

International Comparisons of GDP per Capita and per Hour, 1960–2011



Division of International Labor Comparisons

November 7, 2012

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Related Info

Dashboard and data tables:

www.bls.gov/ilc/intl_gdp_capita_gdp_hour.xls

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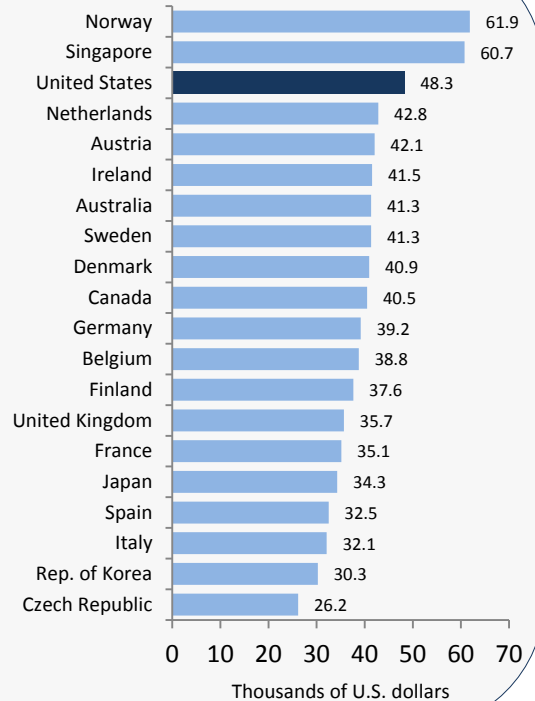
GDP per capita, when converted to U.S. dollars using purchasing power parities, is the most widely used income measure for international comparisons of living standards.

In 2011, Norway had the highest GDP per capita followed by Singapore and then the United States.

GDP per capita was lowest in the Czech Republic and the Republic of Korea.

For more details, see page 3.

GDP per capita, 2011



GDP per hour worked is a general measure of labor productivity for the entire economy.

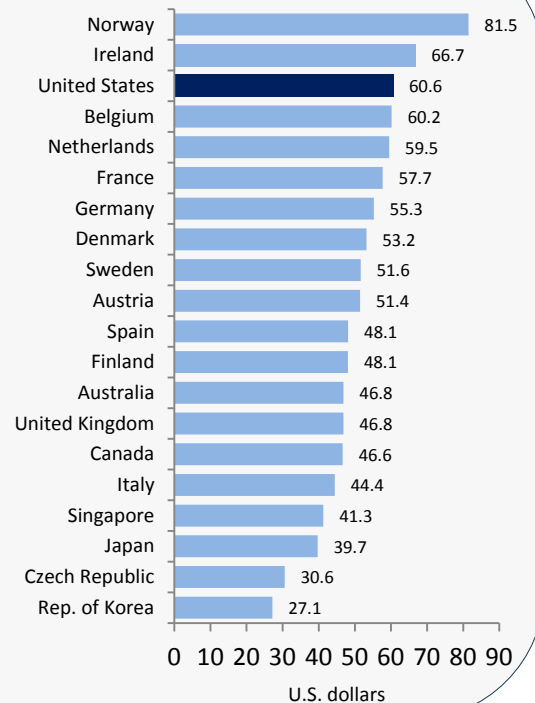
In 2011, Norway and Ireland had the highest GDP per hour worked followed by the United States.

GDP per hour worked was lowest in the Republic of Korea and the Czech Republic.

Singapore had one of the highest levels of GDP per capita, but one of the lower levels of GDP per hour worked.

For more details, see page 5.

GDP per hour worked, 2011



Introduction

This report updates international comparisons of GDP per capita and related measures produced annually by the Bureau of Labor Statistics (BLS). Charts on current levels and recent trends of GDP per capita, GDP per hour worked, average annual hours worked, and employment are followed by tables with time series and growth rates of these and related indicators. The estimates shown in this report are based on data available as of September 2012. Data are available for all countries through 2011.

Concepts and Definitions

Gross Domestic Product (GDP) is defined as the value of all market and some nonmarket goods and services produced within a country's geographic borders. As such, it is the most comprehensive measure of a country's economic output that is estimated by statistical agencies. GDP per capita may therefore be viewed as a rough indicator of a nation's economic well being, while GDP per hour worked can provide a general picture of a country's productivity.

These indicators, however, are only approximations. The total production of a country consists of many things that are not included in its GDP, for example leisure, health, safety, and cultural resources. Due to these types of data limitations, small differences in rankings should not be considered economically significant. Nevertheless, these measures are commonly used to compare the economic performance of different countries.

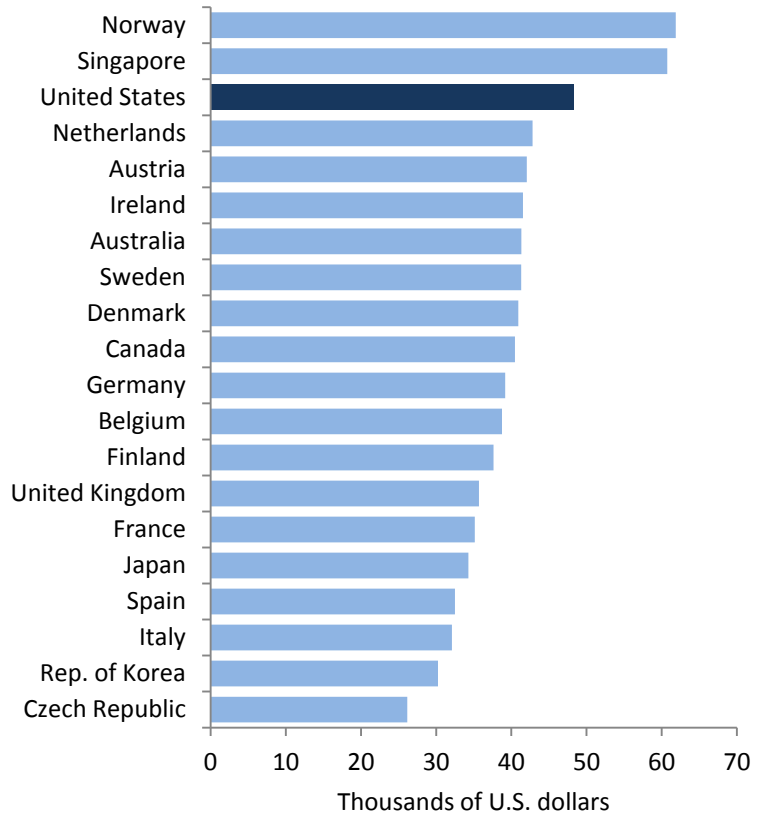
For international comparisons of levels of GDP, GDP per capita, or GDP per hour worked, the output has to be measured in a common currency unit. BLS converts the output measures from national currency units to U.S. dollars through the use of purchasing power parities (PPPs). PPPs are currency conversion rates that allow output in different currency units to be expressed in a common unit of value - in this case, U.S. dollars. The PPP for a given country is a ratio, where the numerator is the number of national currency units needed to purchase a specific basket of goods and services in that country and the denominator is the number of U.S. dollars needed to purchase a similar basket of goods in the United States, the base country.

This report now uses 2011 PPPs instead of 2010 PPPs. In addition, since the previous update, the organizations that publish the PPPs have revised their earlier data. As a result, GDP for some countries may have changed.

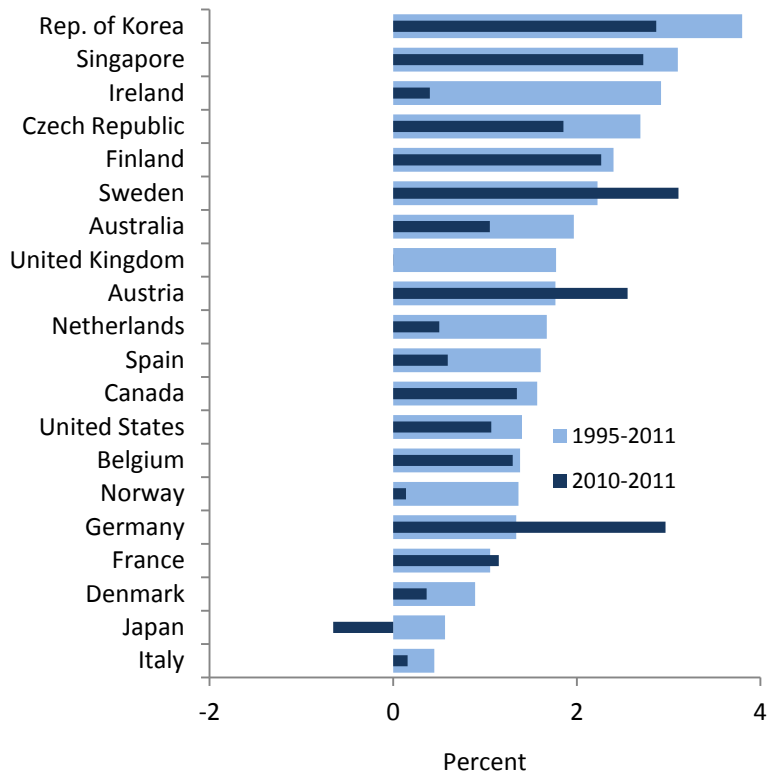
For further information on sources and methods see technical notes. Additional historical data on GDP per capita, GDP per hour worked, and related measures are available at www.bls.gov/ilc/#gdp.

- **GDP per capita** is a basic indicator of a country's economic well-being. GDP measures the value of all final goods and services produced within a country.
- The country with the highest GDP per capita, Norway, had a GDP per capita value in 2011 that was more than twice that of the country with the lowest value, the Czech Republic.
- In 2011, real GDP per capita grew in 18 of the 20 countries compared. The greatest increases occurred in Sweden and Germany. The growth in 2011 by the 18 countries is in line with the average annual changes over the 1995–2011 period, with the largest increases occurring in the Republic of Korea and Singapore.
- The charts on page 4 show that countries began experiencing declines in real GDP per capita around 2007. Several countries, however, have increased GDP per capita since 2009.

GDP per capita, 2011
 Converted to U.S. dollars using 2011 PPPs



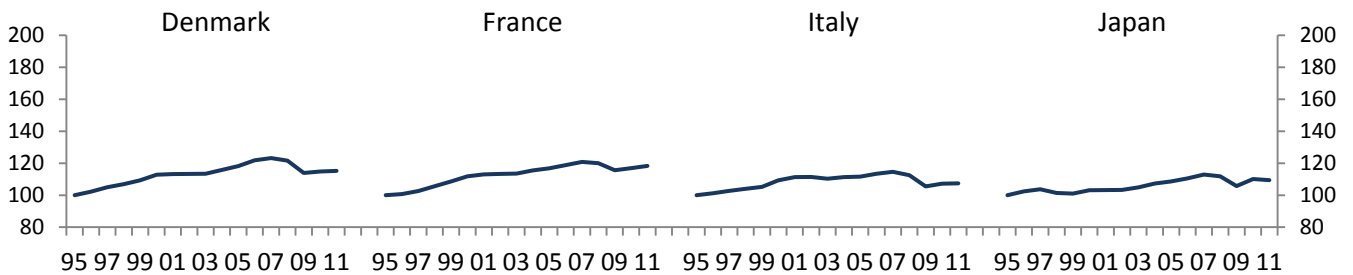
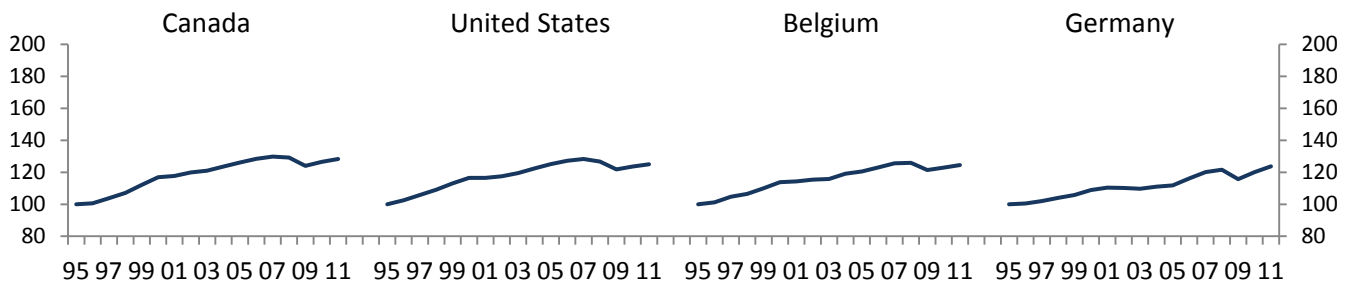
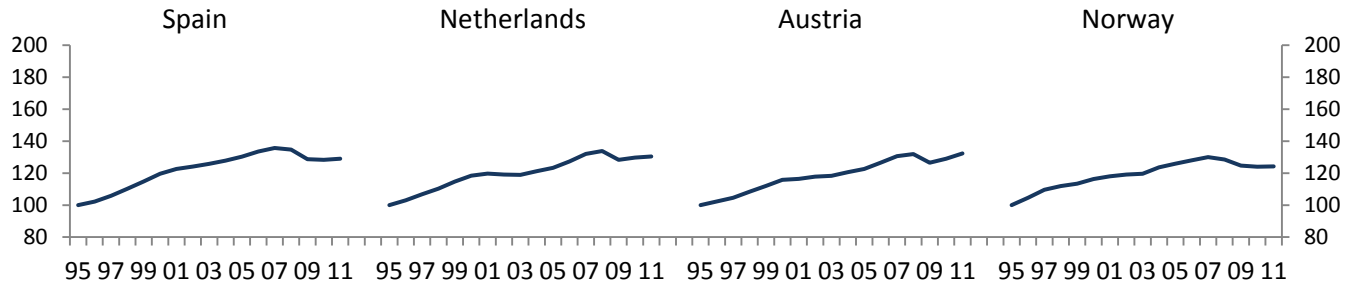
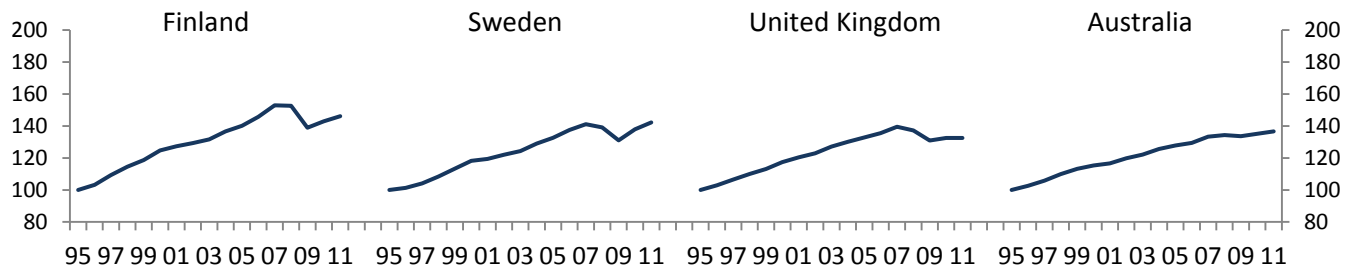
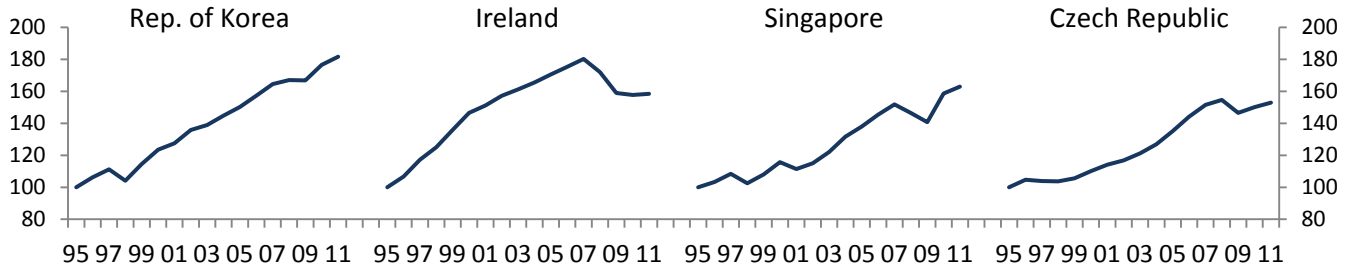
Real GDP per capita
 Average annual growth rates



Real GDP per capita, by country, 1995–2011

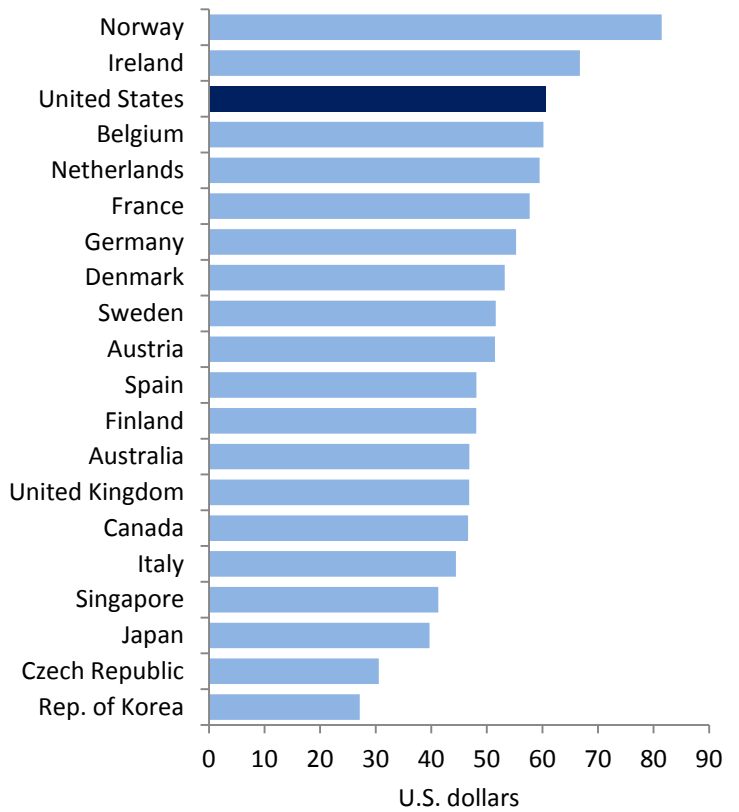
Converted to U.S. dollars using 2011 PPPs

Index: 1995 = 100



GDP per hour worked, 2011

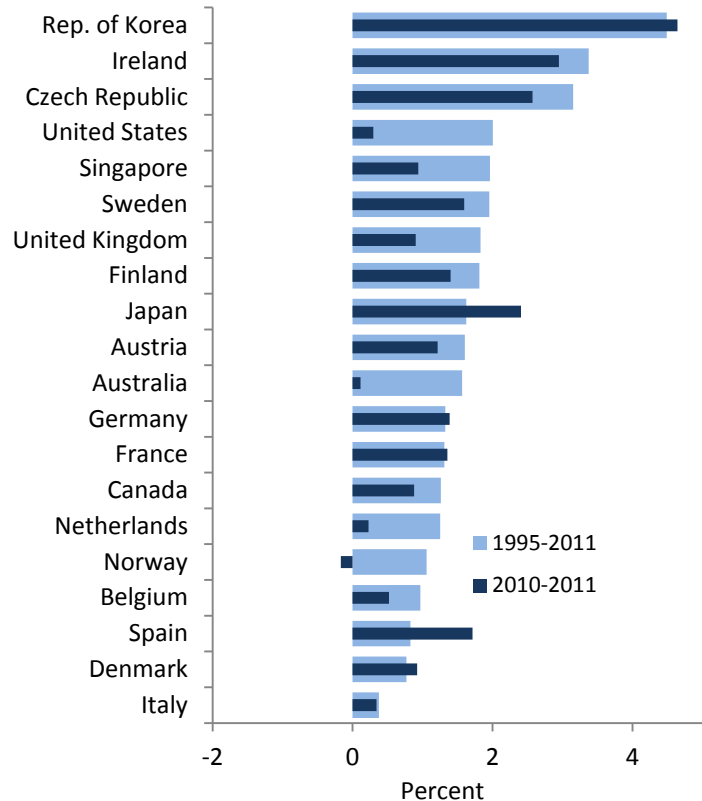
Converted to U.S. dollars using 2011 PPPs



- **GDP per hour worked** is an indicator of a country's productivity.
- In 2011, Norway had the highest level of GDP per hour among the countries covered; approximately 20 percent higher than the next highest ranked country, Ireland, and roughly three times the level of the Republic of Korea.
- While Singapore had the second highest level of GDP per capita, it had a relatively low level of GDP per hour worked. The difference is related to Singapore having the highest average annual hours worked per employed person (see page 15) and the highest employment to population ratio (see page 16) of all countries covered.
- In general, countries with low levels of GDP per hour worked, such as Singapore and the Republic of Korea, had a high number of annual average hours worked per employed person. For more details, see page 7.
- Over the 1995–2011 period, all countries compared experienced increases in real GDP per hour worked. All countries also saw increases in real GDP per hour worked in 2011 except Norway.
- The charts on page 6 show how growth in GDP per hour differed across countries. Since 1995, GDP per hour in the Republic of Korea has doubled while remaining relatively flat in Italy.

Real GDP per hour worked

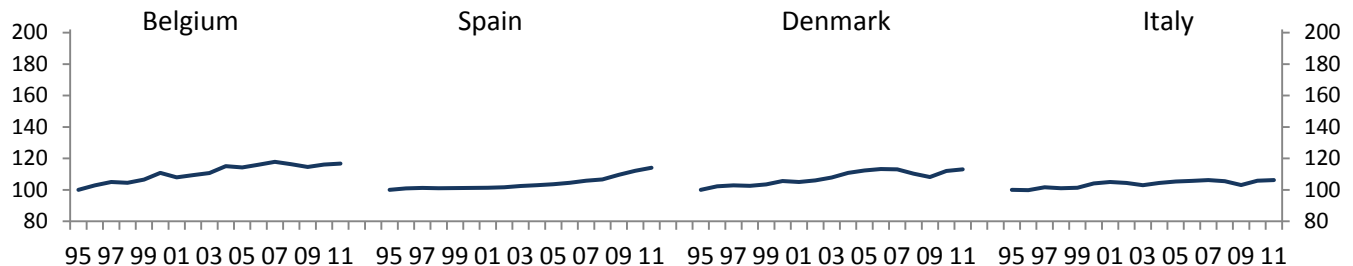
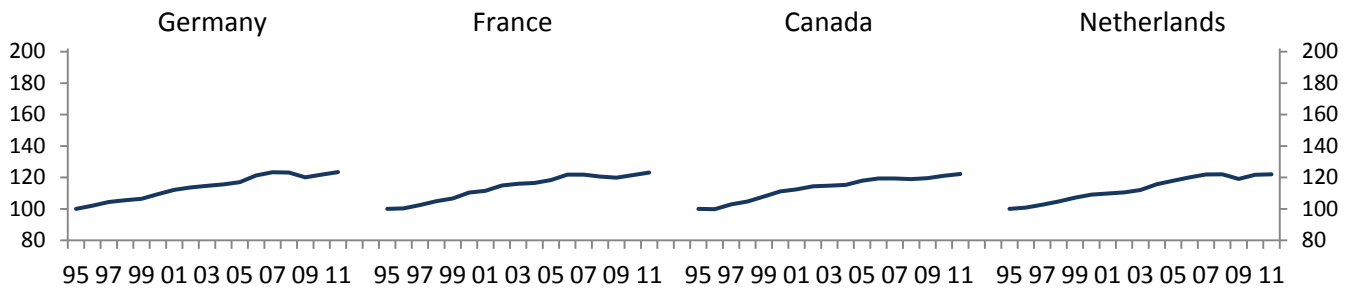
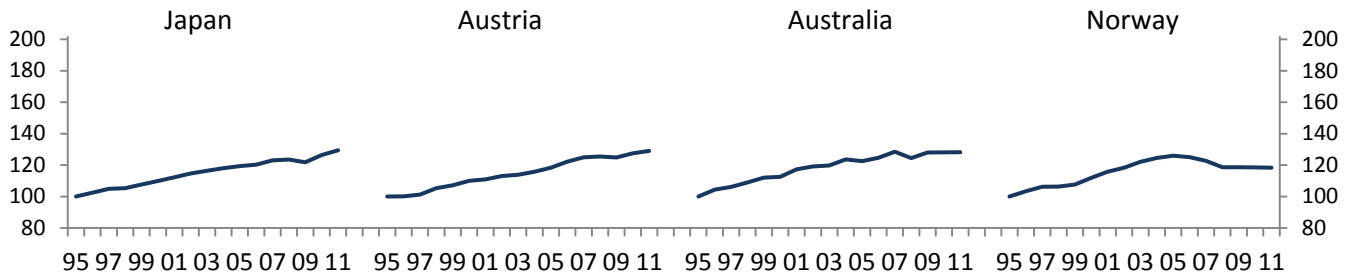
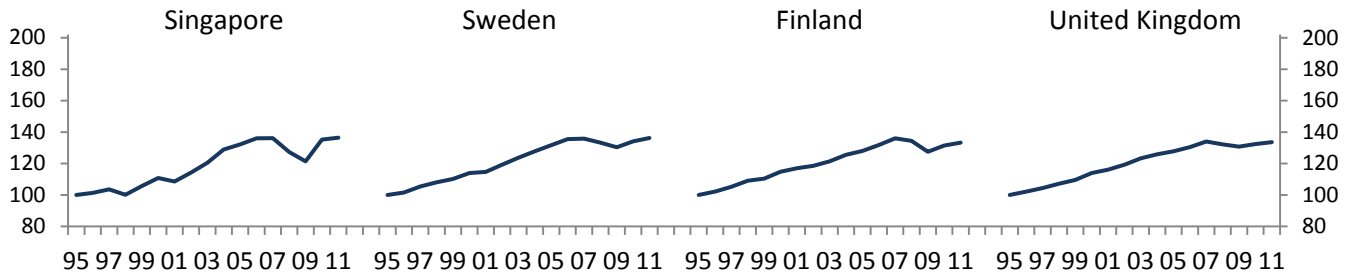
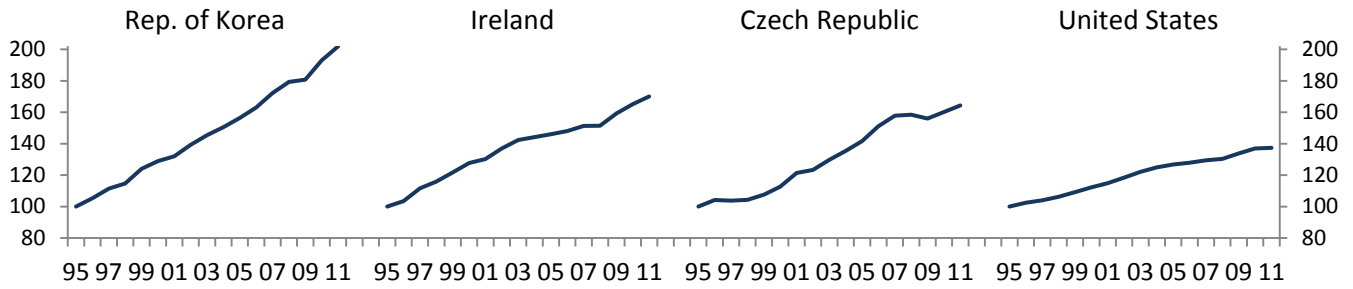
Average annual growth rates



Real GDP per hour, by country, 1995–2011

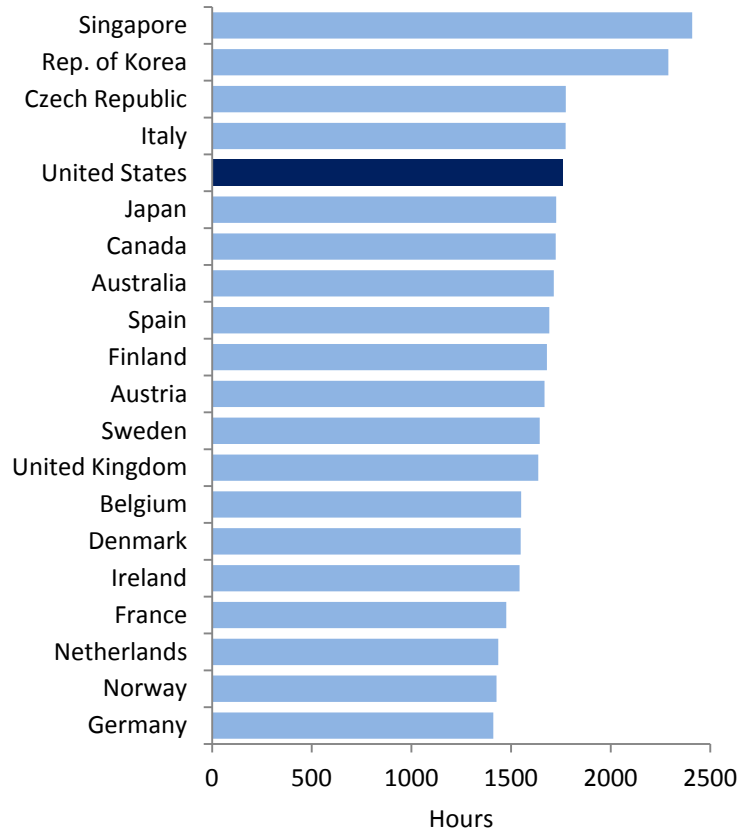
Converted to U.S. dollars using 2011 PPPs

Index: 1995 = 100

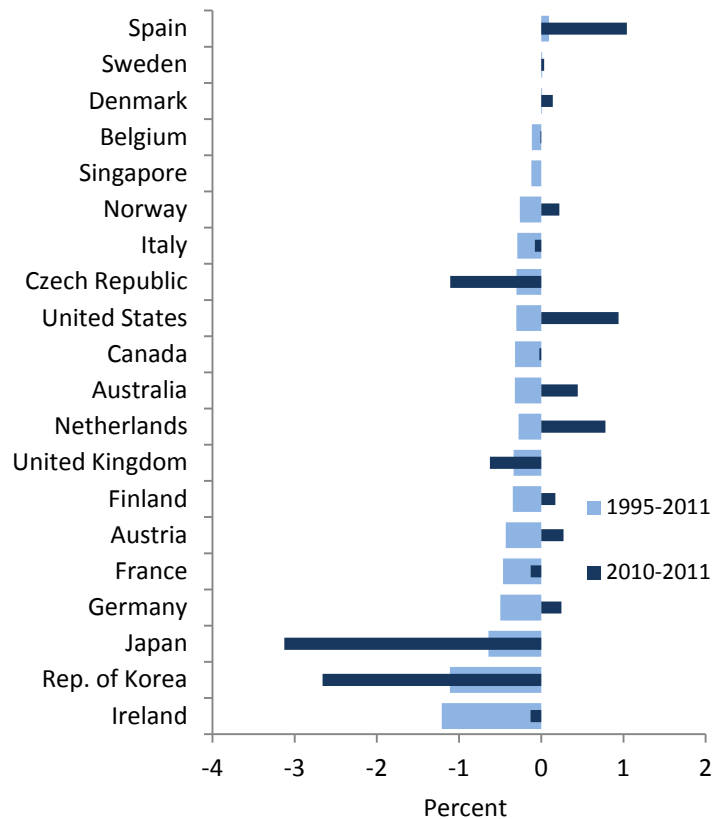


- **Average annual hours worked** is total number of hours worked in an economy divided by the number of persons employed.
- Of the countries covered, average annual hours worked were highest in Singapore and the Republic of Korea, at well over 2000 hours.
- In general, European countries had a lower number of average annual hours worked than non-European countries. Average annual hours were lowest in Germany and Norway. The European country with the highest level of average annual hours worked was the Czech Republic, followed by Italy.
- With the exception of Spain, Sweden, and Denmark, average annual hours declined in all countries covered since 1995. In the latest year, however, hours declined in less than half the countries.

Average annual hours worked, 2011
per employed person

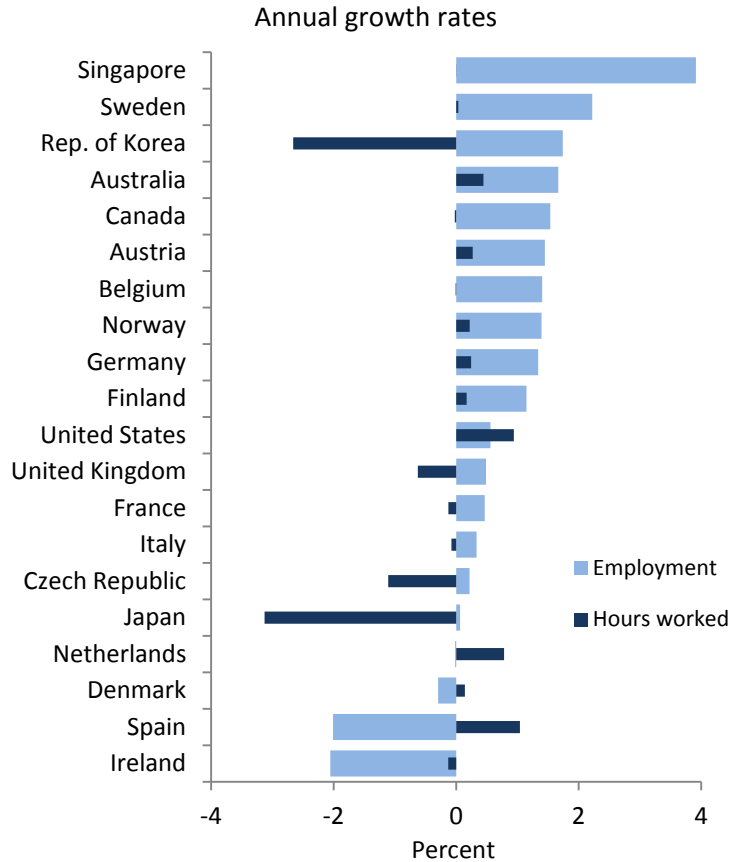


Average annual hours worked
Average annual growth rates



- **Employment and average hours worked** combine to yield total hours worked, which is typically used as the labor input in productivity measures.
- In 2011, most countries experienced increases of employment and comparatively small changes in average hours worked.
- The 1995–2011 period saw growth in employment coupled with small declines in average annual hours worked for most of the countries covered. The only exceptions to this trend occurred in Japan and the Czech Republic, where both indicators declined, and Spain, where both indicators rose.

Employment and average hours worked, 2010- 2011



Employment and average hours worked, 1995 - 2011



Real GDP per capita, by country, 1960–2011

Table 1a. Converted to U.S. dollars using 2011 PPPs (2011 U.S. dollars)

Country	1960	1979	1990	2000	2007	2008	2009	2010	2011
United States	17,747	29,467	36,378	45,026	49,571	48,951	47,041	47,772	48,282
Canada	14,733	26,027	30,668	36,903	40,973	40,773	39,161	39,951	40,489
Australia	15,320	23,085	27,967	34,910	40,357	40,644	40,447	40,910	41,340
Japan	6,109	19,551	29,679	32,322	35,392	35,040	33,144	34,519	34,294
Republic of Korea	1,537	5,517	11,985	20,575	27,406	27,834	27,791	29,411	30,254
Singapore	4,378	15,768	28,600	43,142	56,606	54,586	52,445	59,131	60,742
Austria	11,432	23,713	29,484	36,831	41,534	41,935	40,209	41,019	42,066
Belgium	11,741	23,279	29,276	35,427	39,108	39,177	37,775	38,269	38,767
Czech Republic	NA	NA	NA	18,845	25,930	26,460	25,069	25,692	26,169
Denmark	14,926	26,423	32,188	40,049	43,774	43,177	40,441	40,782	40,930
Finland	NA	19,979	27,201	32,128	39,378	39,310	35,782	36,802	37,636
France	11,272	23,547	28,546	33,207	35,882	35,656	34,351	34,734	35,133
Germany	12,352	22,589	27,971	34,508	38,036	38,515	36,649	38,057	39,186
Ireland	NA	16,433	21,551	38,429	47,250	45,105	41,661	41,371	41,537
Italy	9,841	21,458	27,954	32,661	34,261	33,612	31,543	32,050	32,100
Netherlands	14,244	25,569	30,330	38,886	43,360	43,971	42,143	42,610	42,824
Norway	16,574	33,135	42,626	57,922	64,772	63,992	62,137	61,782	61,869
Spain	NA	18,231	23,694	30,128	34,182	33,941	32,432	32,309	32,501
Sweden	13,936	23,628	28,936	34,356	41,003	40,420	38,057	40,071	41,316
United Kingdom	11,879	18,981	24,779	31,640	37,588	36,975	35,279	35,689	35,688

Table 1b. Average annual rates of change

Country	1979-2011	1979-1990	1990-2000	2000-2007	2007-2011	2009-2010	2010-2011
United States	1.6	1.9	2.2	1.4	-0.7	1.6	1.1
Canada	1.4	1.5	1.9	1.5	-3	2.0	1.3
Australia	1.8	1.8	2.2	2.1	.6	1.1	1.1
Japan	1.8	3.9	.9	1.3	-.8	4.1	-.7
Republic of Korea	5.5	7.3	5.6	4.2	2.5	5.8	2.9
Singapore	4.3	5.6	4.2	4.0	1.8	12.7	2.7
Austria	1.8	2.0	2.2	1.7	.3	2.0	2.6
Belgium	1.6	2.1	1.9	1.4	-.2	1.3	1.3
Czech Republic	NA	NA	NA	4.7	.2	2.5	1.9
Denmark	1.4	1.8	2.2	1.3	-1.7	.8	.4
Finland	2.0	2.8	1.7	2.9	-1.1	2.9	2.3
France	1.3	1.8	1.5	1.1	-.5	1.1	1.1
Germany	NA	2.0	NA	1.4	.7	3.8	3.0
Ireland	2.9	2.5	6.0	3.0	-3.2	-.7	.4
Italy	1.3	2.4	1.6	.7	-1.6	1.6	.2
Netherlands	1.6	1.6	2.5	1.6	-3	1.1	.5
Norway	2.0	2.3	3.1	1.6	-1.1	-.6	.1
Spain	1.8	2.4	2.4	1.8	-1.3	-.4	.6
Sweden	1.8	1.9	1.7	2.6	.2	5.3	3.1
United Kingdom	2.0	2.5	2.5	2.5	-1.3	1.2	.0

Note: Data for Germany for years before 1991 pertain to the former West Germany.

NA = Not available.

PPPs = purchasing power parities.

Percent changes were calculated using the compound rate method.

Real GDP per employed person, by country, 1960–2011

Table 2a. Converted to U.S. dollars using 2011 PPPs (2011 U.S. dollars)

Country	1960	1979	1990	2000	2007	2008	2009	2010	2011
United States	46,951	65,717	75,227	91,921	101,409	101,522	102,185	105,235	106,541
Canada	42,310	58,643	64,510	76,417	79,976	79,198	78,242	79,676	80,357
Australia	37,876	54,218	60,209	73,969	79,803	79,547	80,038	79,884	80,330
Japan	12,101	38,814	56,912	62,703	69,007	68,605	65,844	69,087	68,537
Republic of Korea	NA	15,223	28,409	45,717	56,836	57,787	58,147	60,984	62,119
Singapore	NA	32,792	54,565	82,090	99,391	92,962	88,036	98,489	99,415
Austria	23,919	52,614	64,644	78,934	86,467	85,978	83,369	84,558	85,816
Belgium	30,699	60,565	75,776	88,274	94,811	94,036	91,566	92,844	93,317
Czech Republic	NA	NA	NA	39,888	52,625	53,032	51,157	53,459	54,226
Denmark	32,057	53,274	63,421	78,820	83,547	81,644	78,597	81,510	82,378
Finland	NA	41,606	54,680	72,512	83,769	81,903	76,909	79,526	80,779
France	25,811	56,735	69,831	78,808	84,746	84,266	82,695	84,122	85,152
Germany	26,243	51,395	58,183	72,017	78,504	78,394	74,344	76,724	77,978
Ireland	NA	46,902	64,348	86,202	97,050	95,172	96,352	100,162	102,983
Italy	23,608	57,359	70,128	81,107	80,764	79,629	76,438	78,606	78,813
Netherlands	34,524	63,295	69,816	78,668	83,928	84,159	81,039	84,583	85,437
Norway	38,808	70,918	87,816	112,140	120,490	116,751	115,316	116,190	116,251
Spain	NA	51,579	64,160	73,916	74,052	74,844	77,209	79,220	81,417
Sweden	28,540	46,301	53,852	70,869	82,913	81,634	79,432	83,454	84,816
United Kingdom	26,064	42,368	52,781	67,791	78,430	77,112	75,275	76,431	76,638

Table 2b. Average annual rates of change

Country	1979-2011	1979-1990	1990-2000	2000-2007	2007-2011	2009-2010	2010-2011
United States	1.5	1.2	2.0	1.4	1.2	3.0	1.2
Canada	1.0	.9	1.7	.7	.1	1.8	.9
Australia	1.2	1.0	2.1	1.1	.2	-.2	.6
Japan	1.8	3.5	1.0	1.4	-.2	4.9	-.8
Republic of Korea	4.5	5.8	4.9	3.2	2.2	4.9	1.9
Singapore	3.5	4.7	4.2	2.8	.0	11.9	.9
Austria	1.5	1.9	2.0	1.3	-.2	1.4	1.5
Belgium	1.4	2.1	1.5	1.0	-.4	1.4	.5
Czech Republic	NA	NA	NA	4.0	.8	4.5	1.4
Denmark	1.4	1.6	2.2	.8	-.4	3.7	1.1
Finland	2.1	2.5	2.9	2.1	-.9	3.4	1.6
France	1.3	1.9	1.2	1.0	.1	1.7	1.2
Germany	NA	1.1	NA	1.2	-.2	3.2	1.6
Ireland	2.5	2.9	3.0	1.7	1.5	4.0	2.8
Italy	1.0	1.8	1.5	-.1	-.6	2.8	.3
Netherlands	.9	.9	1.2	.9	.4	4.4	1.0
Norway	1.6	2.0	2.5	1.0	-.9	.8	.1
Spain	1.4	2.0	1.4	.0	2.4	2.6	2.8
Sweden	1.9	1.4	2.8	2.3	.6	5.1	1.6
United Kingdom	1.9	2.0	2.5	2.1	-.6	1.5	.3

Note: Data for Germany for years before 1991 pertain to the former West Germany.

NA = Not available.

PPPs = purchasing power parities.

Percent changes were calculated using the compound rate method.

Real GDP per hour worked, by country, 1960–2011

Table 3a. Converted to U.S. dollars using 2011 PPPs (2011 U.S. dollars)

Country	1960	1979	1990	2000	2007	2008	2009	2010	2011
United States	NA	35.94	41.57	49.50	57.08	57.51	59.00	60.41	60.59
Canada	NA	31.97	35.70	42.40	45.54	45.35	45.62	46.20	46.61
Australia	NA	29.16	33.59	41.11	46.97	45.46	46.77	46.79	46.84
Japan	NA	18.30	27.56	33.71	37.73	37.89	37.37	38.76	39.70
Republic of Korea	NA	NA	10.13	17.33	23.14	24.09	24.30	25.93	27.14
Singapore	NA	13.73	22.50	33.50	41.17	38.51	36.70	40.88	41.27
Austria	NA	NA	NA	43.86	49.82	50.03	49.79	50.83	51.45
Belgium	NA	35.24	45.77	57.14	60.78	59.98	59.07	59.86	60.17
Czech Republic	NA	NA	NA	20.95	29.35	29.46	29.00	29.79	30.55
Denmark	NA	32.34	41.03	49.71	53.23	51.92	50.90	52.72	53.20
Finland	NA	22.26	30.91	41.42	49.09	48.51	45.98	47.42	48.08
France	NA	31.45	42.48	51.74	57.08	56.49	56.17	56.93	57.70
Germany	NA	29.03	36.88	48.97	55.20	55.13	53.76	54.50	55.26
Ireland	NA	NA	32.37	50.15	59.39	59.45	62.53	64.83	66.74
Italy	NA	NA	37.57	43.57	44.46	44.17	43.15	44.28	44.43
Netherlands	NA	39.27	46.68	53.17	59.44	59.49	58.06	59.35	59.49
Norway	NA	44.88	58.44	77.06	84.50	81.68	81.70	81.61	81.47
Spain	NA	27.90	38.11	42.71	44.66	45.01	46.25	47.32	48.13
Sweden	NA	NA	34.18	43.17	51.45	50.49	49.37	50.80	51.61
United Kingdom	NA	23.27	30.15	39.93	46.96	46.32	45.81	46.40	46.82

Table 3b. Average annual rates of change

Country	1979-2011	1979-1990	1990-2000	2000-2007	2007-2011	2009-2010	2010-2011
United States	1.6	1.3	1.8	2.1	1.5	2.4	0.3
Canada	1.2	1.0	1.7	1.0	.6	1.3	.9
Australia	1.5	1.3	2.0	1.9	-.1	.1	.1
Japan	2.4	3.8	2.0	1.6	1.3	3.7	2.4
Republic of Korea	NA	NA	5.5	4.2	4.1	6.7	4.6
Singapore	3.5	4.6	4.1	3.0	.1	11.4	.9
Austria	NA	NA	NA	1.8	.8	2.1	1.2
Belgium	1.7	2.4	2.2	.9	-.3	1.3	.5
Czech Republic	NA	NA	NA	4.9	1.0	2.7	2.6
Denmark	1.6	2.2	1.9	1.0	.0	3.6	.9
Finland	2.4	3.0	3.0	2.5	-.5	3.1	1.4
France	1.9	2.8	2.0	1.4	.3	1.4	1.4
Germany	NA	2.2	NA	1.7	.0	1.4	1.4
Ireland	NA	NA	4.5	2.4	3.0	3.7	2.9
Italy	NA	NA	1.5	.3	.0	2.6	.3
Netherlands	1.3	1.6	1.3	1.6	.0	2.2	.2
Norway	1.9	2.4	2.8	1.3	-.9	-.1	-.2
Spain	1.7	2.9	1.1	.6	1.9	2.3	1.7
Sweden	NA	NA	2.4	2.5	.1	2.9	1.6
United Kingdom	2.2	2.4	2.9	2.3	-.1	1.3	.9

Note: Data for Germany for years before 1991 pertain to the former West Germany.

NA = Not available.

PPPs = purchasing power parities.

Percent changes were calculated using the compound rate method.

Real GDP, by country, 1960–2011

Table 4a. Converted to U.S. dollars using 2011 PPPs (In millions of 2011 U.S. dollars)

Country	1960	1979	1990	2000	2007	2008	2009	2010	2011
United States	3,206,354	6,631,603	9,099,424	12,714,776	14,970,616	14,920,172	14,462,202	14,808,060	15,075,700
Canada	263,862	629,903	849,218	1,132,385	1,349,232	1,358,525	1,320,897	1,363,363	1,396,160
Australia	157,411	335,103	477,263	668,641	848,145	869,146	880,883	902,684	922,870
Japan	574,859	2,266,209	3,665,580	4,100,386	4,522,116	4,475,012	4,227,680	4,415,672	4,383,325
Republic of Korea	38,433	207,070	513,774	967,196	1,331,845	1,362,455	1,366,808	1,453,194	1,506,004
Singapore	7,208	37,583	87,147	173,771	259,744	264,162	261,574	300,191	314,867
Austria	80,570	179,016	226,376	295,073	344,777	349,591	336,272	344,055	354,235
Belgium	107,474	229,262	291,810	363,160	415,559	419,588	407,836	416,962	424,966
Czech Republic	NA	NA	NA	193,586	267,670	275,965	263,008	270,211	274,683
Denmark	68,117	135,225	165,457	213,800	239,008	237,135	223,301	226,194	227,935
Finland	NA	95,194	135,634	166,299	208,258	208,869	191,034	197,384	202,795
France	525,384	1,290,762	1,659,596	2,016,489	2,288,602	2,286,756	2,214,790	2,251,623	2,289,849
Germany	684,721	1,386,009	1,769,286	2,836,161	3,128,922	3,162,815	3,000,657	3,111,392	3,204,596
Ireland	NA	55,484	75,660	146,182	206,001	199,878	185,898	185,099	186,405
Italy	493,997	1,208,461	1,585,538	1,859,766	2,034,257	2,011,087	1,898,677	1,938,471	1,950,050
Netherlands	163,562	358,833	453,338	619,136	710,328	723,143	696,621	707,970	714,997
Norway	59,380	134,941	180,796	260,125	305,020	305,127	300,040	302,070	306,441
Spain	NA	679,806	920,538	1,213,063	1,533,863	1,547,494	1,489,606	1,488,571	1,499,111
Sweden	104,309	195,971	247,661	304,809	375,097	372,661	353,871	375,792	390,407
United Kingdom	622,141	1,067,464	1,418,287	1,863,163	2,292,365	2,270,178	2,179,951	2,219,175	2,236,004

Table 4b. Average annual rates of change

Country	1979-2011	1979-1990	1990-2000	2000-2007	2007-2011	2009-2010	2010-2011
United States	2.6	2.9	3.4	2.4	0.2	2.4	1.8
Canada	2.5	2.8	2.9	2.5	.9	3.2	2.4
Australia	3.2	3.3	3.4	3.5	2.1	2.5	2.2
Japan	2.1	4.5	1.1	1.4	-.8	4.4	-.7
Republic of Korea	6.4	8.6	6.5	4.7	3.1	6.3	3.6
Singapore	6.9	7.9	7.1	5.9	4.9	14.8	4.9
Austria	2.2	2.2	2.7	2.2	.7	2.3	3.0
Belgium	1.9	2.2	2.2	1.9	.6	2.2	1.9
Czech Republic	NA	NA	NA	4.7	.6	2.7	1.7
Denmark	1.6	1.9	2.6	1.6	-1.2	1.3	.8
Finland	2.4	3.3	2.1	3.3	-.7	3.3	2.7
France	1.8	2.3	2.0	1.8	.0	1.7	1.7
Germany	NA	2.2	NA	1.4	.6	3.7	3.0
Ireland	3.9	2.9	6.8	5.0	-2.5	-.4	.7
Italy	1.5	2.5	1.6	1.3	-1.1	2.1	.6
Netherlands	2.2	2.1	3.2	2.0	.2	1.6	1.0
Norway	2.6	2.7	3.7	2.3	.1	.7	1.4
Spain	2.5	2.8	2.8	3.4	-.6	-.1	.7
Sweden	2.2	2.2	2.1	3.0	1.0	6.2	3.9
United Kingdom	2.3	2.6	2.8	3.0	-.6	1.8	.8

Note: Data for Germany for years before 1991 pertain to the former West Germany.

NA = Not available.

PPPs = purchasing power parities.

Percent changes were calculated using the compound rate method.

Population, by country, 1960–2011

Table 5a. Millions of persons

Country	1960	1979	1990	2000	2007	2008	2009	2010	2011
United States	180.67	225.06	250.13	282.38	302.00	304.80	307.44	309.98	312.24
Canada	17.91	24.20	27.69	30.69	32.93	33.32	33.73	34.13	34.48
Australia	10.28	14.52	17.07	19.15	21.02	21.38	21.78	22.07	22.32
Japan	94.10	115.91	123.51	126.86	127.77	127.71	127.56	127.92	127.82
Republic of Korea	25.01	37.53	42.87	47.01	48.60	48.95	49.18	49.41	49.78
Singapore	1.65	2.38	3.05	4.03	4.59	4.84	4.99	5.08	5.18
Austria	7.05	7.55	7.68	8.01	8.30	8.34	8.36	8.39	8.42
Belgium	9.15	9.85	9.97	10.25	10.63	10.71	10.80	10.90	10.96
Czech Republic	NA	NA	NA	10.27	10.32	10.43	10.49	10.52	10.50
Denmark	4.56	5.12	5.14	5.34	5.46	5.49	5.52	5.55	5.57
Finland	4.43	4.76	4.99	5.18	5.29	5.31	5.34	5.36	5.39
France	46.61	54.82	58.14	60.72	63.78	64.13	64.48	64.82	65.18
Germany	55.43	61.36	63.25	82.19	82.26	82.12	81.88	81.76	81.78
Ireland	2.83	3.38	3.51	3.80	4.36	4.43	4.46	4.47	4.49
Italy	50.20	56.32	56.72	56.94	59.38	59.83	60.19	60.48	60.75
Netherlands	11.48	14.03	14.95	15.92	16.38	16.45	16.53	16.62	16.70
Norway	3.58	4.07	4.24	4.49	4.71	4.77	4.83	4.89	4.95
Spain	30.26	37.29	38.85	40.26	44.87	45.59	45.93	46.07	46.13
Sweden	7.49	8.29	8.56	8.87	9.15	9.22	9.30	9.38	9.45
United Kingdom	52.37	56.24	57.24	58.89	60.99	61.40	61.79	62.18	62.65

Table 5b. Average annual rates of change

Country	1979-2011	1979-1990	1990-2000	2000-2007	2007-2011	2009-2010	2010-2011
United States	1.0	1.0	1.2	1.0	0.8	0.8	0.7
Canada	1.1	1.2	1.0	1.0	1.2	1.2	1.0
Australia	1.4	1.5	1.2	1.3	1.5	1.3	1.2
Japan	.3	.6	.3	.1	.0	.3	-.1
Republic of Korea	.9	1.2	.9	.5	.6	.5	.7
Singapore	2.5	2.3	2.8	1.9	3.1	1.8	2.1
Austria	.3	.2	.4	.5	.4	.3	.4
Belgium	.3	.1	.3	.5	.8	.9	.6
Czech Republic	NA	NA	NA	.1	.4	.2	-.2
Denmark	.3	.0	.4	.3	.5	.5	.4
Finland	.4	.4	.4	.3	.5	.5	.5
France	.5	.5	.4	.7	.5	.5	.5
Germany	NA	.3	NA	.0	-.1	-.1	.0
Ireland	.9	.4	.8	2.0	.7	.3	.3
Italy	.2	.1	.0	.6	.6	.5	.4
Netherlands	.5	.6	.6	.4	.5	.5	.5
Norway	.6	.4	.6	.7	1.3	1.3	1.3
Spain	.7	.4	.4	1.6	.7	.3	.1
Sweden	.4	.3	.4	.4	.8	.9	.8
United Kingdom	.3	.2	.3	.5	.7	.6	.8

Note: Data for Germany for years before 1991 pertain to the former West Germany.

NA = Not available.

Percent changes were calculated using the compound rate method.

Employment, by country, 1960-2011

Table 6a. Millions of persons

Country	1960	1979	1990	2000	2007	2008	2009	2010	2011
United States	68.29	100.91	120.96	138.32	147.63	146.97	141.53	140.71	141.50
Canada	6.24	10.74	13.16	14.82	16.87	17.15	16.88	17.11	17.37
Australia	4.16	6.18	7.93	9.04	10.63	10.93	11.01	11.30	11.49
Japan	47.51	58.39	64.41	65.39	65.53	65.23	64.21	63.92	63.96
Republic of Korea	NA	13.60	18.09	21.16	23.43	23.58	23.51	23.83	24.24
Singapore	NA	1.15	1.60	2.12	2.61	2.84	2.97	3.05	3.17
Austria	3.37	3.40	3.50	3.74	3.99	4.07	4.03	4.07	4.13
Belgium	3.50	3.79	3.85	4.11	4.38	4.46	4.45	4.49	4.55
Czech Republic	NA	NA	NA	4.85	5.09	5.20	5.14	5.05	5.07
Denmark	2.12	2.54	2.61	2.71	2.86	2.90	2.84	2.78	2.77
Finland	NA	2.29	2.48	2.29	2.49	2.55	2.48	2.48	2.51
France	20.35	22.75	23.77	25.59	27.01	27.14	26.78	26.77	26.89
Germany	26.09	26.97	30.41	39.38	39.86	40.35	40.36	40.55	41.10
Ireland	1.07	1.18	1.18	1.70	2.12	2.10	1.93	1.85	1.81
Italy	20.92	21.07	22.61	22.93	25.19	25.26	24.84	24.66	24.74
Netherlands	4.74	5.67	6.49	7.87	8.46	8.59	8.60	8.37	8.37
Norway	1.53	1.90	2.06	2.32	2.53	2.61	2.60	2.60	2.64
Spain	NA	13.18	14.35	16.41	20.71	20.68	19.29	18.79	18.41
Sweden	3.65	4.23	4.60	4.30	4.52	4.57	4.46	4.50	4.60
United Kingdom	23.87	25.20	26.87	27.48	29.23	29.44	28.96	29.04	29.18

Table 6b. Average annual rates of change

Country	1979-2011	1979-1990	1990-2000	2000-2007	2007-2011	2009-2010	2010-2011
United States	1.1	1.7	1.4	0.9	-1.1	-0.6	0.6
Canada	1.5	1.9	1.2	1.9	.7	1.4	1.5
Australia	2.0	2.3	1.3	2.3	2.0	2.7	1.7
Japan	.3	.9	.2	.0	-.6	-.5	.1
Republic of Korea	1.8	2.6	1.6	1.5	.9	1.4	1.7
Singapore	3.2	3.1	2.9	3.1	4.9	2.6	3.9
Austria	.6	.3	.7	.9	.9	.9	1.4
Belgium	.6	.2	.7	.9	1.0	.8	1.4
Czech Republic	NA	NA	NA	.7	-.1	-1.7	.2
Denmark	.3	.2	.4	.8	-.8	-2.3	-.3
Finland	.3	.7	-.8	1.2	.2	-.1	1.1
France	.5	.4	.7	.8	-.1	-.1	.5
Germany	NA	1.1	NA	.2	.8	.5	1.3
Ireland	1.3	-.1	3.7	3.3	-3.9	-4.2	-2.1
Italy	.5	.6	.1	1.4	-.4	-.7	.3
Netherlands	1.2	1.2	1.9	1.0	-.3	-2.6	.0
Norway	1.0	.7	1.2	1.3	1.0	-.1	1.4
Spain	1.1	.8	1.4	3.4	-2.9	-2.6	-2.0
Sweden	.3	.8	-.7	.7	.4	1.1	2.2
United Kingdom	.5	.6	.2	.9	.0	.3	.5

Note: Data for Germany for years before 1991 pertain to the former West Germany.

NA = Not available.

Percent changes were calculated using the compound rate method.

Average annual hours worked per employed person, by country, 1960-2011

Table 7a. Hours

Country	1960	1979	1990	2000	2007	2008	2009	2010	2011
United States	NA	1,829	1,809	1,857	1,776	1,765	1,732	1,742	1,758
Canada	NA	1,834	1,807	1,802	1,756	1,746	1,715	1,724	1,724
Australia	NA	1,859	1,792	1,799	1,699	1,750	1,711	1,707	1,715
Japan	NA	2,121	2,065	1,860	1,829	1,811	1,762	1,782	1,727
Republic of Korea	NA	NA	2,805	2,638	2,456	2,399	2,393	2,352	2,289
Singapore	NA	2,388	2,425	2,451	2,414	2,414	2,399	2,409	2,409
Austria	NA	NA	NA	1,800	1,736	1,718	1,674	1,663	1,668
Belgium	NA	1,719	1,655	1,545	1,560	1,568	1,550	1,551	1,551
Czech Republic	NA	NA	NA	1,904	1,793	1,800	1,764	1,795	1,775
Denmark	NA	1,647	1,546	1,585	1,570	1,573	1,544	1,546	1,548
Finland	NA	1,869	1,769	1,751	1,706	1,688	1,673	1,677	1,680
France	NA	1,804	1,644	1,523	1,485	1,492	1,472	1,478	1,476
Germany	NA	1,770	1,578	1,471	1,422	1,422	1,383	1,408	1,411
Ireland	NA	NA	1,988	1,719	1,634	1,601	1,541	1,545	1,543
Italy	NA	NA	1,867	1,861	1,816	1,803	1,771	1,775	1,774
Netherlands	NA	1,612	1,496	1,480	1,412	1,415	1,396	1,425	1,436
Norway	NA	1,580	1,503	1,455	1,426	1,429	1,411	1,424	1,427
Spain	NA	1,849	1,684	1,731	1,658	1,663	1,669	1,674	1,692
Sweden	NA	NA	1,575	1,642	1,612	1,617	1,609	1,643	1,643
United Kingdom	NA	1,820	1,751	1,698	1,670	1,665	1,643	1,647	1,637

Table 7b. Average annual rates of change

Country	1979-2011	1979-1990	1990-2000	2000-2007	2007-2011	2009-2010	2010-2011
United States	-0.1	-0.1	0.3	-0.6	-0.3	0.6	0.9
Canada	-.2	-.1	.0	-.4	-.5	.5	.0
Australia	-.3	-.3	.0	-.8	.2	-.2	.4
Japan	-.6	-.2	-1.0	-.2	-1.4	1.2	-3.1
Republic of Korea	NA	NA	-.6	-1.0	-1.7	-1.7	-2.7
Singapore	.0	.1	.1	-.2	-.1	.4	.0
Austria	NA	NA	NA	-.5	-1.0	-.7	.3
Belgium	-.3	-.3	-.7	.1	-.1	.1	.0
Czech Republic	NA	NA	NA	-.9	-.3	1.7	-1.1
Denmark	-.2	-.6	.3	-.1	-.3	.1	.1
Finland	-.3	-.5	-.1	-.4	-.4	.3	.2
France	-.6	-.8	-.8	-.4	-.2	.4	-.1
Germany	NA	-1.0	NA	-.5	-.2	1.8	.2
Ireland	NA	NA	-1.4	-.7	-1.4	.3	-.1
Italy	NA	NA	.0	-.3	-.6	.2	-.1
Netherlands	-.4	-.7	-.1	-.7	.4	2.1	.8
Norway	-.3	-.5	-.3	-.3	.0	.9	.2
Spain	-.3	-.8	.3	-.6	.5	.3	1.0
Sweden	NA	NA	.4	-.3	.5	2.1	.0
United Kingdom	-.3	-.4	-.3	-.2	-.5	.2	-.6

Note: Data for Germany for years before 1991 pertain to the former West Germany.

NA = Not available.

Percent changes were calculated using the compound rate method.

Employment as percentage of population, by country, 1960–2011

Table 8.

Country	1960	1979	1990	2000	2007	2008	2009	2010	2011
United States	37.80	44.84	48.36	48.98	48.88	48.22	46.04	45.40	45.32
Canada	34.82	44.38	47.54	48.29	51.23	51.48	50.05	50.14	50.39
Australia	40.45	42.58	46.45	47.20	50.57	51.09	50.53	51.21	51.46
Japan	50.48	50.37	52.15	51.55	51.29	51.08	50.34	49.97	50.04
Republic of Korea	NA	36.24	42.19	45.00	48.22	48.17	47.79	48.23	48.70
Singapore	NA	48.09	52.42	52.55	56.95	58.72	59.57	60.04	61.10
Austria	47.80	45.07	45.61	46.66	48.04	48.77	48.23	48.51	49.02
Belgium	38.25	38.44	38.64	40.13	41.25	41.66	41.25	41.22	41.54
Czech Republic	NA	NA	NA	47.24	49.27	49.89	49.00	48.06	48.26
Denmark	46.56	49.60	50.75	50.81	52.39	52.88	51.45	50.03	49.69
Finland	NA	48.02	49.75	44.31	47.01	48.00	46.52	46.28	46.59
France	43.67	41.50	40.88	42.14	42.34	42.31	41.54	41.29	41.26
Germany	47.07	43.95	48.07	47.92	48.45	49.13	49.30	49.60	50.25
Ireland	37.82	35.04	33.49	44.58	48.69	47.39	43.24	41.30	40.33
Italy	41.68	37.41	39.86	40.27	42.42	42.21	41.27	40.77	40.73
Netherlands	41.26	40.40	43.44	49.43	51.66	52.25	52.00	50.38	50.12
Norway	42.71	46.72	48.54	51.65	53.76	54.81	53.88	53.17	53.22
Spain	NA	35.35	36.93	40.76	46.16	45.35	42.01	40.78	39.92
Sweden	48.83	51.03	53.73	48.48	49.45	49.51	47.91	48.02	48.71
United Kingdom	45.58	44.80	46.95	46.67	47.93	47.95	46.87	46.69	46.57

Note: Data for Germany for years before 1991 pertain to the former West Germany.

NA = Not available.

Purchasing power parities (PPPs), exchange rates, and relative prices, by country, 2011

Table 9. U.S.=1.00

Country	PPPs for GDP	Exchange rates	Relative prices ¹
United States	1.00	1.00	1.00
Canada	1.23	0.99	1.25
Australia	1.56	0.97	1.61
Japan	106.83	79.70	1.34
Republic of Korea	821.46	1106.94	0.74
Singapore	1.04	1.26	0.83
Austria	0.85	0.72	1.18
Belgium	0.87	0.72	1.21
Czech Republic	13.87	17.25	0.80
Denmark	7.82	5.35	1.46
Finland	0.93	0.72	1.30
France	0.87	0.72	1.21
Germany	0.80	0.72	1.12
Ireland	0.84	0.72	1.17
Italy	0.79	0.72	1.10
Netherlands	0.84	0.72	1.17
Norway	8.88	5.60	1.58
Spain	0.72	0.72	1.00
Sweden	8.95	6.49	1.38
United Kingdom	0.68	0.62	1.09

¹ Relative prices are the ratio of PPPs to exchange rates. They are a measure of how expensive goods and services are in a country relative to the United States. A number greater than 1 indicates relatively higher prices while a number less than 1 indicates relatively lower prices. See technical notes.

Technical Notes

This report updates international comparisons of GDP per capita and related measures produced annually by the Bureau of Labor Statistics (BLS). The estimates shown in this report are based on data available as of September 2012. Data are available for all countries through 2011.

These technical notes provide definitions, sources, and methods for the basic time series and indicators included in this report.

Gross domestic product

Gross domestic product (GDP) is the market value of goods and services produced by labor and capital in a country, regardless of nationality (see table 4). As such, it is the most comprehensive measure of a country's economic output that is generally estimated by statistical agencies.

The GDP measures in this report were obtained from the national accounts programs of their respective national statistical agencies. For all countries in this comparison, data for more recent years have been produced using chain linked real output measures as recommended in the 1993 United Nations System of National Accounts (SNA93). For several countries, however, older data were produced on the 1968 United Nations System of National Accounts (SNA68). Data produced on an SNA68 basis used fixed base-year deflators that were typically updated only every 5 years. In order to construct one continuous GDP series, BLS links several time series, each of which has its own set of base-year price weights.

The U.S. GDP series are produced by the Bureau of Economic Analysis (BEA) and are based on the system of national income and product accounts (NIPAs), which are also prepared in accordance with SNA93.

GDP per capita

GDP per capita is calculated as GDP divided by population and is a rough measure of a population's economic well being. (See table 1.) However, this measure may have the following limitations: The total production of a country consists of many things that are not included in its GDP, and some items included may not contribute to a country's well-being. In addition, some countries experience significant in- and out-flows of income because of foreign investment, which may affect a country's prosperity.

GDP per hour worked and GDP per employed person

GDP per hour worked is one measure of labor productivity. (See table 3.) Although it relates output to labor hours involved in its production by all persons in a country, it does not measure the specific contribution of labor or any other factor of production. Rather, it reflects the joint effects of many influences, including changes in technology; capital investment; utilization of capacity, energy, and materials; the use of purchased services inputs, including contract employment services; the organization of production; and managerial skill; in addition to the characteristics and effort of the workforce.

In addition to GDP per hour worked, this report also provides GDP per employed person. (See table 2.) GDP per employed person is a less precise measure of labor productivity in that it does not take into

account the often substantial differences in working hours among countries; however, data on GDP per employed person are available for longer time periods and are thus useful as a rough indicator of labor productivity for years in which GDP per hour data are not available.

Comparative levels of time series with real output using purchasing power parities (PPPs)

In order to make international comparisons of levels of GDP, GDP per capita, GDP per hour worked, and GDP per employed person, it is necessary to express output in a common currency unit. In this report, BLS converted the output measures from national currency units to U.S. dollars through the use of purchasing power parities (PPPs). PPPs are currency conversion rates that allow output in different currency units to be expressed in a common unit of value - in this case, U.S. dollars.

There are two primary reasons for using PPPs rather than market exchange rates to convert GDP into a common currency. First, PPPs reflect the relative purchasing powers of different currencies. By contrast, market exchange rates represent at best relative prices of goods and services that are traded internationally, not the relative value of total domestic output, which also consists of goods, and particularly services, that are not traded internationally. Second, PPPs are more stable than market exchange rates, which can vary frequently and abruptly. Often these changes in market exchange rates are due to currency speculation or interest rate changes. Thus, if GDP is converted into a common currency using exchange rates, the output of a country's economy could appear to vary for reasons that are unrelated to the country's economic activity.

The levels of GDP in this report were derived as follows. First, the real GDP series from each country was expressed in constant prices of the national currency in 2011. Next, each country's constant GDP series was divided by the country's PPP for 2011 as calculated by the OECD-Eurostat PPP Program¹ or the International Monetary Fund² (IMF), thereby converting the series into constant 2011 U.S. dollars. Finally, the time series of GDP per capita, per employed person, and per hour were estimated by dividing each country's GDP in 2011 dollars by its population, employment, and hours, respectively.

PPPs are an effective tool for international comparisons of output levels, but they should be used and interpreted with caution, as the accuracy of PPPs may be limited by several factors; for example, goods and services included in the calculation of PPPs may not be representative of the entire economy or comparable across countries, countries may use different price aggregation methods, and the statistical capabilities among countries may differ. Although comparative estimates like GDP per capita are useful for grouping countries, changes in country rankings can occur as a result of relatively minor adjustments to PPP estimates. Thus, small differences between countries are not, in general, economically significant, and a strict ranking order interpretation should be avoided.

Currency exchange rates and relative prices

The currency exchange rate is the rate at which one currency may be converted into the currency of another country for commercial purposes, such as international trade. The market exchange rates in this

¹ OECD and Eurostat, Purchasing Power Parities and Real Expenditures. 2008 Benchmark Year.

² International Monetary Fund, World Economic Outlook Database, April 2012

report are based on reports by the U.S. Federal Reserve Board and the International Monetary Fund. (See table 9.)

The relationship between PPPs and market exchange rates can be used to estimate comparative prices in different countries. This report calculates relative prices in 2011 by dividing a country's PPP by its market exchange rate. (See table 9.) The resulting values indicate the domestic price, expressed in U.S. dollars, of a basket of goods that would cost exactly one dollar in the United States. Consequently, values less than 1.00 indicate that prices in that country are relatively low compared with the United States. Values greater than 1.00 indicate that prices in a particular country are relatively high compared with the United States.

Population and employment

The population data in this report represent the total average resident population, which refers to the civilian population and the armed forces residing within a country. (See table 5.) The data are derived from national statistical agencies and international organizations.

The employment data in this report represent the number of persons employed, which consists of the sum of civilian employment and armed forces. (See table 6.) Most of the data are obtained from the countries' national accounts, where the data series have been developed from various surveys, including labor force (household) and establishment surveys, and other sources. In some cases, national accounts data have been supplemented with data obtained from other series published by national statistical or international organizations.

The employment-population ratio measures the participation of the population in the production process. (See table 8.) In this report, the population and employment figures include the Armed Forces. This inclusion is a conceptual difference to the population and employment figures published in the BLS report *International comparisons of annual labor force statistics, 16 countries*³, which exclude the Armed Forces.

Hours worked

The hours worked data in this report represent hours actually worked, including regular work time, overtime, preparing the work place, waiting for supplies, and short rests. Hours worked exclude vacation, sick leave, lunch breaks, and commuting to and from work.

Hours worked may not be fully comparable across countries because national statistical offices may use different concepts, data sources, and estimation techniques to calculate total hours worked; for example, the employment series may refer to the number of persons or the number of jobs, hours worked may be estimated from hours paid, and different establishment and household surveys may be used to cover all employees, self-employed, and Armed Forces. These differences may affect the comparability of hours worked data among different countries.⁴

³ This report is available on the Internet at www.bls.gov/ilc/.

⁴ Some of these differences are addressed by Susan Fleck in "International comparisons of hours worked: an assessment of the statistics," *Monthly Labor Review*, May 2009, pp. 3-31.

For most countries, the hours data used in this report are obtained from the countries' national accounts, in which the data series have been developed from various surveys and other sources. For some countries, the data are based on other series published by national statistical or international organizations.

Data limitations

BLS prepares the data in this report with the utmost attention to comparability across countries. However, there are several issues that limit comparability, including the following:

- *Different national methodologies*: The measures in this report were calculated from data that were obtained from national statistical agencies and international organizations. While these data are generally comparable, some differences remain in the statistical methodologies used by these organizations.
- *Different historical methodologies*: National statistical agencies change their methodology periodically. As a result, continuous time series from 1960 forward are generally not available. In order to construct longer time series, BLS often links several shorter series that may have used different methodologies.
- *PPP choice*: To provide the most accurate level comparisons for the latest year, BLS converts output from foreign currency units to U.S. dollars with PPPs for the latest year. However, PPPs for the latest year may not be representative of purchasing powers of earlier years and may misrepresent earlier levels.
- *Missing data for recent years*: In some cases, when data for the most recent year(s) are not available, BLS may estimate the missing data using alternative data series.