percent in Norway to 10.7 percent in Korea. (See table A and chart 1.) The U.S. productivity measure posted its second highest growth rate since 1995. (Average annual growth rates for selected measures, years, and periods are found in tables A and B.)

U.S. manufacturing unit labor costs increased by 1.4 percent in 2000, the largest annual increase since 1993. This is the second time that U.S. unit labor costs have increased

since that year. Only 2 of the 14 countries for which comparable data are available, Canada and Norway, had larger increases in unit labor costs expressed in national currency units. Unit labor costs in the Netherlands also increased by 1.4 percent. In all the other countries, manufacturing unit labor costs in national currency units declined in 2000. In U.S. dollars, unit labor costs in 2000 fell in all of the other countries except Canada and Korea. (See table A and chart 2.)

This report examines comparative trends in manufacturing output per hour, unit labor costs, and related measures in 2000, the most recent year for which comparative data are available. Annual indexes of these variables also are estimated for the period 1950-2000.¹ The complete historical

CHART 1. Percent change in manufacturing output per hour in 13 countries or areas, 2000

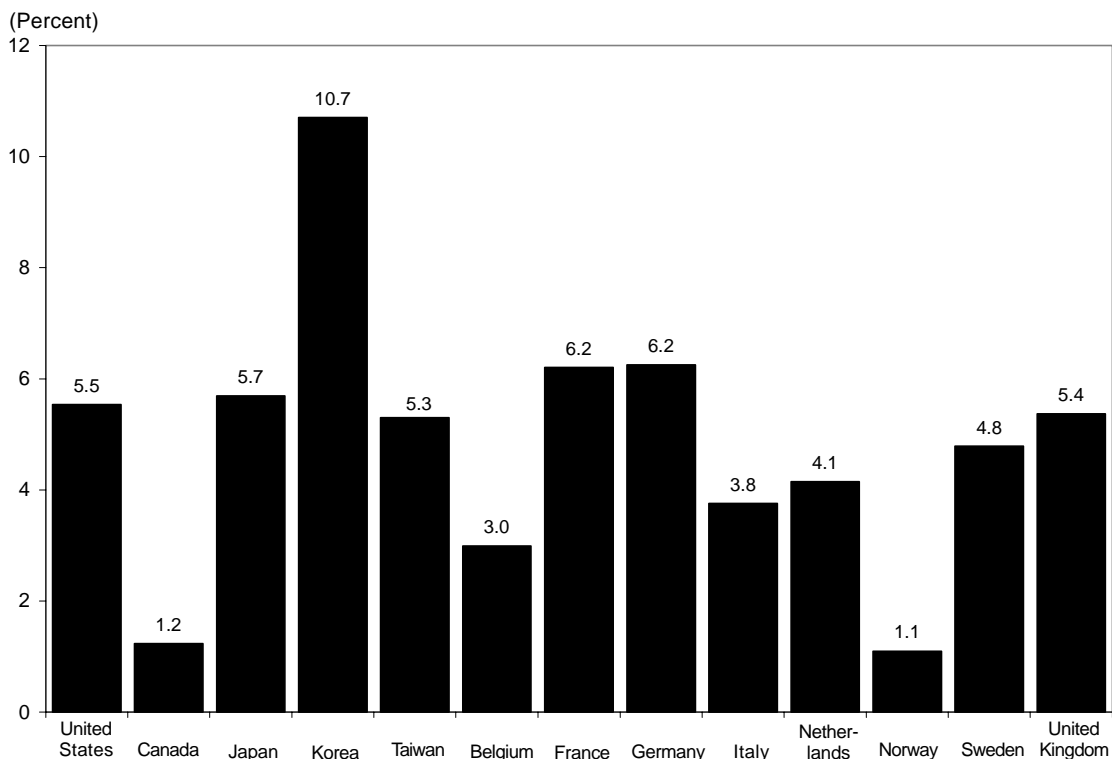


Table A. **Changes in manufacturing productivity and unit labor costs in 14 countries or areas, 1999-2000**

Country or area	Output per hour		Hours	Employment	Average hours	Total compensation	Hourly compensation	Unit labor costs		Exchange rate ¹
	Output	Output						National currency	U.S. dollars	
United States	5.5	4.1	- 1.4	- 0.6	- 0.8	5.5	7.0	1.4	1.4	---
Canada	1.2	5.7	4.4	4.4	.0	8.0	3.5	2.2	2.2	0.0
Japan	5.7	5.5	-1	-1.7	1.6	-8	-6	-6.0	-8	5.5
Korea	10.7	15.4	4.2	5.5	-1.2	10.8	6.3	-4.0	1.0	5.2
Taiwan	5.3	7.3	1.9	2.1	-.2	3.5	1.6	-3.5	-.3	3.4
Belgium	3.0	3.6	.6	.3	.3	3.0	2.3	-.6	-13.9	-13.3
Denmark	NA	5.0	NA	-.7	NA	3.3	NA	-1.7	-15.1	-13.7
France	6.2	3.3	-2.7	.7	-3.4	3.0	5.9	-.3	-13.6	-13.3
Germany	6.2	6.1	-.1	.7	-.9	3.1	3.2	-2.8	-15.8	-13.3
Italy	3.8	3.4	-.4	-.2	-.2	2.8	3.2	-.5	-13.8	-13.3
Netherlands	4.1	4.7	.6	.7	-.1	6.2	5.6	1.4	-12.1	-13.3
Norway	1.1	-2.7	-3.8	-2.7	-1.1	1.1	5.0	3.9	-8.0	-11.4
Sweden	4.8	6.3	1.5	1.3	.2	4.1	2.6	-2.1	-11.7	- 9.8
United Kingdom	5.4	1.9	-3.3	-3.6	.4	.5	3.9	-1.4	-7.6	- 6.3

NA = not available.

¹ Value of foreign currency relative to the U.S. dollar.

index series for the variables underlying the Bureau of Labor Statistics (BLS) international comparisons are shown in tables 1 through 15. With this report, comparative hours measures and labor productivity estimates for Korea and Taiwan are being released by BLS for the first time. The data presented here update preliminary estimates for 2000 that were released on August 31, 2001; a summary of revisions is contained in table 16.

The historical series of the variables also are available at the BLS Division of Foreign Labor Statistics Web site at: <http://stats.bls.gov/fls/home.htm>.

Comparative growth, 1999-2000

Output per hour. Labor productivity (output per hour worked) in U.S. manufacturing grew 5.5 percent in 2000. The productivity increase resulted from output growth of 4.1 percent combined with a 1.4-percent decrease in labor input (as measured by total hours).²

Productivity gains in five other countries—Japan, France, Germany, Italy, and the United Kingdom—were achieved by a similar combination of an increase in output accompanied by a decline in hours worked. Norway experienced a gain in productivity even though output decreased, because hours worked declined at a faster rate than did output. In all other countries for which comparable data are available, productivity gains were realized due to a larger increase in output than in hours worked. (See table A and chart 1.)

The 4.1-percent increase in output placed the United States behind 8 of the 14 economies compared. The largest increases in output were in Korea (15.4 percent) and Taiwan (7.3 percent). In Europe, Sweden (6.3 percent) and Germany (6.1 percent) achieved the largest output increases in 2000.

Only Norway experienced a decline in manufacturing output for the year.

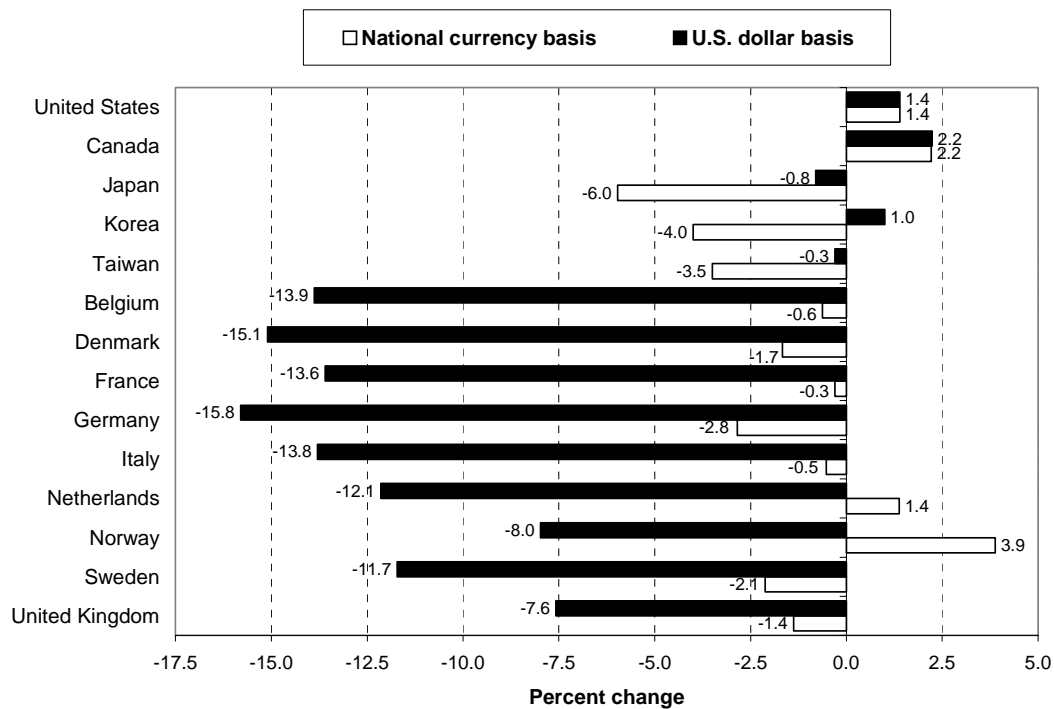
Of the 13 countries for which data on total hours worked are available, hours worked declined in 7 (the United States, Japan, France, Germany, Italy, Norway, and the United Kingdom) and increased in the remaining six. The increase in Canadian total hours worked, 4.4 percent, was the highest among the countries.

Average hours worked in 2000 declined in eight countries, rose in four, and remained unchanged in Canada. The 1.4-percent decline in total hours worked in the United States was the result of declines both in employment (0.6 percent) and in average hours worked (0.8 percent). The decreases in total hours worked in Italy and Norway also were caused by declines in both employment and average hours worked. In Belgium and Sweden, the increase in total hours worked was composed of increases in both employment and average hours. In all other countries, growth in employment was offset by declines in average hours, or growth in average hours was offset by declines in employment.

Unit labor costs and hourly compensation. U.S. manufacturing hourly compensation increased 7 percent in 2000, the highest rate of growth among the countries compared. The next three largest increases in hourly compensation were in Korea (6.3 percent), France (5.9 percent), and the Netherlands (5.6 percent). Only Japan experienced a decline in hourly compensation in 2000. (See table A.)

Unit labor costs (labor compensation per unit of output), expressed in national currency units, declined in 10 of the 14 countries in 2000. The largest declines occurred in Japan (6.0 percent), Korea (4.0 percent), and Taiwan (3.5 percent). The United States, Canada, the Netherlands, and Norway

CHART 2. Percent change in manufacturing unit labor costs in 14 countries or areas, 1999-2000



experienced increases in unit labor costs. (See table A and chart 2.)

The measure of unit labor costs is equivalent to compensation per hour divided by output per hour. In the United States, Korea, France, and the Netherlands, the relatively large increases in hourly compensation were offset by increases in output per hour, resulting in only modest increases or declines in unit labor costs. Norway's increase in unit labor costs (3.9 percent) was the largest among the countries for which data are compared, because hourly compensation increases were only modestly offset by productivity growth.

To compare changes in competitiveness across economies in terms of U.S. dollars, unit labor costs in national currency units must be adjusted for changes in the currencies' exchange rates against the dollar. When a foreign currency depreciates against the U.S. dollar, fewer dollars must be paid in exchange for each national currency unit. This will lead to a smaller increase or a larger decline in unit labor costs converted from the foreign currency into U.S. dollars.

Movements in the currency markets in 2000 had a noticeable impact on comparative unit labor costs expressed in U.S. dollars. The European countries showed sharp decreases in unit labor costs expressed in U.S. dollars that were due largely to the relative strength of the dollar against European currencies in 2000. For the Euro member countries (Belgium, France, Germany, Italy, and the Netherlands), as well as Denmark and Sweden, the declines all were over 10 percent. Unlike Europe, Japan and Taiwan experienced decreases in unit labor costs expressed in U.S. dollars in 2000 that were

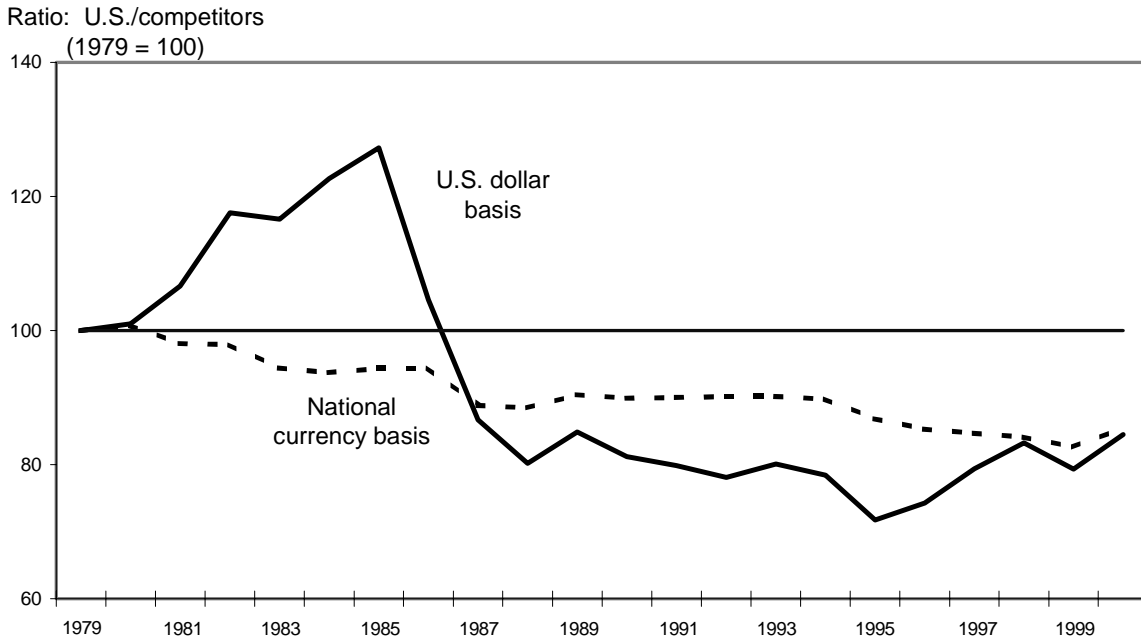
smaller than decreases in unit labor costs denominated in national currency units; in Korea, dollar-denominated unit labor costs actually rose. For each of the three Asian countries, unit labor cost movements reflected a strengthening of the national currencies against the U.S. dollar. (See table A and chart 2.)

Trade-weighted unit labor costs

To take account of differences in the relative importance of foreign economies to U.S. trade in manufactured goods, BLS constructs indexes of U.S. unit labor cost trends relative to a trade-weighted average of unit labor cost trends in the other economies. These measures are shown in chart 3. (Note that the earliest data in the chart relate to 1979 because U.S. manufacturing output reached a peak during that year, declining in 1980.)

The construction of the trade-weighted indexes is a three-step process. First, the indexes of unit labor costs for all economies are rebased to a common year (in this case, 1979 = 100). Second, for each year, a "competitors" index is calculated as the weighted geometric mean of the indexes for all competitor economies; the weights reflect each country's importance in terms of U.S. trade in manufactured goods. Finally, the U.S. index number for each year is divided by the "competitors" index number (and multiplied by 100) to obtain a relative ratio of the United States to the competitors. This process is used to calculate the relative trade-weighted unit labor cost indexes on both a national currency and a U.S. dollar basis. In this report, the relative U.S. trade-weighted

Chart 3. U.S. manufacturing unit labor costs relative to those of 12 competitors, 1979-2000



indexes are estimated against 12 economies for which comparable data are available over the 1979-2000 period; the indexes underlying this chart are shown in table C.

In chart 3, the solid line indicates that U.S. unit labor costs rose faster than “competitors” costs from 1979 to 1986 on a U.S. dollar basis. In most years from 1986 to 1995, U.S. costs either rose at a slower rate than the “competitors” costs or fell at a faster rate. From 1996 to 1998, however, the strength of the U.S. dollar caused relative U.S. unit labor costs to rise. After a dip in 1999, the index of relative U.S. unit labor costs rose again in 2000.

Measuring productivity and unit labor cost trends in manufacturing

Labor productivity is defined as real output per hour worked. Although the labor productivity measure presented in the report relates output to the hours worked of persons employed in manufacturing, it does not measure the specific contributions of labor as a single factor of production. Rather, it reflects the joint effects of many influences, including new technology, capital investment, capacity utilization, energy use, and managerial skills, as well as the skills and efforts of the workforce.

Unit labor costs are defined as the cost of labor input required to produce one unit of output. They are computed as labor compensation in nominal terms divided by real output.

BLS constructs trend indexes of manufacturing labor productivity, hourly compensation costs, and unit labor costs from three basic aggregate measures—output, total labor hours, and total compensation. The hours and compensation measures refer to employees (wage and salary earners)

in Belgium, Denmark, Italy, and Taiwan. For all other countries, the measures refer to all employed persons, including employees, self-employed persons, and unpaid family workers. For all of the countries, the term “hours” refers to hours worked, and not to hours paid.

In general, the measures relate to total manufacturing as defined by the International Standard Industrial Classification (ISIC). However, the measures for Denmark include mining and exclude the manufacture of handicrafts from 1960 to 1966.

The comparisons in this report make use of data made available to BLS as of November 2001 by the statistical agencies of the individual countries. For some countries, the data for the most recent years are based on the European System of Integrated National Accounts (ESA 95) or on the United Nations System of National Accounts 1993 (SNA 93). For other countries, data were compiled according to previously used systems.

To obtain historical time series, BLS may link together data series that were compiled according to different accounting systems by the countries’ statistical agencies.

Output. For most countries, the output measures are value added in manufacturing from the national accounts. However, output for Japan prior to 1970 and for the Netherlands prior to 1960 are indexes of industrial production. The manufacturing value added measures for the United Kingdom are essentially identical to that country’s indexes of industrial production.

In this report, manufacturing output data for the United States from 1977 forward are the gross product originating

(value added) measures prepared by the Bureau of Economic Analysis (BEA) of the U.S. Department of Commerce. U. S. gross product originating is a chain-type annual-weighted series.³ Comparable manufacturing output data are not available prior to 1977.

The gross product originating series differs from the manufacturing output series that BLS publishes as one of its quarterly measures of U.S. productivity and costs. The quarterly measures are on a sectoral output basis rather than a value added basis. Sectoral output is gross output less intrasector sales and transfers.⁴

A value added concept has been used for the international comparisons series because the data are more readily available from the countries' national accounts, whereas sectoral output would require a complex estimation procedure. Also, although BLS has determined that sectoral output is the correct concept for U.S. measures of single factor productivity (output per hour), there are other considerations that may make value added a better concept for international comparisons, such as differences among countries in the extent of vertical integration of industries.

Estimation of manufacturing real output using moving price weights is becoming prevalent. For example, the output measure for manufacturing in the United States is the chain-weighted index of real gross product originating, based on annually changing price weights. However, real output for many earlier periods within the historical real output series has been estimated using fixed price weights, with the weights updated periodically (for example, every 5 or 10 years).

Measures of real output also may differ among countries because of differences in approaches to estimating the prices of high-technology products such as computers and, in general, of products that undergo rapid quality change.

Labor input. The aggregate hours worked series used for France (from 1970 forward), Norway, Sweden, and Canada are series published with the national accounts. For the former West Germany after 1959 and Germany from 1991, BLS uses estimates of aggregate hours worked, which were developed by a research institute of the German Ministry of Labor for use with the national accounts employment figures. For the United Kingdom from 1992, an index of total manufacturing hours is used, derived from published quarterly indexes of manufacturing hours. For other countries and for the United Kingdom before 1992 and the former West Germany before 1959, BLS constructs its own estimates of average hours, using employment figures published with the national accounts, or other comprehensive employment series, and estimates of average annual hours worked. For this report, Italian employment is based on a new series of the number of employees in manufacturing, instead of on labor units, as in previous releases.

The new estimates of total hours worked in the manufacturing sector in Korea from 1985 to 2000 are based on an employed persons series and an average annual hours

worked series. The data are prepared by the Korean Productivity Center (KPC) according to the System of National Accounts 1993 (SNA 93). The resulting hours worked series is the same as that used by the KPC to calculate manufacturing productivity. The KPC publishes the employed persons series, the average hours series, and the aggregate hours series as indexes in the Korean *Quarterly Productivity Review*.

The new estimates of aggregate hours worked in the manufacturing sector in Taiwan from 1973 to 2000 are based on the number of employees and average annual hours worked data from the monthly "Employees' Earnings Survey" conducted by the Taiwan Directorate General of Budget Accounting and Statistics (DGBAS). The survey covers all establishments with two or more employees in the entire territory of Taiwan. The results are published in the Taiwan *Yearbook of Earnings and Productivity Statistics*.

Compensation (labor cost). The compensation measures are from national accounts data. Compensation includes employer expenditures for legally required insurance programs and contractual and private benefit plans, in addition to all payments made in cash or in kind directly to employees. For Canada, France, and Sweden, compensation is increased to account for important taxes on payroll or employment. For the United Kingdom, compensation is reduced between 1967 and 1991 to account for subsidies. When data for the self-employed are not available, total compensation is estimated by assuming the same hourly compensation for self-employed and employees; in this report, this procedure is used for the first time to adjust Korean manufacturing compensation to an all-persons basis. Real compensation for the United States is derived using the Consumer Price Index research series (CPI-U-RS).

Data for Germany. After the reunification of Germany in 1991, the German Federal Statistical Office began to publish economic statistical series for the unified German territory, while continuing temporarily to produce data for the territory of former West Germany. Beginning with the data estimates for 1999 (released in October 2000), the international comparisons of manufacturing productivity and unit labor costs produced by BLS have included separate series for unified Germany and for the former West Germany. The West German estimates end with 1998, the last year for which the German Statistical Office has published the necessary underlying data.

Current indicators. The measures for recent years may be based on current indicators of output (such as industrial production indexes), employment, average hours, and hourly compensation until national accounts and other statistics, normally used for the long-term measures, become available.

Trade-weighted measures. The trade weights for Canada, Japan, and the European countries were obtained by rescaling

a series of weights, developed by the International Monetary Fund, based on average trade flows over the 1989-91 period. These weights are based on aggregate trade data for total manufacturing and take account of both bilateral trade and the relative importance of “third country” markets. The 1989-91 weights do not include Korea and Taiwan. BLS developed weights for Korea and Taiwan by using data from an earlier study from the International Monetary Fund and other sources. The weight used for Germany is based on the trade weight of the former West Germany.

The following weights were used for the entire period for which trade-weighted unit labor cost measures are produced:

Country	Weight	Country	Weight
Canada	25.31	Italy	4.60
Japan	30.57	Netherlands	2.25
Belgium	2.14	Norway	.48
Denmark	.48	Sweden	1.89
France	5.90	United Kingdom	8.99
Germany	11.61	Taiwan	5.79

Level comparisons. BLS measures are limited to trend comparisons. BLS does not prepare level comparisons of manufacturing productivity and unit labor costs because of data limitations and technical problems in comparing the levels of manufacturing output among countries. Each country measures manufacturing output in its own currency units. To compare outputs among countries, a common unit of measure is needed. Market exchange rates are not suitable as a basis for comparing output levels. What is needed are purchasing power parities, which are the number of foreign currency units required to buy goods and services equivalent to those that can be bought with one unit of U.S. currency.

Purchasing power parities are available for total gross domestic product (GDP) from the Organization for Economic Cooperation and Development. However, these parities are derived for expenditures made by consumers, business, and government for goods and services—not for value added by industry. Therefore, they do not yield purchasing power

parities by industry. The parities developed for total GDP are not suitable for component industries, such as manufacturing.

European exchange rates. On January 1, 1999, 11 European countries joined the European Monetary Union (EMU). Greece joined on January 1, 2001. Currencies of EMU members are established at fixed conversion rates to the euro, the official currency of the EMU. Exchange rates between the national currencies of EMU countries and the U.S. dollar are no longer reported; only the exchange rate between the euro and the U.S. dollar is available.

In this report, 2000 exchange rates in national currencies for Belgium, France, Germany, Italy, and the Netherlands are calculated by determining the number of euros per U.S. dollar and then converting the euros into national currencies at fixed conversion rates.

1 euro equals:	40.3399	Belgian francs	1936.27	Italian lire
	6.55957	French franc	2.20371	Netherlands guilders
	1.95583	German marks		

In 2000, 1 euro was equal to 0.9232 U.S. dollars. The currency exchange rates cited in this publication are annual averages of daily buying rates in New York City.

¹ Because the value added output data for U.S. manufacturing industries are not available prior to 1977, U.S. measures of output, output per hour, and unit labor costs begin with 1977. Also, productivity measures for Denmark are not available after 1993 due to a lack of comparable hours data, and data for Germany for years prior to 1991 relate to the former West Germany.

² In this report, U.S. manufacturing output is real gross product originating in manufacturing, published by BEA in November 2001. The preliminary 2000 growth estimate for U.S. manufacturing output (published in the news release USDL 01-280 in August 2001) was based on the Federal Reserve Board Index of Industrial Production for Manufacturing.

³ For more information on the U.S. measure, see Sherlene K.S. Lum, Brian C. Moyer, and Robert E. Yuskavage, “Improved Estimates of Gross Product by Industry for 1947-98,” *Survey of Current Business*, June 2000, pp. 24-38.

⁴ For information on sectoral output, see William Gullickson, “Measurement of productivity growth in U.S. manufacturing,” *Monthly Labor Review*, July 1995, pp. 13-28.

TABLE B. Changes in output per hour, hourly compensation, unit labor costs, and related measures for manufacturing, 14 countries or areas, 1979-2000

(Average annual rates of change¹)

Country or area	1979-2000	1979-85	1985-90	1990-95	1995-2000	1999-2000
Output per hour						
United States	3.4	3.5	2.4	3.3	4.6	5.5
Canada	2.1	3.4	.5	3.3	.9	1.2
Japan	3.7	3.5	4.3	3.3	3.9	5.7
Korea	NA	NA	8.2	9.7	11.6	10.7
Taiwan	5.9	5.1	7.9	5.3	5.5	5.3
Belgium	3.8	6.0	2.2	3.2	3.3	3.0
Denmark	NA	2.1	.5	NA	NA	NA
France	3.7	3.0	3.4	4.1	4.2	6.2
Germany	NA	NA	NA	NA	2.6	6.2
Italy	2.7	3.5	2.4	3.5	1.1	3.8
Netherlands	3.3	4.4	2.2	3.7	2.5	4.1
Norway	1.4	2.4	1.4	1.1	.4	1.1
Sweden	3.6	3.1	1.9	5.2	4.3	4.8
United Kingdom	3.7	4.4	4.6	3.3	2.3	5.4
Output						
United States	3.0	2.2	2.5	3.1	4.4	4.1
Canada	2.6	1.9	1.8	2.0	4.7	5.7
Japan	3.0	4.7	4.8	.4	1.7	5.5
Korea	9.2	8.3	12.2	8.4	8.0	15.4
Taiwan	6.6	8.2	7.0	5.0	5.7	7.3
Belgium	2.3	2.6	2.5	.6	3.3	3.6
Denmark	1.8	2.9	-.2	2.2	1.9	5.0
France	1.5	-.4	2.6	1.1	2.9	3.3
Germany	NA	NA	NA	NA	1.3	6.1
Italy	1.7	.9	3.2	1.5	1.2	3.4
Netherlands	2.3	1.8	3.2	1.6	2.7	4.7
Norway	.3	.6	-1.6	1.7	.4	-2.7
Sweden	2.9	2.2	1.4	3.1	4.9	6.3
United Kingdom	.8	-1.2	3.4	.5	1.0	1.9

TABLE B. Changes in output per hour, hourly compensation, unit labor costs, and related measures for manufacturing, 14 countries or areas, 1979-2000—Continued

(Average annual rates of change¹)

Country or area	1979-2000	1979-85	1985-90	1990-95	1995-2000	1999-2000
Total hours						
United States	-0.4	-1.2	0.0	-0.1	-0.2	-1.4
Canada	.5	-1.5	1.3	-1.3	3.8	4.4
Japan	-.7	1.1	.5	-2.8	-2.1	-.1
Korea	NA	NA	3.7	-1.2	-3.2	4.2
Taiwan	.6	2.9	-.8	-.3	.2	1.9
Belgium	-1.4	-3.2	.4	-2.5	-.1	.6
Denmark	NA	.8	-.6	NA	NA	NA
France	-2.1	-3.3	-.8	-2.9	-1.3	-2.7
Germany	NA	NA	NA	NA	-1.3	-.1
Italy	-1.0	-2.5	.8	-1.9	.1	-.4
Netherlands	-.9	-2.5	1.0	-2.0	.2	.6
Norway	-1.1	-1.8	-2.9	.6	-.1	-3.8
Sweden	-.7	-.8	-.5	-2.0	.6	1.5
United Kingdom	-2.8	-5.3	-1.2	-2.8	-1.3	-3.3
Employment						
United States	-0.6	-1.4	-0.1	-0.6	-0.1	-0.6
Canada	.3	-1.3	1.2	-1.5	3.4	4.4
Japan	-.3	1.2	.8	-1.6	-1.9	-1.7
Korea	NA	NA	5.4	-.9	-3.1	5.5
Taiwan	1.1	4.1	-.5	-.3	.5	2.1
Belgium	-1.5	-2.6	-.3	-2.2	-.6	.3
Denmark	-.2	1.0	-.2	-1.2	-.5	-.7
France	-1.6	-2.3	-.9	-2.7	-.4	.7
Germany	NA	NA	NA	NA	-.8	.7
Italy	-1.1	-2.3	-.2	-1.8	.3	-.2
Netherlands	-.8	-2.2	1.2	-2.0	.4	.7
Norway	-1.0	-1.8	-2.7	.3	.3	-2.7
Sweden	-1.3	-1.2	-.8	-3.5	.4	1.3
United Kingdom	-2.5	-4.6	-.9	-3.1	-1.1	-3.6

TABLE B. Changes in output per hour, hourly compensation, unit labor costs, and related measures for manufacturing, 14 countries or areas, 1979-2000—Continued

(Average annual rates of change¹)

Country or area	1979-2000	1979-85	1985-90	1990-95	1995-2000	1999-2000
Average hours						
United States	0.2	0.2	0.1	0.4	-0.1	-0.8
Canada	.1	-.2	.1	.3	.4	.0
Japan	-.4	.0	-.3	-1.3	-.1	1.6
Korea	NA	NA	-1.6	-.2	-.1	-1.2
Taiwan	-.5	-1.1	-.4	.0	-.3	-.2
Belgium	.0	-.6	.7	-.3	.6	.3
Denmark	NA	-.3	-.5	NA	NA	NA
France	-.5	-1.0	.1	-.2	-.9	-3.4
Germany	NA	NA	NA	NA	-.5	-.9
Italy	.1	-.1	1.0	-.1	-.2	-.2
Netherlands	-.2	-.3	-.2	.0	-.2	-.1
Norway	-.1	.0	-.2	.3	-.3	-1.1
Sweden	.6	.4	.3	1.6	.2	.2
United Kingdom	-.3	-.8	-.3	.3	-.2	.4
Total labor compensation in manufacturing²: national currency basis						
United States	4.3	5.8	3.9	3.4	3.7	5.5
Canada	5.4	7.5	5.6	2.4	5.8	8.0
Japan	2.8	5.9	5.1	.7	-1.0	-.8
Korea	NA	NA	19.9	16.8	3.8	10.8
Taiwan	9.6	15.9	10.6	6.8	4.2	3.5
Belgium	3.1	4.7	4.0	1.3	2.0	3.0
Denmark	4.9	9.0	4.6	2.3	3.2	3.3
France	4.0	9.1	3.6	.7	1.7	3.0
Germany	NA	NA	NA	NA	1.2	3.1
Italy	7.3	13.0	8.2	4.0	3.2	2.8
Netherlands	2.7	2.3	3.1	1.9	3.6	6.2
Norway	5.5	8.0	4.7	4.0	5.0	1.1
Sweden	6.0	8.9	7.9	1.9	4.8	4.1
United Kingdom	5.1	6.3	8.1	2.5	3.2	.5

TABLE B. Changes in output per hour, hourly compensation, unit labor costs, and related measures for manufacturing, 14 countries or areas, 1979-2000—Continued

(Average annual rates of change¹)

Country or area	1979-2000	1979-85	1985-90	1990-95	1995-2000	1999-2000
Hourly compensation²: national currency basis						
United States	4.7	7.2	3.9	3.5	3.9	7.0
Canada	4.9	9.1	4.2	3.7	2.0	3.5
Japan	3.6	4.7	4.6	3.7	1.1	-6
Korea	NA	NA	15.6	18.2	7.3	6.3
Taiwan	8.9	12.6	11.5	7.1	4.0	1.6
Belgium	4.6	8.1	3.7	3.9	2.1	2.3
Denmark	NA	8.1	5.3	NA	NA	NA
France	6.2	12.8	4.5	3.7	3.0	5.9
Germany	NA	NA	NA	NA	2.6	3.2
Italy	8.3	15.9	7.4	6.0	3.1	3.2
Netherlands	3.7	5.0	2.1	4.0	3.4	5.6
Norway	6.7	10.0	7.8	3.4	5.1	5.0
Sweden	6.7	9.8	8.4	3.9	4.2	2.6
United Kingdom	8.0	12.2	9.4	5.4	4.5	3.9
Unit labor costs: national currency basis						
United States	1.2	3.6	1.4	0.2	-0.7	1.4
Canada	2.8	5.5	3.7	.4	1.1	2.2
Japan	-.2	1.1	.3	.4	-2.6	-6.0
Korea	NA	NA	6.9	7.8	-3.9	-4.0
Taiwan	2.9	7.1	3.4	1.7	-1.5	-3.5
Belgium	.8	2.0	1.5	.7	-1.2	-6
Denmark	3.1	5.9	4.8	.0	1.3	-1.7
France	2.5	9.5	1.0	-.4	-1.2	-.3
Germany	NA	NA	NA	NA	-.1	-2.8
Italy	5.5	12.0	4.8	2.4	1.9	-.5
Netherlands	.4	.5	-.1	.3	.9	1.4
Norway	5.3	7.4	6.4	2.3	4.7	3.9
Sweden	3.0	6.5	6.4	-1.2	-.1	-2.1
United Kingdom	4.2	7.5	4.5	2.0	2.2	-1.4

TABLE B. Changes in output per hour, hourly compensation, unit labor costs, and related measures for manufacturing, 14 countries or areas, 1979-2000—Continued

(Average annual rates of change¹)

Country or area	1979-2000	1979-85	1985-90	1990-95	1995-2000	1999-2000
Unit labor costs: U.S. dollar basis						
United States	1.2	3.6	1.4	0.2	-0.7	1.4
Canada	1.6	2.8	7.0	-2.8	-.5	2.2
Japan	3.2	-.3	10.8	9.5	-5.3	-.8
Korea	NA	NA	11.1	6.0	-11.0	1.0
Taiwan	3.6	5.3	11.8	2.0	-4.7	-.3
Belgium	-1.1	-9.3	13.8	3.3	-8.7	-13.9
Denmark	1.0	-5.8	16.7	2.1	-5.9	-15.1
France	.0	-3.3	11.6	1.3	-8.0	-13.6
Germany	NA	NA	NA	NA	-7.6	-15.8
Italy	1.0	-2.5	15.1	-3.7	-3.1	-13.8
Netherlands	-.4	-7.6	12.7	2.9	-6.8	-12.1
Norway	2.5	-1.7	13.3	2.0	-2.0	-8.0
Sweden	-.6	-5.2	14.7	-4.8	-5.0	-11.7
United Kingdom	2.5	-1.0	11.4	-.4	1.3	-7.6
Exchange rates³						
United States	---	---	---	---	---	---
Canada	-1.1	-2.5	3.2	-3.2	-1.6	0.0
Japan	3.4	-1.5	10.5	9.1	-2.7	5.5
Korea	-4.0	-9.2	3.9	-1.7	-7.3	5.2
Taiwan	.7	-1.7	8.2	.3	-3.3	3.4
Belgium	-1.9	-11.1	12.2	2.5	-7.6	-13.3
Denmark	-2.0	-11.0	11.4	2.0	-7.1	-13.7
France	-2.4	-11.7	10.5	1.8	-6.8	-13.3
Germany	NA	NA	NA	NA	-7.5	-13.3
Italy	-4.3	-12.9	9.8	-6.0	-4.9	-13.3
Netherlands	-.8	-8.0	12.7	2.6	-7.6	-13.3
Norway	-2.6	-8.4	6.6	-.3	-6.4	-11.4
Sweden	-3.6	-11.0	7.8	-3.7	-4.9	-9.8
United Kingdom	-1.6	-7.9	6.6	-2.4	-.8	-6.3

NA = not available.

¹ Rates of change based on the compound rate method.

² Adjusted to include employment taxes that are not compen-

sation to employees but are labor costs to employers.

³ Value of foreign currency relative to the U.S. dollar.

TABLE C. U.S. manufacturing unit labor costs relative to those of 12 competitors, 1979-2000

Year	Unit labor costs: national currency basis			Unit labor costs: U.S. dollar basis		
	Own index	Competitors' index	Ratio	Own index	Competitors' index	Ratio
1979	100.0	100.0	100.0	100.0	100.0	100.0
1980	111.4	110.6	100.8	111.4	110.3	101.0
1981	116.5	118.8	98.1	116.5	109.3	106.6
1982	124.2	126.9	97.9	124.2	105.7	117.6
1983	121.6	128.7	94.4	121.6	104.2	116.6
1984	121.0	129.1	93.7	121.0	98.6	122.7
1985	123.4	130.7	94.4	123.4	96.9	127.2
1986	128.9	136.5	94.4	128.9	123.2	104.6
1987	122.8	138.2	88.8	122.8	141.6	86.7
1988	122.5	138.5	88.5	122.5	152.8	80.2
1989	128.0	141.5	90.4	128.0	150.8	84.9
1990	132.4	147.2	89.9	132.4	163.0	81.2
1991	138.0	153.3	90.0	138.0	172.9	79.9
1992	141.3	156.8	90.2	141.3	181.0	78.1
1993	142.3	157.7	90.2	142.3	177.6	80.1
1994	139.2	155.0	89.8	139.2	177.5	78.4
1995	134.0	154.3	86.8	134.0	186.7	71.8
1996	132.1	154.9	85.3	132.1	177.9	74.3
1997	129.9	153.4	84.7	129.9	163.7	79.4
1998	131.2	156.0	84.1	131.2	157.6	83.2
1999	127.6	154.3	82.6	127.6	160.8	79.3
2000	129.3	151.2	85.5	129.3	153.1	84.5

Table 1. Output per hour in manufacturing, 14 countries or areas, 1950-2000

[Indexes: 1992 = 100]

Year	United States	Canada	Japan	Korea	Taiwan	Belgium	Denmark	France	Germany (unified)	Former West Germany	Italy	Netherlands	Norway	Sweden	United Kingdom
1950	NA	26.5	NA	NA	NA	NA	22.6	13.4	NA	13.2	12.9	11.2	24.7	19.5	24.5
1955	NA	32.5	8.6	NA	NA	NA	24.6	16.8	NA	19.7	18.0	14.4	28.7	21.3	26.5
1960	NA	38.5	13.8	NA	NA	18.0	29.9	21.9	NA	29.2	22.5	18.5	37.0	27.3	30.0
1961	NA	40.6	15.6	NA	NA	18.2	31.6	23.3	NA	30.6	24.3	19.5	38.3	28.7	30.1
1962	NA	43.6	16.4	NA	NA	19.2	33.2	24.8	NA	32.8	26.9	20.2	38.3	30.9	30.7
1963	NA	45.4	17.7	NA	NA	19.9	34.3	26.1	NA	34.1	27.7	21.1	40.3	32.7	32.4
1964	NA	47.2	20.1	NA	NA	21.2	37.1	28.1	NA	37.1	27.9	23.0	42.6	35.5	34.5
1965	NA	49.5	21.0	NA	NA	22.3	38.9	30.1	NA	39.3	31.1	24.5	45.1	38.2	35.5
1966	NA	50.4	23.0	NA	NA	23.8	40.8	32.5	NA	40.9	33.8	26.2	47.0	39.8	36.7
1967	NA	50.9	26.0	NA	NA	25.1	43.8	34.6	NA	43.4	35.5	28.1	48.7	43.2	38.4
1968	NA	53.8	29.1	NA	NA	27.3	47.8	38.2	NA	47.0	38.3	31.6	51.7	47.2	41.3
1969	NA	56.4	33.4	NA	NA	29.9	49.8	40.6	NA	50.4	39.7	34.7	56.5	50.9	42.3
1970	NA	56.0	37.5	NA	NA	32.9	52.7	43.0	NA	52.0	42.2	37.9	58.3	52.2	43.2
1971	NA	59.4	39.8	NA	NA	35.1	56.3	45.5	NA	54.0	42.9	40.1	60.0	54.5	45.4
1972	NA	62.5	43.6	NA	NA	39.2	60.8	47.6	NA	57.4	45.6	43.3	63.1	57.2	47.9
1973	NA	66.5	47.6	NA	33.1	43.5	66.9	50.9	NA	61.1	49.7	48.0	66.9	61.4	51.4
1974	NA	67.5	48.8	NA	32.0	45.8	69.1	52.1	NA	63.2	52.7	51.5	69.5	64.0	52.2
1975	NA	64.7	50.2	NA	33.7	47.6	76.1	53.9	NA	65.9	49.9	50.9	68.8	65.0	51.1
1976	NA	70.1	53.2	NA	36.7	52.4	78.8	57.2	NA	70.6	57.1	56.4	70.5	66.0	53.3
1977	68.3	73.9	55.3	NA	38.5	55.0	80.4	60.6	NA	72.7	58.8	61.0	71.5	65.0	53.8
1978	69.2	75.2	57.5	NA	43.4	58.3	81.6	63.3	NA	75.2	61.9	65.0	72.8	66.8	54.6
1979	70.1	75.3	62.2	NA	45.1	61.4	85.6	66.2	NA	78.4	67.8	68.1	78.1	72.0	55.0
1980	70.5	74.4	63.2	NA	47.7	65.4	90.3	66.6	NA	77.2	70.8	68.8	76.7	73.1	54.3
1981	74.1	78.0	65.2	NA	52.8	70.1	91.8	68.5	NA	78.7	70.3	70.4	76.5	72.7	57.1
1982	76.2	77.3	67.9	NA	54.1	73.5	92.1	73.3	NA	78.8	70.6	71.6	79.7	75.4	60.2
1983	80.0	82.2	68.8	NA	57.5	81.0	96.6	75.0	NA	82.6	72.2	77.3	82.4	80.9	65.0
1984	83.2	90.2	71.1	NA	59.1	85.0	96.1	76.2	NA	85.4	78.1	84.9	87.4	85.2	68.4
1985	86.0	92.2	76.5	54.9	60.9	87.0	96.7	79.1	NA	89.1	83.3	88.5	90.2	86.2	71.1
1986	86.0	89.6	76.1	58.9	66.6	87.8	91.1	80.4	NA	89.6	84.3	90.2	89.0	87.5	73.9
1987	92.9	90.3	80.2	63.2	72.8	88.9	90.6	81.9	NA	88.1	86.5	91.0	93.3	89.2	78.1
1988	96.9	90.7	83.9	68.7	76.4	92.0	94.1	87.5	NA	91.5	88.5	93.1	92.2	90.5	82.6
1989	95.7	93.2	88.5	73.2	83.1	96.9	99.6	91.9	NA	94.6	91.3	96.9	94.6	93.2	86.2
1990	96.9	94.7	94.4	81.3	88.9	96.8	99.1	93.6	NA	99.0	93.9	98.5	96.6	94.6	89.1
1991	97.9	95.5	99.0	91.4	96.6	99.1	99.6	96.9	98.3	101.9	95.9	99.6	97.5	95.5	93.8
1992	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1993	102.1	104.9	101.7	108.1	102.9	102.5	104.5	100.6	101.8	100.6	101.8	101.6	100.6	107.3	103.9
1994	107.3	109.7	103.3	118.0	106.7	108.4	NA	108.6	109.6	107.9	106.1	113.2	101.4	119.4	107.1
1995	113.8	111.3	111.0	129.2	115.1	113.2	NA	114.7	112.3	111.2	111.2	118.2	102.0	121.9	104.9
1996	117.0	110.1	116.1	142.5	123.1	117.0	NA	115.3	114.0	115.1	110.8	120.2	102.0	124.5	103.8
1997	121.2	113.2	121.0	163.3	129.2	127.0	NA	123.8	119.5	121.8	113.7	122.3	103.0	132.3	105.2
1998	126.5	113.1	121.2	182.9	135.8	129.2	NA	129.5	120.4	127.1	113.1	125.0	103.6	139.5	106.9
1999	135.3	114.9	126.9	202.3	143.1	129.5	NA	132.9	120.5	NA	113.5	128.5	103.1	143.5	111.6
2000	142.8	116.3	134.1	224.0	150.6	133.4	NA	141.1	128.0	NA	117.8	133.8	104.2	150.4	117.6

NA = not available.

Note: The data relate to employees (wage and salary earners) in Belgium, Denmark, Italy, and Taiwan and to all employed persons (employees and self-employed workers) in the other countries.

Source: U.S. Department of Labor, Bureau of Labor Statistics, April 2002.

Table 2. Output per employed person in manufacturing, 14 countries or areas, 1950-2000

[Indexes: 1992 = 100]

Year	United States	Canada	Japan	Korea	Taiwan	Belgium	Denmark	France	Germany (unified)	Former West Germany	Italy	Netherlands	Norway	Sweden	United Kingdom
1950	NA	28.8	NA	NA	NA	NA	31.8	16.2	NA	19.2	14.2	14.6	32.3	25.3	30.1
1955	NA	34.1	10.3	NA	NA	NA	34.0	20.2	NA	28.8	20.3	18.7	37.7	27.5	32.9
1960	NA	40.1	17.1	NA	NA	22.6	39.2	26.5	NA	38.4	25.7	24.4	46.7	33.3	36.5
1961	NA	42.1	19.1	NA	NA	22.9	40.2	28.3	NA	39.6	27.5	24.7	47.6	34.7	36.1
1962	NA	45.5	19.6	NA	NA	24.1	42.6	30.0	NA	41.3	29.5	25.4	47.4	37.1	36.5
1963	NA	47.5	21.0	NA	NA	25.0	43.3	31.7	NA	42.4	30.4	26.3	49.7	38.9	38.5
1964	NA	49.7	23.7	NA	NA	26.5	47.2	33.9	NA	46.1	30.7	28.5	52.8	41.8	41.3
1965	NA	52.1	24.3	NA	NA	27.4	49.5	35.9	NA	48.7	33.1	30.3	54.6	44.5	41.9
1966	NA	52.6	26.8	NA	NA	29.1	51.0	39.1	NA	50.0	36.4	32.1	57.1	46.4	42.6
1967	NA	53.2	30.4	NA	NA	30.3	54.1	41.1	NA	51.7	38.7	34.4	58.6	49.5	44.2
1968	NA	56.0	33.9	NA	NA	33.0	57.7	44.1	NA	56.6	41.8	37.9	60.7	52.9	48.0
1969	NA	58.6	38.3	NA	NA	35.7	59.3	48.1	NA	60.7	43.0	41.1	64.9	56.1	49.1
1970	NA	57.8	42.6	NA	NA	38.3	60.8	50.3	NA	62.4	44.9	44.0	66.3	57.4	49.4
1971	NA	61.0	44.5	NA	NA	40.2	64.6	52.8	NA	63.4	44.3	46.2	67.6	59.8	50.6
1972	NA	64.3	48.5	NA	NA	43.9	68.4	54.7	NA	66.6	46.8	49.2	70.0	61.1	52.9
1973	NA	67.9	52.4	NA	36.9	47.6	71.2	57.6	NA	70.4	51.7	53.4	73.9	64.4	57.5
1974	NA	68.5	51.5	NA	34.4	48.7	75.0	58.1	NA	71.4	52.9	55.6	75.6	66.5	56.6
1975	NA	64.8	51.8	NA	37.1	48.0	79.9	58.4	NA	72.5	49.1	53.8	74.5	66.2	55.2
1976	NA	70.3	56.5	NA	40.5	53.8	83.2	62.1	NA	79.9	56.2	59.6	74.2	66.4	58.1
1977	67.1	74.0	58.9	NA	42.6	56.1	84.1	65.2	NA	81.1	57.7	64.2	74.1	64.9	59.0
1978	67.9	76.0	61.5	NA	47.5	59.4	84.3	67.6	NA	82.8	60.6	67.7	73.9	64.9	59.6
1979	68.4	75.7	67.0	NA	49.2	62.6	88.4	70.6	NA	86.0	65.8	70.2	78.0	69.0	59.8
1980	67.9	74.0	68.0	NA	52.1	65.6	93.9	71.0	NA	83.5	68.9	71.3	77.0	69.3	57.4
1981	71.4	76.9	69.7	NA	54.9	68.7	94.3	72.1	NA	84.1	68.4	73.3	76.9	69.3	59.2
1982	72.1	75.7	72.3	NA	56.2	73.7	96.0	74.0	NA	83.7	68.5	75.4	79.4	72.1	62.9
1983	77.8	81.5	73.4	NA	59.8	79.2	102.1	75.4	NA	87.9	70.0	81.5	82.5	78.3	67.7
1984	82.0	89.3	76.6	NA	61.9	82.5	101.2	76.7	NA	90.9	75.9	88.1	87.4	84.0	71.4
1985	84.9	91.9	82.1	60.7	62.0	85.7	98.4	79.2	NA	93.1	80.2	89.5	89.8	84.4	73.8
1986	84.8	89.6	81.2	66.3	69.0	86.5	94.9	80.6	NA	93.0	83.1	90.9	88.7	85.3	76.4
1987	92.1	91.1	86.0	70.0	75.4	88.4	92.2	82.6	NA	91.3	86.9	91.2	90.7	88.0	80.9
1988	96.9	93.4	90.9	74.2	78.2	93.0	95.8	88.6	NA	94.4	92.0	94.0	90.3	89.1	85.7
1989	95.7	93.9	94.8	76.0	83.8	97.5	100.2	92.9	NA	96.2	94.7	97.3	93.3	91.5	89.0
1990	96.3	94.9	99.7	83.2	88.8	98.5	98.4	94.1	NA	98.8	95.0	98.8	95.1	94.0	91.2
1991	96.6	95.3	102.2	92.7	96.6	99.2	99.3	96.4	NA	94.7	96.0	99.7	96.4	94.7	93.8
1992	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1993	103.4	106.0	99.6	108.3	102.9	100.9	103.6	100.5	99.4	97.6	99.8	101.5	100.9	110.0	104.8
1994	109.7	111.9	101.4	119.0	107.0	109.7	114.0	108.5	107.9	104.7	106.9	113.2	101.9	127.3	109.5
1995	115.6	113.1	109.7	130.5	114.9	113.3	116.9	113.9	110.6	107.3	112.2	118.4	101.6	131.2	109.0
1996	118.7	112.6	115.4	141.7	122.7	117.6	111.6	114.5	110.4	109.3	110.9	120.3	101.1	134.2	108.4
1997	123.9	115.7	119.6	160.1	129.2	127.7	121.4	122.7	115.9	116.0	114.2	122.0	101.9	142.9	109.2
1998	128.1	116.0	117.3	172.2	133.2	130.2	122.9	128.0	117.3	122.3	113.3	124.4	102.6	150.9	110.2
1999	137.9	118.9	122.5	205.7	141.2	132.8	124.5	130.7	116.8	NA	113.3	127.8	102.1	155.7	114.7
2000	144.5	120.3	131.6	225.0	148.4	137.2	131.7	134.1	123.0	NA	117.3	133.0	102.0	163.5	121.3

NA = not available.

Note: The data relate to employees (wage and salary earners) in Belgium, Denmark, Italy, and Taiwan and to all employed persons (employees and self-employed workers) in the other countries.

Source: U.S. Department of Labor, Bureau of Labor Statistics, April 2002.

Table 3. Output in manufacturing, 14 countries or areas, 1950-2000

[Indexes: 1992 = 100]

Year	United States	Canada	Japan	Korea	Taiwan	Belgium	Denmark	France	Germany (unified)	Former West Germany	Italy	Netherlands	Norway	Sweden	United Kingdom
1950	NA	22.5	2.2	NA	NA	NA	26.8	18.4	NA	14.5	10.1	16.7	38.5	30.9	49.6
1955	NA	29.1	4.9	NA	NA	NA	29.4	22.9	NA	27.5	15.6	22.8	47.2	35.7	58.3
1960	NA	34.0	10.7	NA	NA	30.7	40.8	31.0	NA	41.5	23.0	31.5	57.0	45.9	67.3
1961	NA	35.4	12.9	NA	NA	32.1	43.0	33.3	NA	44.0	25.4	32.6	59.4	49.0	67.6
1962	NA	39.3	14.0	NA	NA	34.6	46.7	35.7	NA	46.2	28.1	34.2	59.8	52.8	67.7
1963	NA	42.0	15.6	NA	NA	36.2	47.3	38.4	NA	47.1	29.9	35.7	63.4	55.4	70.2
1964	NA	45.9	18.1	NA	NA	39.5	52.9	42.0	NA	51.2	30.3	39.0	67.9	60.3	76.5
1965	NA	50.5	18.8	NA	NA	40.8	56.3	44.1	NA	55.0	31.9	41.7	71.5	64.5	78.7
1966	NA	53.9	21.3	NA	NA	43.2	57.5	48.1	NA	55.9	34.8	44.0	75.8	66.3	80.1
1967	NA	55.0	25.6	NA	NA	43.7	58.1	50.4	NA	54.7	38.3	45.7	78.2	68.5	80.6
1968	NA	58.1	29.5	NA	NA	46.7	62.6	53.2	NA	60.3	41.8	50.1	80.1	72.0	86.6
1969	NA	61.9	34.4	NA	NA	52.2	66.0	59.6	NA	67.4	44.5	54.9	86.0	77.7	89.9
1970	NA	60.0	39.2	7.0	12.7	57.6	68.0	64.1	NA	70.9	48.1	59.1	89.9	80.7	90.2
1971	NA	63.7	41.0	8.3	15.5	60.1	69.4	68.1	NA	71.6	48.8	61.1	92.3	81.2	89.3
1972	NA	69.2	44.7	9.5	18.9	64.7	75.3	71.3	NA	73.8	51.5	62.7	96.5	81.7	91.2
1973	NA	76.4	50.4	12.3	22.3	70.6	79.5	76.7	NA	78.5	58.1	67.2	102.0	87.5	99.7
1974	NA	77.9	49.1	14.3	21.0	73.4	80.7	78.2	NA	77.7	61.8	69.7	105.6	92.2	98.4
1975	NA	71.8	46.6	16.2	22.0	67.9	78.7	76.6	NA	74.1	58.3	65.1	103.2	92.5	91.6
1976	NA	77.9	50.6	19.9	27.0	73.0	82.5	81.1	NA	79.8	66.9	69.1	102.8	92.5	93.3
1977	72.5	80.3	52.2	22.8	30.6	73.3	82.9	84.8	NA	81.3	69.3	72.5	102.7	87.2	95.2
1978	76.5	84.9	53.7	27.5	37.1	74.3	82.7	86.8	NA	82.8	72.7	74.8	100.6	84.9	95.7
1979	79.0	87.6	58.4	30.1	40.0	76.2	87.4	89.3	NA	87.1	80.3	76.7	104.7	90.3	95.5
1980	75.8	85.2	60.4	29.9	44.0	78.2	91.3	88.7	NA	85.3	84.4	76.8	103.6	90.7	87.2
1981	79.2	88.3	62.6	32.7	47.3	77.2	88.4	87.3	NA	84.4	81.8	77.0	101.7	88.0	81.8
1982	74.6	78.9	64.6	34.6	48.5	80.4	89.8	88.2	NA	81.5	80.2	76.1	101.3	88.3	81.7
1983	79.2	82.7	66.6	39.5	54.1	84.6	95.8	88.0	NA	82.7	79.6	78.5	99.9	93.9	83.5
1984	87.6	93.2	71.0	46.0	62.2	87.2	100.3	87.0	NA	85.2	82.2	83.0	104.7	101.3	86.5
1985	90.0	98.1	76.7	48.8	64.3	89.1	103.5	87.3	NA	88.3	84.9	85.4	108.5	102.9	89.0
1986	88.6	98.9	75.5	57.9	74.7	89.1	103.5	87.3	NA	89.7	86.4	87.6	108.1	104.0	90.2
1987	96.4	103.6	79.0	68.5	84.3	88.8	99.3	87.2	NA	88.0	89.0	88.8	110.7	106.6	94.5
1988	103.2	109.9	85.3	76.7	87.7	93.3	100.8	92.2	NA	90.9	95.0	92.1	105.3	109.8	101.4
1989	102.4	112.1	90.9	79.4	90.8	99.1	104.3	97.2	NA	94.0	98.3	96.6	101.3	110.9	105.5
1990	101.6	107.5	97.1	86.7	90.0	101.0	102.7	99.1	NA	99.1	99.4	99.9	100.2	110.1	105.3
1991	98.3	99.2	102.0	95.0	96.1	100.7	101.7	99.8	102.3	102.8	99.3	100.4	98.3	104.1	100.0
1992	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1993	103.5	105.0	96.3	105.4	102.4	97.0	99.0	95.7	92.5	91.8	96.5	98.4	102.7	101.9	101.4
1994	111.1	113.0	94.9	116.8	108.5	101.4	109.3	100.3	95.2	93.5	102.4	104.6	106.7	117.1	106.1
1995	118.4	118.5	98.9	129.9	114.9	104.2	114.7	104.9	95.3	93.7	107.2	108.1	109.0	128.4	107.8
1996	121.3	120.0	103.0	138.7	120.3	106.6	109.7	104.6	92.6	92.5	105.4	108.7	110.1	131.1	108.5
1997	127.9	127.3	106.5	147.8	128.3	113.8	118.5	109.7	95.7	95.8	108.8	111.5	115.7	138.0	109.9
1998	133.1	132.5	100.2	136.8	132.6	116.4	120.8	115.0	97.2	100.7	110.5	114.8	117.7	147.6	110.8
1999	141.2	140.8	101.9	165.6	141.5	118.0	119.8	117.3	95.9	NA	110.2	118.1	114.0	153.6	111.1
2000	147.0	148.8	107.6	191.1	151.8	122.2	125.8	121.2	101.7	NA	113.9	123.7	110.9	163.4	113.3

NA = not available.

Source: U.S. Department of Labor, Bureau of Labor Statistics, April 2002.

Table 4. Total hours in manufacturing, 14 countries or areas, 1950-2000

[Indexes: 1992 = 100]

Year	United States	Canada	Japan	Korea	Taiwan	Belgium	Denmark	France	Germany (unified)	Former West Germany	Italy	Netherlands	Norway	Sweden	United Kingdom
1950	85.5	84.8	NA	NA	NA	NA	118.7	137.1	NA	109.8	78.7	148.5	156.1	158.5	202.2
1955	94.6	89.4	57.0	NA	NA	NA	119.8	136.0	NA	139.6	87.1	158.9	164.2	167.3	220.2
1960	92.1	88.3	77.8	NA	NA	170.7	136.5	141.2	NA	142.3	102.3	170.5	154.1	168.3	224.6
1961	89.7	87.2	82.4	NA	NA	175.9	136.2	142.8	NA	143.9	104.4	167.0	154.9	171.0	224.7
1962	93.4	90.3	85.2	NA	NA	180.3	140.7	144.0	NA	140.8	104.3	169.0	156.3	170.8	220.3
1963	94.4	92.6	87.9	NA	NA	181.8	138.0	147.3	NA	138.1	108.2	169.3	157.3	169.1	216.6
1964	96.4	97.2	90.0	NA	NA	186.5	142.6	149.1	NA	138.0	108.5	169.8	159.6	169.6	221.7
1965	102.0	101.9	89.8	NA	NA	183.2	144.9	146.4	NA	140.0	102.4	170.2	158.5	168.8	221.5
1966	108.6	106.8	92.8	NA	NA	181.5	140.8	147.8	NA	136.7	103.0	168.2	161.2	166.5	218.2
1967	108.0	107.9	98.3	NA	NA	173.6	132.7	145.8	NA	125.9	107.8	162.5	160.5	158.4	209.8
1968	109.6	108.2	101.4	NA	NA	170.9	130.9	139.3	NA	128.3	109.2	158.6	155.0	152.6	209.6
1969	110.9	109.7	103.0	NA	NA	174.9	132.7	146.9	NA	133.8	112.2	158.3	152.1	152.5	212.4
1970	104.4	107.1	104.4	NA	NA	174.7	129.0	148.9	NA	136.3	113.8	156.1	154.3	154.7	208.8
1971	100.5	107.4	103.1	NA	NA	171.4	123.3	149.6	NA	132.5	113.7	152.3	153.8	149.1	196.9
1972	105.1	110.8	102.6	NA	NA	165.2	123.8	149.8	NA	128.7	112.9	144.8	153.0	142.9	190.5
1973	110.4	114.9	106.0	NA	67.4	162.1	118.8	150.6	NA	128.4	116.8	140.0	152.5	142.5	194.1
1974	107.9	115.5	100.6	NA	65.6	160.4	116.7	150.2	NA	122.9	117.2	135.2	151.9	144.0	188.5
1975	97.2	111.1	92.8	NA	65.1	142.6	103.5	142.2	NA	112.5	116.8	128.1	150.0	142.3	179.3
1976	101.9	111.1	95.1	NA	73.7	139.4	104.7	141.8	NA	113.1	117.3	122.5	145.8	140.2	175.1
1977	106.1	108.8	94.4	NA	79.3	133.3	103.1	140.0	NA	111.8	117.8	119.0	143.6	134.2	176.9
1978	110.6	112.8	93.4	NA	85.5	127.4	101.4	137.2	NA	110.1	117.4	115.1	138.3	127.1	175.4
1979	112.7	116.2	93.8	NA	88.7	124.2	102.1	134.8	NA	111.0	118.3	112.5	134.0	125.5	173.7
1980	107.5	114.6	95.6	NA	92.3	119.7	101.1	133.2	NA	110.5	119.3	111.7	135.0	124.0	160.5
1981	107.0	113.2	95.9	NA	89.7	110.2	96.3	127.4	NA	107.1	116.3	109.3	133.0	121.0	143.3
1982	97.9	102.0	95.1	NA	89.6	109.4	97.5	120.2	NA	103.4	113.6	106.2	127.1	117.2	135.6
1983	98.9	100.7	96.8	NA	94.0	104.3	99.2	117.4	NA	100.1	110.4	101.5	121.2	116.1	128.4
1984	105.3	103.4	99.8	NA	105.2	102.6	104.4	114.2	NA	99.7	105.2	97.8	119.7	118.9	126.4
1985	104.6	106.4	100.3	88.8	105.5	102.4	107.0	110.4	NA	99.1	101.8	96.6	120.2	119.4	125.2
1986	103.0	110.5	99.2	98.3	112.2	101.5	113.7	108.6	NA	100.1	102.5	97.2	121.6	118.9	122.0
1987	103.8	114.7	98.5	108.3	115.8	100.0	109.6	106.5	NA	99.9	102.9	97.6	118.6	119.5	121.0
1988	106.6	121.2	101.7	111.6	114.8	101.5	107.2	105.4	NA	99.3	107.4	98.9	114.3	121.4	122.8
1989	107.1	120.2	102.7	108.5	109.2	102.3	104.7	105.8	NA	99.3	107.6	99.7	107.1	119.0	122.4
1990	104.8	113.5	102.9	106.6	101.3	104.3	103.7	105.9	NA	100.1	105.9	101.4	103.7	116.4	118.1
1991	100.4	103.9	103.1	103.9	99.5	101.5	102.1	103.1	104.1	100.9	103.6	100.9	100.8	109.0	106.6
1992	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1993	101.4	100.1	94.7	97.5	99.6	94.7	94.8	95.1	90.8	91.3	94.9	96.8	102.1	94.9	97.6
1994	103.6	103.0	91.9	98.9	101.6	93.6	NA	92.4	86.8	86.7	96.5	92.4	105.2	98.1	99.1
1995	104.0	106.4	89.1	100.6	99.8	92.0	NA	91.5	84.9	84.3	96.4	91.5	106.8	105.3	102.7
1996	103.6	109.0	88.7	97.3	97.7	91.1	NA	90.7	81.2	80.4	95.1	90.4	107.9	105.3	104.5
1997	105.5	112.4	88.0	90.5	99.3	89.6	NA	88.6	80.1	78.6	95.7	91.1	112.3	104.3	104.5
1998	105.2	117.1	82.7	74.8	97.7	90.1	NA	88.8	80.7	79.3	97.7	91.8	113.6	105.8	103.6
1999	104.3	122.6	80.3	81.9	98.9	91.1	NA	88.3	79.6	NA	97.1	92.0	110.6	107.1	99.5
2000	102.9	128.0	80.2	85.3	100.8	91.7	NA	85.9	79.5	NA	96.7	92.5	106.4	108.6	96.3

NA = not available.

Note: The data relate to employees (wage and salary earners) in Belgium, Denmark, Italy, and Taiwan and to all employed persons (employees and self-employed workers) in the other countries.

Source: U.S. Department of Labor, Bureau of Labor Statistics, April 2002.

Table 5. Employment in manufacturing, 14 countries or areas, 1950-2000

[Indexes: 1992 = 100]

Year	United States	Canada	Japan	Korea	Taiwan	Belgium	Denmark	France	Germany (unified)	Former West Germany	Italy	Netherlands	Norway	Sweden	United Kingdom
1950	84.3	77.9	NA	NA	NA	NA	84.4	113.7	NA	75.2	71.4	114.1	119.2	122.0	164.7
1955	93.1	85.3	47.8	NA	NA	NA	86.7	113.3	NA	95.5	77.1	121.8	125.1	129.7	177.2
1960	92.6	84.8	62.8	NA	NA	135.7	104.1	116.9	NA	108.1	89.5	129.4	122.2	137.8	184.4
1961	90.0	84.1	67.5	NA	NA	140.1	107.0	117.7	NA	111.3	92.4	132.2	124.8	141.3	187.0
1962	92.8	86.5	71.3	NA	NA	143.3	109.7	118.9	NA	111.8	95.3	134.7	126.2	142.2	185.3
1963	93.5	88.5	74.1	NA	NA	144.7	109.3	121.5	NA	111.0	98.3	135.4	127.7	142.4	182.3
1964	94.9	92.5	76.4	NA	NA	148.8	112.0	123.7	NA	111.0	98.6	137.1	128.8	144.3	185.1
1965	99.3	96.9	77.4	NA	NA	148.7	113.9	122.5	NA	113.0	96.3	137.9	130.8	144.8	187.6
1966	105.4	102.4	79.7	NA	NA	148.5	112.8	123.2	NA	111.8	95.7	137.0	132.7	143.0	188.1
1967	106.7	103.3	84.3	NA	NA	143.9	107.5	122.7	NA	105.8	98.8	132.9	133.5	138.3	182.3
1968	108.5	103.8	87.2	NA	NA	141.5	108.5	120.6	NA	106.6	100.2	132.1	132.0	136.0	180.5
1969	110.6	105.7	89.7	NA	NA	146.3	111.4	124.1	NA	111.0	103.6	133.7	132.6	138.4	183.0
1970	106.3	103.9	91.9	NA	NA	150.2	111.9	127.3	NA	113.6	107.0	134.3	135.5	140.6	182.7
1971	102.2	104.4	92.3	NA	NA	149.6	107.3	128.9	NA	112.9	109.9	132.2	136.4	135.9	176.5
1972	105.0	107.7	92.3	NA	NA	147.4	110.1	130.4	NA	110.8	110.0	127.5	137.8	133.8	172.3
1973	110.5	112.5	96.2	NA	60.3	148.4	111.6	133.2	NA	111.5	112.4	125.8	138.1	135.8	173.3
1974	110.1	113.9	95.3	NA	61.2	150.7	107.6	134.6	NA	108.9	116.9	125.4	139.6	138.7	174.0
1975	100.6	110.9	90.0	NA	59.3	141.5	98.5	131.2	NA	102.2	118.5	121.0	138.6	139.8	166.0
1976	104.2	110.7	89.5	NA	66.7	135.8	99.2	130.5	NA	99.9	119.1	116.0	138.4	139.4	160.7
1977	108.2	108.5	88.6	NA	71.9	130.5	98.5	130.0	NA	100.3	120.1	113.1	138.6	134.5	161.3
1978	112.7	111.7	87.4	NA	78.1	125.0	98.0	128.4	NA	100.0	120.0	110.5	136.1	130.7	160.6
1979	115.6	115.7	87.2	NA	81.4	121.8	98.8	126.5	NA	101.2	121.9	109.3	134.2	131.0	159.7
1980	111.6	115.1	88.9	NA	84.4	119.3	97.2	125.0	NA	102.2	122.6	107.8	134.5	130.9	151.8
1981	111.0	114.8	89.8	NA	86.2	112.4	93.8	121.0	NA	100.3	119.6	105.0	132.3	127.0	138.1
1982	103.5	104.3	89.3	NA	86.3	109.2	93.6	119.1	NA	97.4	117.1	101.0	127.6	122.4	129.9
1983	101.8	101.6	90.8	NA	90.5	106.8	93.9	116.7	NA	94.1	113.7	96.4	121.0	119.9	123.3
1984	106.8	104.4	92.7	NA	100.4	105.7	99.1	113.4	NA	93.7	108.4	94.2	119.8	120.5	121.3
1985	106.0	106.8	93.5	80.3	103.7	104.0	105.2	110.3	NA	94.9	105.8	95.4	120.7	122.0	120.6
1986	104.5	110.4	93.0	87.3	108.4	103.0	109.1	108.3	NA	96.4	103.9	96.5	122.0	121.9	118.0
1987	104.7	113.7	91.9	97.9	111.8	100.5	107.7	105.6	NA	96.4	102.5	97.4	122.0	121.1	116.9
1988	106.6	117.6	93.9	103.4	112.2	100.4	105.3	104.1	NA	96.3	103.3	98.0	116.6	123.3	118.3
1989	107.0	119.4	95.9	104.4	108.3	101.7	104.1	104.7	NA	97.6	103.8	99.3	108.7	121.2	118.6
1990	105.4	113.2	97.5	104.3	101.4	102.5	104.3	105.4	NA	100.3	104.6	101.1	105.4	117.2	115.4
1991	101.8	104.1	99.8	102.5	99.5	101.5	102.4	103.6	108.0	101.8	103.5	100.7	101.9	109.9	106.6
1992	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1993	100.1	99.1	96.8	97.3	99.6	96.1	95.5	95.2	93.0	94.0	96.8	96.9	101.8	92.6	96.7
1994	101.3	100.9	93.6	98.1	101.4	92.5	95.8	92.4	88.2	89.3	95.8	92.4	104.7	92.0	97.0
1995	102.5	104.8	90.1	99.6	99.9	91.9	98.1	92.1	86.2	87.3	95.6	91.3	107.2	97.9	98.9
1996	102.2	106.6	89.3	97.9	98.1	90.7	98.3	91.3	83.8	84.6	95.1	90.3	108.9	97.6	100.1
1997	103.2	110.0	89.1	92.3	99.3	89.1	97.5	89.4	82.6	82.6	95.3	91.4	113.6	96.6	100.6
1998	104.0	114.2	85.5	79.5	99.6	89.4	98.3	89.8	82.9	82.4	97.5	92.2	114.7	97.8	100.5
1999	102.4	118.5	83.2	80.5	100.2	88.8	96.2	89.7	82.1	NA	97.3	92.4	111.6	98.7	96.9
2000	101.7	123.7	81.7	84.9	102.3	89.1	95.6	90.4	82.7	NA	97.1	93.0	108.7	100.0	93.4

NA = not available.

Note: The data relate to employees (wage and salary earners) in Belgium, Denmark, Italy, and Taiwan and to all employed persons (employees and self-employed workers) in the other countries.

Source: U.S. Department of Labor, Bureau of Labor Statistics, April 2002.

Table 6. Average annual hours in manufacturing, 14 countries or areas, 1950-2000

[Indexes: 1992 = 100]

Year	United States	Canada	Japan	Korea	Taiwan	Belgium	Denmark	France	Germany (unified)	Former West Germany	Italy	Netherlands	Norway	Sweden	United Kingdom
1950	101.4	108.8	NA	NA	NA	NA	140.7	120.6	NA	146.0	110.2	130.2	130.9	129.9	122.7
1955	101.5	104.8	119.3	NA	NA	NA	138.2	120.1	NA	146.1	113.0	130.5	131.2	129.0	124.3
1960	99.5	104.1	123.9	NA	NA	125.8	131.2	120.8	NA	131.7	114.3	131.8	126.1	122.1	121.8
1961	99.6	103.6	122.0	NA	NA	125.5	127.3	121.3	NA	129.4	113.1	126.3	124.2	121.1	120.1
1962	100.6	104.4	119.5	NA	NA	125.8	128.3	121.1	NA	126.0	109.5	125.4	123.8	120.1	118.9
1963	100.9	104.7	118.6	NA	NA	125.7	126.3	121.2	NA	124.4	110.0	125.0	123.2	118.8	118.8
1964	101.6	105.1	117.9	NA	NA	125.3	127.4	120.5	NA	124.3	110.0	123.9	124.0	117.5	119.8
1965	102.7	105.2	115.9	NA	NA	123.2	127.2	119.4	NA	123.9	106.4	123.5	121.1	116.6	118.1
1966	103.0	104.4	116.5	NA	NA	122.2	124.8	120.0	NA	122.3	107.6	122.8	121.4	116.4	116.0
1967	101.2	104.5	116.7	NA	NA	120.7	123.4	118.9	NA	119.0	109.1	122.3	120.3	114.5	115.1
1968	101.0	104.2	116.4	NA	NA	120.7	120.6	115.5	NA	120.4	109.1	120.1	117.4	112.2	116.1
1969	100.2	103.9	114.8	NA	NA	119.5	119.1	118.4	NA	120.6	108.3	118.4	114.7	110.2	116.1
1970	98.2	103.2	113.6	NA	NA	116.3	115.3	117.0	NA	119.9	106.4	116.2	113.9	110.0	114.3
1971	98.4	102.8	111.8	NA	NA	114.6	114.9	116.1	NA	117.3	103.4	115.1	112.7	109.7	111.6
1972	100.0	102.9	111.1	NA	NA	112.0	112.4	114.9	NA	116.2	102.7	113.5	111.0	106.8	110.5
1973	99.9	102.1	110.2	NA	111.7	109.3	106.4	113.1	NA	115.2	103.9	111.3	110.4	104.9	112.0
1974	98.0	101.5	105.6	NA	107.3	106.4	108.5	111.6	NA	112.9	100.3	107.9	108.9	103.8	108.4
1975	96.6	100.2	103.2	NA	109.9	100.7	105.1	108.3	NA	110.1	98.5	105.9	108.2	101.8	108.0
1976	97.7	100.3	106.2	NA	110.5	102.6	105.6	108.7	NA	113.2	98.5	105.7	105.4	100.6	109.0
1977	98.1	100.3	106.5	NA	110.4	102.1	104.6	107.7	NA	111.5	98.0	105.2	103.6	99.8	109.7
1978	98.1	101.0	106.9	NA	109.6	101.9	103.4	106.8	NA	110.1	97.8	104.2	101.6	97.2	109.2
1979	97.5	100.5	107.6	NA	109.0	102.0	103.3	106.6	NA	109.7	97.1	103.0	99.9	95.8	108.8
1980	96.3	99.6	107.6	NA	109.3	100.4	104.0	106.6	NA	108.1	97.3	103.6	100.4	94.8	105.7
1981	96.4	98.7	106.8	NA	104.1	98.1	102.7	105.3	NA	106.8	97.3	104.1	100.6	95.3	103.7
1982	94.6	97.8	106.5	NA	103.9	100.2	104.2	100.9	NA	106.2	97.1	105.2	99.7	95.7	104.4
1983	97.2	99.1	106.6	NA	103.9	97.7	105.6	100.6	NA	106.4	97.1	105.3	100.1	96.9	104.1
1984	98.6	99.0	107.7	NA	104.8	97.1	105.3	100.7	NA	106.4	97.1	103.8	99.9	98.6	104.3
1985	98.7	99.6	107.3	110.6	101.7	98.5	101.8	100.1	NA	104.5	96.2	101.2	99.6	97.9	103.8
1986	98.6	100.1	106.7	112.6	103.5	98.6	104.2	100.3	NA	103.9	98.6	100.7	99.7	97.5	103.4
1987	99.1	100.9	107.2	110.7	103.6	99.4	101.8	100.9	NA	103.6	100.4	100.2	97.2	98.7	103.6
1988	100.0	103.0	108.3	108.0	102.3	101.1	101.8	101.2	NA	103.2	104.0	101.0	98.0	98.5	103.8
1989	100.0	100.7	107.1	103.9	100.8	100.6	100.6	101.0	NA	101.7	103.7	100.4	98.6	98.2	103.2
1990	99.4	100.2	105.6	102.3	99.9	101.8	99.4	100.5	NA	99.8	101.2	100.4	98.4	99.3	102.3
1991	98.7	99.8	103.2	101.4	100.0	100.0	99.7	99.5	96.3	99.1	100.1	100.1	98.9	99.2	100.1
1992	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1993	101.3	101.0	97.9	100.2	100.0	98.5	99.2	99.9	97.6	97.0	98.0	99.9	100.3	102.6	100.9
1994	102.2	102.0	98.1	100.8	100.2	101.2	NA	99.9	98.4	97.1	100.7	100.0	100.5	106.6	102.2
1995	101.5	101.6	98.8	101.0	99.9	100.1	NA	99.3	98.5	96.5	100.8	100.2	99.6	107.6	103.9
1996	101.5	102.3	99.4	99.4	99.7	100.5	NA	99.4	96.9	95.0	100.0	100.1	99.1	107.9	104.4
1997	102.2	102.2	98.8	98.0	100.0	100.6	NA	99.1	97.0	95.2	100.4	99.7	98.9	108.0	103.8
1998	101.2	102.6	96.7	94.1	98.1	100.8	NA	98.9	97.4	96.2	100.2	99.5	99.1	108.2	103.1
1999	101.9	103.5	96.6	101.7	98.7	102.6	NA	98.4	97.0	NA	99.8	99.5	99.0	108.5	102.7
2000	101.2	103.4	98.1	100.4	98.5	102.9	NA	95.0	96.1	NA	99.6	99.4	97.9	108.7	103.1

NA = not available.

Note: The data relate to employees (wage and salary earners) in Belgium, Denmark, Italy, and Taiwan and to all employed persons (employees and self-employed workers) in the other countries.

Source: U.S. Department of Labor, Bureau of Labor Statistics, April 2002.

Table 7. Hourly compensation in manufacturing, national currency basis, 14 countries or areas, 1950-2000

[Indexes: 1992 = 100]

Year	United States	Canada*	Japan	Korea	Taiwan	Belgium	Denmark	France*	Germany (unified)	Former West Germany	Italy	Netherlands	Norway	Sweden*	United Kingdom*
1950	8.7	5.4	NA	NA	NA	NA	2.5	1.6	NA	3.4	0.9	3.1	2.2	1.9	1.5
1955	11.7	7.7	3.1	NA	NA	NA	3.4	2.8	NA	5.0	1.3	4.5	3.4	2.9	2.2
1960	14.9	10.0	4.3	NA	NA	5.4	4.6	4.3	NA	8.1	1.7	6.4	4.7	4.1	3.0
1961	15.3	10.2	5.0	NA	NA	5.7	5.2	4.7	NA	9.1	1.9	7.3	5.2	4.5	3.2
1962	15.9	10.6	5.7	NA	NA	6.2	5.6	5.2	NA	10.3	2.2	7.8	5.7	5.0	3.3
1963	16.4	11.1	6.4	NA	NA	6.8	6.1	5.7	NA	11.0	2.6	8.6	6.1	5.5	3.5
1964	17.0	11.5	7.2	NA	NA	7.7	6.6	6.2	NA	11.9	2.8	9.9	6.5	6.0	3.7
1965	17.4	12.2	8.1	NA	NA	8.5	7.4	6.7	NA	13.1	3.0	11.1	7.2	6.6	4.0
1966	18.2	13.1	8.9	NA	NA	9.4	8.4	7.1	NA	14.2	3.2	12.5	7.8	7.3	4.4
1967	19.2	13.8	10.0	NA	NA	10.3	9.4	7.6	NA	15.0	3.5	13.8	8.8	8.1	4.5
1968	20.7	14.7	11.6	NA	NA	11.0	10.3	8.6	NA	16.1	3.8	15.4	9.6	8.8	4.8
1969	22.2	15.9	13.8	NA	NA	12.1	11.6	9.2	NA	17.6	4.1	17.5	10.6	9.6	5.3
1970	23.7	17.1	16.4	NA	NA	13.7	13.3	10.3	NA	20.7	5.0	20.2	11.8	10.7	6.1
1971	25.2	18.2	19.0	NA	NA	15.9	15.2	11.6	NA	23.2	5.8	23.1	13.5	12.1	6.9
1972	26.5	19.5	21.9	NA	NA	18.8	16.9	12.8	NA	25.6	6.4	26.5	15.2	13.5	8.0
1973	28.5	21.2	26.7	NA	9.5	22.3	20.5	14.7	NA	29.0	7.5	31.6	17.1	15.2	9.1
1974	31.6	24.6	35.0	NA	13.9	27.4	24.8	17.4	NA	33.0	9.8	37.7	20.1	17.9	11.0
1975	35.5	28.3	40.8	NA	14.9	33.1	29.6	21.3	NA	36.4	12.1	43.2	24.0	21.9	14.6
1976	38.4	32.5	43.9	NA	16.7	38.3	33.0	24.4	NA	39.1	15.1	48.2	27.7	25.7	16.9
1977	41.8	36.1	48.5	NA	18.2	41.4	36.5	27.7	NA	42.8	18.0	52.5	31.1	28.1	19.1
1978	45.2	38.8	51.7	NA	20.5	44.4	40.2	31.2	NA	45.9	20.5	56.9	34.1	31.1	22.3
1979	49.6	42.7	55.0	NA	24.3	47.2	45.0	35.4	NA	49.3	24.8	61.1	35.8	33.5	26.5
1980	55.6	47.6	58.5	NA	29.6	52.5	49.6	40.8	NA	53.6	29.0	64.4	39.0	37.3	32.1
1981	61.1	53.8	62.6	NA	38.0	57.3	54.6	47.2	NA	57.0	34.5	67.5	43.3	41.2	37.4
1982	67.0	61.0	65.7	NA	41.5	59.9	59.5	56.1	NA	60.4	40.2	71.6	48.2	44.2	41.2
1983	68.8	65.3	67.5	NA	43.3	65.7	63.6	61.9	NA	63.1	46.3	74.9	52.9	49.0	44.4
1984	71.2	69.0	69.5	NA	46.2	71.4	67.2	67.2	NA	66.0	53.1	77.7	57.9	53.2	48.1
1985	75.1	71.9	72.4	33.1	49.5	75.3	71.7	72.8	NA	70.0	60.2	81.9	63.4	58.6	52.9
1986	78.5	73.0	76.0	35.2	55.7	77.3	73.2	75.8	NA	72.8	63.2	85.1	69.1	63.4	57.6
1987	80.7	74.7	77.8	40.3	60.9	79.7	80.1	78.6	NA	76.0	67.3	87.9	78.4	67.6	64.3
1988	84.0	77.5	79.1	50.0	65.6	81.1	82.9	81.6	NA	79.1	70.3	87.8	83.3	71.8	68.8
1989	86.6	82.6	84.0	57.6	74.3	85.9	87.7	86.0	NA	83.2	77.4	88.6	87.2	79.4	73.8
1990	90.8	88.3	90.5	68.5	85.3	90.1	92.7	90.6	NA	89.4	85.8	90.9	92.3	87.8	82.9
1991	95.6	95.0	96.4	86.1	93.5	97.3	95.9	96.2	91.5	95.1	94.2	95.3	97.5	95.5	93.8
1992	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1993	102.7	102.0	102.8	114.0	106.0	104.8	104.6	103.1	106.4	105.9	106.1	103.8	101.5	97.4	104.7
1994	105.6	103.7	104.9	129.5	111.1	106.1	NA	105.6	111.7	111.7	108.1	108.2	104.4	100.0	106.8
1995	107.9	106.0	108.3	158.1	120.3	109.2	NA	108.5	117.6	117.7	114.6	110.7	109.2	106.5	107.9
1996	109.4	107.0	109.2	184.1	128.2	110.9	NA	110.3	122.4	123.7	122.0	113.0	113.6	114.4	109.5
1997	111.4	109.3	112.9	197.7	132.3	114.9	NA	113.1	124.7	126.6	127.2	115.8	118.7	119.4	113.8
1998	117.4	111.6	115.8	214.8	140.2	116.6	NA	115.7	126.5	127.6	125.6	120.6	126.1	124.4	120.5
1999	122.1	113.1	115.2	211.1	144.0	118.3	NA	118.7	129.3	NA	129.4	124.0	133.4	127.5	129.6
2000	130.7	117.0	114.5	224.4	146.2	121.1	NA	125.7	133.5	NA	133.6	131.0	140.1	130.7	134.7

NA = not available.

* Compensation adjusted to include changes in employment taxes that are not compensation to employees, but are labor costs to employers.

Note: The data relate to employees (wage and salary earners) in Belgium, Denmark, Italy, and Taiwan and to all employed persons (employees and self-employed workers) in the other countries.

Source: U.S. Department of Labor, Bureau of Labor Statistics, April 2002.

Table 8. Hourly compensation in manufacturing, U.S. dollar basis, 14 countries or areas, 1950-2000

[Indexes: 1992 = 100]

Year	United States	Canada*	Japan	Korea	Taiwan	Belgium	Denmark	France*	Germany (unified)	Former West Germany	Italy	Netherlands	Norway	Sweden*	United Kingdom*
1950	8.7	6.0	NA	NA	NA	NA	2.2	2.4	NA	1.3	1.8	1.4	1.9	2.1	2.5
1955	11.7	9.5	1.1	NA	NA	NA	3.0	4.3	NA	1.9	2.5	2.1	2.9	3.3	3.5
1960	14.9	12.4	1.5	NA	NA	3.5	4.0	4.6	NA	3.0	3.4	3.0	4.1	4.6	4.7
1961	15.3	12.2	1.8	NA	NA	3.7	4.5	5.1	NA	3.5	3.7	3.5	4.5	5.0	5.0
1962	15.9	12.0	2.0	NA	NA	4.0	4.9	5.6	NA	4.0	4.4	3.8	5.0	5.6	5.3
1963	16.4	12.4	2.2	NA	NA	4.4	5.4	6.1	NA	4.3	5.2	4.2	5.3	6.2	5.5
1964	17.0	12.9	2.5	NA	NA	5.0	5.8	6.7	NA	4.7	5.5	4.8	5.6	6.8	5.8
1965	17.4	13.7	2.8	NA	NA	5.5	6.4	7.2	NA	5.1	5.9	5.4	6.2	7.5	6.4
1966	18.2	14.7	3.1	NA	NA	6.1	7.3	7.6	NA	5.5	6.3	6.1	6.8	8.2	6.9
1967	19.2	15.4	3.5	NA	NA	6.7	8.1	8.2	NA	5.9	6.9	6.8	7.6	9.1	7.0
1968	20.7	16.5	4.1	NA	NA	7.1	8.3	9.2	NA	6.3	7.4	7.5	8.4	9.9	6.6
1969	22.2	17.9	4.9	NA	NA	7.7	9.3	9.4	NA	7.0	8.1	8.5	9.3	10.8	7.1
1970	23.7	19.8	5.8	NA	NA	8.9	10.7	9.9	NA	8.9	9.8	9.8	10.3	12.0	8.3
1971	25.2	21.7	6.9	NA	NA	10.5	12.4	11.1	NA	10.4	11.5	11.6	11.9	13.8	9.6
1972	26.5	23.8	9.1	NA	NA	13.7	14.7	13.4	NA	12.6	13.4	14.5	14.3	16.5	11.4
1973	28.5	25.6	12.5	NA	6.3	18.5	20.5	17.5	NA	17.1	15.9	20.0	18.5	20.3	12.7
1974	31.6	30.5	15.2	NA	9.2	22.6	24.6	19.2	NA	19.9	18.5	24.7	22.6	23.5	14.5
1975	35.5	33.7	17.4	NA	9.9	29.0	31.1	26.3	NA	23.1	22.8	30.1	28.6	30.8	18.4
1976	38.4	39.9	18.8	NA	11.0	31.9	32.9	27.0	NA	24.3	22.4	32.1	31.6	34.3	17.3
1977	41.8	41.1	22.9	NA	12.1	37.1	36.7	29.8	NA	28.8	25.2	37.7	36.3	36.7	18.9
1978	45.2	41.2	31.4	NA	13.9	45.4	44.1	36.7	NA	35.8	29.8	46.3	40.4	40.2	24.2
1979	49.6	44.0	32.0	NA	16.9	51.7	51.6	44.0	NA	42.0	36.8	53.6	43.9	45.6	31.9
1980	55.6	49.1	32.7	NA	20.7	57.7	53.2	51.1	NA	46.1	41.8	57.0	49.0	51.4	42.2
1981	61.1	54.2	36.0	NA	26.0	49.5	46.2	46.0	NA	39.3	37.3	47.5	46.9	47.4	42.8
1982	67.0	59.7	33.4	NA	26.7	42.1	43.0	45.1	NA	38.8	36.6	47.1	46.4	41.0	40.8
1983	68.8	64.0	36.0	NA	27.2	41.3	42.0	43.0	NA	38.6	37.6	46.2	45.0	37.2	38.1
1984	71.2	64.4	37.1	NA	29.3	39.7	39.2	40.7	NA	36.3	37.3	42.6	44.1	37.5	36.4
1985	75.1	63.6	38.5	30.2	31.2	40.8	40.9	42.9	NA	37.2	38.9	43.4	45.8	39.7	38.9
1986	78.5	63.5	57.2	31.2	37.0	55.6	54.6	57.9	NA	52.4	52.2	61.1	58.0	51.8	47.9
1987	80.7	68.1	68.2	38.3	48.3	68.6	70.6	69.2	NA	66.0	63.9	76.3	72.3	62.1	59.7
1988	84.0	76.2	78.2	53.5	57.7	70.9	74.3	72.5	NA	70.4	66.5	78.0	79.3	68.2	69.4
1989	86.6	84.3	77.1	67.0	70.8	70.1	72.3	71.4	NA	69.1	69.5	73.4	78.4	71.6	68.4
1990	90.8	91.5	79.1	75.6	79.7	86.6	90.4	88.0	NA	86.4	88.3	87.7	91.7	86.4	83.7
1991	95.6	100.1	90.8	91.7	87.9	91.5	90.5	90.2	86.0	89.4	93.5	89.5	93.3	91.9	93.9
1992	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1993	102.7	95.5	117.3	111.0	100.9	97.4	97.4	96.3	100.4	100.0	83.1	98.2	88.8	72.8	89.0
1994	105.6	91.7	130.1	126.0	105.6	102.1	NA	100.8	107.6	107.6	82.6	104.6	91.9	75.5	92.6
1995	107.9	93.3	146.2	160.5	114.2	119.1	NA	115.2	128.2	128.3	86.7	121.4	107.1	86.9	96.4
1996	109.4	94.8	127.2	179.4	117.4	115.1	NA	114.1	127.0	128.4	97.4	117.9	109.3	99.3	96.8
1997	111.4	95.3	118.3	163.7	115.6	103.1	NA	102.5	112.3	114.0	92.0	104.3	104.1	91.0	105.5
1998	117.4	90.9	112.0	120.4	105.1	103.2	NA	103.8	112.3	113.3	89.1	106.9	103.8	91.1	113.1
1999	122.1	92.0	128.4	139.2	112.1	100.5	NA	102.1	110.0	NA	87.7	105.4	106.2	89.8	118.7
2000	130.7	95.2	134.7	155.7	117.7	89.1	NA	93.6	98.4	NA	78.5	96.5	98.8	83.0	115.6

NA = not available.

* Compensation adjusted to include changes in employment taxes that are not compensation to employees, but are labor costs to employers.

Note: The data relate to employees (wage and salary earners) in Belgium, Denmark, Italy, and Taiwan and to all employed persons (employees and self-employed workers) in the other countries.

Source: U.S. Department of Labor, Bureau of Labor Statistics, April 2002.

Table 9. Unit labor costs in manufacturing, national currency basis, 14 countries or areas, 1950-2000

[Indexes: 1992 = 100]

Year	United States	Canada*	Japan	Korea	Taiwan	Belgium	Denmark	France*	Germany (unified)	Former West Germany	Italy	Netherlands	Norway	Sweden*	United Kingdom
1950	NA	20.5	NA	NA	NA	NA	11.0	12.0	NA	25.5	7.0	27.7	8.9	9.5	6.3
1955	NA	23.7	36.4	NA	NA	NA	13.8	16.8	NA	25.4	7.2	31.6	11.7	13.8	8.3
1960	NA	25.9	31.3	NA	NA	30.1	15.4	19.4	NA	27.8	7.5	34.6	12.8	15.0	9.8
1961	NA	25.2	32.1	NA	NA	31.5	16.3	20.2	NA	29.7	7.7	37.4	13.5	15.6	10.5
1962	NA	24.4	34.9	NA	NA	32.1	17.0	21.0	NA	31.5	8.2	38.5	14.9	16.2	10.8
1963	NA	24.4	36.1	NA	NA	34.2	17.9	21.7	NA	32.2	9.5	40.7	15.1	16.9	10.7
1964	NA	24.4	35.8	NA	NA	36.3	17.9	21.9	NA	32.1	10.0	43.2	15.2	16.9	10.7
1965	NA	24.6	38.7	NA	NA	38.3	18.9	22.2	NA	33.3	9.6	45.4	15.9	17.4	11.4
1966	NA	26.0	38.9	NA	NA	39.6	20.5	21.7	NA	34.7	9.4	47.7	16.7	18.2	11.9
1967	NA	27.1	38.5	NA	NA	40.9	21.4	22.0	NA	34.5	9.9	49.2	18.0	18.7	11.7
1968	NA	27.4	40.0	NA	NA	40.3	21.6	22.6	NA	34.3	9.8	48.8	18.7	18.5	11.7
1969	NA	28.2	41.4	NA	NA	40.4	23.4	22.6	NA	35.0	10.4	50.4	18.8	18.8	12.5
1970	NA	30.5	43.8	NA	23.8	41.7	25.2	24.0	NA	39.8	11.9	53.3	20.3	20.6	14.1
1971	NA	30.6	47.8	NA	24.8	45.2	27.1	25.5	NA	42.9	13.5	57.6	22.5	22.2	15.3
1972	NA	31.2	50.1	NA	24.9	47.9	27.8	26.9	NA	44.7	13.9	61.2	24.1	23.6	16.7
1973	NA	31.9	56.2	NA	28.8	51.2	30.6	28.8	NA	47.5	15.1	65.8	25.5	24.8	17.8
1974	NA	36.5	71.8	NA	43.5	59.9	35.9	33.5	NA	52.1	18.6	73.2	28.9	27.9	21.0
1975	NA	43.8	81.3	NA	44.2	69.5	38.9	39.5	NA	55.2	24.2	84.9	34.8	33.7	28.6
1976	NA	46.4	82.6	NA	45.5	73.1	41.8	42.6	NA	55.4	26.4	85.5	39.3	38.9	31.8
1977	61.2	48.9	87.6	NA	47.3	75.3	45.4	45.7	NA	58.8	30.7	86.2	43.5	43.3	35.5
1978	65.3	51.6	89.8	NA	47.4	76.1	49.3	49.4	NA	61.1	33.1	87.5	46.8	46.6	40.9
1979	70.7	56.7	88.4	NA	53.8	76.8	52.5	53.4	NA	62.9	36.6	89.7	45.8	46.6	48.2
1980	78.8	63.9	92.5	NA	62.2	80.3	55.0	61.3	NA	69.4	41.0	93.7	50.8	51.0	59.0
1981	82.4	69.0	96.0	NA	72.1	81.7	59.5	68.9	NA	72.4	49.0	95.8	56.6	56.6	65.4
1982	87.9	78.9	96.7	NA	76.8	81.5	64.6	76.5	NA	76.7	57.0	100.0	60.5	58.7	68.5
1983	86.0	79.4	98.0	NA	75.2	81.1	65.8	82.5	NA	76.4	64.2	96.9	64.2	60.7	68.3
1984	85.6	76.5	97.7	NA	78.1	84.0	69.9	88.2	NA	77.3	67.9	91.6	66.3	62.5	70.3
1985	87.3	78.0	94.6	60.4	81.3	86.5	74.2	92.0	NA	78.6	72.2	92.5	70.2	68.0	74.4
1986	91.2	81.5	99.9	59.8	83.5	88.0	80.4	94.3	NA	81.2	74.9	94.4	77.7	72.4	77.9
1987	86.9	82.8	97.0	63.8	83.7	89.7	88.4	96.1	NA	86.3	77.8	96.6	84.1	75.8	82.4
1988	86.7	85.5	94.3	72.8	85.9	88.1	88.2	93.3	NA	86.5	79.4	94.2	90.4	79.4	83.3
1989	90.5	88.6	94.9	78.7	89.5	88.7	88.1	93.5	NA	87.9	84.8	91.4	92.2	85.1	85.6
1990	93.7	93.3	95.9	84.2	95.9	93.0	93.6	96.8	NA	90.3	91.5	92.3	95.6	92.9	93.0
1991	97.6	99.5	97.4	94.1	96.8	98.1	96.3	99.3	93.1	93.3	98.2	95.6	100.0	100.0	100.1
1992	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1993	100.6	97.2	101.1	105.4	103.0	102.3	100.1	102.4	104.5	105.3	104.3	102.1	100.9	90.8	100.8
1994	98.5	94.5	101.5	109.8	104.1	97.9	93.0	97.3	101.9	103.6	101.9	95.6	102.9	83.8	99.7
1995	94.8	95.2	97.6	122.4	104.5	96.4	93.8	94.6	104.7	105.9	103.0	93.7	107.0	87.4	102.9
1996	93.5	97.2	94.0	129.1	104.1	94.7	100.9	95.7	107.4	107.5	110.0	94.0	111.4	91.9	105.5
1997	91.9	96.5	93.3	121.0	102.3	90.5	96.9	91.4	104.3	103.9	111.9	94.7	115.2	90.2	108.2
1998	92.8	98.6	95.5	117.4	103.2	90.2	98.7	89.4	105.1	100.4	111.1	96.5	121.7	89.2	112.7
1999	90.2	98.4	90.8	104.4	100.7	91.4	101.9	89.3	107.4	NA	114.0	96.6	129.5	88.8	116.1
2000	91.5	100.6	85.4	100.2	97.1	90.8	100.2	89.1	104.3	NA	113.4	97.9	134.5	86.9	114.5

NA = not available.

* Compensation adjusted to include changes in employment taxes that are not compensation to employees, but are labor costs to employers.

Note: The data relate to employees (wage and salary earners) in Belgium, Denmark, Italy, and Taiwan and to all employed persons (employees and self-employed workers) in the other countries.

Source: U.S. Department of Labor, Bureau of Labor Statistics, April 2002.

Table 10. Unit labor costs in manufacturing, U.S. dollar basis, 14 countries or areas, 1950-2000

[Indexes: 1992 = 100]

Year	United States	Canada*	Japan	Korea	Taiwan	Belgium	Denmark	France*	Germany (unified)	Former West Germany	Italy	Netherlands	Norway	Sweden*	United Kingdom*
1950	NA	22.7	NA	NA	NA	NA	9.6	18.1	NA	9.5	13.8	12.8	7.8	10.7	10.0
1955	NA	29.1	12.8	NA	NA	NA	12.0	25.3	NA	9.4	14.1	14.6	10.2	15.5	13.2
1960	NA	32.2	11.0	NA	NA	19.4	13.5	20.9	NA	10.4	15.0	16.1	11.2	16.9	15.6
1961	NA	30.1	11.3	NA	NA	20.3	14.3	21.8	NA	11.6	15.3	18.1	11.8	17.6	16.7
1962	NA	27.6	12.3	NA	NA	20.7	14.9	22.7	NA	12.3	16.3	18.8	12.9	18.3	17.2
1963	NA	27.3	12.7	NA	NA	22.0	15.7	23.4	NA	12.6	18.8	19.9	13.1	18.9	17.0
1964	NA	27.3	12.5	NA	NA	23.5	15.6	23.6	NA	12.6	19.8	21.1	13.2	19.1	16.9
1965	NA	27.6	13.6	NA	NA	24.8	16.5	24.0	NA	13.0	19.0	22.2	13.8	19.6	18.0
1966	NA	29.1	13.6	NA	NA	25.6	17.9	23.4	NA	13.6	18.6	23.2	14.5	20.6	18.8
1967	NA	30.3	13.5	NA	NA	26.5	18.5	23.7	NA	13.5	19.6	24.0	15.6	21.1	18.3
1968	NA	30.7	14.1	NA	NA	25.9	17.4	24.1	NA	13.4	19.4	23.7	16.2	20.9	15.9
1969	NA	31.7	14.6	NA	NA	25.9	18.8	23.1	NA	13.9	20.4	24.4	16.4	21.1	16.9
1970	NA	35.3	15.5	NA	14.9	27.0	20.3	23.0	NA	17.1	23.3	25.9	17.6	23.1	19.1
1971	NA	36.6	17.4	NA	15.6	29.9	22.1	24.5	NA	19.3	26.9	29.0	19.9	25.3	21.2
1972	NA	38.1	21.0	NA	15.7	35.0	24.1	28.2	NA	21.9	29.4	33.5	22.7	28.9	23.7
1973	NA	38.6	26.3	NA	18.9	42.4	30.7	34.3	NA	28.0	32.0	41.6	27.6	33.1	24.7
1974	NA	45.1	31.2	NA	28.8	49.5	35.6	36.9	NA	31.5	35.2	48.0	32.5	36.7	27.9
1975	NA	52.0	34.8	NA	29.3	60.9	40.9	48.8	NA	35.1	45.7	59.2	41.5	47.4	35.9
1976	NA	56.9	35.3	NA	30.1	60.9	41.8	47.3	NA	34.4	39.2	56.9	44.8	52.0	32.5
1977	61.2	55.6	41.5	NA	31.3	67.6	45.7	49.3	NA	39.6	42.8	61.8	50.8	56.4	35.1
1978	65.3	54.7	54.6	NA	32.2	77.8	54.1	58.0	NA	47.6	48.1	71.2	55.5	60.1	44.4
1979	70.7	58.5	51.3	NA	37.5	84.2	60.3	66.5	NA	53.6	54.3	78.6	56.2	63.3	58.0
1980	78.8	66.1	51.8	NA	43.4	88.3	58.9	76.7	NA	59.6	59.0	82.9	63.9	70.2	77.7
1981	82.4	69.6	55.2	NA	49.2	70.6	50.4	67.1	NA	49.9	53.1	67.4	61.3	65.1	75.0
1982	87.9	77.2	49.2	NA	49.4	57.2	46.7	61.5	NA	49.3	51.9	65.8	58.2	54.4	67.8
1983	86.0	77.9	52.3	NA	47.2	51.0	43.4	57.3	NA	46.7	52.1	59.7	54.7	46.1	58.6
1984	85.6	71.4	52.2	NA	49.6	46.8	40.8	53.4	NA	42.4	47.7	50.2	50.5	44.0	53.2
1985	87.3	69.0	50.3	55.0	51.3	46.9	42.3	54.2	NA	41.7	46.6	49.0	50.8	46.1	54.7
1986	91.2	70.9	75.2	53.0	55.6	63.4	60.0	72.0	NA	58.5	61.9	67.8	65.3	59.2	64.8
1987	86.9	75.4	85.0	60.6	66.3	77.2	77.9	84.6	NA	74.9	73.9	83.8	77.5	69.6	76.5
1988	86.7	84.0	93.2	77.8	75.5	77.0	79.0	82.8	NA	76.9	75.2	83.8	86.1	75.4	84.0
1989	90.5	90.4	87.1	91.6	85.2	72.3	72.6	77.6	NA	73.0	76.1	75.8	82.9	76.8	79.4
1990	93.7	96.6	83.8	93.0	89.7	89.5	91.3	94.0	NA	87.3	94.1	89.1	95.0	91.3	93.9
1991	97.6	104.9	91.7	100.3	91.1	92.3	90.8	93.1	87.5	87.8	97.5	89.9	95.7	96.3	100.1
1992	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1993	100.6	91.0	115.4	102.7	98.1	95.1	93.2	95.7	98.6	99.4	81.6	96.6	88.3	67.8	85.7
1994	98.5	83.6	125.9	106.8	99.0	94.2	88.3	92.8	98.2	99.8	77.9	92.4	90.7	63.2	86.5
1995	94.8	83.8	131.7	124.3	99.2	105.2	101.1	100.5	114.2	115.5	77.9	102.7	105.0	71.3	92.0
1996	93.5	86.1	109.6	125.9	95.4	98.4	105.0	99.0	111.4	111.6	87.9	98.1	107.1	79.8	93.2
1997	91.9	84.2	97.7	100.2	89.5	81.2	88.6	82.8	93.9	93.5	80.9	85.3	101.0	68.8	100.3
1998	92.8	80.4	92.4	65.8	77.4	79.9	88.9	80.2	93.3	89.1	78.8	85.5	100.2	65.3	105.8
1999	90.2	80.0	101.2	68.8	78.3	77.6	88.0	76.8	91.3	NA	77.3	82.1	103.1	62.5	106.3
2000	91.5	81.8	100.4	69.5	78.1	66.8	74.8	66.4	76.9	NA	66.6	72.1	94.8	55.2	98.3

NA = not available.

* Compensation adjusted to include changes in employment taxes that are not compensation to employees, but are labor costs to employers.

Note: The data relate to employees (wage and salary earners) in Belgium, Denmark, Italy, and Taiwan and to all employed persons (employees and self-employed workers) in the other countries.

Table 11. Exchange rates, 14 countries or areas, 1950-2000 (value of foreign currency relative to U.S. dollar)

[Indexes: 1992 = 100]

Year	United States	Canada	Japan	Korea	Taiwan	Belgium	Denmark	France	Germany (unified)	Former West Germany	Italy	Netherlands	Norway	Sweden	United Kingdom
1950	100.0	110.5	35.2	NA	NA	NA	87.5	151.3	NA	37.2	197.3	46.2	87.1	112.6	158.6
1955	100.0	122.5	35.2	NA	NA	NA	87.4	151.2	NA	37.1	197.1	46.1	87.0	112.6	158.0
1960	100.0	124.6	35.2	NA	NA	64.5	87.6	107.9	NA	37.4	198.4	46.6	87.1	112.7	159.0
1961	100.0	119.4	35.1	NA	NA	64.5	87.4	107.9	NA	38.9	198.4	48.5	87.0	112.7	158.6
1962	100.0	113.1	35.1	NA	NA	64.6	87.5	108.0	NA	39.1	198.5	48.8	87.1	113.0	159.0
1963	100.0	112.0	35.1	NA	NA	64.5	87.4	108.0	NA	39.2	198.2	48.8	86.9	112.3	158.5
1964	100.0	112.0	35.0	NA	NA	64.6	87.3	108.0	NA	39.3	197.3	48.8	86.8	113.1	158.1
1965	100.0	112.1	35.1	NA	NA	64.8	87.3	108.0	NA	39.1	197.2	48.8	86.9	112.9	158.3
1966	100.0	112.2	35.0	NA	NA	64.5	87.4	107.7	NA	39.1	197.3	48.6	86.9	112.8	158.1
1967	100.0	112.0	35.0	NA	NA	64.7	86.5	107.6	NA	39.2	197.4	48.8	86.9	112.9	155.7
1968	100.0	112.2	35.2	NA	NA	64.4	80.7	106.9	NA	39.1	197.7	48.6	87.0	112.7	135.5
1969	100.0	112.2	35.4	NA	NA	64.1	80.3	102.2	NA	39.8	196.4	48.5	87.0	112.7	135.3
1970	100.0	115.8	35.4	252.7	62.9	64.7	80.5	95.7	NA	42.8	196.5	48.6	86.9	112.3	135.6
1971	100.0	119.7	36.5	226.0	62.9	66.2	81.6	96.1	NA	44.9	199.3	50.4	88.3	114.1	138.4
1972	100.0	122.0	41.8	199.7	62.9	73.0	86.8	104.9	NA	49.0	211.1	54.8	94.3	122.5	141.6
1973	100.0	120.8	46.8	197.0	65.8	82.8	100.2	119.3	NA	59.0	211.8	63.3	108.2	133.8	138.8
1974	100.0	123.6	43.5	194.0	66.2	82.7	99.3	110.1	NA	60.5	189.4	65.5	112.6	131.4	132.5
1975	100.0	118.8	42.7	162.1	66.2	87.6	105.3	123.6	NA	63.6	188.9	69.7	119.2	140.6	125.8
1976	100.0	122.6	42.8	162.1	66.2	83.3	99.9	110.9	NA	62.1	148.4	66.6	113.9	133.7	102.2
1977	100.0	113.7	47.3	162.1	66.2	89.7	100.6	107.7	NA	67.3	139.6	71.7	116.8	130.4	98.8
1978	100.0	106.0	60.8	162.1	67.9	102.3	109.6	117.6	NA	77.9	145.2	81.4	118.6	129.0	108.6
1979	100.0	103.2	58.1	162.1	69.8	109.6	114.8	124.4	NA	85.2	148.3	87.7	122.7	135.9	120.2
1980	100.0	103.4	55.9	129.2	69.8	110.0	107.1	125.3	NA	85.9	143.9	88.5	125.8	137.7	131.7
1981	100.0	100.8	57.5	115.2	68.3	86.4	84.6	97.3	NA	69.0	108.2	70.4	108.2	115.0	114.6
1982	100.0	97.9	50.9	107.2	64.3	70.2	72.4	80.5	NA	64.3	91.0	65.8	96.2	92.7	99.0
1983	100.0	98.1	53.4	101.1	62.8	62.9	66.0	69.5	NA	61.2	81.1	61.6	85.1	75.9	85.8
1984	100.0	93.3	53.4	97.1	63.5	55.7	58.3	60.6	NA	54.9	70.2	54.8	76.2	70.4	75.7
1985	100.0	88.5	53.2	91.0	63.1	54.2	57.0	58.9	NA	53.1	64.5	53.0	72.3	67.7	73.5
1986	100.0	87.0	75.3	88.7	66.5	72.0	74.6	76.4	NA	72.0	82.6	71.8	84.0	81.7	83.1
1987	100.0	91.1	87.7	95.0	79.2	86.1	88.2	88.0	NA	86.9	95.0	86.8	92.2	91.8	92.8
1988	100.0	98.2	98.9	106.8	87.9	87.4	89.6	88.8	NA	88.9	94.6	88.9	95.2	94.9	100.8
1989	100.0	102.1	91.8	116.4	95.3	81.6	82.5	83.0	NA	83.0	89.8	82.9	89.9	90.2	92.7
1990	100.0	103.6	87.4	110.4	93.5	96.2	97.5	97.2	NA	96.6	102.8	96.6	99.4	98.4	101.0
1991	100.0	105.5	94.2	106.5	94.0	94.0	94.3	93.7	94.0	94.0	99.3	93.9	95.7	96.3	100.1
1992	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1993	100.0	93.7	114.1	97.4	95.2	93.0	93.1	93.4	94.4	94.4	78.3	94.6	87.5	74.7	85.0
1994	100.0	88.4	124.1	97.2	95.1	96.2	95.0	95.4	96.3	96.3	76.5	96.7	88.1	75.5	86.7
1995	100.0	88.1	134.9	101.5	95.0	109.1	107.8	106.2	109.1	109.1	75.6	109.6	98.1	81.6	89.4
1996	100.0	88.6	116.5	97.5	91.6	103.8	104.1	103.5	103.8	103.8	79.9	104.3	96.2	86.8	88.4
1997	100.0	87.3	104.7	82.8	87.4	89.8	91.3	90.7	90.0	90.0	72.3	90.1	87.7	76.2	92.7
1998	100.0	81.5	96.8	56.0	75.0	88.5	90.1	89.7	88.8	88.8	70.9	88.7	82.3	73.3	93.8
1999	100.0	81.3	111.5	65.9	77.8	84.9	86.4	86.0	85.1	NA	67.8	85.0	79.6	70.4	91.6
2000	100.0	81.4	117.6	69.4	80.5	73.6	74.6	74.5	73.7	NA	58.7	73.7	70.5	63.5	85.8

NA = not available.

Source: U.S. Department of Labor, Bureau of Labor Statistics, April 2002.

Table 12. Average annual compensation in manufacturing, national currency basis, 14 countries or areas, 1950-2000

[Indexes: 1992 = 100]

Year	United States	Canada*	Japan	Korea	Taiwan	Belgium	Denmark	France*	Germany (unified)	Former West Germany	Italy	Netherlands	Norway	Sweden*	United Kingdom
1950	8.8	5.9	NA	NA	NA	NA	3.5	1.9	NA	4.9	1.0	4.0	2.9	2.4	1.9
1955	11.8	8.1	3.7	NA	NA	NA	4.7	3.4	NA	7.3	1.5	5.9	4.4	3.8	2.7
1960	14.8	10.4	5.3	NA	NA	6.8	6.0	5.1	NA	10.7	1.9	8.4	6.0	5.0	3.6
1961	15.2	10.6	6.1	NA	NA	7.2	6.6	5.7	NA	11.8	2.1	9.2	6.4	5.4	3.8
1962	16.0	11.1	6.9	NA	NA	7.8	7.2	6.3	NA	13.0	2.4	9.8	7.0	6.0	3.9
1963	16.5	11.6	7.6	NA	NA	8.6	7.8	6.9	NA	13.7	2.9	10.7	7.5	6.6	4.1
1964	17.3	12.1	8.5	NA	NA	9.6	8.5	7.4	NA	14.8	3.1	12.3	8.0	7.1	4.4
1965	17.9	12.8	9.4	NA	NA	10.5	9.4	8.0	NA	16.2	3.2	13.8	8.7	7.7	4.8
1966	18.8	13.7	10.4	NA	NA	11.5	10.4	8.5	NA	17.4	3.4	15.3	9.5	8.5	5.1
1967	19.4	14.4	11.7	NA	NA	12.4	11.6	9.0	NA	17.8	3.8	16.9	10.5	9.2	5.2
1968	20.9	15.4	13.6	NA	NA	13.3	12.5	10.0	NA	19.4	4.1	18.5	11.3	9.8	5.6
1969	22.2	16.5	15.8	NA	NA	14.4	13.8	10.9	NA	21.3	4.5	20.7	12.2	10.5	6.1
1970	23.3	17.6	18.7	NA	NA	16.0	15.3	12.1	NA	24.8	5.3	23.5	13.5	11.8	7.0
1971	24.8	18.7	21.2	NA	NA	18.2	17.5	13.5	NA	27.2	6.0	26.6	15.3	13.3	7.7
1972	26.5	20.1	24.3	NA	NA	21.0	19.0	14.7	NA	29.8	6.5	30.1	16.8	14.4	8.9
1973	28.5	21.7	29.4	NA	10.6	24.3	21.8	16.6	NA	33.4	7.8	35.2	18.9	16.0	10.2
1974	31.0	25.0	37.0	NA	15.0	29.2	26.9	19.5	NA	37.2	9.8	40.7	21.8	18.6	11.9
1975	34.3	28.4	42.1	NA	16.4	33.3	31.1	23.0	NA	40.0	11.9	45.7	25.9	22.3	15.8
1976	37.6	32.7	46.7	NA	18.4	39.3	34.8	26.5	NA	44.3	14.9	50.9	29.2	25.8	18.4
1977	41.0	36.2	51.6	NA	20.1	42.3	38.2	29.8	NA	47.7	17.7	55.3	32.2	28.1	21.0
1978	44.3	39.2	55.2	NA	22.5	45.2	41.6	33.4	NA	50.6	20.1	59.2	34.6	30.3	24.4
1979	48.4	42.9	59.2	NA	26.5	48.1	46.5	37.7	NA	54.1	24.1	62.9	35.7	32.1	28.8
1980	53.5	47.3	62.9	NA	32.4	52.7	51.6	43.5	NA	57.9	28.2	66.7	39.1	35.3	33.9
1981	58.8	53.1	66.9	NA	39.6	56.1	56.1	49.7	NA	60.9	33.6	70.2	43.6	39.2	38.8
1982	63.3	59.7	70.0	NA	43.1	60.0	62.0	56.6	NA	64.1	39.0	75.3	48.1	42.3	43.1
1983	66.9	64.7	71.9	NA	44.9	64.2	67.2	62.3	NA	67.2	45.0	78.9	53.0	47.5	46.2
1984	70.2	68.3	74.9	NA	48.4	69.3	70.8	67.7	NA	70.3	51.5	80.7	57.9	52.5	50.2
1985	74.1	71.6	77.7	36.7	50.4	74.1	73.0	72.8	NA	73.1	57.9	82.9	63.1	57.4	54.9
1986	77.4	73.0	81.1	39.6	57.6	76.2	76.3	76.0	NA	75.6	62.3	85.7	68.9	61.8	59.6
1987	80.0	75.4	83.4	44.6	63.1	79.2	81.5	79.3	NA	78.8	67.6	88.1	76.3	66.8	66.6
1988	84.0	79.9	85.7	54.0	67.1	81.9	84.4	82.6	NA	81.7	73.1	88.6	81.6	70.7	71.4
1989	86.7	83.2	89.9	59.9	75.0	86.4	88.2	86.9	NA	84.6	80.3	89.0	86.0	77.9	76.2
1990	90.2	88.5	95.5	70.0	85.2	91.7	92.1	91.0	NA	89.2	86.9	91.2	90.9	87.2	84.8
1991	94.3	94.8	99.5	87.3	93.5	97.3	95.6	95.7	88.1	94.3	94.3	95.4	96.4	94.7	93.9
1992	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1993	104.1	103.0	100.6	114.2	106.0	103.2	103.8	102.9	103.9	102.8	104.0	103.7	101.8	99.9	105.6
1994	108.0	105.8	102.9	130.6	111.4	107.4	106.0	105.6	109.9	108.5	108.8	108.2	104.9	106.6	109.1
1995	109.5	107.6	107.1	159.7	120.1	109.2	109.7	107.8	115.8	113.6	115.6	110.9	108.8	114.6	112.2
1996	111.0	109.5	108.5	182.9	127.7	111.4	112.6	109.6	118.5	117.6	122.0	113.1	112.6	123.4	114.3
1997	113.9	111.7	111.6	193.8	132.3	115.5	117.7	112.1	121.0	120.5	127.7	115.5	117.4	128.9	118.2
1998	118.8	114.4	112.0	202.2	137.5	117.5	121.3	114.4	123.3	122.8	125.9	120.0	124.9	134.6	124.3
1999	124.5	117.0	111.3	214.6	142.1	121.4	127.0	116.8	125.4	NA	129.2	123.4	132.1	138.2	133.2
2000	132.2	121.0	112.4	225.4	144.1	124.6	132.0	119.4	128.3	NA	133.1	130.2	137.2	142.1	138.9

NA = not available.

* Compensation adjusted to include changes in employment taxes that are not compensation to employees, but are labor costs to employers.

Note: The data relate to employees (wage and salary earners) in Belgium, Denmark, Italy, and Taiwan and to all employed persons (employees and self-employed workers) in the other countries.

Source: U.S. Department of Labor, Bureau of Labor Statistics, April 2002.

Table 13. Real hourly compensation in manufacturing, CPI basis, 14 countries or areas, 1950-2000

[Indexes: 1992 = 100]

Year	United States	Canada	Japan	Korea	Taiwan	Belgium	Denmark	France	Germany (unified)	Former West Germany	Italy	Netherlands	Norway	Sweden	United Kingdom
1950	46.8	37.0	NA	NA	NA	NA	28.6	19.8	NA	11.7	18.2	17.1	26.3	25.3	25.6
1955	56.5	46.5	18.2	NA	NA	NA	31.9	26.7	NA	15.9	21.3	21.2	29.5	30.5	28.0
1960	65.2	54.6	23.1	NA	NA	24.5	38.7	30.1	NA	23.6	25.5	26.4	36.4	35.4	32.8
1961	66.4	55.5	25.5	NA	NA	25.7	41.7	32.2	NA	25.8	27.7	29.8	38.7	37.9	33.9
1962	68.3	56.9	27.3	NA	NA	27.2	42.5	34.1	NA	28.4	31.2	31.1	40.4	40.4	34.2
1963	69.4	58.3	28.4	NA	NA	29.4	43.9	35.4	NA	29.4	34.4	33.2	42.0	43.4	35.1
1964	71.4	59.6	30.7	NA	NA	31.9	45.7	37.2	NA	31.1	34.6	36.3	42.5	45.7	36.2
1965	71.8	61.7	32.1	NA	NA	34.0	47.7	39.4	NA	33.1	35.5	39.1	45.0	48.1	37.8
1966	73.0	63.8	33.7	NA	NA	36.0	50.8	40.6	NA	34.7	36.9	41.4	47.7	49.5	39.3
1967	74.6	64.9	36.3	NA	NA	38.3	53.0	42.6	NA	36.1	39.2	44.4	51.0	52.6	40.3
1968	77.1	66.6	40.1	NA	NA	39.8	54.0	46.4	NA	38.3	41.3	47.6	54.3	56.0	41.4
1969	78.4	68.9	45.2	NA	NA	42.0	58.7	47.6	NA	41.1	44.2	50.3	58.1	58.9	42.6
1970	79.4	71.5	49.9	NA	NA	46.1	62.9	50.9	NA	46.7	51.3	56.1	58.3	61.8	46.1
1971	80.7	73.9	54.3	NA	NA	51.0	68.3	54.2	NA	49.8	56.4	59.6	62.9	64.1	47.9
1972	82.2	75.7	59.6	NA	NA	57.2	71.0	56.3	NA	52.3	58.7	63.4	65.8	67.5	51.6
1973	83.4	76.6	65.2	NA	32.7	63.5	78.8	60.0	NA	55.4	62.6	69.8	69.0	69.8	53.8
1974	83.4	80.2	69.4	NA	32.5	69.3	82.8	62.8	NA	58.9	68.4	76.0	74.0	74.8	55.7
1975	85.6	83.2	72.3	NA	33.0	74.3	90.0	68.4	NA	61.3	72.2	79.1	79.1	83.6	59.8
1976	87.7	88.8	71.2	NA	36.0	78.8	92.1	71.5	NA	63.1	77.1	80.9	83.9	88.4	59.5
1977	89.6	91.2	72.6	NA	36.8	79.4	91.8	74.2	NA	66.7	78.9	82.9	86.3	86.1	57.9
1978	90.5	89.9	74.3	NA	39.2	81.5	91.9	76.6	NA	69.9	80.0	86.1	87.4	88.9	62.1
1979	90.9	90.6	76.2	NA	42.2	82.9	93.7	78.4	NA	72.2	84.4	88.7	87.6	89.9	64.9
1980	91.6	91.6	75.2	NA	43.3	86.5	92.1	79.6	NA	74.6	81.4	87.5	86.0	87.7	66.7
1981	92.1	92.0	76.8	NA	47.8	87.7	90.7	81.3	NA	74.6	82.1	85.8	84.1	86.3	69.8
1982	95.4	94.1	78.4	NA	50.7	84.4	89.7	86.3	NA	75.0	82.2	86.2	84.1	85.1	70.5
1983	94.1	95.2	79.0	NA	52.1	86.0	89.7	87.0	NA	76.0	82.6	87.8	85.1	84.5	72.6
1984	93.6	96.4	79.6	NA	55.6	87.8	89.2	87.8	NA	77.7	85.4	88.2	87.7	85.2	74.8
1985	95.5	96.6	81.2	50.2	59.8	88.3	90.9	89.7	NA	80.7	88.7	90.8	90.8	87.4	77.5
1986	98.1	94.1	84.8	51.8	66.7	89.6	89.6	91.0	NA	84.1	87.9	94.3	92.4	90.4	81.6
1987	97.5	92.3	86.7	57.6	72.6	90.9	94.1	91.6	NA	87.7	89.4	97.7	96.4	92.4	87.4
1988	97.9	92.1	87.5	66.7	77.2	91.4	93.2	92.7	NA	90.3	88.9	96.7	96.0	94.1	89.1
1989	96.8	93.4	90.9	72.6	83.8	94.0	94.1	94.2	NA	92.3	92.1	96.7	96.1	98.3	88.7
1990	96.6	94.7	95.0	79.6	92.3	95.2	96.9	96.0	NA	96.6	96.0	96.7	97.7	97.6	91.0
1991	98.1	96.3	98.0	91.5	97.7	99.7	98.0	98.8	96.1	99.1	99.1	98.3	99.8	97.3	97.4
1992	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1993	100.2	100.2	101.4	108.8	102.9	102.0	103.3	101.0	101.8	102.1	101.6	101.1	99.2	95.3	103.0
1994	100.8	101.6	102.8	116.4	103.7	100.9	NA	101.8	104.1	104.8	99.4	102.6	100.6	95.8	102.6
1995	100.4	101.7	106.3	136.0	108.3	102.3	NA	102.8	107.7	108.7	100.3	103.0	102.7	97.6	100.2
1996	99.1	101.1	107.0	150.9	111.9	101.8	NA	102.5	110.5	112.8	102.6	103.1	105.6	103.6	99.3
1997	98.8	101.6	108.7	155.1	114.5	103.8	NA	103.8	110.6	113.3	104.9	103.4	107.5	106.9	100.1
1998	102.7	102.8	110.8	156.8	119.3	104.3	NA	105.4	111.2	113.3	101.5	105.5	111.7	110.6	102.4
1999	104.6	102.4	110.6	152.8	122.4	104.7	NA	107.6	113.0	NA	102.9	106.2	115.6	109.4	108.5
2000	108.3	103.1	110.7	158.8	122.7	104.5	NA	112.1	114.4	NA	103.6	109.3	117.7	115.8	109.5

NA = not available.

Note: The data relate to employees (wage and salary earners) in Belgium, Denmark, Italy, and Taiwan and to all employed persons (employees and self-employed workers) in the other countries.

Source: U.S. Department of Labor, Bureau of Labor Statistics, April 2002.

Table 14. Real average annual compensation in manufacturing, CPI basis, 14 countries or areas, 1950-2000

[Indexes: 1992 = 100]

Year	United States	Canada	Japan	Korea	Taiwan	Belgium	Denmark	France	Germany (unified)	Former West Germany	Italy	Netherlands	Norway	Sweden	United Kingdom
1950	47.4	40.3	NA	NA	NA	NA	40.2	23.9	NA	17.2	20.1	22.3	34.5	32.8	31.4
1955	57.4	48.7	21.7	NA	NA	NA	44.0	32.1	NA	23.3	24.0	27.7	38.7	39.4	34.8
1960	64.9	56.8	28.6	NA	NA	30.8	50.8	36.4	NA	31.0	29.2	34.8	45.9	43.2	40.0
1961	66.2	57.5	31.2	NA	NA	32.2	53.1	39.1	NA	33.4	31.3	37.7	48.1	45.9	40.8
1962	68.7	59.4	32.6	NA	NA	34.2	54.5	41.2	NA	35.8	34.1	39.0	50.0	48.5	40.6
1963	70.1	61.0	33.6	NA	NA	37.0	55.4	42.9	NA	36.5	37.8	41.5	51.8	51.5	41.6
1964	72.5	62.7	36.2	NA	NA	39.9	58.3	44.8	NA	38.7	38.1	45.0	52.7	53.7	43.4
1965	73.7	64.9	37.2	NA	NA	41.9	60.7	47.1	NA	41.0	37.8	48.3	54.5	56.0	44.6
1966	75.2	66.6	39.3	NA	NA	44.0	63.4	48.8	NA	42.4	39.7	50.9	57.9	57.6	45.6
1967	75.5	67.8	42.3	NA	NA	46.2	65.4	50.6	NA	42.9	42.8	54.3	61.3	60.3	46.4
1968	77.9	69.4	46.6	NA	NA	48.1	65.1	53.6	NA	46.1	45.0	57.2	63.7	62.9	48.1
1969	78.6	71.5	51.8	NA	NA	50.2	69.9	56.3	NA	49.5	47.9	59.6	66.6	64.9	49.5
1970	78.0	73.7	56.7	NA	NA	53.6	72.5	59.6	NA	56.0	54.5	65.2	66.4	68.0	52.7
1971	79.4	76.0	60.7	NA	NA	58.5	78.5	62.9	NA	58.4	58.3	68.6	70.9	70.3	53.5
1972	82.3	77.9	66.2	NA	NA	64.1	79.8	64.7	NA	60.7	60.2	72.0	73.0	72.1	57.0
1973	83.3	78.3	71.8	NA	36.5	69.4	83.9	67.9	NA	63.8	65.1	77.7	76.1	73.2	60.2
1974	81.7	81.4	73.3	NA	34.9	73.8	89.8	70.1	NA	66.5	68.6	81.9	80.5	77.6	60.4
1975	82.7	83.4	74.6	NA	36.3	74.8	94.6	74.1	NA	67.4	71.1	83.7	85.6	85.1	64.6
1976	85.7	89.1	75.6	NA	39.8	80.8	97.2	77.7	NA	71.5	76.0	85.6	88.4	89.0	64.9
1977	87.9	91.4	77.4	NA	40.6	81.1	96.0	80.0	NA	74.3	77.3	87.3	89.4	86.0	63.5
1978	88.8	90.8	79.4	NA	43.0	83.1	95.0	81.8	NA	76.9	78.3	89.7	88.8	86.5	67.8
1979	88.6	91.1	82.0	NA	46.0	84.6	96.8	83.6	NA	79.2	81.9	91.4	87.5	86.1	70.6
1980	88.3	91.2	80.9	NA	47.4	86.9	95.7	84.9	NA	80.7	79.2	90.6	86.3	83.1	70.5
1981	88.7	90.8	82.0	NA	49.8	86.0	93.2	85.6	NA	79.7	79.9	89.3	84.6	82.2	72.4
1982	90.2	92.0	83.5	NA	52.7	84.5	93.5	87.2	NA	79.7	79.8	90.6	83.8	81.4	73.5
1983	91.4	94.3	84.3	NA	54.1	84.0	94.8	87.4	NA	80.9	80.2	92.4	85.2	81.8	75.6
1984	92.3	95.4	85.8	NA	58.3	85.3	93.9	88.5	NA	82.7	82.9	91.6	87.7	84.0	78.0
1985	94.2	96.2	87.2	55.5	60.8	87.0	92.5	89.8	NA	84.3	85.3	91.9	90.4	85.5	80.4
1986	96.7	94.2	90.5	58.3	69.0	88.3	93.3	91.3	NA	87.3	86.7	95.0	92.1	88.1	84.3
1987	96.7	93.2	92.9	63.7	75.2	90.4	95.8	92.4	NA	90.9	89.8	98.0	93.7	91.2	90.6
1988	97.9	94.9	94.8	72.0	79.0	92.4	94.9	93.8	NA	93.2	92.5	97.7	94.1	92.7	92.5
1989	96.9	94.1	97.4	75.5	84.5	94.5	94.6	95.2	NA	93.9	95.6	97.1	94.7	96.5	91.6
1990	96.0	94.9	100.3	81.4	92.2	96.9	96.3	96.5	NA	96.4	97.2	97.0	96.2	96.9	93.1
1991	96.8	96.1	101.2	92.8	97.7	99.7	97.6	98.3	92.6	98.2	99.2	98.4	98.7	96.6	97.4
1992	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1993	101.5	101.2	99.3	109.0	102.9	100.5	102.5	100.8	99.4	99.1	99.6	101.0	99.5	97.7	104.0
1994	103.0	103.6	100.9	117.4	103.9	102.1	102.6	101.7	102.4	101.7	100.2	102.6	101.2	102.1	104.9
1995	101.9	103.3	105.1	137.3	108.1	102.3	104.0	102.1	106.1	104.9	101.1	103.2	102.4	105.0	104.2
1996	100.5	103.4	106.4	150.0	111.5	102.3	104.6	101.8	107.1	107.2	102.6	103.2	104.6	111.8	103.7
1997	101.0	103.8	107.5	152.1	114.5	104.3	107.0	102.9	107.3	107.9	105.3	103.1	106.3	115.5	103.9
1998	103.9	105.4	107.2	147.6	117.1	105.1	108.2	104.3	108.3	109.0	101.8	105.0	110.7	119.7	105.6
1999	106.6	105.9	106.8	155.4	120.7	107.4	110.6	105.9	109.5	NA	102.7	105.7	114.4	118.7	111.5
2000	109.6	106.7	108.6	159.5	120.9	107.5	111.7	106.5	110.0	NA	103.2	108.7	115.2	125.9	112.9

NA = not available.

Note: The data relate to employees (wage and salary earners) in Belgium, Denmark, Italy, and Taiwan and to all employed persons (employees and self-employed workers) in the other countries.

Source: U.S. Department of Labor, Bureau of Labor Statistics, April 2002.

Table 15. Total labor compensation in manufacturing, 14 countries or areas, 1950-2000

[Indexes: 1992 = 100]

Year	United States	Canada*	Japan	Korea	Taiwan	Belgium	Denmark	France*	Germany (unified)	Former West Germany	Italy	Netherlands	Norway	Sweden*	United Kingdom*
1950	7.4	4.6	NA	NA	NA	NA	2.9	2.2	NA	3.7	.7	4.6	3.4	2.9	3.1
1955	11.0	6.9	1.8	NA	NA	NA	4.1	3.8	NA	7.0	1.1	7.2	5.5	4.9	4.9
1960	13.7	8.8	3.4	NA	NA	9.2	6.3	6.0	NA	11.6	1.7	10.9	7.3	6.9	6.6
1961	13.7	8.9	4.1	NA	NA	10.1	7.0	6.7	NA	13.1	2.0	12.2	8.0	7.7	7.1
1962	14.8	9.6	4.9	NA	NA	11.1	7.9	7.5	NA	14.5	2.3	13.2	8.9	8.5	7.3
1963	15.4	10.2	5.6	NA	NA	12.4	8.5	8.3	NA	15.2	2.8	14.5	9.6	9.3	7.5
1964	16.4	11.2	6.5	NA	NA	14.3	9.5	9.2	NA	16.4	3.0	16.9	10.4	10.2	8.2
1965	17.8	12.4	7.3	NA	NA	15.6	10.7	9.8	NA	18.3	3.1	19.0	11.4	11.2	9.0
1966	19.8	14.0	8.3	NA	NA	17.1	11.8	10.5	NA	19.4	3.3	21.0	12.6	12.1	9.5
1967	20.7	14.9	9.8	NA	NA	17.9	12.5	11.1	NA	18.9	3.8	22.5	14.0	12.8	9.5
1968	22.6	15.9	11.8	NA	NA	18.8	13.5	12.0	NA	20.7	4.1	24.4	14.9	13.4	10.1
1969	24.6	17.5	14.2	NA	NA	21.1	15.4	13.5	NA	23.6	4.6	27.7	16.2	14.6	11.2
1970	24.8	18.3	17.1	NA	3.0	24.0	17.1	15.4	NA	28.2	5.7	31.5	18.2	16.6	12.7
1971	25.3	19.5	19.6	NA	3.9	27.2	18.8	17.3	NA	30.7	6.6	35.2	20.8	18.0	13.7
1972	27.8	21.6	22.4	NA	4.7	31.0	20.9	19.2	NA	33.0	7.2	38.4	23.2	19.3	15.3
1973	31.5	24.4	28.3	NA	6.4	36.1	24.3	22.1	NA	37.3	8.8	44.2	26.1	21.7	17.7
1974	34.2	28.5	35.3	NA	9.1	43.9	28.9	26.2	NA	40.5	11.5	51.0	30.5	25.7	20.7
1975	34.5	31.5	37.9	NA	9.7	47.2	30.6	30.2	NA	40.9	14.1	55.3	35.9	31.2	26.2
1976	39.2	36.1	41.8	NA	12.3	53.4	34.5	34.6	NA	44.2	17.7	59.1	40.4	36.0	29.6
1977	44.4	39.3	45.7	NA	14.5	55.2	37.7	38.8	NA	47.8	21.2	62.5	44.7	37.7	33.8
1978	50.0	43.8	48.2	NA	17.6	56.5	40.8	42.8	NA	50.6	24.1	65.5	47.1	39.6	39.1
1979	55.9	49.6	51.6	NA	21.5	58.6	45.9	47.7	NA	54.8	29.4	68.8	48.0	42.1	46.0
1980	59.7	54.5	55.9	NA	27.4	62.8	50.2	54.3	NA	59.2	34.6	72.0	52.6	46.3	51.4
1981	65.3	60.9	60.1	NA	34.1	63.1	52.6	60.1	NA	61.0	40.1	73.8	57.6	49.8	53.5
1982	65.6	62.2	62.5	NA	37.2	65.5	58.0	67.4	NA	62.5	45.7	76.1	61.3	51.8	55.9
1983	68.1	65.7	65.3	NA	40.7	68.6	63.1	72.7	NA	63.2	51.1	76.1	64.1	56.9	57.0
1984	75.0	71.3	69.4	NA	48.6	73.2	70.2	76.7	NA	65.9	55.8	76.1	69.4	63.2	60.9
1985	78.5	76.5	72.6	29.4	52.3	77.1	76.8	80.3	NA	69.4	61.3	79.0	76.2	70.0	66.3
1986	80.8	80.6	75.4	34.6	62.5	78.5	83.2	82.3	NA	72.9	64.7	82.7	84.0	75.4	70.3
1987	83.8	85.7	76.6	43.7	70.5	79.7	87.7	83.8	NA	76.0	69.2	85.8	93.0	80.8	77.8
1988	89.5	94.0	80.4	55.9	75.3	82.3	88.9	86.0	NA	78.6	75.5	86.8	95.2	87.2	84.5
1989	92.8	99.3	86.3	62.5	81.2	87.9	91.8	90.9	NA	82.6	83.3	88.3	93.4	94.5	90.3
1990	95.1	100.2	93.1	73.0	86.4	94.0	96.1	95.9	NA	89.5	90.9	92.2	95.7	102.3	97.9
1991	96.0	98.6	99.4	89.4	93.1	98.8	98.0	99.2	95.2	96.0	97.6	96.1	98.3	104.1	100.1
1992	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1993	104.2	102.1	97.4	111.1	105.5	99.2	99.1	98.0	96.6	96.6	100.6	100.5	103.6	92.5	102.2
1994	109.4	106.8	96.3	128.2	112.9	99.3	101.6	97.5	97.0	96.8	104.3	100.0	109.9	98.1	105.8
1995	112.2	112.8	96.5	159.0	120.0	100.4	107.6	99.3	99.8	99.2	110.5	101.3	116.6	112.2	110.9
1996	113.4	116.7	96.9	179.1	125.3	101.0	110.7	100.1	99.4	99.4	116.0	102.2	122.6	120.4	114.5
1997	117.5	122.9	99.4	178.9	131.3	102.9	114.8	100.2	99.9	99.5	121.7	105.5	133.3	124.5	118.9
1998	123.5	130.7	95.7	160.7	136.9	105.1	119.2	102.8	102.2	101.2	122.7	110.7	143.3	131.6	124.9
1999	127.4	138.6	92.5	172.8	142.4	107.8	122.2	104.8	102.9	NA	125.7	114.1	147.5	136.5	129.0
2000	134.5	149.7	91.8	191.5	147.4	111.0	126.2	108.0	106.1	NA	129.2	121.1	149.1	142.0	129.7

NA = not available.

* Compensation adjusted to include changes in employment taxes that are not compensation to employees, but are labor costs to employers.

Note: The data relate to employees (wage and salary earners) in Belgium, Denmark, Italy, and Taiwan and to all employed persons (employees and self-employed workers) in the other countries.

Source: U.S. Department of Labor, Bureau of Labor Statistics, April 2002.

Table 16. Changes in manufacturing productivity and unit labor costs in 14 countries or areas, 1999-2000, preliminary and revised

Country or area		Output			Total compensation	Unit labor costs	
		per hour	Output	Hours		National currency	U.S. dollars
United States	Revised	5.5	4.1	- 1.4	5.5	1.4	1.4
	Preliminary	7.1	6.1	-.9	5.5	-.5	-.5
Canada	Revised	1.2	5.7	4.4	8.0	2.2	2.2
	Preliminary	1.2	5.7	4.4	8.0	2.2	2.2
Japan	Revised	5.7	5.5	-.1	-.8	-6.0	-.8
	Preliminary	5.4	5.8	.4	.4	-5.1	.1
Korea	Revised	10.7	15.4	4.2	10.8	-4.0	1.0
	Preliminary	NA	15.4	NA	12.3	-2.7	2.4
Taiwan	Revised	5.3	7.3	1.9	3.5	-3.5	-.3
	Preliminary	NA	7.5	NA	5.0	-2.3	1.0
Belgium	Revised	3.0	3.6	.6	3.0	-.6	-13.9
	Preliminary	3.0	3.6	.6	3.2	-.4	-13.7
Denmark	Revised	NA	5.0	NA	3.3	-1.7	-15.1
	Preliminary	NA	6.3	NA	3.3	-2.9	-16.2
France	Revised	6.2	3.3	-2.7	3.0	-.3	-13.6
	Preliminary	5.8	3.3	-2.3	2.8	-.5	-13.8
Germany	Revised	6.2	6.1	-.1	3.1	-2.8	-15.8
	Preliminary	6.0	5.7	-.3	3.2	-2.3	-15.4
Italy	Revised	3.8	3.4	-.4	2.8	-.5	-13.8
	Preliminary	3.5	3.4	-.1	2.8	-.5	-13.8
Netherlands	Revised	4.1	4.7	.6	6.2	1.4	-12.1
	Preliminary	NA	NA	NA	NA	NA	NA
Norway	Revised	1.1	-2.7	-3.8	1.1	3.9	-8.0
	Preliminary	1.1	-2.7	-3.8	1.1	3.9	-8.0
Sweden	Revised	4.8	6.3	1.5	4.1	-2.1	-11.7
	Preliminary	4.8	6.3	1.5	4.1	-2.1	-11.7
United Kingdom	Revised	5.4	1.9	-3.3	.5	-1.4	-7.6
	Preliminary	5.0	1.6	-3.3	.3	-1.3	-7.5

NA = not available.

Note: Preliminary data were published in News Release USDL 01-280 (U.S. Department of Labor, Aug. 31, 2001).