

Macroeconomic Assumptions

The macroeconomic assumptions underlying USDA's long-term projections indicate steady world economic growth over the next decade despite a near-term outlook moderated by a slowdown in many emerging economies. Real global gross domestic product (GDP) is projected to increase at an average annual rate of 3.1 percent over the projection period, slightly below the long-term, pre-financial crisis (1970-2007) average of 3.3 percent.

The United States is expected to be the growth leader among developed countries over the next decade. U.S. economic growth is expected to be near 3 percent in 2016 and 2017 before moving to a longer term growth rate of 2.3 percent. While labor markets and credit conditions continue to improve in the United States and most developed countries, inflation is likely to remain subdued because of excess capacity. Long-run growth is expected to be relatively weak in the rest of the developed world, especially in Japan and the European Union (EU).



Economic growth in developing countries is projected to slow relative to recent years, especially in the near term. In particular, China's economy is projected to grow less rapidly as the country makes the adjustment to a more consumer-oriented economy. Lingering economic challenges in Argentina, Brazil, and Venezuela constrain Latin American growth. Recessions in Russia and Ukraine are projected to continue in 2016. Nonetheless, developing country growth is expected to continue outpacing that of developed countries. As a result, developing countries' share of global real GDP is projected to rise to 43.4 percent in 2025 from 37.7 percent in 2016.

After a generally steady depreciation from 2002 to 2011 and relative weakness in subsequent years, the U.S. dollar appreciated significantly against the currencies of many key trade partners in 2015 and is projected to remain stronger than its 2011-14 lows throughout the projection period. Crude oil prices are projected to rise slowly to around \$80 per barrel over the projection period after a dramatic decline starting in mid-2014.

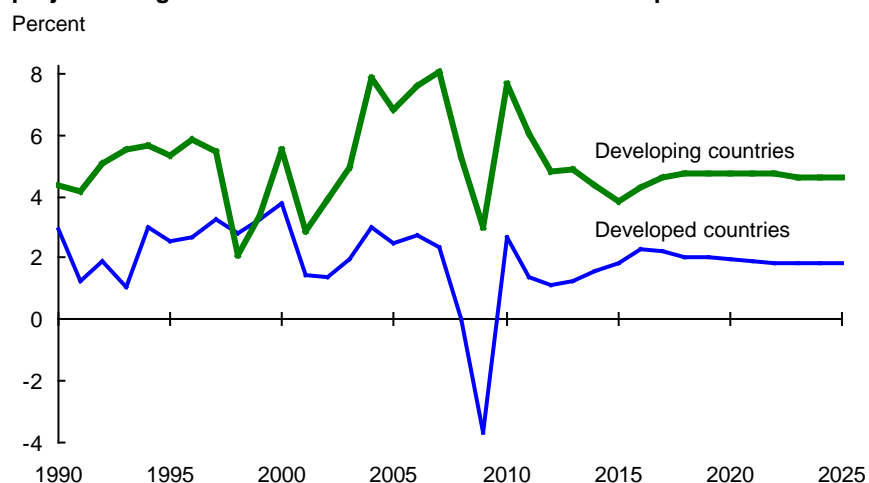
Agricultural Implications

Global demand for food and agricultural products is expected to grow over the projection period, even with slower economic growth in developing countries. Economic growth and population gains in developing countries provide a boost to global agricultural demand as more people in those countries become middle class consumers. Improved economic conditions in developed country markets will provide an additional boost to global demand.

With world economic and population growth concentrated in developing countries, those countries continue to account for most of the gains in U.S. agricultural exports. Although a stronger U.S. dollar constrains growth in U.S. agricultural exports, the United States will remain a competitive agricultural exporter.

- Although growth prospects in developing countries have dampened, incomes will continue to rise, bringing more consumers into the middle class. In this process, diets become more diversified and meat, dairy, and processed foods consumption increases. This shifts import demand toward animal feed and high-value food products.
- The 2002-11 depreciation of the dollar gave the United States an advantage in international markets. The reversal of this trend will erode U.S. competitiveness as a stronger dollar increases the relative price of U.S. exports.
- Low energy prices in early years of the projection period will decrease costs of production for farmers and ranchers. The availability of domestic oil and natural gas supplies will dampen cost increases for U.S. producers relative to competitors as global energy prices rise. Agricultural trade also has benefited from reduced shipping and freight rates resulting from lower energy prices.

Gross domestic product (GDP) growth: Developing countries are projected to grow at more than double the rate of developed countries



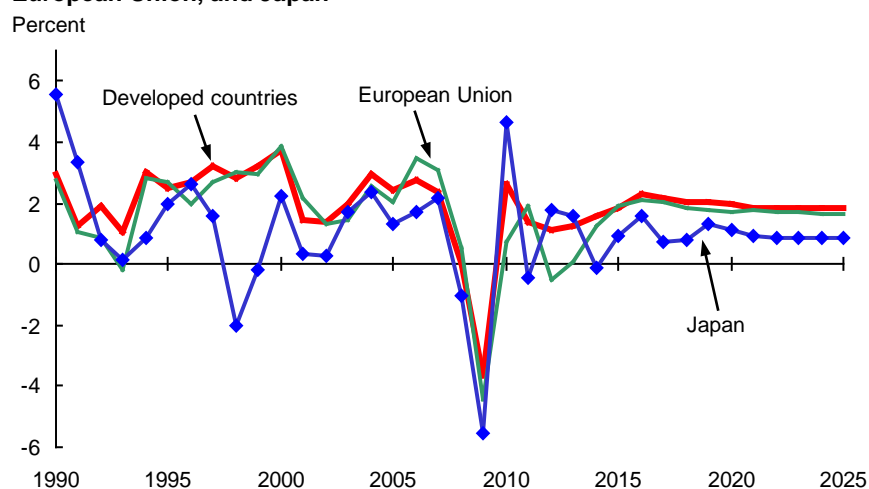
Economic growth in developing countries is projected to average 4.7 percent annually during the projection period. While this represents a slowdown compared to recent history, it is more than twice the growth rate of developed countries. In many cases the slowdown can be traced to weak global demand and low commodity prices. These closely linked conditions are expected to abate over the projection period. The strongest developing country growth is projected among Asian countries at 5.5 percent, followed by African countries at 4.5 percent. The slowest growth among developing countries is projected for Latin America and the former Soviet Union region, at less than 3 percent.

- Despite a slowdown relative to recent years, continued strong GDP growth in developing Asia makes this region an increasingly important part of the global economy. Its share of world GDP is projected to rise from 22.5 to 27.4 percent over the projection period. Weak global demand from relatively slow growth in developed countries and economic transition in China will be a drag on growth in export-oriented economies while lower oil prices will moderate these challenges.
- China's economic growth is projected to slow from historical highs near 10 percent to an average of 5.3 percent per year over the next decade as it moves to a more domestic consumer-oriented economy. This adjustment implies significant economic challenges in the short term. Nevertheless, the country is expected to account for almost 15 percent of the world economy in 2025, up from about 12 percent today. Economic growth in other developing countries in Asia and elsewhere is expected to be negatively affected by China's slowdown, because China's demand for commodities and other intermediate inputs has been a significant source of export income for many of those countries.
- In contrast to the general slowdown in much of developing Asia, economic growth in India is projected to be strong, with average growth of 8.1 percent per year. This very strong growth is expected to be supported by continued economic reform.
- Latin America is projected to grow at an average of only 2.6 percent a year, with near-term weakness limiting potential gains. Argentina, Brazil, and Venezuela were in recession in

2015, with very slow growth or continued recession is expected in the near term, followed by a slow recovery. The projection for Mexico is stronger. After short term sluggishness due to low commodity prices, the Mexican economy is expected to benefit from a strengthening U.S. economy. Average annual growth is expected to be strong at roughly 3.3 percent.

- Economic growth in Africa, the poorest region in the world, is projected to average 4.5 percent per year. This growth rate is high by historical standards and is likely to improve standards of living and mitigate increases in the poverty rate. However, low per capita GDP levels imply significant poverty will persist. Near-term economic weakness in China is not expected to affect African growth, on average, to the same extent as other developing countries. This is less a sign of economic resilience than a reflection of Africa's lack of integration with the global economy. However, there are important exceptions—for countries that are primarily commodity exporters, slowing Chinese demand and the persistence of low prices more generally present a challenge.
- Following several years of average annual growth below 3 percent, the Middle East and North Africa region is expected to grow at an average annual rate of about 4 percent over the projection period. As with other developing countries, many of these economies are facing slow growth in the near term. For some, this is due to low commodity prices, particularly oil prices. Others are experiencing political instability and violence that has brought economic activity to a virtual standstill.
- Low oil prices and geopolitical conflicts, among other factors, pushed the former Soviet Union region into a deep recession in 2015, which is expected to continue in 2016. Growth prospects for the region have been nearly cut in half from recent history—projected growth is 2.5 percent on average for the next decade, compared to a 4.5 percent average over 2000-15.

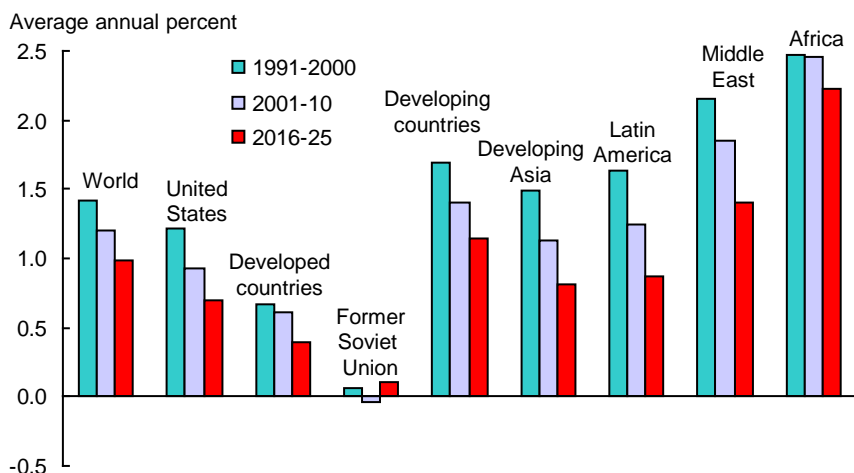
Growth in gross domestic product (GDP) for developed countries, European Union, and Japan



Developed economies continue to recover from the 2007-08 global financial crisis and 2010-13 European debt crisis—growth is expected to be relatively anemic at an average rate of less than 2 percent annually over the projection period. The economies of the European Union and Japan are expected to experience particularly weak growth. Growth rates for the United States, Canada, and Australia is expected to be stronger, although still below the long-term trend.

- U.S. economic growth is expected to be strong relative to the rest of the developed world throughout the projection period. The U.S. economy will benefit from relatively strong domestic consumer and investment demand, driven by low oil prices, low interest rates, and a continuing rebound from the 2007-08 global financial crisis. Weakness in the international sector and a strong dollar will be drags on export demand, however, particularly in the near term.
- Economic growth in the European Union is projected at about 1.8 percent per year over the next decade. Challenges continue within the Eurozone, particularly with the ability of Greece and other members to meet debt obligations. Structural rigidities also constrain the EU outlook. Growth in the former centrally planned EU member countries is projected to be somewhat higher, at an annual average close to 3 percent over the projection period.
- The projections assume economic growth in Japan averages less than 1 percent per year, a continuation of the slow growth and deflationary environment that Japan has experienced since the 1990s. Economic initiatives to boost growth and overcome deflation have had limited success. Going forward, a shrinking working age population implies slowing labor force growth, a key element of economic growth.
- The Canadian economy is facing sluggish near-term growth, as a nascent economic recovery has been undercut by low energy prices. Low commodity prices are likewise expected to be a drag on Australian growth.

Population growth continues to slow



Source: U.S. Department of Commerce, U.S. Census Bureau, International Data Base at <http://www.census.gov/population/international/data/idb/informationGateway.php>

World population growth is projected to continue slowing over the next decade, rising about 1.0 percent per year for the projection period compared to an annual rate of 1.4 percent over the decade 1991-2000 and 1.2 percent in 2001-10.

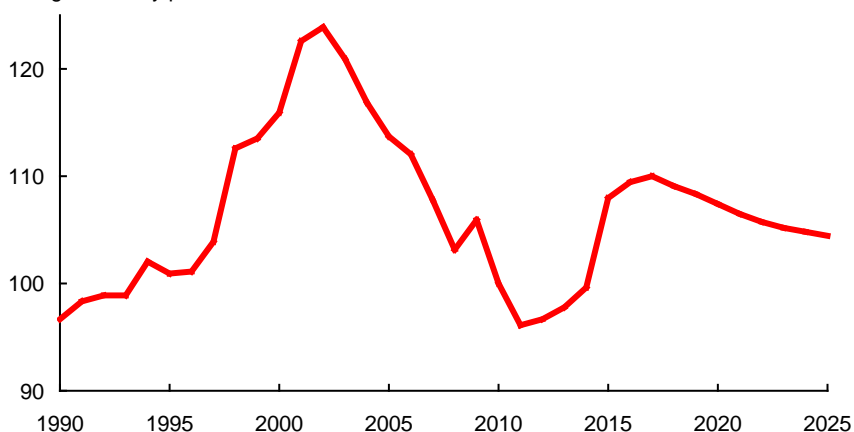
- Developed countries have very low projected rates of population growth, at 0.4 percent over 2016-25. U.S. population growth is projected to exceed the developed country average at about 0.7 percent, in part reflecting the importance of immigration. Only small population increases are projected for the European Union, averaging 0.2 percent over the next decade. However, this projection does not take into account recent increases in immigration from Africa and the Middle East, which may affect European population growth for several years. Population in Japan is projected to fall at around 0.3 percent per year.
- Population growth rates in developing countries are projected to be sharply lower than in previous decades, but remain above those in the rest of the world at about 1.1 percent per year over the projection period. As a result, developing countries' share of global population is projected to be 83 percent by 2025, compared to 79 percent in 2000. Notable lower rates of population growth include Brazil, where the population is expected to grow by 0.7 percent per year from 2016-25, compared to an average of 1.6 percent in 1991-2000. Similarly, Indonesia's population is expected to grow by 0.8 percent per year from 2016-25 compared to 1.7 percent in 1991-2000.
- Sub-Saharan Africa maintains the highest population growth rate at 2.4 percent per year. Like other regions, population growth has fallen compared to historical experience, although the decline is relatively modest.
- China and India together accounted for 36 percent of the world's population in 2015. Population growth in both countries has declined significantly relative to 1991-2000. China's population is expected to grow at only 0.3 percent per year over the projection period, well below the global average. As such, its share of the global population is

projected to decline. Population growth in India is likewise expected to slow to 1.1 percent per year over 2016-25 compared to 1.8 percent per year over 1991-2000.

- Population growth in the former Soviet Union region is expected to average 0.1 percent per year over the projection period. Russian and Ukrainian populations are expected to decline, with average growth rates of -0.2 and -0.4 percent, respectively.
- Population growth in the Middle East is forecast to grow above the world average, at 1.4 percent. Migration within and outside the region is expected to continue. However, this projection does not take into account recent increases in emigration, primarily to Europe.

U.S. agricultural trade-weighted dollar

Index values, 2010=100,
foreign currency per dollar



Note: Real U.S. agricultural trade-weighted dollar exchange rate, using 2009-2011 U.S. agricultural export weights.

From mid-2014 to the end of 2015, the U.S. agricultural trade-weighted dollar appreciated more than 13 percent in real terms. This appreciation was primarily driven by the relative strength and safety of the U.S. economy. Monetary policy both at home and abroad will continue to keep the value of the U.S. dollar strong. Although U.S. interest rates are likely to remain relatively low for some time before moving back toward historical averages, they are expected to rise sooner and faster than rates in other developed countries.

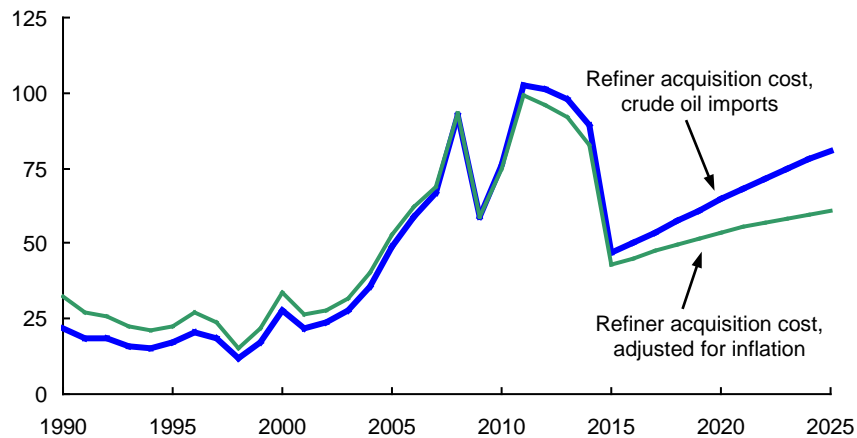
- The real value of the dollar increased substantially in 2015 relative to developed country currencies, up more than 18 percent relative to the euro, 13.5 percent relative to the yen, over 14 percent relative to the Canadian dollar, and more than 18 percent relative to the Australian dollar. These gains largely reflect the relative strength of the U.S. economy in a period of economic uncertainty in Europe and weakness elsewhere in the developed world. Since these conditions are expected to persist in the near term, the dollar is expected to strengthen further, although at a slower pace, against most developed country currencies before stabilizing in the longer run as economic conditions improve and monetary policy normalizes in these countries.
- The dollar also appreciated relative to developing country currencies in 2015, although generally less sharply. The real dollar appreciated about 11 percent relative to Latin American currencies; 5.6 percent relative to Southeast Asian countries; 6.6 percent relative to Middle Eastern countries; and 6.8 percent relative to African countries. In the near term, the dollar is projected to continue appreciating relative to most developing country currencies in nominal terms. However, high rates of inflation in many developing countries are expected to mitigate rising nominal dollar values and may result in real dollar depreciation, notably in Latin American countries.
- The dollar appreciated relative to the Chinese yuan in the second half of 2015. The Chinese have maintained a policy of keeping the value of the yuan closely linked to the dollar, which, for the 10 years up through the end of 2014, resulted in a slow, steady appreciation of the yuan. However, as the dollar began to strengthen and the Chinese economy began to

slow at the end of 2014, the yuan began to slowly depreciate. In August 2015, Chinese authorities announced a policy change that would allow its exchange rate to be more influenced by market forces. This led to an immediate nominal depreciation of roughly 3 percent, along with some with further depreciation toward the end of the year. The projections assume that the economic slowdown in China will mean that the yuan will continue depreciating at a measured pace over the next two years, followed by a period of relatively stable real exchange rates as adjustment takes hold.

- The largest real appreciation of the dollar in 2015 was with respect to the countries of the former Soviet Union. The dollar appreciated 33 percent in real terms against a trade-weighted basket of currencies in the region, appreciating more than 36 percent with respect to the Russian ruble and over 26 percent against Ukraine's currency. The dollar is expected to continue to appreciate in nominal terms in the next few years against many of the FSU currencies, although generally high rates of inflation in the FSU are expected to result in real dollar depreciation in many cases.

U.S. crude oil prices

Dollars per barrel



The projections reflect continued low crude oil prices in the near term, rising to about \$80 per barrel by the end of the projection period.

- Growing surpluses of oil in late 2014 and into 2015 led to a more than 50 percent decline in crude oil prices. Both weak global demand and steady, if not rising, supply are expected to keep prices low in the near term. Low oil prices will lead to a significant reduction in exploration and development, resulting in rising prices throughout the projection period.
- Increased domestic oil and natural gas production using horizontal drilling and hydraulic fracturing (fracking) technology has increased U.S. domestic supply substantially, reducing the need for petroleum imports. In the absence of a substantial increase in U.S. crude oil exports, domestic oil prices will be below world crude oil prices.

Table 1. U.S. macroeconomic assumptions

Item	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Gross Domestic Product												
Nominal, billion dollars	17,348	17,966	18,786	19,648	20,548	21,483	22,438	23,413	24,431	25,493	26,600	27,756
Real, billion 2009 chain-weighted dollars	15,962	16,329	16,812	17,290	17,751	18,195	18,632	19,060	19,498	19,947	20,405	20,875
percent change	2.4	2.3	3.0	2.8	2.7	2.5	2.4	2.3	2.3	2.3	2.3	2.3
Disposable personal income												
Nominal, billion dollars	12,914	13,478	14,079	14,710	15,366	16,043	16,725	17,428	18,160	18,922	19,717	20,545
percent change	4.2	4.4	4.5	4.5	4.5	4.4	4.3	4.2	4.2	4.2	4.2	4.2
Nominal per capita, dollars	40,461	41,921	43,473	45,097	46,772	48,484	50,193	51,939	53,749	55,628	57,577	59,601
percent change	3.4	3.6	3.7	3.7	3.7	3.7	3.5	3.5	3.5	3.5	3.5	3.5
Real, billion 2009 chain-weighted dollars	11,836	12,208	12,562	12,912	13,248	13,566	13,872	14,177	14,489	14,808	15,133	15,466
percent change	2.7	3.1	2.9	2.8	2.6	2.4	2.3	2.2	2.2	2.2	2.2	2.2
Real per capita, 2009 chained dollars	37,084	37,971	38,790	39,584	40,323	40,999	41,630	42,251	42,884	43,531	44,192	44,867
percent change	2.0	2.4	2.2	2.0	1.9	1.7	1.5	1.5	1.5	1.5	1.5	1.5
Personal consumption expenditures												
Real, billion 2009 chain-weighted dollars	10,876	11,208	11,531	11,845	12,153	12,445	12,725	13,005	13,291	13,584	13,883	14,188
percent change	2.7	3.1	2.9	2.7	2.6	2.4	2.3	2.2	2.2	2.2	2.2	2.2
Inflation measures												
GDP chained price index, 2009=100	108.7	110.0	111.7	113.6	115.8	118.1	120.4	122.8	125.3	127.8	130.4	133.0
percent change	1.6	1.2	1.6	1.7	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0
CPI-U, 1982-84=100	236.7	237.2	241.7	246.6	251.7	257.3	263.2	269.2	275.4	281.8	288.2	294.9
percent change	1.6	0.2	1.9	2.0	2.1	2.2	2.3	2.3	2.3	2.3	2.3	2.3
PPI, finished goods 1982=100	200.4	194.8	199.3	203.6	207.6	211.8	216.4	221.2	226.0	231.0	236.1	241.3
percent change	1.9	-2.8	2.3	2.2	2.0	2.0	2.2	2.2	2.2	2.2	2.2	2.2
PPI, crude goods 1982=100	249.2	197.8	205.3	212.8	219.8	226.5	233.0	239.3	245.4	251.2	256.9	262.5
percent change	1.1	-20.6	3.8	3.6	3.3	3.1	2.9	2.7	2.5	2.4	2.3	2.2
Crude oil price, \$/barrel												
EIA refiner acquisition cost, imports	89.6	47.2	50.1	53.9	57.5	61.1	64.6	68.0	71.4	74.6	77.8	80.9
percent change	-8.7	-47.3	6.2	7.5	6.8	6.2	5.7	5.3	4.9	4.6	4.3	4.0
Real 2009 chain-weighted dollars	82.4	42.9	44.9	47.4	49.7	51.8	53.6	55.4	57.0	58.4	59.7	60.9
percent change	-10.2	-47.9	4.6	5.7	4.8	4.1	3.6	3.2	2.9	2.5	2.2	2.0
Labor compensation per hour nonfarm business, 2005=100												
Real 2009 chain-weighted dollars	111.1	114.5	117.3	120.4	123.7	126.9	130.2	133.5	137.0	140.6	144.2	148.0
percent change	2.7	3.0	2.4	2.7	2.7	2.6	2.6	2.6	2.6	2.6	2.6	2.6
Interest rates, percent												
3-month Treasury bills	0.03	0.05	0.5	1.2	1.9	2.6	3.1	3.2	3.2	3.2	3.2	3.2
3-month AA nonfinancial commercial paper	0.10	0.13	0.6	1.3	2.0	2.8	3.3	3.4	3.4	3.4	3.4	3.4
Bank prime rate	3.25	3.25	3.9	4.7	5.2	5.8	6.2	6.2	6.2	6.2	6.2	6.2
10-year Treasury bonds	2.54	2.20	2.9	3.5	3.9	4.1	4.3	4.3	4.4	4.4	4.4	4.4
Moody's Aaa bond yield index	4.16	3.90	4.6	4.9	5.1	5.3	5.6	5.6	5.7	5.7	5.7	5.7
Labor and population												
Civilian unemployment rate, percent	6.2	5.4	5.1	4.9	4.9	5.0	5.1	5.2	5.2	5.2	5.2	5.2
Nonfarm payroll employees, millions	139.0	141.6	143.5	145.0	146.0	147.0	148.1	149.1	150.2	151.2	152.3	153.3
percent change	1.9	1.9	1.3	1.0	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Total population, millions	319.2	321.5	323.9	326.2	328.5	330.9	333.2	335.5	337.9	340.2	342.4	344.7
percent change	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7

Domestic macroeconomic assumptions were completed in October 2015. CPI-U is the consumer price index for all urban consumers. PPI is the producer price index. EIA is the Energy Information Administration, U.S. Department of Energy.

Table 2. Global real GDP growth assumptions

Region/country	GDP, 2014	GDP share		Per capita GDP, 2014	2014	2015	2016	2017	2018	2019	Average		
		2012-14	Percent								2010 dollars	1991-2000	2001-2010
World	<i>Bil. 2010</i> 72,574 <i>dollars</i>	100.0	<i>Percent</i>	10,188 <i>2010</i> <i>dollars</i>	2.6	2.4	3.0	3.1	3.1	3.1	2.8	2.8	3.1
					<i>Percent change in real GDP</i>								
North America	18,053	24.9	50,997	2.4	2.2	2.9	2.8	2.7	2.5	3.4	1.7	2.5	
Canada	1,771	2.4	50,852	2.5	1.0	2.2	2.7	2.7	2.4	2.9	1.9	2.3	
United States	16,282	22.5	51,013	2.4	2.3	3.0	2.8	2.7	2.5	3.4	1.7	2.5	
Latin America	5,975	8.3	9,787	1.0	-0.3	0.9	2.0	2.5	2.8	3.1	3.3	2.6	
Mexico	1,178	1.6	9,792	2.1	2.5	3.1	3.3	3.4	3.5	3.6	1.8	3.3	
Caribbean & Central America	470	0.6	5,580	2.9	2.8	3.2	3.2	3.3	3.4	3.0	3.0	3.5	
South America	4,327	6.0	10,659	0.5	-1.3	0.0	1.5	2.2	2.5	3.0	3.8	2.3	
Argentina	523	0.7	12,149	0.5	-0.3	0.1	0.3	0.4	0.4	4.7	4.1	0.7	
Brazil	2,404	3.4	11,862	0.1	-2.7	-1.0	1.0	1.7	2.2	2.6	3.7	1.8	
Other	1,400	1.9	8,737	1.0	0.6	1.7	2.9	3.5	3.7	3.2	3.9	3.6	
Europe	18,547	26.0	34,196	1.3	1.8	2.0	2.0	1.8	1.8	2.2	1.5	1.8	
European Union	17,373	24.3	33,888	1.3	1.9	2.1	2.0	1.8	1.8	2.2	1.3	1.8	
Other Europe	1,175	1.6	39,506	1.9	0.7	1.3	2.1	2.0	1.9	1.9	1.9	1.8	
Former Soviet Union	2,249	3.1	7,918	0.9	-3.3	-0.3	2.4	3.3	3.3	-4.0	5.4	2.5	
Russia	1,677	2.3	11,770	0.6	-4.0	-1.0	2.0	3.0	3.0	-3.6	4.9	2.1	
Ukraine	134	0.2	2,982	-6.8	-10.3	-4.0	0.1	4.0	4.4	-7.7	4.6	3.1	
Other	438	0.6	4,534	4.5	1.7	3.3	4.1	4.2	3.9	-3.3	8.5	3.5	
Asia and Oceania	22,469	30.4	5,732	4.4	4.4	4.6	4.3	4.3	4.4	3.8	4.8	4.3	
East Asia	15,914	21.6	10,127	4.1	4.0	4.2	3.8	3.7	3.8	3.5	4.6	3.7	
China	8,236	10.8	6,050	7.4	6.5	6.1	5.7	5.5	5.3	10.5	10.5	5.3	
Hong Kong	257	0.4	36,202	2.5	2.4	2.8	3.1	3.3	3.5	4.0	4.1	3.3	
Japan	5,650	7.9	44,455	-0.1	1.0	1.6	0.7	0.8	1.3	1.1	0.8	1.0	
South Korea	1,234	1.7	25,162	3.3	2.7	3.4	3.4	3.4	3.2	6.6	4.4	3.0	
Taiwan	483	0.7	20,686	3.8	1.6	3.4	3.5	3.1	2.8	6.2	4.0	2.4	
Southeast Asia	2,439	3.3	3,882	4.6	4.5	4.7	4.9	5.1	5.0	5.1	5.1	4.9	
Burma	125	0.2	2,247	7.7	6.8	7.2	7.0	6.7	6.5	6.5	5.2	6.2	
Cambodia	15	0.0	960	7.0	7.7	7.7	7.6	7.5	7.4	6.9	8.1	7.3	
Indonesia	943	1.3	3,717	5.0	4.8	5.0	5.3	5.4	5.3	4.4	5.2	5.2	
Malaysia	305	0.4	10,158	6.0	4.7	4.3	4.7	4.7	4.7	7.2	4.6	4.5	
Philippines	251	0.3	2,528	6.1	5.4	5.6	5.6	5.6	5.3	2.9	4.8	5.2	
Thailand	352	0.5	5,199	0.7	2.7	3.3	3.3	3.8	3.8	4.6	4.4	3.6	
Vietnam	145	0.2	1,550	6.0	6.3	6.4	6.7	6.7	6.6	7.6	6.6	6.5	
South Asia	2,660	3.5	1,579	7.1	7.2	7.7	7.7	7.7	7.8	5.3	7.0	7.7	
Bangladesh	147	0.2	884	6.1	5.9	6.3	6.7	6.9	6.9	4.7	5.6	6.5	
India	2,198	2.9	1,778	7.4	7.6	8.1	8.0	8.0	8.2	5.6	7.5	8.1	
Pakistan	208	0.3	1,059	5.4	5.5	5.6	5.6	5.5	5.5	4.0	4.2	5.4	
Oceania	1,456	2.0	40,389	2.6	2.6	2.7	2.9	2.9	2.9	3.3	3.0	2.8	
Australia	1,272	1.8	56,534	2.5	2.4	2.6	2.9	2.9	3.0	3.3	3.0	2.8	
New Zealand	161	0.2	36,495	3.3	2.8	2.7	2.7	2.6	2.6	3.1	2.5	2.5	
Middle East	3,083	4.3	10,085	2.1	2.4	3.2	3.7	4.3	4.4	4.0	4.3	4.0	
Iran	408	0.6	5,052	1.5	1.0	4.3	4.9	5.3	5.5	3.8	5.1	5.0	
Iraq	174	0.3	4,847	-6.4	2.3	3.0	4.8	5.3	5.5	9.1	5.0	5.5	
Saudi Arabia	649	0.9	23,715	3.5	3.0	3.1	3.4	4.8	4.8	2.8	5.1	4.3	
Turkey	871	1.2	11,104	2.9	2.9	3.0	3.4	4.0	4.0	3.7	4.0	3.8	
Other	982	1.4	11,799	2.6	2.1	3.0	3.5	3.7	3.9	5.5	4.0	3.3	
Africa	2,198	3.0	1,986	3.4	3.5	4.0	4.7	4.8	4.8	2.6	5.3	4.5	
North Africa	612	0.9	3,481	0.7	3.2	3.3	4.6	4.7	4.5	3.8	4.5	4.2	
Egypt	238	0.3	2,735	2.2	4.3	3.7	4.2	4.5	4.6	4.3	4.9	4.4	
Morocco	105	0.1	3,175	2.6	4.7	4.4	5.0	4.8	4.5	3.0	4.9	3.9	
Sub-Saharan Africa	1,586	2.1	1,703	4.5	3.6	4.2	4.7	4.9	4.9	2.1	5.7	4.7	
South Africa	411	0.6	7,753	1.5	1.5	1.9	2.6	3.2	3.2	1.8	3.5	3.0	
West African Community	599	0.8	1,790	4.1	4.8	5.1	5.0	4.9	4.9	2.3	6.0	4.9	
Other Sub-Saharan Africa	576	0.8	1,059	5.2	4.6	5.1	5.5	5.5	5.6	2.1	6.0	5.5	

Source: Historical data from various sources; compiled in the International Macroeconomic Data Set, U.S. Department of Agriculture, Economic Research Service. International macroeconomic assumptions were based on information available in August 2015.

Table 3. Population growth assumptions

Region/country	Population in							Average		
	2015	2014	2015	2016	2017	2018	2019	1991-2000	2001-2010	2016-2025
	<i>Millions</i>							<i>Percent change</i>		
World ¹	7,200	1.1	1.1	1.1	1.1	1.0	1.0	1.4	1.2	1.0
North America	357	0.7	0.7	0.7	0.7	0.7	0.7	1.2	0.9	0.7
Canada	35	0.8	0.8	0.7	0.7	0.7	0.7	1.1	0.8	0.7
United States	322	0.7	0.7	0.7	0.7	0.7	0.7	1.2	0.9	0.7
Latin America	617	1.0	1.0	1.0	1.0	0.9	0.9	1.6	1.2	0.9
Mexico	122	1.2	1.2	1.2	1.1	1.1	1.1	1.7	1.3	1.0
Caribbean & Central America	85	1.0	1.0	1.0	1.0	1.0	0.9	1.7	1.2	0.9
South America	410	1.0	0.9	0.9	0.9	0.9	0.9	1.6	1.2	0.8
Argentina	43	1.0	0.9	0.9	0.9	0.9	0.9	1.2	1.0	0.8
Brazil	204	0.8	0.8	0.8	0.7	0.7	0.7	1.6	1.2	0.7
Other	162	1.2	1.1	1.1	1.1	1.1	1.1	1.8	1.3	1.0
Europe	544	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.4	0.2
European Union	514	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.4	0.2
Other Europe	30	0.4	0.3	0.3	0.3	0.3	0.3	0.0	0.2	0.2
Former Soviet Union	284	0.1	0.1	0.2	0.2	0.2	0.2	0.1	0.0	0.1
Russia	142	0.0	0.0	0.0	-0.1	-0.1	-0.1	-0.1	-0.3	-0.2
Ukraine	44	-1.0	-1.1	-0.5	-0.4	-0.2	0.0	-0.5	-0.7	-0.4
Other	97	0.8	0.8	0.8	0.8	0.7	0.7	0.6	0.7	0.7
Asia and Oceania	3,956	0.9	0.9	0.9	0.9	0.9	0.8	1.4	1.1	0.8
East Asia	1,578	0.4	0.4	0.4	0.4	0.3	0.3	0.9	0.5	0.2
China	1,367	0.4	0.5	0.4	0.4	0.4	0.4	1.0	0.5	0.3
Hong Kong	7	0.4	0.4	0.4	0.3	0.3	0.3	1.6	0.5	0.2
Japan	127	-0.1	-0.1	-0.2	-0.2	-0.2	-0.2	0.3	0.1	-0.3
South Korea	49	0.2	0.2	0.1	0.1	0.1	0.1	0.9	0.4	0.1
Taiwan	23	0.3	0.2	0.2	0.2	0.2	0.1	0.9	0.4	0.1
Southeast Asia	635	1.1	1.1	1.0	1.0	1.0	1.0	1.8	1.4	0.9
Burma	56	1.0	1.0	1.0	1.0	1.0	1.0	1.6	1.2	0.9
Cambodia	16	1.7	1.6	1.6	1.5	1.5	1.5	2.8	1.6	1.4
Indonesia	256	1.0	0.9	0.9	0.9	0.8	0.8	1.7	1.3	0.8
Malaysia	31	1.5	1.5	1.4	1.4	1.4	1.3	2.6	2.0	1.3
Philippines	101	1.7	1.6	1.6	1.6	1.6	1.6	2.2	2.0	1.5
Thailand	68	0.4	0.3	0.3	0.3	0.3	0.3	1.2	0.6	0.2
Vietnam	94	1.0	1.0	1.0	0.9	0.9	0.9	1.6	1.2	0.8
South Asia	1,707	1.4	1.3	1.3	1.3	1.3	1.2	2.0	1.6	1.2
Bangladesh	169	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.7	1.6
India	1,252	1.3	1.2	1.2	1.2	1.2	1.1	1.8	1.5	1.1
Pakistan	199	1.5	1.5	1.5	1.5	1.4	1.4	2.5	1.9	1.4
Oceania	36	1.2	1.2	1.2	1.1	1.1	1.1	1.4	1.4	1.0
Australia	23	1.1	1.1	1.1	1.0	1.0	1.0	1.2	1.2	1.0
New Zealand	4	0.8	0.8	0.8	0.8	0.8	0.8	1.1	1.1	0.7
Middle East	310	1.4	1.4	1.5	1.6	1.6	1.5	2.1	1.9	1.4
Iran	82	1.2	1.2	1.2	1.2	1.1	1.1	1.7	1.1	1.0
Iraq	37	3.7	3.0	2.9	2.7	2.6	2.5	2.5	2.8	2.5
Saudi Arabia	28	1.5	1.5	1.5	1.5	1.4	1.4	2.9	1.9	1.4
Turkey	79	1.3	1.3	1.1	0.7	0.5	0.5	1.6	1.2	0.6
Other	84	0.6	1.0	1.7	2.2	2.5	2.4	3.0	2.8	1.9
Africa	1,133	2.4	2.4	2.3	2.3	2.3	2.3	2.5	2.5	2.2
North Africa	179	1.7	1.7	1.6	1.5	1.5	1.5	1.7	1.8	1.4
Egypt	88	1.9	1.8	1.8	1.7	1.7	1.7	1.7	2.1	1.6
Morocco	33	1.0	1.0	1.0	1.0	1.0	0.9	1.6	1.2	0.9
Sub-Saharan Africa	954	2.5	2.5	2.5	2.4	2.4	2.4	2.6	2.6	2.4
South Africa	54	1.1	1.3	1.2	1.0	1.0	1.0	1.6	1.3	1.0
West African Community	343	2.6	2.5	2.5	2.5	2.5	2.5	2.6	2.7	2.5
Other Sub-Saharan Africa	558	2.7	2.6	2.6	2.5	2.5	2.5	2.8	2.7	2.4

1/ Totals for the world include countries not otherwise listed in the table.

Source: U.S. Department of Commerce, U.S. Census Bureau, <http://www.census.gov/population/international/data/idb/informationGateway.php>. The population assumptions were completed in August 2015 based on the July 2015 Census update.