

## Macroeconomic Assumptions

Macroeconomic assumptions underlying USDA's long-term projections reflect a near-term global economic slowdown due to the current financial crisis, followed by a transition back toward steady growth at longrun sustainable rates in 2011 and beyond. Implicit in these assumptions is the U.S. Federal Reserve Board and other major central banks around the world taking aggressive action to counter the financial crisis, and governments also being aggressive in providing stimulus to overcome the economic downturn to keep it short-lived (see box, *Global Economic Slowdown*, page 9). The macroeconomic assumptions were completed in October 2008.

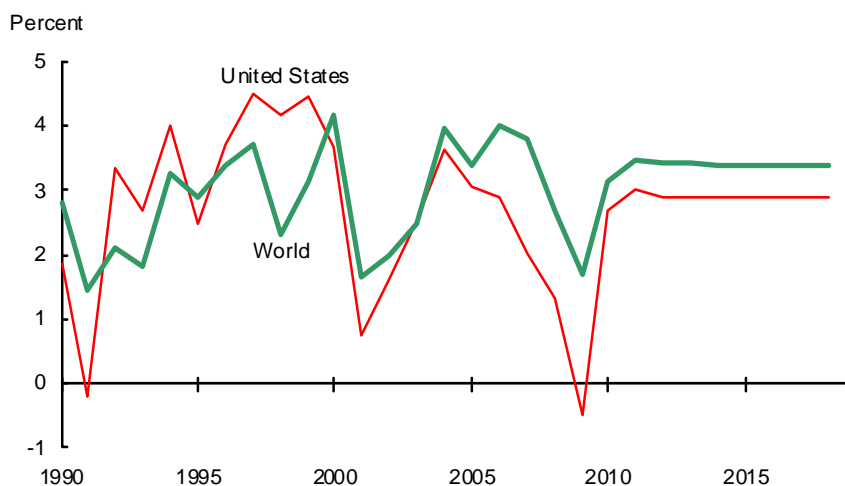
After averaging 3 percent annually between 2001 and 2008, overall world economic growth is projected to increase only 1.7 percent in 2009. Global growth then is projected to average 3.4 percent in 2010 through 2018. The projections assume slowing rates of growth in developed countries and continued strong growth in developing countries and countries of the former Soviet Union.

The financial crisis has a significant impact on economic growth in the United States. The U.S. economy grows 1.3 percent in 2008, contracts by 0.5 percent in 2009, and resumes growth of only 2.5 percent in 2010. After 2010, U.S. growth moves back toward a sustainable rate near 3 percent. Nonetheless, the U.S. share of global gross domestic product (GDP) falls to 25 percent by the end of the projections from 27 percent in 2007.

The return of global economic growth after 2009 and continued population gains are expected to boost food demand. The longer term increases in global purchasing power and population, competing against demand for biofuels and other domestic uses, are important factors shaping the projections for world trade, U.S. agricultural exports, and for commodity prices. Also supporting the outlook for U.S. agricultural exports is the cumulative effect of the depreciated U.S. dollar since 2002.

The global economic slowdown has dampened inflation. Even with the U.S. and world economies projected to move back toward stronger, sustainable growth, global inflation is projected at relatively low rates, averaging about 3 percent globally through 2018. The U.S. Federal Reserve Board and other major central banks are assumed to continue policies to balance growth against increasing inflation.

**U.S. and world gross domestic product (GDP) growth**



## **Global Economic Slowdown**

The U.S. recession and the world economic slowdown assumed for 2009 reflect the current global financial crisis. The U.S. housing market downturn, which began in late 2006, spread to the housing finance sector and then into the banking and financial sectors worldwide, significantly affecting the U.S. economy by the spring of 2008. By the third quarter of 2008, effects of the financial crisis had spread to much of the developed world. Numerous policy actions—lowering interest rates by the world's central banks, targeting activities by various agencies to aid homeowners, providing a fiscal stimulus package, and implementing rescue packages to support failing financial institutions—were designed to mitigate the size of the economic downturn. Despite these policies, the United States and most developed economies are in recession and economic growth in the developing world is slowing.

The global economic slowdown has been severe enough to reverse the sharp rise in oil prices, which likely contributed to the economic slowdown. Crude oil prices, which were near \$150 per barrel at their peak in mid-2008, fell to under \$50 per barrel by the end of the year. Other commodity prices slid as well. The U.S. dollar strengthened against major foreign currencies except the yen, reflecting a flight from risky assets.

U.S. farm operators entered the economic downturn in a strong financial position following a period of record farm incomes and rising farmland values. However, lower prices, in part brought on by the global economic downturn, will reduce U.S. farm income in 2009. Additionally, any declines in off-farm incomes could negatively affect the finances of farm households. Lenders specializing in farm lending are in relatively good financial shape with farm loan default and loss rates only recently creeping up. Small rural banks, which are major providers of farm operating credit, do not appear to have been large investors in the risky securities that have troubled larger banks. Nonetheless, a large share of farm credit comes from these larger banks.

The U.S. and world economies are assumed to improve after 2009. Growth prospects in 2010 are for a solid, but not stellar, economic rebound, with the U.S. dollar weakening somewhat and crude oil prices rising. By 2012, the macroeconomic assumptions largely reflect a return to expected long-term trends, with higher U.S. interest rates as the Federal Reserve Board boosts rates to forestall inflation.

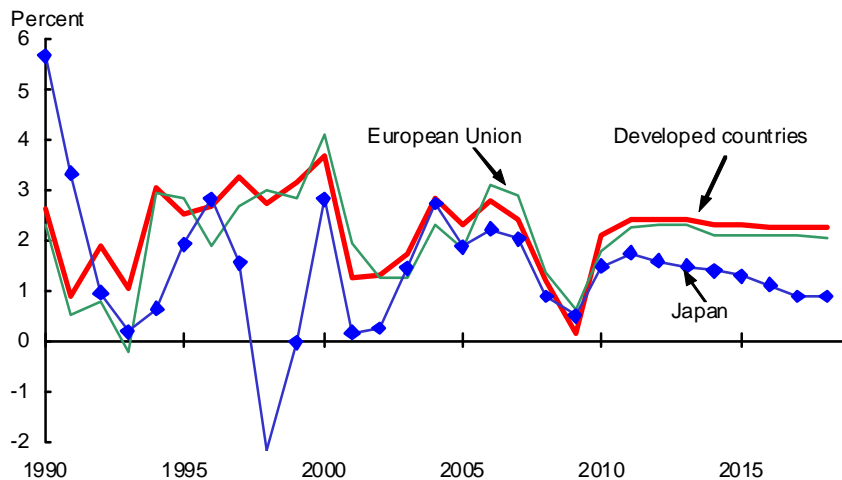
### **Macroeconomic Outlook Uncertainty**

There is significant uncertainty in the macroeconomic outlook. The decline in prices for oil and other commodities, low short-term interest rates, and the potential for conditions in credit markets to be eased could bring a shorter and shallower economic slowdown than in the macroeconomic assumptions. Rapid action by policymakers and regulators to address various aspects of the financial and housing crises provides further support for this alternative outcome.

However, there is also the possibility of a deeper and longer lasting U.S. recession than assumed. The recent declines in consumer spending, the large overhang of excess housing, and the spillover of the mortgage crisis into other domestic and international financial markets are some of the factors that could slow the economy further.

There is also a very small possibility of sustained and deep price deflation. Consistent with this scenario would be a sharp rise in the value of the U.S. dollar as a safe haven for international financial markets and a sharper and more protracted slowdown in world economic growth going into 2010. This situation, if realized, could have severe short-to-medium term repercussions for farm commodity prices as well as the volume and value of U.S. agricultural exports.

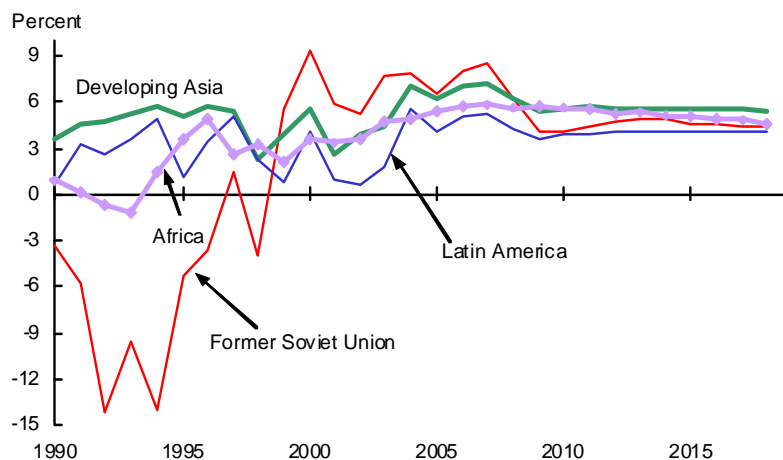
### GDP growth for developed countries, European Union, and Japan



Developed economies are projected to grow at rates almost half a percentage point less than the 1970-2008 historical average, to an average around 2.2 percent in 2009-18. Economic growth rates for the European Union (EU) remain below 2 percent per year in the projection period, also around a 0.5 percentage point below their historical average. Japan is projected to have modest growth of 1.25 percent per year on average. As a consequence, both the EU and Japan account for smaller shares of global GDP.

- The EU does not grow as rapidly as the U.S. economy because of lingering structural rigidities, particularly inflexible labor laws and a very expensive social security system. Political difficulties also constrain the benefits of economic integration, particularly with continued restrictions on labor mobility between EU countries and a very cumbersome EU decisionmaking process. Unemployment rates decline from double-digit rates, however, indicating some progress in increasing employment flexibility.
- Japan continues to face constraints to economic growth, largely the result of long-term structural rigidities (such as legal constraints to new business entry), a difficult political process for economic reform, and a rapidly aging population. Japan's labor market liberalization partly offsets these constraints, aiding productivity growth. Japan's increasing integration with the other economies of Asia, especially China, further mitigates the growth constraints in the Japanese economy. The projections assume sustained economic growth in Japan of just over 1 percent per year, with the country's share of world GDP declining to 7.5 percent by 2018, down from almost 11 percent in 1991. While Japan's projected growth remains relatively low compared with most other countries, it represents a modest improvement from its growth in the 1990s.

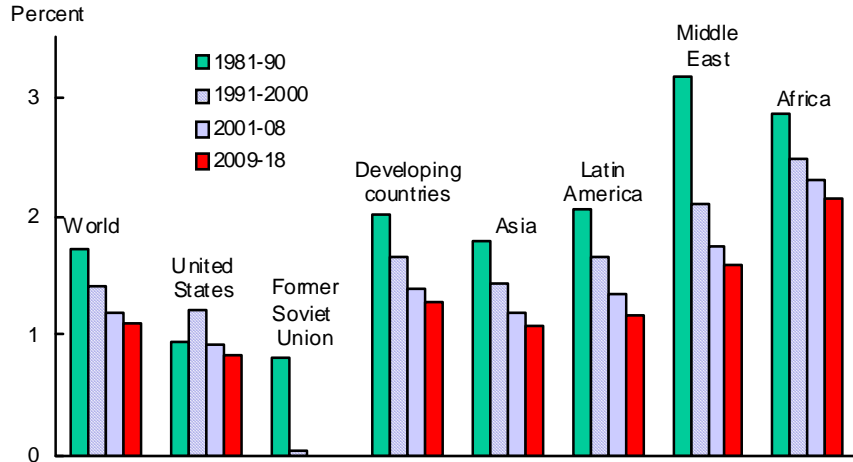
### GDP growth for developing economies and the former Soviet Union



Economic growth in developing countries is projected to average 5.6 percent annually during 2009-18. These countries will play an increasingly important role in global growth in food demand and will become a more important destination for U.S. agricultural exports. Relatively high income growth, along with large responsiveness of consumption and imports of food and feed to income growth in these countries, underlies this result. As incomes rise in developing countries, consumers generally diversify their diets, moving away from staple foods to include more meat, dairy products, fruits, vegetables, and processed foods (including vegetable oils). These consumption shifts increase import demand for feedstuffs and high-value food products.

- Continued strong growth in China, India, and the rest of Asia make this region an increasingly important part of the global economy, with Asia's share of world GDP rising to almost 30 percent by the end of the projection period. Relatively high oil prices, by historical standards, assumed in the projections modestly constrain Asia from even higher economic growth since the manufacturing sector in Asian countries is far more dependent on energy for GDP growth than more developed economies. China's economic growth has been consistently the strongest in Asia, exceeding 10 percent between 2003 and 2007. While some slowing is expected, China's growth is expected to average more than 7.5 percent over the next decade. India's projected average economic growth of 7.5 percent per year puts it in the top tier of high-growth countries. Nonetheless, India is still a low-income country, with real (inflation-adjusted) 2005-based per capita income of \$849 in 2008, compared with \$2,350 in China. Continued strong income growth is expected to bring India's real per capita income to more than \$1,500 by 2018 and is expected to move a significant number of people out of poverty. Projected growth for Southeast Asia exceeds 4.9 percent for the next decade while growth in developing countries of East Asia is projected to be 5.5 percent. Although large, these projected growth rates are below the very strong average economic growth in these regions in 1971-2008.
- Long-term growth of 4 percent is projected for Latin America. An overall improvement in macroeconomic policies has attracted foreign capital inflows (particularly foreign direct investment, notably to Chile, Colombia, and Brazil) and sustained growth in the region.
- Economic growth in the countries of the former Soviet Union (FSU) is projected to average 5.0 percent annually for the next decade as Russia, Ukraine, and other FSU countries benefit from their shift to more market-oriented economies. Russia and other energy-rich FSU countries also benefit from relatively high oil prices.

### Population growth continues to slow



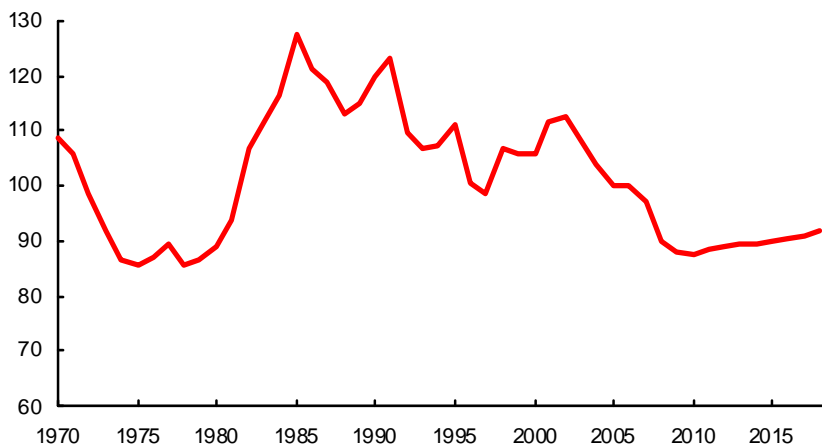
Source: U.S. Department of Commerce, U.S. Census Bureau and U.S. Department of Agriculture, Economic Research Service.

A continued slowing of population growth around the world limits increases in food and agricultural demand over the next decade. World population growth declines from an annual rate of 1.7 percent in the 1980s to an average of just over 1.1 percent per year for the projection period.

- Developed countries have very low projected rates of population growth, at 0.35 percent over 2009-18. Projected annual average population growth rate for the United States is the highest among developed countries, at 0.9 percent, in part reflecting large immigration.
- Overall, population in the former Soviet Union is projected to decline moderately. Population growth rates in developing economies are projected to be sharply lower than rates in the 1980s and 1990s, but remain above those in developed countries and the FSU. As a result, the share of world population accounted for by developing countries increases to nearly 84 percent by 2018, compared to 78 percent in the 1980s and 80 percent in the 1990s.
- China and India together account for more than one-third of the world's population. China's population growth rate slows from 1.5 percent per year in 1981-90 to 0.6 percent in 2009-18. The population growth rate in India, the world's second most populous nation, is projected to decline from 2.1 percent to 1.5 percent per year between the same periods.
- Brazil's population growth rate falls from 2.1 percent per year in 1981-90 to 1.1 percent annually in 2009-18. Sub-Saharan Africa's population growth rate declines from 2.9 percent to 2.3 percent per year between the same periods, leaving this impoverished region with the highest population growth rate in the world.
- There are a number of countries with declining populations, including Japan, Russia, Ukraine, and countries in Western and Central Europe. Additionally, several countries in Sub-Saharan Africa are projected to have declining populations resulting from the AIDS epidemic, including the Republic of South Africa.

### U.S. agricultural trade-weighted dollar projected to stabilize 1/

Index values, 2005=100

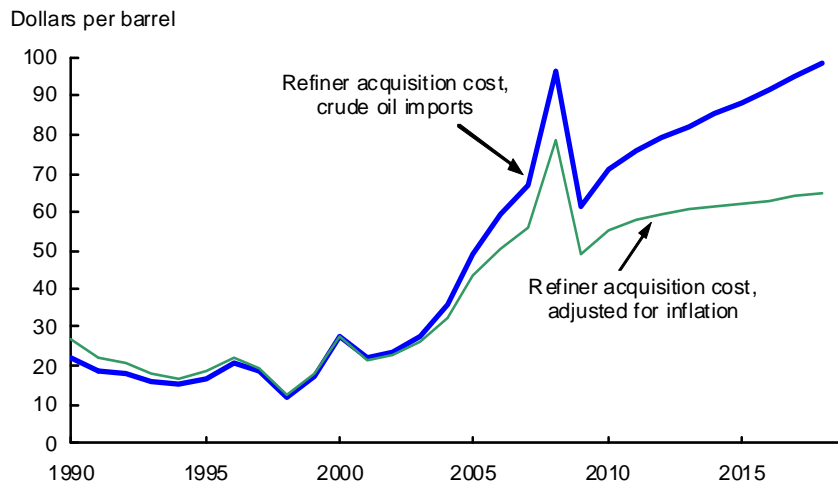


1/ Real U.S. agricultural trade-weighted dollar exchange rate, using U.S. agricultural export weights, based on 192 countries.

The U.S. dollar depreciated 20 percent between February 2002 and April 2008, a facilitating factor in the growth in U.S. agricultural exports. Since April 2008, the U.S. dollar has generally appreciated. On an annual basis, the U.S. dollar is projected to strengthen moderately from 2010 to 2018. Despite this projected appreciation, the dollar's low level relative to the early 2000s is likely to continue to positively impact U.S. exports.

- Strong GDP growth in the United States relative to the EU and Japan will tend to reverse the appreciation of the euro to the U.S. dollar and offsets some of the trade-driven appreciation of the yen.
- China initiated a process for appreciating its currency in 2005 after a long period of maintaining a fixed nominal exchange rate and an undervalued currency. The projections assume that China allows its real exchange rate to continue to appreciate, but at decreasing rates. The appreciation of China's currency also leads to some appreciation of other Asian currencies. These exchange rate developments will strengthen U.S. agricultural exports to Asian countries.
- Among agricultural products, U.S. exports of bulk commodities and horticultural products tend to be the most sensitive to swings in the U.S. dollar's value, because they face more global trade competition.

### U.S. crude oil prices



Crude oil prices rose sharply from late 2002 into 2008, much of which reflected increased crude oil demand due to a robust world economic growth and rapid manufacturing growth in China, India, and other countries in Asia. At its peak in July 2008, the refiner acquisition cost of crude oil imports reached \$147 a barrel. The weakening of the U.S. and global economies toward the end of 2008 and resulting decline in demand for petroleum and other energy supplies pushed crude oil prices down more than 70 percent from the peak values.

- Crude oil prices are assumed to rebound in 2009 and average about \$60 per barrel. Prices are then assumed to increase over the remainder of the projection period as global economic activity picks up. From 2010 through 2018, crude oil prices are expected to rise somewhat faster than the general inflation rate. By the end of the projection period, the refiner acquisition cost for crude oil imports is projected to be near \$100 per barrel.

Table 1. U.S. macroeconomic assumptions

Item	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
<b>GDP, billion dollars</b>												
Nominal	13,808	14,295	14,508	15,212	16,013	16,840	17,710	18,624	19,586	20,597	21,661	22,780
Real 2000 chained dollars	11,524	11,674	11,615	11,929	12,287	12,643	13,010	13,387	13,775	14,175	14,586	15,009
percent change	2.0	1.3	-0.5	2.7	3.0	2.9	2.9	2.9	2.9	2.9	2.9	2.9
<b>Disposable personal income</b>												
Nominal (billions)	10,171	10,516	10,737	11,263	11,838	12,441	13,076	13,743	14,444	15,180	15,954	16,768
percent change	5.5	3.4	2.1	4.9	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1
Nominal per capita, dollars	33,666	34,486	34,883	36,255	37,757	39,324	40,959	42,666	44,447	46,306	48,245	50,270
percent change	4.5	2.4	1.2	3.9	4.1	4.2	4.2	4.2	4.2	4.2	4.2	4.2
Real (billion 2000 chained)	8,644	8,748	8,757	9,002	9,263	9,531	9,808	10,092	10,385	10,686	10,996	11,315
percent change	2.8	1.2	0.1	2.8	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
Real per capita, 2000 dollars	28,615	28,686	28,448	28,976	29,544	30,126	30,722	31,332	31,957	32,597	33,251	33,921
percent change	1.8	0.3	-0.8	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.2	2.2
<b>Consumer spending</b>												
Real (billion 2000 chained)	8,253	8,327	8,285	8,493	8,730	8,975	9,226	9,484	9,750	10,023	10,304	10,592
percent change	2.8	0.9	-0.5	2.5	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
<b>Inflation measures</b>												
GDP price index, chained, 2000=100	119.8	122.5	124.9	127.5	130.3	133.2	136.1	139.1	142.2	145.3	148.5	151.8
percent change	2.7	2.2	2.0	2.1	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
CPI-U, 1982-84=100	207.3	216.3	221.0	226.5	232.2	238.0	244.0	250.1	256.3	262.7	269.3	276.0
percent change	2.9	4.3	2.2	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
PPI, finished goods 1982=100	166.6	179.9	181.7	185.3	188.5	191.3	194.2	196.9	199.7	202.5	205.3	208.2
percent change	3.9	8.0	1.0	2.0	1.7	1.5	1.5	1.4	1.4	1.4	1.4	1.4
PPI, crude goods 1982=100	207.1	254.7	229.3	236.1	242.0	246.9	251.1	254.8	258.4	261.8	265.2	268.6
percent change	12.1	23.0	-10.0	3.0	2.5	2.0	1.7	1.5	1.4	1.3	1.3	1.3
<b>Crude oil price, \$/barrel</b>												
EIA refiner acq. cost, imports	67.1	96.3	61.0	70.7	75.5	79.0	82.0	85.1	88.3	91.5	94.9	98.4
percent change	14.0	43.5	-36.7	15.9	6.8	4.6	3.8	3.8	3.7	3.7	3.7	3.7
Real 2000 chained dollars	56.0	78.7	48.8	55.4	57.9	59.3	60.2	61.2	62.1	63.0	63.9	64.8
percent change	11.0	40.4	-37.9	13.5	4.5	2.4	1.6	1.5	1.5	1.5	1.5	1.5
<b>Labor compensation per hour nonfarm business, 1992=100</b>												
	175.3	182.0	187.8	193.4	198.6	204.0	209.5	215.2	221.0	226.9	233.1	239.4
percent change	4.1	3.8	3.2	3.0	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7
<b>Interest rates, percent</b>												
3-month Treasury bills	4.4	1.5	0.9	2.0	3.6	4.8	4.8	4.8	4.8	4.8	4.8	4.8
3-month commercial paper	5.1	2.4	2.9	2.5	4.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3
Bank prime rate	8.1	5.2	4.1	5.5	8.0	8.2	8.2	8.2	8.2	8.2	8.2	8.2
10-year Treasury bonds	4.6	3.7	3.6	4.0	5.0	5.8	5.8	5.8	5.8	5.8	5.8	5.8
Moody's Aaa bond yield index	5.6	5.7	6.0	6.0	5.5	6.2	6.2	6.2	6.2	6.2	6.2	6.2
<b>Labor and population</b>												
Civilian unemployment rate, percent	4.7	5.8	6.3	6.4	6.0	5.8	5.8	5.8	5.8	5.8	5.8	5.8
Nonfarm payroll emp., millions	137.7	137.8	137.6	138.5	139.5	140.6	141.9	143.2	144.4	145.7	147.1	148.4
percent change	1.1	0.1	-0.2	0.7	0.7	0.8	0.9	0.9	0.9	0.9	0.9	0.9
Total population, millions	302.1	304.9	307.8	310.7	313.5	316.4	319.2	322.1	325.0	327.8	330.7	333.6
percent change	1.0	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9

Domestic macroeconomic assumptions were completed in October 2008. 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, 2007	Share of world GDP		Per capita income,						Average		
		2005-2007	2007	2007	2008	2009	2010	2011	2012	1991-2000	2001-2008	2009-2018
	<i>Bil. 2005 dollars</i>	<i>Percent</i>	<i>2005 dollars</i>	<i>Percent change</i>								
World	48,327	100.0	7,292	3.8	2.7	1.7	3.1	3.5	3.5	2.7	3.0	3.2
Less United States	35,277	72.6	5,576	4.5	3.2	2.5	3.3	3.6	3.6	2.5	3.3	3.4
North America	14,325	30.1	42,878	2.1	1.2	-0.4	2.7	3.0	2.9	3.3	2.2	2.5
Canada	1,274	2.7	38,688	2.7	0.7	0.2	2.4	2.8	3.0	2.9	2.4	2.5
United States	13,050	27.4	43,337	2.0	1.3	-0.5	2.7	3.0	2.9	3.3	2.2	2.5
Latin America	3,027	6.2	5,293	5.2	4.2	3.7	4.0	4.0	4.2	3.1	3.4	4.0
Mexico	830	1.7	7,638	3.3	2.2	1.5	2.8	3.2	3.8	3.5	2.4	3.5
Caribbean & Central America	312	0.6	3,919	4.2	3.0	3.9	4.3	4.3	4.8	3.1	3.2	4.4
South America	1,885	3.8	4,913	6.3	5.3	4.5	4.4	4.2	4.2	3.0	3.9	4.2
Argentina	205	0.4	5,118	8.6	5.6	4.7	4.0	3.9	3.8	4.4	4.3	3.7
Brazil	1,016	2.2	5,526	5.4	5.1	4.1	4.0	3.8	4.0	2.6	3.5	4.0
Other	609	1.2	4,065	7.0	5.6	5.3	5.3	5.0	4.7	3.3	4.6	4.7
Europe	15,252	31.8	28,836	2.9	1.4	0.7	1.8	2.3	2.3	2.1	2.0	2.0
European Union-27	14,452	30.2	29,470	2.9	1.4	0.6	1.8	2.3	2.3	2.1	2.0	2.0
Other Europe	800	1.7	21,234	3.7	2.4	1.6	1.9	1.9	1.9	1.9	2.2	2.0
Former Soviet Union	1,202	2.4	4,334	8.5	6.2	4.0	4.1	4.5	4.8	-4.0	7.0	4.5
Russia	922	1.8	6,521	8.1	6.0	4.0	4.0	4.3	4.5	-3.6	6.5	4.5
Ukraine	97	0.2	2,102	7.7	5.0	2.6	3.0	4.0	5.0	-7.7	7.3	4.2
Other	183	0.4	2,037	11.2	8.1	5.0	5.0	5.5	5.9	-3.8	9.8	4.8
Asia and Oceania	11,980	24.3	3,239	5.9	4.6	3.8	4.5	4.8	4.7	3.7	4.6	4.5
East Asia	8,875	18.1	5,711	5.6	4.3	3.4	4.2	4.5	4.4	3.4	4.3	4.2
China	2,873	5.5	2,173	11.9	9.8	7.5	7.8	7.8	7.7	10.5	10.1	7.6
Hong Kong	197	0.4	28,276	6.4	4.8	4.8	5.2	5.0	4.6	4.5	4.9	4.4
Japan	4,468	9.4	35,060	2.0	0.9	0.5	1.5	1.8	1.6	1.2	1.5	1.2
Korea	933	1.9	19,343	5.0	3.9	3.0	4.0	4.7	4.4	6.2	4.6	4.0
Taiwan	389	0.8	17,035	5.7	4.0	3.8	4.3	4.5	4.3	6.5	4.3	4.0
Southeast Asia	1,073	2.2	1,860	6.4	5.4	4.9	5.2	5.2	5.1	5.2	5.1	4.9
Indonesia	335	0.7	1,428	6.3	6.0	4.9	5.4	5.2	5.0	4.4	5.2	4.8
Malaysia	152	0.3	6,116	6.3	6.0	4.8	5.0	5.3	5.0	7.2	5.1	4.8
Philippines	118	0.2	1,250	7.3	4.4	4.3	4.8	5.0	5.3	3.1	4.7	4.6
Thailand	206	0.4	3,173	4.8	5.3	5.2	5.1	5.0	5.0	4.6	5.0	4.9
Vietnam	61	0.1	720	8.4	6.7	6.5	7.8	7.9	8.0	7.4	7.6	7.4
South Asia	1,144	2.3	747	8.5	7.2	6.4	6.9	7.8	7.6	5.2	7.0	7.2
Bangladesh	61	0.1	404	6.5	6.2	5.8	6.6	6.5	6.3	4.8	5.7	5.9
India	906	1.8	802	9.0	7.5	6.5	7.3	8.3	8.0	5.5	7.4	7.5
Pakistan	129	0.3	760	6.4	5.7	6.0	4.8	5.4	5.4	4.0	5.5	5.4
Oceania	888	1.8	24,972	4.1	2.7	2.6	3.0	3.2	3.1	3.5	3.3	3.1
Australia	753	1.6	36,271	4.3	2.7	2.7	3.0	3.2	3.2	3.6	3.3	3.1
New Zealand	105	0.2	25,514	3.2	2.0	2.0	3.0	3.3	3.1	2.9	3.2	3.0
Middle East	1,406	2.9	5,286	4.9	5.8	5.2	4.7	4.8	4.9	4.4	3.9	4.8
Iran	58	0.1	884	6.6	5.8	5.4	5.5	4.8	4.7	4.0	5.9	4.6
Iraq	142	0.3	5,178	5.1	6.8	10.5	8.1	7.7	6.3	9.5	12.3	6.7
Saudi Arabia	334	0.7	12,112	3.4	6.8	5.9	5.2	5.2	5.2	2.6	4.3	5.3
Turkey	381	0.8	5,352	4.5	3.9	3.2	4.0	4.6	4.9	3.6	4.7	4.5
Other	491	1.0	6,601	6.1	6.3	4.6	3.7	3.8	4.1	4.8	5.0	4.1
Africa	1,135	2.3	1,194	5.9	5.7	5.7	5.6	5.5	5.3	2.0	4.9	5.2
North Africa	348	0.7	2,124	4.9	5.5	6.2	5.8	5.3	5.0	3.5	4.6	5.1
Algeria	105	0.2	3,148	3.4	3.6	5.8	6.0	5.7	5.0	1.7	4.1	5.0
Egypt	112	0.2	1,391	7.2	6.0	6.5	5.8	5.0	4.5	4.5	4.9	4.7
Morocco	57	0.1	1,684	2.2	6.1	5.6	5.4	5.3	5.2	2.4	4.6	5.0
Tunisia	31	0.1	3,044	6.3	5.6	5.9	6.1	6.0	5.9	4.8	4.9	5.8
Sub-Saharan Africa	787	1.6	1,000	6.3	5.8	5.5	5.5	5.6	5.4	1.3	5.0	5.2
Republic of South Africa	245	0.5	5,070	5.1	3.6	2.5	3.5	4.5	5.0	1.8	3.9	4.6
Other Sub-Saharan Africa	541	1.1	733	6.8	6.7	6.8	6.4	6.0	5.6	1.1	5.6	5.5

International macroeconomic assumptions were completed in October 2008.

Table 3. Population growth assumptions

Region/country	Population in 2007	2007	2008	2009	2010	2011	2012	Average		
								1991-2000	2001-2008	2009-2018
	Millions	Percent change								
World <sup>1</sup>	6,628	1.2	1.2	1.2	1.2	1.2	1.2	1.4	1.2	1.1
Less United States	6,326	1.2	1.2	1.2	1.2	1.2	1.2	1.4	1.2	1.1
North America	334	0.9	0.9	0.9	0.9	0.9	0.9	1.2	0.9	0.8
Canada	33	0.9	0.8	0.8	0.8	0.8	0.8	1.1	0.8	0.8
United States	301	0.9	0.9	0.9	0.9	0.9	0.9	1.2	0.9	0.9
Latin America	572	1.3	1.3	1.3	1.2	1.2	1.2	1.6	1.3	1.2
Mexico	109	1.2	1.2	1.1	1.1	1.1	1.1	1.6	1.2	1.1
Caribbean & Central America	80	1.5	1.5	1.5	1.5	1.5	1.4	1.7	1.5	1.4
South America	384	1.3	1.3	1.2	1.2	1.2	1.2	1.6	1.4	1.1
Argentina	40	1.1	1.1	1.1	1.1	1.0	1.0	1.2	1.0	1.0
Brazil	194	1.3	1.3	1.2	1.2	1.2	1.1	1.6	1.4	1.1
Other	150	1.4	1.4	1.3	1.3	1.3	1.3	1.9	1.4	1.3
Europe	529	0.2	0.1	0.1	0.1	0.1	0.1	0.3	0.2	0.1
European Union-27	490	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1
Other Europe	38	0.5	0.5	0.5	0.5	0.4	0.3	0.6	0.4	0.3
Former Soviet Union	277	-0.2	-0.1	-0.1	-0.1	-0.1	-0.1	0.0	-0.2	-0.1
Russia	141	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5	-0.1	-0.5	-0.5
Ukraine	46	-0.7	-0.7	-0.6	-0.6	-0.6	-0.6	-0.5	-0.8	-0.6
Other	90	0.7	0.7	0.7	0.7	0.7	0.7	0.6	0.6	0.7
Asia and Oceania	3,699	1.2	1.2	1.1	1.1	1.1	1.1	1.4	1.2	1.1
East Asia	1,554	0.5	0.5	0.6	0.6	0.6	0.6	0.9	0.5	0.5
China	1,322	0.6	0.6	0.6	0.7	0.7	0.7	1.0	0.6	0.6
Hong Kong	7	0.6	0.5	0.5	0.5	0.5	0.4	1.6	0.7	0.4
Japan	127	-0.1	-0.1	-0.2	-0.2	-0.3	-0.3	0.3	0.1	-0.3
Korea	48	0.3	0.3	0.3	0.3	0.2	0.2	0.9	0.4	0.2
Taiwan	23	0.3	0.3	0.2	0.2	0.2	0.2	0.9	0.4	0.2
Southeast Asia	577	1.3	1.3	1.2	1.2	1.2	1.2	1.7	1.4	1.1
Indonesia	235	1.2	1.2	1.2	1.1	1.1	1.1	1.6	1.3	1.0
Malaysia	25	1.8	1.8	1.7	1.7	1.7	1.7	2.2	1.9	1.7
Philippines	94	2.0	2.0	2.0	2.0	1.9	1.9	2.2	2.1	1.9
Thailand	65	0.7	0.7	0.6	0.6	0.6	0.6	1.1	0.7	0.5
Vietnam	85	1.0	1.0	1.0	1.0	1.0	1.0	1.6	1.1	1.0
South Asia	1,532	1.8	1.7	1.7	1.7	1.6	1.6	1.9	1.8	1.6
Bangladesh	150	2.1	2.1	2.0	2.0	1.9	1.9	1.7	2.1	1.8
India	1,130	1.6	1.6	1.6	1.5	1.5	1.5	1.8	1.7	1.5
Pakistan	169	2.1	2.0	2.0	1.9	1.9	1.9	2.5	2.1	1.8
Oceania	36	1.5	1.5	1.4	1.4	1.3	1.3	1.5	1.5	1.3
Australia	21	1.3	1.2	1.2	1.2	1.2	1.1	1.2	1.2	1.1
New Zealand	4	1.0	1.0	1.0	0.9	0.9	0.9	1.1	1.2	0.9
Middle East	266	1.7	1.7	1.7	1.7	1.7	1.7	2.1	1.7	1.6
Iran	65	0.6	0.7	0.8	0.9	1.0	1.0	1.1	0.5	1.0
Iraq	27	2.7	2.6	2.6	2.5	2.5	2.4	2.3	2.8	2.3
Saudi Arabia	28	2.2	2.0	1.9	1.8	1.7	1.6	3.7	2.5	1.5
Turkey	71	1.1	1.0	1.0	1.0	0.9	0.9	1.6	1.1	0.9
Other	74	2.8	2.7	2.7	2.7	2.6	2.6	3.2	2.9	2.5
Africa	951	2.3	2.3	2.2	2.2	2.2	2.2	2.5	2.3	2.1
North Africa	164	1.6	1.6	1.5	1.5	1.5	1.4	2.1	1.7	1.4
Algeria	33	1.2	1.2	1.2	1.2	1.2	1.2	1.9	1.3	1.1
Egypt	80	1.8	1.7	1.7	1.6	1.6	1.6	2.2	1.9	1.5
Morocco	34	1.6	1.5	1.5	1.5	1.4	1.4	2.0	1.6	1.4
Tunisia	10	1.0	1.0	1.0	1.0	1.0	1.0	1.5	1.0	0.9
Sub-Saharan Africa	787	2.4	2.4	2.4	2.4	2.4	2.3	2.6	2.4	2.3
Republic of South Africa	48	0.9	0.9	0.6	0.1	-0.2	-0.4	1.6	1.0	-0.1
Other Sub-Saharan Africa	738	2.5	2.5	2.5	2.5	2.5	2.5	2.7	2.5	2.4

1/ Totals for the world and world less United States include countries not otherwise listed in the table.

Source: U.S. Department of Commerce, U.S. Census Bureau and U.S. Department of Agriculture, Economic Research Service. August 2008.