



INTERNATIONAL LABOR COMPARISONS

International Comparisons of Manufacturing Productivity & Unit Labor Costs Trends, 2012

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Additional Information

For the associated press release, data tables, and technical notes, see [International Comparisons of Manufacturing Productivity and Unit Labor Cost Trends](#).

For other ILC products visit www.conference-board.org/ilcprogram

The Conference Board continues government program on International Labor Comparisons

The Conference Board will continue the International Labor Comparisons (ILC) program that was eliminated by the U.S. Bureau of Labor Statistics. The international productivity and unit labor cost trends in this report are produced using the same concepts and methodology as those formerly used by BLS. For additional information, see the [news release](#).

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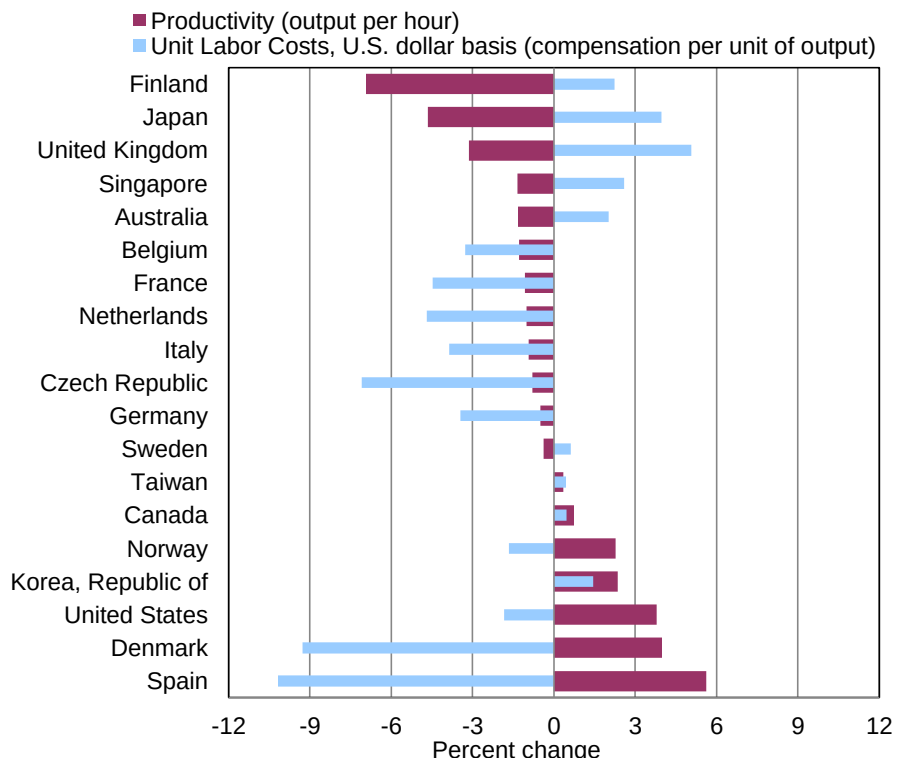
Summary

Based on estimates prepared by The Conference Board International Labor Comparisons program, manufacturing productivity performance weakened in 2012 across countries in North America, Europe, and Asia. Manufacturing productivity declined in 12 of 19 countries compared (see [Chart 1](#)), and most economies experienced a slowdown in productivity for the second year in a row (see [Chart 4](#)). In almost half the countries, except for the 2008/2009 global financial and economic crisis, 2012 manufacturing productivity growth was the lowest seen since the 1980s or earlier.

Productivity rates in the Czech Republic, Finland, the Republic of Korea, Sweden, and Taiwan slowed especially compared to their average growth rates in the period 2000-2007, when manufacturing productivity in these countries averaged 6 percent or higher (see [Table 1](#)).

In 2012, manufacturing unit labor costs in national currency terms increased in all but three economies compared (see [Chart 5](#)). However, largely due to the appreciation of the U.S. dollar, unit labor costs in U.S. dollar terms decreased in 10 of 19 countries (see [Chart 1](#) and [Chart 6](#)). All Euro Area countries compared, except for Finland, saw larger declines in U.S. dollar-based unit labor costs than the U.S., so that these countries gained a competitive edge against U.S. manufacturing in 2012. In contrast, U.S. manufacturing competitiveness improved relative to all Asian economies covered.

Chart 1. Productivity and unit labor costs in manufacturing, annual percent change, 2012



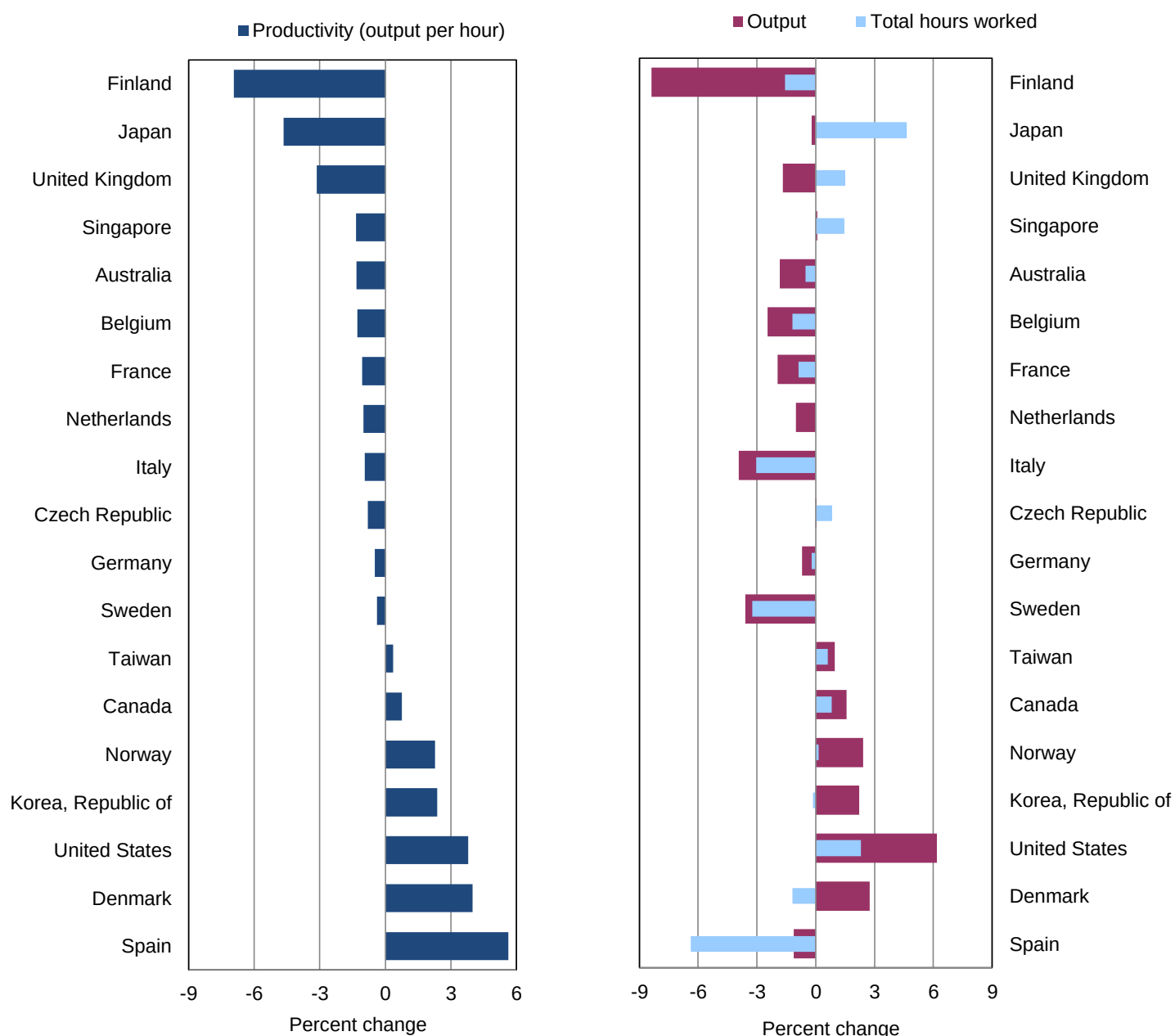
Source: The Conference Board, International Labor Comparisons program

Manufacturing productivity (output per hour) decreased in 2012 for 12 of 19 countries compared (see [Chart 1](#)). Most economies experienced a slowdown in manufacturing productivity growth for the second year in a row, except the United States, Australia, Denmark, Norway, and Spain (see [Chart 4](#)).

Productivity is the ratio of real output to total hours worked. Changes in productivity are approximately equal to the difference between the change in output and the change in hours worked (see [Chart 2](#) and [Table 1](#)). For half the countries that saw a decrease in productivity, such as Finland and France, the trend was driven by falling output despite a modest decline in hours worked. For Japan and the United Kingdom, however, the decline in output was exacerbated by an increase in hours worked, which led to even larger productivity losses.

In contrast, productivity increases, including those for the United States, were primarily the result of gains in output. The main exception was Spain, where the fall in hours far outpaced the decline in output, resulting in the largest productivity increase in 2012 of the countries compared.

Chart 2. Productivity, output, and hours worked in manufacturing, annual percent change, 2012



Source: The Conference Board, International Labor Comparisons program

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Definitions

Productivity is calculated as real output (manufacturing value added) divided by total hours worked in manufacturing. It measures how effectively labor hours are converted into output. Increases in labor productivity indicate that a country's workforce is becoming more efficient.

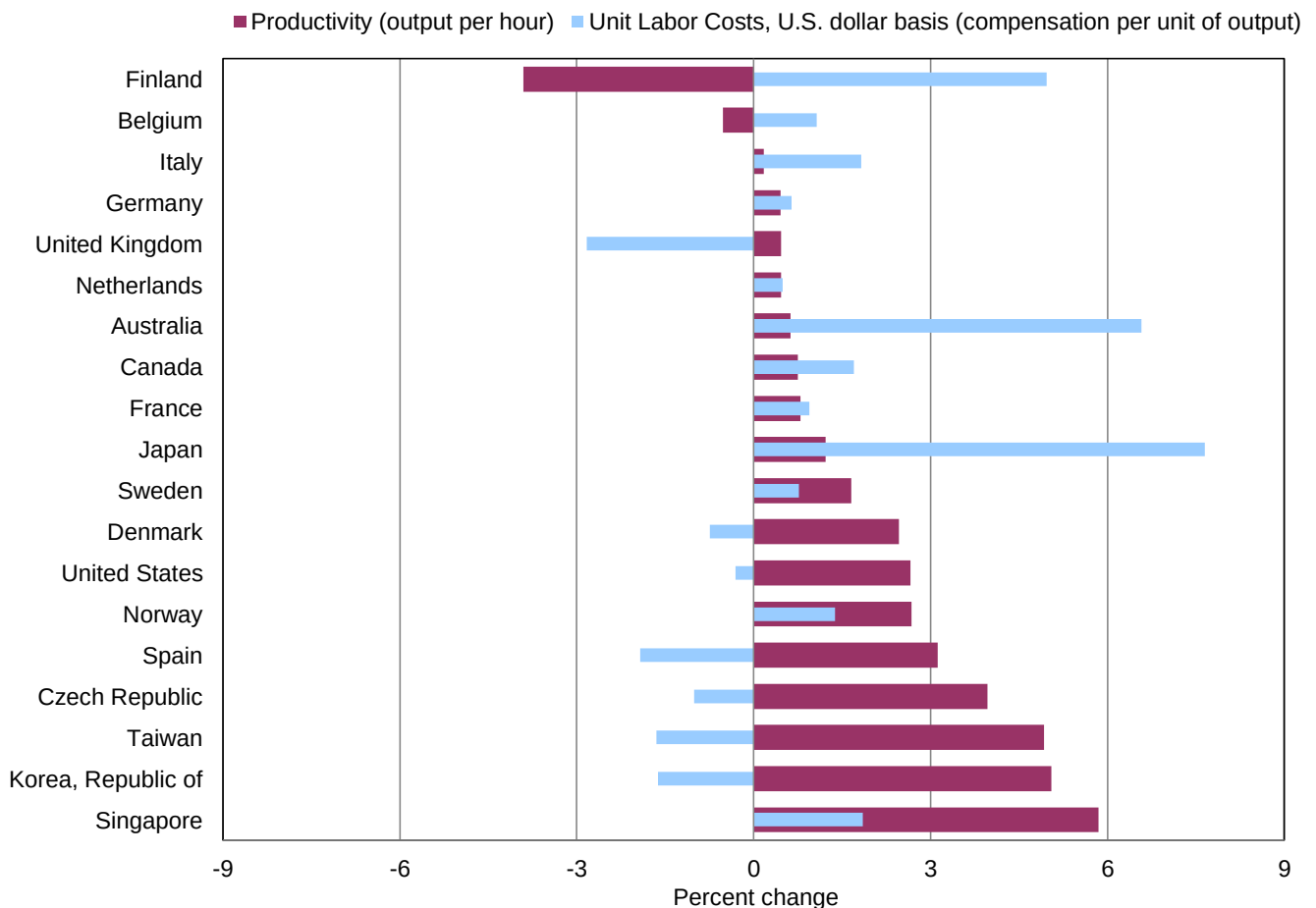
Unit Labor Costs in National Currency Units are calculated as total compensation (in current prices) divided by real output (in constant prices, that is, adjusted for increases in output prices) in manufacturing. It measures the cost of labor input required to produce one unit of output.

Unit Labor Costs in U.S. Dollars are unit labor costs in national currency units with labor compensation converted to U.S. dollars using currency exchange rates. This measure is used to compare manufacturing competitiveness across countries. Declines in U.S. dollar-denominated unit labor costs indicate that an economy is becoming more cost competitive.

For full definitions and methods, see the [Technical Notes](#).

For most countries compared, manufacturing output was the main driver of productivity changes in 2012, as the magnitude of the change in output (whether positive or negative) was generally greater than the magnitude of the change in hours worked (see [Table 1](#)). On average, between 2007 and 2012, manufacturing output contracted in over two-thirds of the economies compared, reflecting the effects of the 2008/2009 financial and economic crisis. All countries compared, except Australia, the Republic of Korea, Singapore, and Taiwan, saw record declines in manufacturing output in 2009. However, manufacturing output recovered strongly in all countries in 2010, with Germany and Sweden posting record output growth (20.1 percent and 27.5 percent, respectively) following record declines the previous year. In 2012, the trend in output was more mixed with decline rather than growth in output in more than half the countries compared.

Chart 3. Productivity and unit labor costs in manufacturing, annual percent change, 2007 - 2012

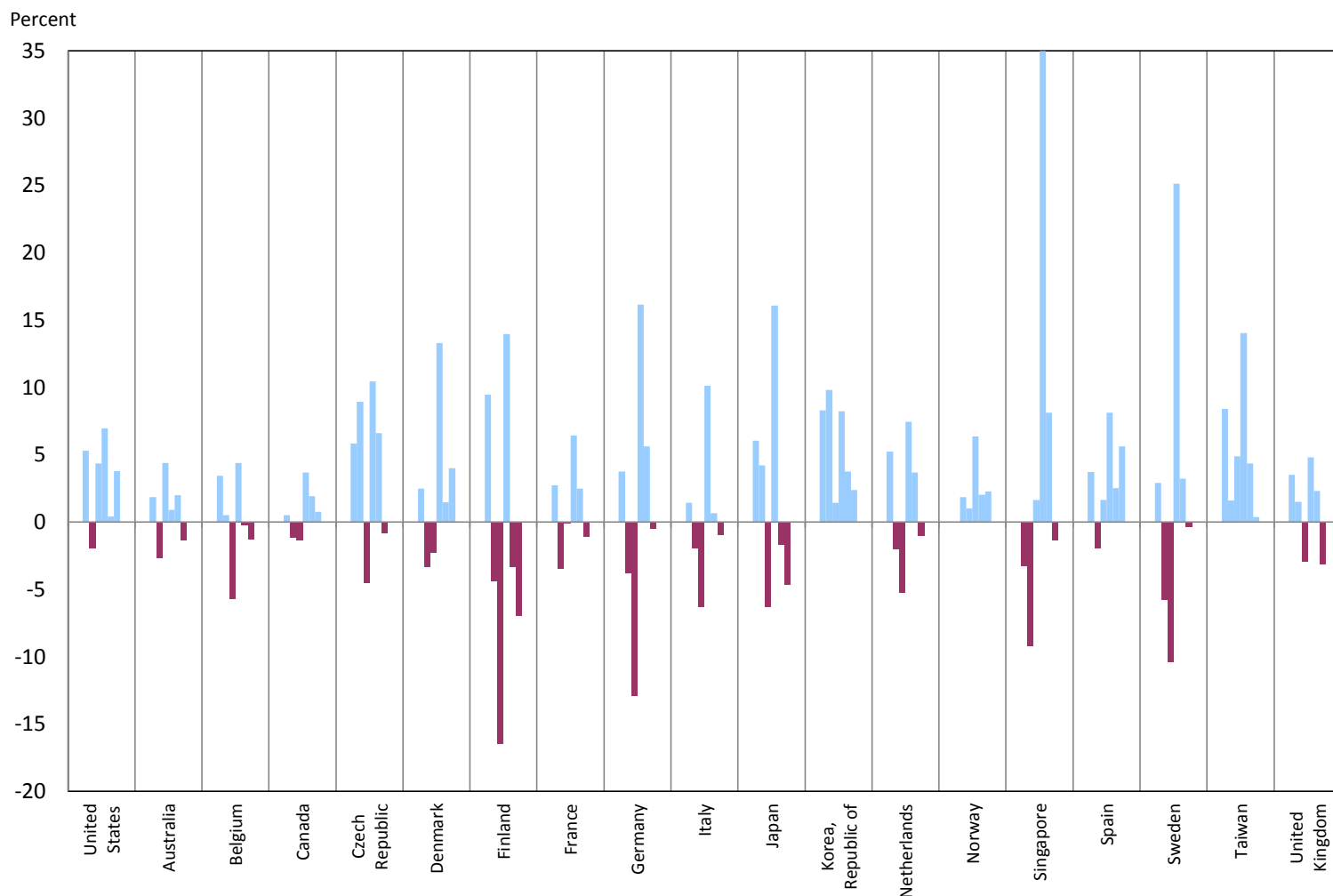


Source: The Conference Board, International Labor Comparisons program

The 2008/2009 global financial and economic crisis also had a significant impact on manufacturing productivity performance in the countries compared (see [Chart 3](#) and [Table 1](#)). In the period 2007 to 2012, manufacturing productivity was weakest across the Euro Area. In particular, manufacturing in Finland and Belgium became less competitive internationally as these countries experienced both falling productivity and rising unit labor costs in U.S. dollar terms. Manufacturing in Spain, however, became increasingly competitive with rising productivity and falling unit labor costs, because of a much faster decline in hours and labor compensation than the drop in manufacturing output. All Asian economies compared, except Japan, also saw relatively strong productivity growth in manufacturing. Manufacturing competitiveness in Taiwan and the Republic of Korea also improved substantially in the last five years, but in contrast to Spain, stronger competitiveness resulted from larger increases in output than labor compensation and hours worked, rather than bigger declines in compensation and hours relative to output.

On an annual basis, however, productivity performance in recent years following the global slowdown was more mixed (see [Chart 4](#)). In 2010, a majority of the countries compared—most notably Denmark, Finland, Germany, Japan, Singapore, and Sweden—experienced record, or near record, productivity growth as manufacturing activity recovered from the immediate effects of the emergence of the global financial and economic crisis. However, since then, manufacturing productivity has been weakening. In almost half the countries, except for the 2008/2009 recession, 2012 manufacturing productivity growth was the lowest seen since the 1980s or earlier.

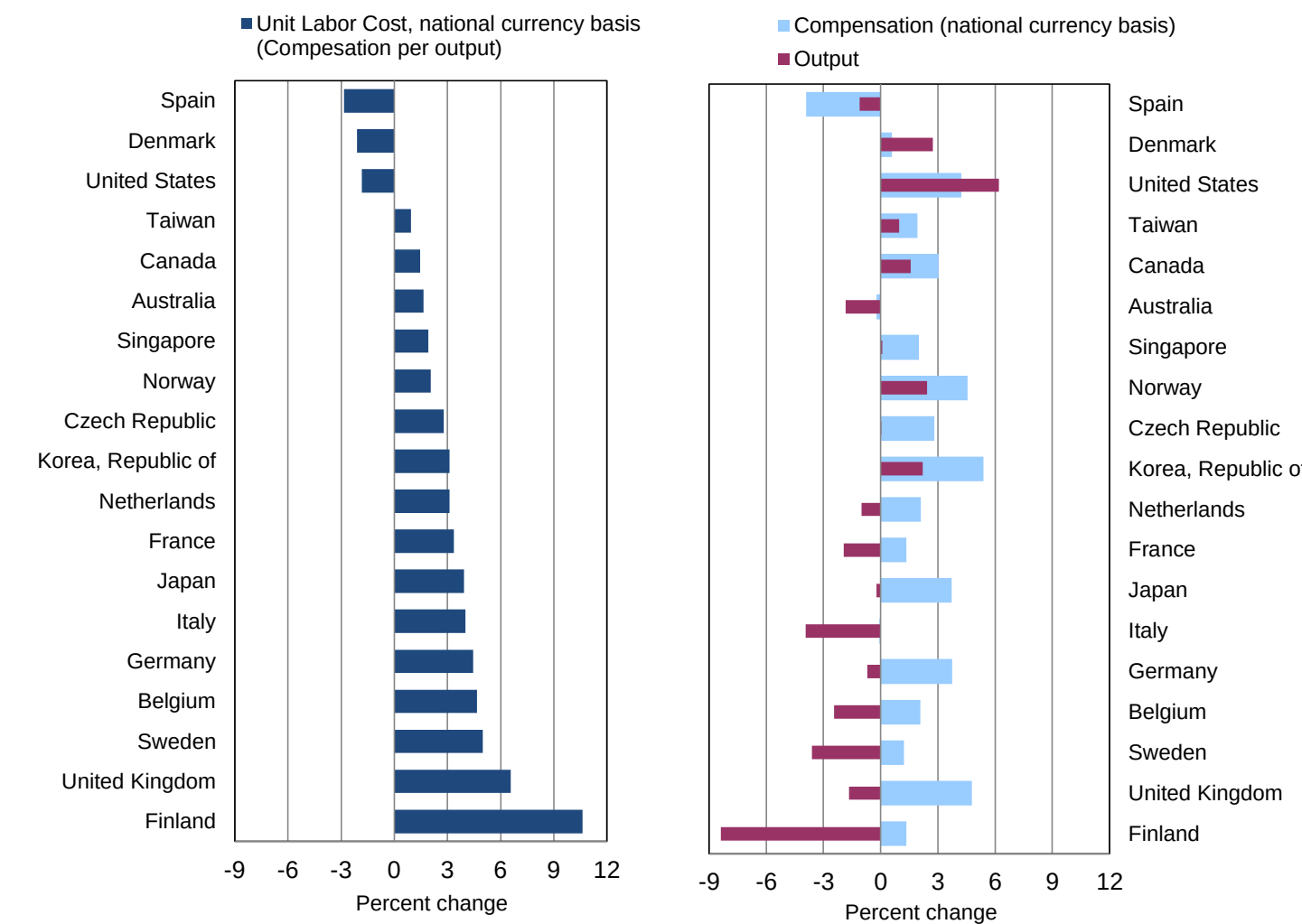
Chart 4. Manufacturing productivity (output per hour), annual percent change, 2007-2012



Source: The Conference Board, International Labor Comparisons program

Unit labor costs (ULC) are the direct link between productivity and the cost of labor required in generating output, and are calculated as the ratio of total labor compensation to real output. Therefore, the change in ULC is composed of the change in compensation and the change in output (see [Chart 5](#) and [Table 2](#)). In 2012, ULC in national currency terms increased in all countries compared except Spain, Denmark, and the United States. Labor compensation rose in 16 of 19 countries and falling output in over half the countries intensified the rise in ULC. Thus, in 2012, output did not keep up with compensation gains in most countries compared. Only in Denmark and the United States did output growth offset increases in compensation, resulting in falling ULC in those countries. In Spain the fall in labor compensation offset the decline in output, causing the largest decline.

Chart 5. Unit labor cost, compensation, and output in manufacturing, annual percent change, 2012

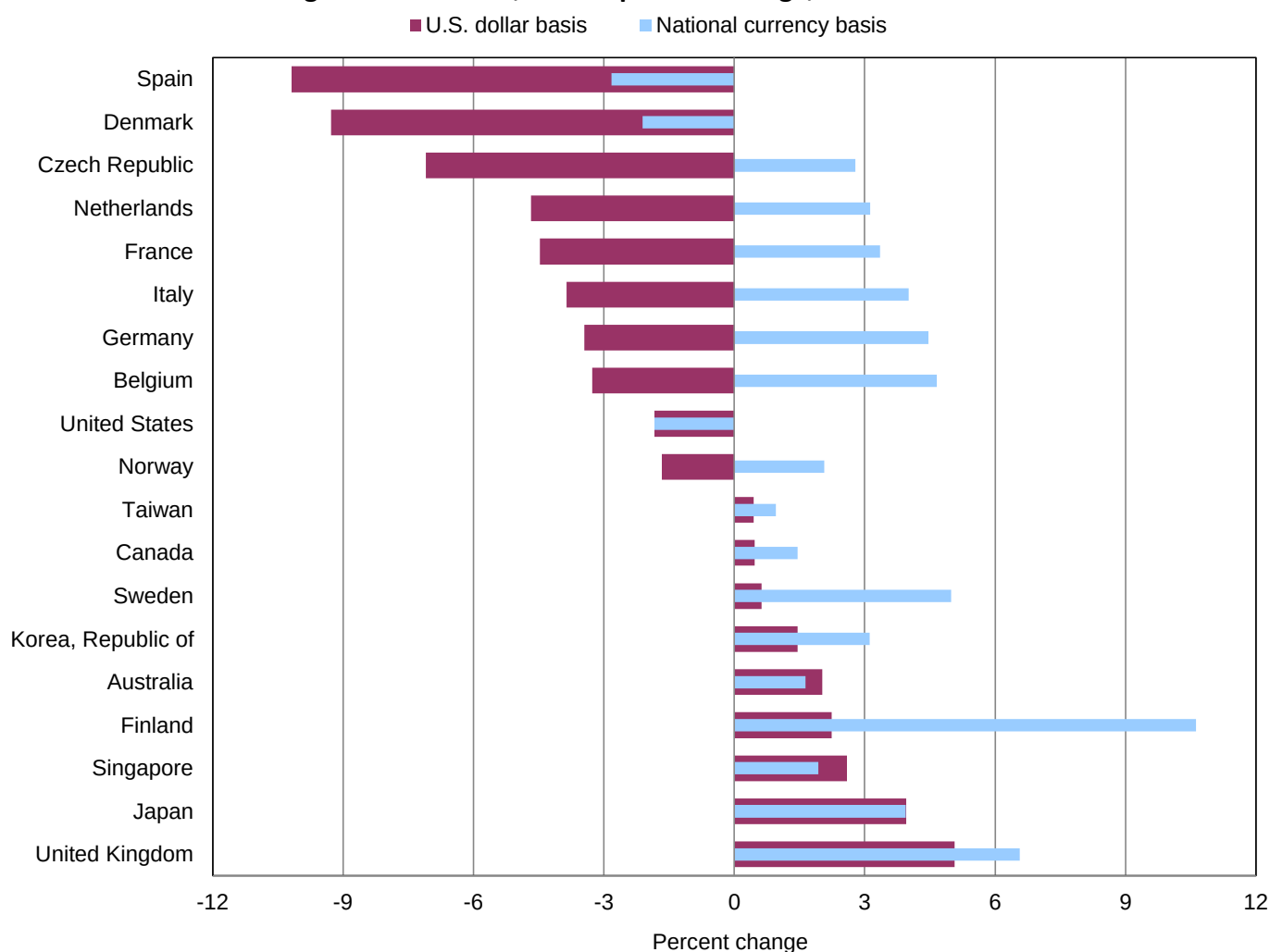


Source: The Conference Board, International Labor Comparisons program

For international comparisons, the labor compensation components in the ULCs are converted into a common currency, in this case U.S. dollars. Changes in a country's ULC in U.S. dollars are roughly equivalent to the change in ULC in national currency plus the change in the value of the country's currency relative to the U.S. dollar (see [Table 3](#)). The national currencies of 15 of 19 countries compared depreciated relative to the U.S. dollar in 2012. As a result of the weakening currencies, ULC in U.S. dollars showed a larger decrease (or smaller increase) than ULC expressed in national currencies, except for Singapore, Australia, and Japan (see [Chart 6](#)).

Despite almost across the board increases in ULC in national currency units, when expressed in U.S. dollars, the results are mixed. In U.S. dollar terms, when ULC in other countries rise faster (or decline slower) than ULC in the United States, U.S. cost competitiveness improves. In 2012, due to the appreciation of the U.S. dollar, unit labor costs in U.S. dollar terms increased in 9 of the 19 countries covered, compared to 16 out of the 19 countries without an adjustment for dollar appreciation (see [Chart 6](#)). Therefore, U.S. manufacturing increased competitiveness against all countries where ULC in U.S. dollars rose, as well as Norway. Notably, U.S. competitiveness increased against all Asian countries compared (Taiwan, the Republic of Korea, Singapore, and Japan) and had the largest improvement against the United Kingdom. On the other hand, the U.S. competitive position deteriorated against 8 of 19 countries, most notably Spain and other Euro Area economies, which saw greater declines in U.S. dollar-based ULC than the United States.

Chart 6. Manufacturing unit labor costs, annual percent change, 2012



Source: The Conference Board, International Labor Comparisons program

Table 1. Productivity (output per hour), output, and hours worked

Manufacturing, 19 countries, 1979–2012

Average annual compound rates of change

Country	Indicator	1979-2012	1979-1990	1990-2000	2000-2007	2007-2012	2010-2011	2011-2012
United States	Output per hour	4.0	3.0	4.3	6.1	2.7	0.4	3.8
	Output	2.6	2.3	4.2	2.9	-0.1	2.5	6.2
	Hours	-1.3	-0.6	-0.1	-3.1	-2.7	2.1	2.3
Australia	Output per hour	1.8	2.1	1.8	2.3	0.6	2.0	-1.3
	Output	1.1	1.6	1.5	1.5	-1.0	-0.4	-1.8
	Hours	-0.7	-0.5	-0.4	-0.8	-1.6	-2.4	-0.5
Belgium	Output per hour	2.5	4.2	2.8	1.6	-0.5	-0.2	-1.3
	Output	1.1	2.6	1.5	0.7	-2.1	3.0	-2.5
	Hours	-1.3	-1.6	-1.2	-0.9	-1.6	3.3	-1.2
Canada	Output per hour	2.1	2.1	3.6	1.0	0.8	1.9	0.8
	Output	1.4	1.9	4.2	-0.6	-1.9	2.4	1.6
	Hours	-0.6	-0.2	0.6	-1.6	-2.6	0.5	0.8
Czech Republic	Output per hour	NA	NA	NA	9.7	4.0	6.6	-0.8
	Output	NA	NA	NA	9.4	2.7	8.6	0.0
	Hours	NA	NA	NA	-0.3	-1.2	1.9	0.8
Denmark	Output per hour	2.5	2.4	2.4	3.0	2.5	1.5	4.0
	Output	0.9	1.4	2.0	0.5	-1.9	3.0	2.7
	Hours	-1.6	-1.0	-0.4	-2.4	-4.3	1.6	-1.2
Finland	Output per hour	4.5	5.0	6.5	7.0	-3.9	-3.3	-6.9
	Output	3.1	3.4	5.5	6.2	-6.5	-1.1	-8.4
	Hours	-1.3	-1.5	-0.9	-0.8	-2.7	2.2	-1.6
France	Output per hour	3.1	3.2	3.9	3.3	0.8	2.5	-1.1
	Output	0.9	0.9	1.9	1.2	-1.6	2.1	-1.9
	Hours	-2.1	-2.3	-1.9	-2.1	-2.4	-0.4	-0.9
Germany	Output per hour	2.8	2.5	3.4	4.2	0.5	5.6	-0.5
	Output	1.3	1.5	0.6	3.0	0.1	9.1	-0.7
	Hours	-1.4	-0.9	-2.6	-1.2	-0.4	3.3	-0.2
Italy	Output per hour	2.1	3.4	2.5	0.9	0.2	0.7	-0.9
	Output	0.9	2.6	1.3	0.8	-3.4	1.0	-3.9
	Hours	-1.2	-0.8	-1.2	-0.1	-3.6	0.4	-3.0
Japan	Output per hour	3.3	3.8	3.6	3.8	1.2	-1.7	-4.7
	Output	2.3	4.7	1.0	2.8	-0.8	-2.7	-0.2
	Hours	-1.0	0.9	-2.5	-1.0	-2.0	-1.1	4.6
Korea, Republic of	Output per hour	NA	NA	10.5	7.3	5.1	3.7	2.4
	Output	8.3	10.8	8.4	6.8	5.0	7.3	2.2
	Hours	NA	NA	-1.9	-0.5	-0.1	3.4	-0.1
Netherlands	Output per hour	3.0	3.2	3.4	3.8	0.5	3.7	-1.0
	Output	1.9	2.4	2.7	2.0	-0.6	3.2	-1.0
	Hours	-1.0	-0.8	-0.7	-1.7	-1.0	-0.5	0.0
Norway	Output per hour	1.9	2.0	0.9	2.3	2.7	2.0	2.3
	Output	0.7	-0.6	1.2	2.3	0.4	2.0	2.4
	Hours	-1.1	-2.5	0.2	-0.1	-2.2	-0.1	0.2
Singapore	Output per hour	4.8	4.0	7.2	2.0	5.9	8.1	-1.4
	Output	6.6	7.3	7.4	5.5	5.1	7.8	0.1
	Hours	1.7	3.2	0.2	3.5	-0.7	-0.3	1.5
Spain	Output per hour	2.8	3.3	2.0	2.9	3.1	2.5	5.6
	Output	1.4	2.1	2.8	1.1	-2.4	1.3	-1.1
	Hours	-1.4	-1.2	0.8	-1.8	-5.3	-1.1	-6.4
Sweden	Output per hour	4.4	2.4	6.3	6.6	1.7	3.2	-0.4
	Output	3.3	1.7	5.8	5.2	-0.8	4.7	-3.6
	Hours	-1.0	-0.7	-0.5	-1.3	-2.4	1.4	-3.2
Taiwan	Output per hour	6.0	6.3	5.0	7.6	4.9	4.3	0.4
	Output	6.4	7.5	5.0	7.2	5.4	6.4	1.0
	Hours	0.4	1.2	-0.1	-0.4	0.5	2.0	0.6
United Kingdom	Output per hour	3.1	3.5	3.0	4.4	0.5	2.3	-3.1
	Output	0.3	0.9	0.9	-0.1	-1.9	1.8	-1.7
	Hours	-2.7	-2.5	-2.1	-4.3	-2.3	-0.5	1.5

Note: Output is real value added in national currency units.

German data for years before 1991 pertain to the former West Germany.

Source: The Conference Board, International Labor Comparisons program

Table 2. Unit labor costs, compensation, and output

National currency basis, manufacturing, 19 countries, 1979–2012

Average annual compound rates of change

Country	Indicator	1979-2012	1979-1990	1990-2000	2000-2007	2007-2012	2010-2011	2011-2012
United States	Unit labor costs	0.2	2.6	-0.4	-2.3	-0.3	0.9	-1.8
	Compensation	2.8	5.0	3.8	0.5	-0.4	3.4	4.2
	Output	2.6	2.3	4.2	2.9	-0.1	2.5	6.2
Australia	Unit labor costs	NA	NA	1.6	2.8	2.1	3.3	1.6
	Compensation	NA	NA	3.1	4.4	1.1	2.9	-0.2
	Output	1.1	1.6	1.5	1.5	-1.0	-0.4	-1.8
Belgium	Unit labor costs	1.2	1.8	0.2	1.0	2.4	-0.9	4.7
	Compensation	2.3	4.4	1.6	1.7	0.2	2.0	2.1
	Output	1.1	2.6	1.5	0.7	-2.1	3.0	-2.5
Canada	Unit labor costs	2.0	4.6	-0.3	2.7	0.2	0.3	1.5
	Compensation	3.5	6.5	3.8	2.1	-1.7	2.8	3.0
	Output	1.4	1.9	4.2	-0.6	-1.9	2.4	1.6
Czech Republic	Unit labor costs	NA	NA	NA	-1.8	-1.7	-3.1	2.8
	Compensation	NA	NA	NA	7.4	0.9	5.2	2.8
	Output	NA	NA	NA	9.4	2.7	8.6	0.0
Denmark	Unit labor costs	2.5	5.5	0.5	2.1	0.5	-1.0	-2.1
	Compensation	3.4	7.0	2.5	2.5	-1.4	2.1	0.6
	Output	0.9	1.4	2.0	0.5	-1.9	3.0	2.7
Finland	Unit labor costs	1.5	5.7	-2.2	-3.1	6.3	5.4	10.6
	Compensation	4.6	9.4	3.3	2.9	-0.6	4.2	1.3
	Output	3.1	3.4	5.5	6.2	-6.5	-1.1	-8.4
France	Unit labor costs	2.2	5.8	-0.2	0.1	2.2	1.4	3.4
	Compensation	3.1	6.7	1.7	1.3	0.6	3.5	1.4
	Output	0.9	0.9	1.9	1.2	-1.6	2.1	-1.9
Germany	Unit labor costs	1.3	3.1	1.4	-2.2	1.9	-3.0	4.5
	Compensation	2.6	4.7	2.0	0.7	2.0	5.8	3.7
	Output	1.3	1.5	0.6	3.0	0.1	9.1	-0.7
Italy	Unit labor costs	4.4	8.8	1.9	2.1	3.1	1.8	4.0
	Compensation	5.3	11.6	3.2	3.0	-0.4	2.8	-0.1
	Output	0.9	2.6	1.3	0.8	-3.4	1.0	-3.9
Japan	Unit labor costs	-1.1	0.7	-1.2	-4.4	-0.4	4.2	3.9
	Compensation	1.2	5.5	-0.3	-1.7	-1.2	1.3	3.7
	Output	2.3	4.7	1.0	2.8	-0.8	-2.7	-0.2
Korea, Republic of	Unit labor costs	4.0	7.9	2.7	1.5	2.2	1.4	3.1
	Compensation	12.7	19.5	11.3	8.4	7.3	8.9	5.4
	Output	8.3	10.8	8.4	6.8	5.0	7.3	2.2
Netherlands	Unit labor costs	0.6	0.8	0.3	-0.1	1.8	-2.0	3.1
	Compensation	2.5	3.2	3.0	1.9	1.2	1.1	2.1
	Output	1.9	2.4	2.7	2.0	-0.6	3.2	-1.0
Norway	Unit labor costs	3.9	6.7	3.4	2.3	1.2	1.8	2.1
	Compensation	4.7	6.1	4.5	4.7	1.7	3.8	4.5
	Output	0.7	-0.6	1.2	2.3	0.4	2.0	2.4
Singapore	Unit labor costs	0.2	3.7	-1.5	-1.1	-1.9	-2.2	1.9
	Compensation	6.9	11.3	5.8	4.4	3.1	5.4	2.0
	Output	6.6	7.3	7.4	5.5	5.1	7.8	0.1
Spain	Unit labor costs	3.8	8.0	2.5	2.3	-0.7	-1.3	-2.8
	Compensation	5.2	10.2	5.4	3.4	-3.0	0.0	-3.9
	Output	1.4	2.1	2.8	1.1	-2.4	1.3	-1.1
Sweden	Unit labor costs	1.1	6.6	-2.1	-2.3	0.8	0.1	5.0
	Compensation	4.4	8.4	3.6	2.8	0.0	4.8	1.2
	Output	3.3	1.7	5.8	5.2	-0.8	4.7	-3.6
Taiwan	Unit labor costs	0.5	5.5	0.2	-3.8	-3.7	-1.6	1.0
	Compensation	6.9	13.5	5.2	3.1	1.6	4.8	1.9
	Output	6.4	7.5	5.0	7.2	5.4	6.4	1.0
United Kingdom	Unit labor costs	2.9	6.2	1.4	0.8	1.9	-1.1	6.6
	Compensation	3.2	7.2	2.3	0.8	0.0	0.6	4.8
	Output	0.3	0.9	0.9	-0.1	-1.9	1.8	-1.7

Note: Output is real value added in national currency units.

German data for years before 1991 pertain to the former West Germany.

Source: The Conference Board, International Labor Comparisons program

Table 3. Unit labor costs (ULC) in U.S. dollars and in national currency and exchange rates

Manufacturing, 19 countries, 1979–2012

Average annual compound rates of change

Country	Indicator	1979-2012	1979-1990	1990-2000	2000-2007	2007-2012	2010-2011	2011-2012
United States	ULC in U.S. dollars	0.2	2.6	-0.4	-2.3	-0.3	0.9	-1.8
	ULC in nat. cur.	0.2	2.6	-0.4	-2.3	-0.3	0.9	-1.8
	Exchange rates	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Australia	ULC in U.S. dollars	NA	NA	-1.4	8.4	6.6	16.2	2.0
	ULC in nat. cur.	NA	NA	1.6	2.8	2.1	3.3	1.6
	Exchange rates	-0.2	-3.2	-2.9	5.4	4.4	12.4	0.4
Belgium	ULC in U.S. dollars	1.0	0.6	-2.5	6.9	1.1	4.0	-3.3
	ULC in nat. cur.	1.2	1.8	0.2	1.0	2.4	-0.9	4.7
	Exchange rates	-0.2	-1.2	-2.7	5.8	-1.3	5.0	-7.6
Canada	ULC in U.S. dollars	2.5	4.6	-2.7	7.6	1.7	4.5	0.5
	ULC in nat. cur.	2.0	4.6	-0.3	2.7	0.2	0.3	1.5
	Exchange rates	0.5	0.0	-2.4	4.7	1.5	4.1	-1.0
Czech Republic	ULC in U.S. dollars	NA	NA	NA	7.7	-1.0	4.6	-7.1
	ULC in nat. cur.	NA	NA	NA	-1.8	-1.7	-3.1	2.8
	Exchange rates	NA	NA	NA	9.6	0.7	7.9	-9.6
Denmark	ULC in U.S. dollars	2.2	3.9	-2.1	8.0	-0.7	3.8	-9.3
	ULC in nat. cur.	2.5	5.5	0.5	2.1	0.5	-1.0	-2.1
	Exchange rates	-0.3	-1.5	-2.6	5.8	-1.2	4.8	-7.3
Finland	ULC in U.S. dollars	0.9	5.9	-7.1	2.6	5.0	10.6	2.2
	ULC in nat. cur.	1.5	5.7	-2.2	-3.1	6.3	5.4	10.6
	Exchange rates	-0.5	0.2	-5.1	5.8	-1.3	5.0	-7.6
France	ULC in U.S. dollars	1.6	3.4	-2.9	5.9	0.9	6.4	-4.5
	ULC in nat. cur.	2.2	5.8	-0.2	0.1	2.2	1.4	3.4
	Exchange rates	-0.6	-2.2	-2.6	5.8	-1.3	5.0	-7.6
Germany	ULC in U.S. dollars	1.8	4.3	-1.4	3.5	0.6	1.8	-3.4
	ULC in nat. cur.	1.3	3.1	1.4	-2.2	1.9	-3.0	4.5
	Exchange rates	0.6	1.2	-2.7	5.8	-1.3	5.0	-7.6
Italy	ULC in U.S. dollars	2.5	5.2	-3.7	8.1	1.8	6.8	-3.9
	ULC in nat. cur.	4.4	8.8	1.9	2.1	3.1	1.8	4.0
	Exchange rates	-1.8	-3.3	-5.5	5.8	-1.3	5.0	-7.6
Japan	ULC in U.S. dollars	1.9	4.6	1.7	-5.6	7.7	14.6	4.0
	ULC in nat. cur.	-1.1	0.7	-1.2	-4.4	-0.4	4.2	3.9
	Exchange rates	3.1	3.8	3.0	-1.3	8.1	10.0	0.0
Korea, Republic of	ULC in U.S. dollars	1.4	4.2	-2.0	4.4	-1.6	5.8	1.5
	ULC in nat. cur.	4.0	7.9	2.7	1.5	2.2	1.4	3.1
	Exchange rates	-2.5	-3.4	-4.6	2.8	-3.8	4.3	-1.6
Netherlands	ULC in U.S. dollars	1.1	1.7	-2.4	5.7	0.5	2.8	-4.7
	ULC in nat. cur.	0.6	0.8	0.3	-0.1	1.8	-2.0	3.1
	Exchange rates	0.5	0.9	-2.7	5.8	-1.3	5.0	-7.6
Norway	ULC in U.S. dollars	3.5	4.7	-0.1	8.5	1.4	9.8	-1.7
	ULC in nat. cur.	3.9	6.7	3.4	2.3	1.2	1.8	2.1
	Exchange rates	-0.4	-1.9	-3.4	6.0	0.2	7.8	-3.7
Singapore	ULC in U.S. dollars	1.9	5.5	-1.0	0.8	1.8	6.1	2.6
	ULC in nat. cur.	0.2	3.7	-1.5	-1.1	-1.9	-2.2	1.9
	Exchange rates	1.7	1.7	0.5	1.9	3.8	8.4	0.6
Spain	ULC in U.S. dollars	1.7	3.9	-3.2	8.3	-1.9	3.6	-10.2
	ULC in nat. cur.	3.8	8.0	2.5	2.3	-0.7	-1.3	-2.8
	Exchange rates	-2.0	-3.7	-5.6	5.8	-1.3	5.0	-7.6
Sweden	ULC in U.S. dollars	-0.3	3.5	-6.3	2.1	0.8	11.1	0.6
	ULC in nat. cur.	1.1	6.6	-2.1	-2.3	0.8	0.1	5.0
	Exchange rates	-1.4	-2.9	-4.3	4.4	0.0	11.0	-4.2
Taiwan	ULC in U.S. dollars	1.1	8.3	-1.3	-4.5	-1.6	5.7	0.4
	ULC in nat. cur.	0.5	5.5	0.2	-3.8	-3.7	-1.6	1.0
	Exchange rates	0.6	2.7	-1.5	-0.7	2.1	7.4	-0.5
United Kingdom	ULC in U.S. dollars	2.0	4.5	-0.2	4.9	-2.8	2.5	5.1
	ULC in nat. cur.	2.9	6.2	1.4	0.8	1.9	-1.1	6.6
	Exchange rates	-0.9	-1.6	-1.6	4.1	-4.6	3.7	-1.4

Note: Exchange rates are value of foreign currency relative to the U.S. dollar.

German data for years before 1991 pertain to the former West Germany.

Source: The Conference Board, International Labor Comparisons program