# Macroeconomic Assumptions

Macroeconomic assumptions underlying the USDA baseline are characterized by steady growth near average historical rates over most of the projection period. The sharp rise in energy and other raw material costs is the main risk to the economic growth outlook. The baseline's macroeconomic assumptions were completed in October 2005.

The U.S. and world economies are highly interdependent through both global trade and financial markets. The United States continues to be the engine of world economic growth, but economic interdependence implies that international macroeconomic conditions have important effects on the U.S. economy as well. While the United States continues to play a large role in determining economic conditions around the world, strong growth in China and India is becoming increasingly important.

U.S. and world gross domestic product (GDP) growth
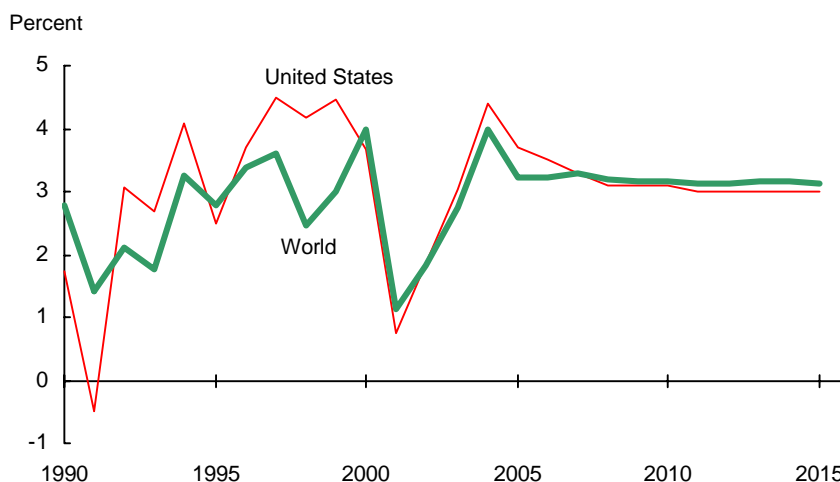
U.S. gross domestic product (GDP) growth moderates over the next several years from 3.7 percent in 2005 toward a sustainable rate of about 3 percent over the longer term after 2007. Nonetheless, the United States continues to maintain its share of global GDP at around 30 percent. World economic growth is projected to increase to a 3.2-percent average between 2006 and 2015, after averaging 3 percent annually between 2001 and 2005.

- Despite moderate European and Japanese growth, most of the world will be moving closer to longrun economic growth, with trend rates in 2006 and beyond. Ongoing computing and telecommunications advances support worldwide productivity gains throughout the baseline projections.

- Continued high oil prices assumed in the baseline modestly constrain Asia and its manufacturing sector, which is far more dependent on energy for GDP growth than more developed economies.

- Improved global economic performance and continued, although slowing, population growth are expected to strengthen food demand in the baseline. Increased global purchasing power and population growth are essential drivers of gains in U.S. agricultural exports.

GDP growth for developed countries, European Union-25, and Japan

Percent

Developed countries

European Union-25

Japan
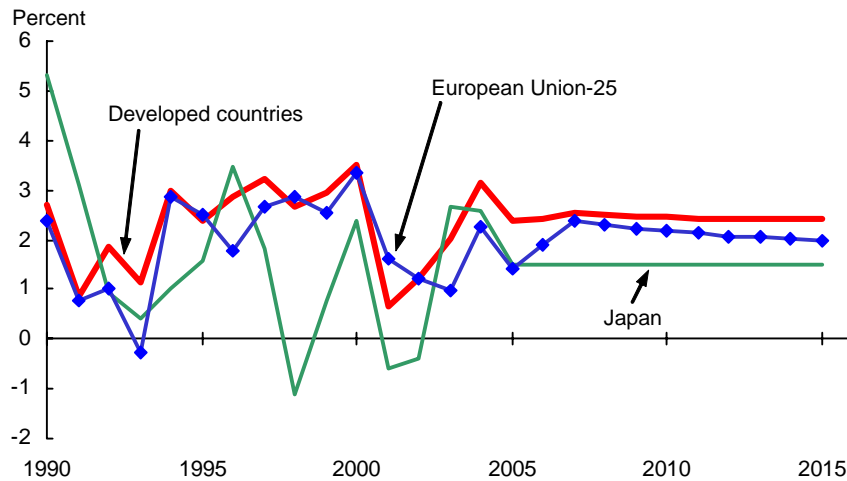
Developed economies are projected to grow at rates similar to those of the 1990s, averaging 2.5 percent in 2006-15.

- Enlargement of the European Union (EU) to include countries of Central and Eastern Europe implies closer integration of those economies, creating more trade and investment opportunities within the expanded EU.

- The EU does not, however, grow as rapidly as the United States because of lingering structural rigidities, particularly rigid 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.

- Japan continues to face significant economic problems, largely the result of long-term structural rigidities and a difficult process of economic reform. The projections assume growth at 1.5 percent a year, with Japan's share of world GDP declining to less than 12 percent by 2015, down from almost 18 percent in 1991.

GDP growth for developing economies and the former Soviet Union
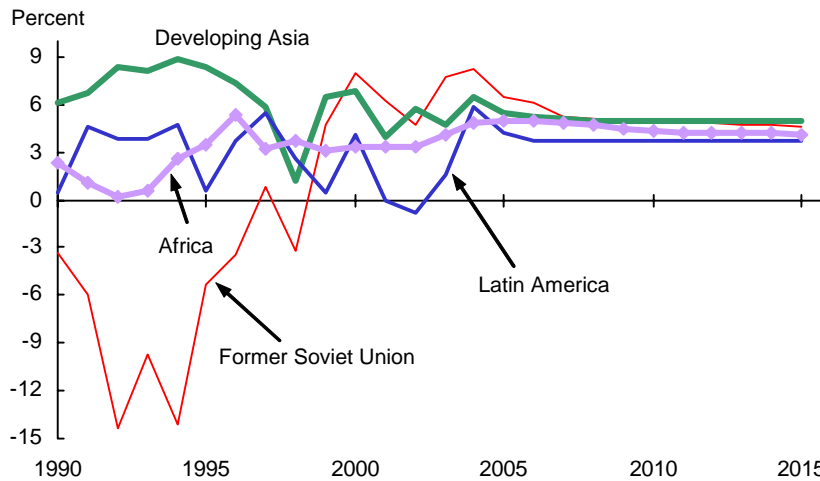
Percent

Economic growth in developing countries is projected at about a 5-percent annual rate in 2006-15. Developing countries play an increasingly important role in global growth in food demand and become a more important destination for U.S. exports. Relatively high income growth, along with large food responsiveness to income growth in these countries, underlies this projection. Consumption and imports of food and feed in developing countries are particularly responsive to income changes. As incomes rise in these countries, consumers generally diversify their diets, moving away from staple foods to include more meat, fruits, vegetables, and processed foods (including vegetable oils). These consumption shifts increase import demand for feedstuffs and high-value food products. Historically, this has included increases in U.S. exports of meat and processed foods.

- Long-term growth of 3.7 percent is projected for Latin America. An overall improvement in macroeconomic policies should attract foreign capital inflows and sustain growth.

- Growth rates for Southeast Asia and developing countries of East Asia are projected at about 5 percent for the next decade, but will still be below the very strong average growth of over 7 percent in 1986-95.

- China's economic growth has been consistently the strongest in Asia, exceeding 9 percent between 2003 and 2005. While some moderation is expected, China's growth is expected to average above 7 percent over the next decade.

- India's projected average growth of around 6 percent a year puts it in the first tier of high-growth countries. India is still among the low-income countries, with a per capita income of less than $600 per year. The projected high growth rate is expected to move a significant number of people out of poverty over the next decade.

- Economic growth in the countries of the former Soviet Union (FSU) is projected to average 5 percent for the next decade, continuing strong growth following the economic declines in the transition period of most of the 1990s. Russia, Ukraine, and other FSU countries benefit from their shift to market economies.

Population growth 1/

Percent
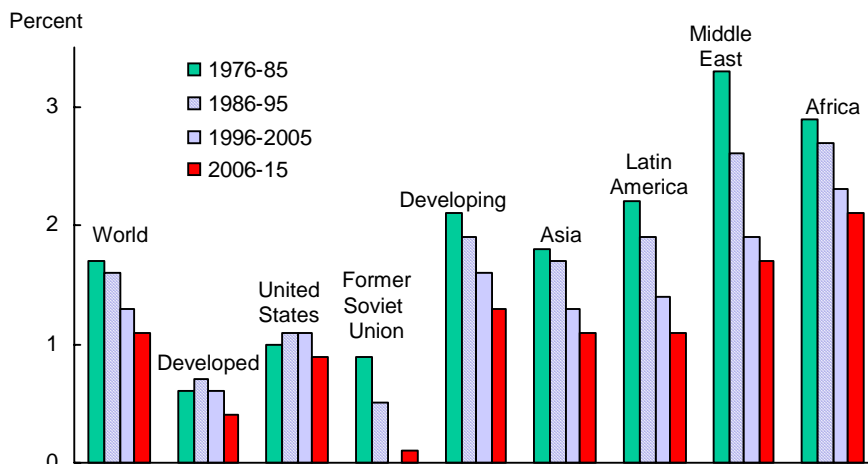
1/ Based on population projections from the Census Bureau, U.S. Department of Commerce.

A continued slowing of population growth around the world is an important factor constraining increases in agricultural demand over the next decade. Historically, about 70 percent of increases in food use have been related to population growth, leaving about 30 percent driven by increasing incomes and other factors. With population growth slowing in the projections, income growth will become a relatively more important factor underlying food and agricultural demand growth.

- World population growth declines from an annual rate of 1.7 percent in the 1980s to an average of about 1.1 percent per year during the projections.

- Developed and FSU countries have very low projected rates of population growth, at 0.4 and 0.1 percent, respectively. The 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.

- Population growth rates in developing economies decline by almost half between the 1970s and the end of the projection period, but remain above those in developed countries and the former Soviet Union. As a result, the share of world population accounted for by developing countries increases to 81 percent by 2015.

- China and India together account for around 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 2006-15. The population growth rate in India, the world's second most populous nation, is projected to decline from 2.1 to 1.3 percent per year between the same periods. This growth narrows the gap between India's population and China's.

- Brazil's population growth rate falls from 2.1 percent per year in 1981-90 to 0.9 percent annually in 2006-15, and Sub-Saharan Africa's population growth rate declines from 2.9 to 2.2 percent per year over the same period.

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

Index values, 2000=100
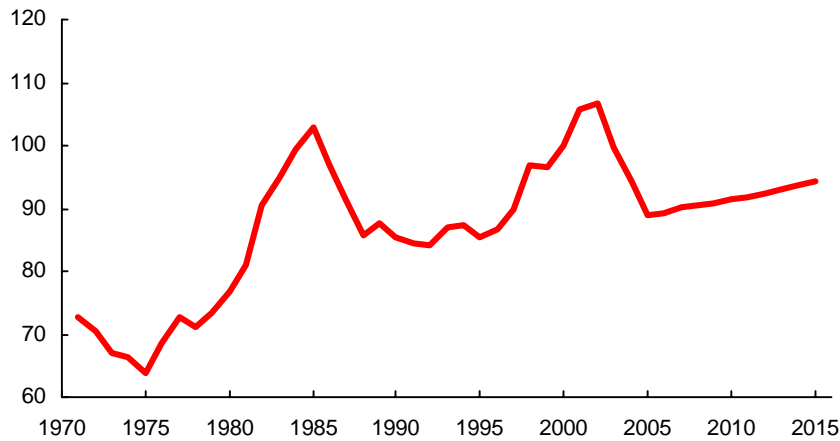
1/ Real U.S. agricultural trade-weighted dollar exchange rate, using U.S. agricultural export weights.

The U.S. dollar is assumed to appreciate slowly in real terms after 2005, remaining relatively high by historical standards. This high real exchange rate—expressed in the baseline as local currency per U.S. dollar, in inflation-adjusted terms—will constrain the growth in U.S. exports. Even so, high long-term economic growth rates, particularly in the developing countries, will increase the demand for U.S. exports.

- Strong relative GDP growth in the United States compared with the EU and Japan strengthens the dollar relative to the euro and offsets much of the trade-driven appreciation of the yen.

- The U.S. dollar stays strong because capital moves into the United States to take advantage of well-functioning financial markets, a relatively risk-free environment, transparent financial accounting standards, and high expected long-term productivity growth and financial returns.

- Due to relatively stronger global trade competition, U.S. exports of bulk commodities and horticultural products tend to be the most sensitive to the strong U.S. dollar among all agricultural products.

- China, after a long period of an undervalued exchange rate and substantial political pressure from its trading partners, has initiated a process for appreciating its currency. To date, the appreciation has been limited to slightly more than 2 percent. This compares with most estimates of undervaluation of at least 30 to 40 percent. The baseline assumes that China holds its real exchange rate constant, implying some appreciation in the nominal exchange rate.

Inflation rates

Percent
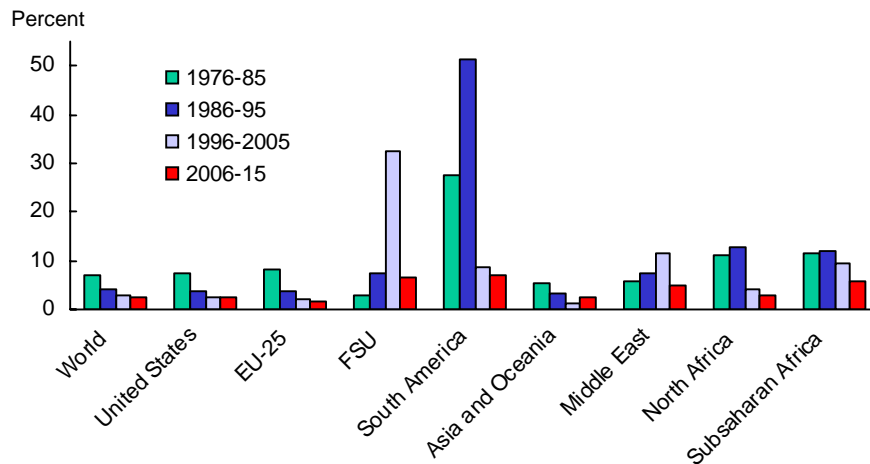
Global inflation rates, which declined in the 1990s (except in the transition economies), are projected to remain relatively low through 2015.

- The U.S. and world economies are moving solidly into an expansion phase. As a result, inflationary pressures have begun. In response, to constrain inflation, the U.S. Federal Reserve Board and central banks in other countries are assumed to further increase short-term interest rates in the initial years of the projections, although less aggressively than in 2005.

- Because of this assumed policy response, inflation is projected to remain below 3 percent in developed countries and the world as a whole.

- Inflation rates in developing countries are projected to fall from over 7 percent to just over 5 percent. Inflation in Asia declines to rates comparable to those in developed countries. Those in Latin America, Africa, and the Middle East, while declining, will remain substantially above inflation rates in the rest of the world.

- In the FSU, inflation rates come down from the high transition rates of the 1990s to an average projected to be below 7 percent.

- Relatively low inflation rates will keep nominal interest rates from moving to the high levels seen in the 1980s. However, as world economies grow more rapidly, demand for credit will rise and further boost interest rates over the longer term. In addition, long-term U.S. interest rates rise in the short run to continue financing the current account deficit.

Crude oil prices

$ per barrel
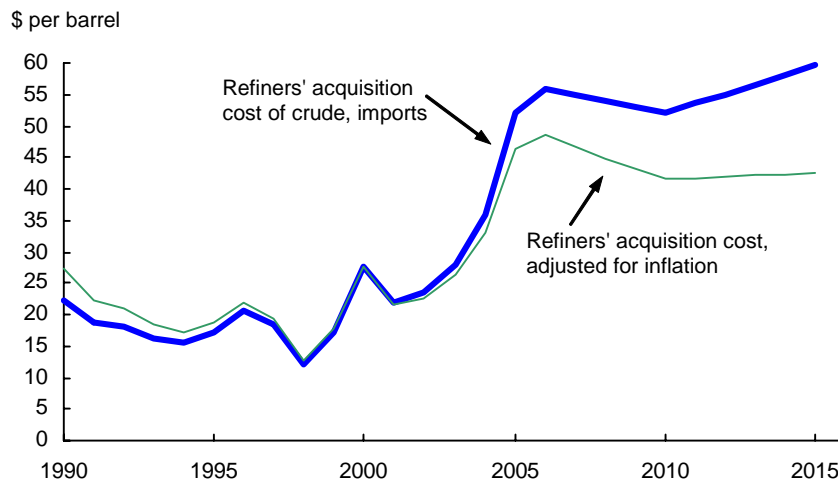
Crude oil prices rose sharply from late 2002 through 2005, largely reflecting world economic recovery and rapid manufacturing growth in China and India, which resulted in sharply increased crude oil demand. Hurricane Katrina put further upward pressure on world oil prices by temporarily reducing supplies of crude oil and refined products in the fall of 2005. The U.S. Government and the International Energy Agency released emergency oil and fuel reserves, keeping this transitory energy supply shock from further boosting oil prices.

Continued growth in Asian economies will keep oil demand strong in 2006. In 2007-10, crude oil prices are expected to drop modestly as new crude supplies help offset the rise in demand from Asia. After 2010, oil prices are projected to rise, but only slightly faster than the general inflation rate. These projections are generally consistent with the U.S. Department of Energy, Energy Information Administration's (EIA) *Annual Long Term Outlook 2006* (released December 2005).

- Underlying these price increases, world oil demand is expected to rise due to strong GDP growth in the relatively high energy-dependent economies in Asia, including China, India, and the rapidly growing economies of East and Southeast Asia.

  - Most of China's energy is from coal, but as consumer incomes and automobile demand grow, an increasing share of its energy use will be from petroleum. China has become increasingly efficient in energy use over the past 25 years, reducing its energy intensity by over 60 percent (using EIA's measure of energy used to produce a dollar's worth of GDP). Nonetheless, even with this improvement, China's energy intensity in the early 21st century is over three times as high as in the United States.

  - India has become more energy intensive over the past 20-25 years compared with the United States. In the early 1980s, India used twice as much energy as the United States to produce a dollar's worth of GDP, while its current energy intensity is more than 2.5 times that in the United States. As India continues to develop its infrastructure, especially the highway system and electric power grid, energy intensity will rise further.

- The newly industrialized East and Southeast Asian economies of Taiwan, South Korea, Malaysia, Hong Kong, Singapore, and Thailand have gone from parity in energy intensity with the United States in the early 1980s to using 50 percent more energy to produce a dollar of GDP currently.

- Several factors are expected to constrain longrun increases in oil prices.

  - New oil discoveries, along with new technologies for finding and extracting oil, are assumed to allow for substantial growth in demand without significant real energy price inflation.

  - The ability to switch to non-petroleum fuels, such as coal and natural gas, especially in industrial uses and electric power generation, is expected to continue restraining increases in oil prices.

  - Further, the ability to substitute non-energy inputs (such as microchip-driven equipment) for energy is an important factor increasing energy efficiency, which is expected to continue to improve through the baseline due to improved energy use technology.

- The net result is that real prices of oil in the baseline are expected to remain higher than over any sustained period historically, largely due to rapid demand growth globally. Nonetheless, higher oil prices are not expected to cause world economic growth to significantly slow (see box, page 16).

Oil prices have historically affected prices of natural gas and nitrogen-based fertilizer. However, the links between the oil and natural gas markets have weakened significantly due to dramatic growth in the demand for natural gas and deregulation throughout the natural gas supply and demand system. Prices for natural gas and nitrogen-based fertilizer have become somewhat more volatile than prices for oil largely because natural gas is less fungible and, as a result, its supply is more inelastic. Nevertheless, over a longer period of time, oil and natural gas prices are expected to move more closely together.

Global Economy Has Not Slowed With Higher Oil Prices

Despite high oil prices, growth in the United States, most of Asia, and the large countries of Latin America is continuing at or above trend levels. Most studies, however, suggest that U.S. and world economic growth should have slowed significantly due to the oil price increases that occurred in 2004 and 2005. What kept a significant global slowdown from occurring?

- In 2004, the world economy realized record growth and the United States had very strong growth. The impact of any macroeconomic shock depends on the state of the economy at the time it occurs. The stronger the economy, the larger a shock must be to have a near-term impact.

- Oil prices, which rose to around $67 per barrel (nominal) in early September 2005, did not reach the record high inflation-adjusted levels of 1981. Nominal oil prices would have to reach $90 per barrel to be at the same inflation-adjusted level reached in the supply-shock-driven price spike that year.

- Oil-surplus countries are boosting global economic growth through financial and direct business investment, lowering the cost of capital and offsetting some of the oil-induced upward boost in production costs. This investment is also helping keep interest rates relatively low.

- Because of low inflation and prudent monetary policy, higher energy prices are not being fully passed on to final consumers. This cost pass-through impact is significantly weaker now than in the 1970s and 1980s, when higher fuel prices were fully reflected in higher prices for other inputs, which were largely passed on to consumers. In the current competitive environment, higher fuel costs are only partially passed on. Lower profit margins and reduced spending on other inputs are now largely offsetting the impact of higher fuel costs. Productivity growth has also partly offset higher energy prices in the business bottom line. The net impact of the recent runup in energy costs is a 1-percent increase in the consumer price index (CPI) spread over 2 years. The result of a similar oil price increase in the 1970s on the CPI would have been several times as large.

- Industrial economies and the rapidly growing economies of Asia are increasingly energy efficient. Moreover, these economies have growing service sectors that are not energy intensive.

- In a number of emerging markets, energy subsidies are cushioning the effects of higher oil prices. In Brazil, for example, the widespread use of ethanol, which benefits from government support, has largely sheltered that economy from higher oil prices.

- The liberalization of the world economy has increased the ability of businesses to substitute other inputs, such as fertilizer imports, for domestic energy on a broader scale than in the 1980s.

Some sectors of the world economy, such as manufacturing and agriculture, are more highly affected by high energy prices than are others. High energy costs are a likely contributor to the decline in U.S. manufacturing jobs since 2002, with employers finding it too costly to operate with as many workers.

Despite the muted impact to date of higher energy prices across the global economy, a large and persistent rise in crude oil prices could cause a world slowdown and represents an important risk to the solid world growth assumptions in the baseline.

Table 1. U.S. macroeconomic assumptions

Item	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
GDP, billion dollars												
Nominal	11,734	12,509	13,271	14,035	14,789	15,583	16,419	17,284	18,194	19,152	20,161	21,202
Real 2006 chained dollars	10,756	11,154	11,544	11,925	12,295	12,676	13,069	13,461	13,865	14,281	14,709	15,136
percent change	4.2	3.7	3.5	3.3	3.1	3.1	3.1	3.0	3.0	3.0	3.0	2.9
Disposable personal income												
Nominal (billions)	8,664	9,167	9,735	10,319	10,881	11,480	12,111	12,778	13,480	14,222	15,004	15,829
percent change	6.1	5.8	6.2	6.0	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Nominal per capita, dollars	29,475	30,886	32,492	34,121	35,649	37,267	38,962	40,738	42,600	44,551	46,595	48,739
percent change	5.0	4.8	5.2	5.0	4.5	4.5	4.5	4.6	4.6	4.6	4.6	4.6
Real (billion 2000 chained)	8,004	8,268	8,574	8,866	9,141	9,424	9,716	10,017	10,328	10,648	10,978	11,318
percent change	3.4	3.3	3.7	3.4	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
Real per capita, 2000 dollars	27,229	27,859	28,618	29,315	29,945	30,592	31,256	31,938	32,637	33,355	34,093	34,850
percent change	2.4	2.3	2.7	2.4	2.1	2.2	2.2	2.2	2.2	2.2	2.2	2.2
Consumer spending												
Real (billion 2000 chained)	7,589	7,869	8,129	8,382	8,625	8,875	9,132	9,397	9,669	9,950	10,238	10,525
percent change	3.9	3.7	3.3	3.1	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.8
Inflation measures												
GDP price index, chained	109.1	112.2	115.0	117.7	120.3	122.9	125.6	128.4	131.2	134.1	137.1	140.1
percent change	2.6	2.8	2.5	2.4	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
CPI-U, 1982-84=100	188.9	195.3	201.2	206.8	212.0	217.3	222.7	228.3	234.0	239.8	245.8	252.0
percent change	2.7	3.4	3.0	2.8	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
PPI, finished goods 1982=100	148.5	154.9	158.8	162.4	164.7	167.0	169.3	171.7	174.1	176.6	179.0	181.5
percent change	3.6	4.3	2.5	2.3	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
PPI, crude goods 1982=100	159.0	176.5	186.2	188.1	189.9	191.8	193.8	195.7	197.7	199.6	201.6	203.7
percent change	17.5	11.0	5.5	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Crude oil price, $/barrel												
Refiner acq. cost, imports	35.9	52.0	56.0	55.0	54.0	53.1	52.1	53.5	55.0	56.4	58.0	59.5
percent change	28.9	44.9	7.7	-1.8	-1.8	-1.8	-1.8	2.7	2.7	2.7	2.7	2.7
Real 2000 chained dollars	32.9	46.4	48.7	46.7	44.9	43.2	41.5	41.7	41.9	42.1	42.3	42.5
percent change	25.6	40.9	5.1	-4.1	-3.9	-3.9	-3.9	0.5	0.5	0.5	0.5	0.5
Labor compensation per hour												
nonfarm business, 92=100	156.7	164.5	172.1	179.3	185.4	191.7	198.3	205.0	212.0	219.2	226.6	234.3
percent change	4.5	5.0	4.6	4.2	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
Interest rates, percent												
3-month T-bills	1.4	3.2	4.3	4.5	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6
3-month commercial paper	1.6	3.4	4.6	4.8	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Bank prime rate	4.3	6.3	7.2	7.4	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6
Treasury bonds (10-year)	5.3	4.4	5.1	5.4	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6
Moody's Aaa bonds	5.6	5.3	6.0	6.4	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7
Civilian unemployment												
rate, percent	5.5	5.1	4.8	4.9	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Nonfarm payroll emp., millions	131.5	133.6	135.7	137.8	139.3	140.8	142.2	143.7	145.1	146.5	148.0	149.5
percent change	1.1	1.6	1.6	1.5	1.1	1.1	1.0	1.0	1.0	1.0	1.0	1.0
Total population, million	294.0	296.8	299.6	302.4	305.2	308.0	310.9	313.6	316.4	319.2	322.0	324.8
percent change	1.0	1.0	1.0	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 2005.

Table 2. Global real GDP growth assumptions

Region/country	Share of world GDP 2001-2005	Per capita income, 2005	2003	2004	2005	2006	2007	2008	2009	Average 1991-2000	2001-2005	2006-2015
	Percent						*Percent change*					
World	100.0	5,562	2.7	4.0	3.2	3.2	3.3	3.2	3.2	2.8	3.0	3.2
less United States	69.2	4,021	2.7	3.8	3.0	3.1	3.3	3.2	3.2	2.6	3.1	3.2
North America	33.1	36,483	2.7	4.3	3.7	3.5	3.3	3.1	3.1	3.3	2.6	3.1
Canada	2.3	24,777	2.0	2.9	3.1	3.0	3.0	3.0	3.0	3.1	2.6	3.0
United States	30.8	37,648	2.7	4.4	3.7	3.5	3.3	3.1	3.1	3.3	2.6	3.1
Latin America	6.3	4,104	1.6	5.8	4.2	3.7	3.7	3.7	3.7	3.5	2.2	3.7
Caribbean & Central America	0.6	2,035	3.0	3.1	3.3	3.2	2.5	2.8	3.4	3.7	2.8	3.3
Mexico	1.8	8,270	1.3	4.4	3.8	3.8	3.8	3.8	3.8	3.7	2.0	3.8
South America	3.9	3,825	1.5	6.9	4.6	3.8	3.8	3.8	3.8	3.3	2.3	3.7
Argentina	0.8	7,699	8.8	9.0	6.0	3.6	3.5	3.4	3.4	4.7	1.7	3.4
Brazil	1.9	3,620	-0.2	4.9	3.6	3.6	3.6	3.6	3.6	2.8	2.3	3.6
Other	1.2	3,035	-0.3	8.7	5.1	4.3	4.2	4.2	4.3	3.3	2.7	4.1
Europe	27.1	17,995	1.0	2.3	1.5	1.9	2.4	2.3	2.2	2.1	1.5	2.2
European Union-25	25.5	19,427	1.0	2.3	1.4	1.9	2.4	2.3	2.2	2.1	1.5	2.1
Other Europe	1.6	8,372	0.8	2.4	2.5	2.4	2.5	2.5	2.5	1.6	1.8	2.5
Former Soviet Union	1.3	1,744	7.7	8.2	6.4	6.1	5.2	5.1	5.0	-4.1	6.7	5.0
Russia	0.9	2,430	7.3	7.2	6.0	5.5	4.5	4.5	4.5	-3.6	6.1	4.6
Ukraine	0.1	989	9.4	12.1	5.5	6.5	6.1	5.3	4.6	-7.7	8.3	4.8
Other	0.2	1,043	8.5	10.1	8.5	8.2	7.5	7.1	6.8	-3.6	8.7	6.5
Asia and Oceania	27.2	2,751	4.3	4.5	3.7	3.6	3.6	3.7	3.7	3.2	3.3	3.7
East Asia	21.8	5,145	3.9	4.3	3.3	3.3	3.3	3.3	3.3	2.9	3.0	3.4
China	4.1	1,256	9.3	9.5	9.0	7.7	7.3	7.3	7.2	10.2	8.7	7.2
Hong Kong	0.5	28,676	3.2	8.1	4.7	4.4	4.6	4.9	5.0	4.5	3.7	4.4
Japan	14.5	39,853	2.7	2.6	1.5	1.5	1.5	1.5	1.5	1.4	1.4	1.5
Korea	1.7	12,982	3.1	4.0	3.6	5.2	5.2	5.1	5.0	6.0	4.3	5.0
Taiwan	1.0	15,479	3.3	5.7	3.7	4.0	4.2	4.2	4.2	6.4	2.9	4.2
Southeast Asia	1.9	1,262	4.6	6.0	5.4	5.4	5.3	5.3	5.2	5.2	4.4	5.2
Indonesia	0.5	771	4.1	5.1	5.8	5.8	5.5	5.4	5.3	4.4	4.4	5.2
Malaysia	0.3	4,688	5.3	7.1	5.5	5.5	5.4	5.3	5.3	7.3	4.5	5.3
Philippines	0.3	1,077	4.5	6.1	4.5	4.2	4.0	4.0	4.0	3.0	4.5	4.0
Thailand	0.4	2,441	6.9	6.1	4.6	4.9	5.2	5.1	5.1	4.6	5.0	5.1
Vietnam	0.1	532	7.2	7.7	7.9	7.5	7.2	7.0	6.8	7.4	7.4	6.8
South Asia	1.9	503	8.0	6.8	6.5	6.2	6.1	5.8	5.8	5.3	6.0	5.8
Bangladesh	0.2	381	2.1	5.5	5.2	5.1	5.0	4.8	4.8	4.4	3.9	4.9
India	1.6	575	8.6	6.9	6.8	6.5	6.3	6.0	6.0	5.5	6.3	6.1
Pakistan	0.2	561	5.1	6.4	5.6	5.0	4.8	4.5	4.2	4.1	4.4	4.4
Oceania	1.6	16,380	4.2	3.4	2.4	3.1	3.2	3.3	3.4	3.5	3.4	3.3
Australia	1.3	22,659	3.8	3.2	2.3	3.2	3.3	3.4	3.4	3.7	3.2	3.4
New Zealand	0.2	20,557	3.6	4.8	2.6	2.6	2.8	3.0	3.2	2.8	3.7	3.1
Other Asia and Oceania	0.5	1,019	3.6	7.4	4.1	4.3	4.5	4.4	4.4	6.1	3.6	4.2
Middle East	3.3	4,743	5.3	6.4	5.3	4.9	4.6	4.4	4.3	3.9	4.2	4.4
Iran	1.0	5,723	6.6	4.8	4.5	4.5	4.5	4.5	4.5	4.1	5.1	4.5
Iraq	0.1	1,633	0.0	33.0	20.0	15.0	10.0	5.6	5.5	4.1	12.5	6.9
Saudi Arabia	0.6	8,562	7.2	5.2	5.6	4.8	4.3	4.1	4.1	2.6	3.7	4.2
Turkey	0.6	3,442	5.8	8.9	4.6	4.9	5.1	5.0	4.6	3.6	3.9	4.7
Other	1.0	4,798	3.0	5.3	4.9	4.2	4.0	4.0	4.0	5.0	3.0	3.9
Africa	1.7	726	4.1	4.9	4.9	4.9	4.9	4.7	4.5	2.7	4.1	4.4
North Africa	0.7	1,659	4.7	4.8	4.7	4.9	4.8	4.7	4.7	3.3	4.3	4.7
Algeria	0.2	2,094	6.8	5.0	6.4	6.3	6.0	5.8	5.6	1.8	5.0	5.6
Egypt	0.3	1,552	3.2	5.0	4.5	4.2	4.2	4.2	4.2	4.3	3.9	4.2
Morocco	0.1	1,250	5.2	3.7	2.5	4.2	4.0	4.0	4.0	2.4	4.2	4.0
Tunisia	0.1	2,417	5.6	5.6	5.2	5.4	5.3	5.5	5.4	4.8	4.6	5.3
Sub-Saharan Africa	1.1	531	3.7	4.9	5.1	4.9	5.0	4.7	4.3	2.3	4.0	4.3
Republic of South Africa	0.6	5,397	5.0	5.7	5.8	5.6	5.8	5.3	5.0	2.7	4.6	4.9
Other Sub-Saharan Africa	0.4	217	1.9	3.7	4.0	3.9	3.7	3.5	3.2	1.8	3.2	3.3

International macroeconomic assumptions were completed in October 2005.

Table 3. Population growth assumptions

Region/country	Population in 2003	2003	2004	2005	2006	2007	2008	2009	Average 1991-2000	2001-2005	2006-2015
	Millions					*Percent change*					
World[1]	6,329	1.2	1.2	1.2	1.2	1.1	1.1	1.1	1.4	1.3	1.1
less United States	6,038	1.2	1.2	1.2	1.2	1.2	1.1	1.1	1.4	1.3	1.1
North America	323	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.2	0.9	0.9
Canada	32	1.0	0.9	0.9	0.9	0.9	0.9	0.9	1.2	1.0	0.8
United States	291	1.2	1.0	1.0	1.0	0.9	0.9	0.9	1.2	1.0	0.9
Latin America	541	1.3	1.3	1.2	1.2	1.2	1.2	1.1	1.6	1.3	1.1
Caribbean & Central America	104	1.2	1.2	1.2	1.2	1.2	1.2	1.1	1.6	1.2	1.1
Mexico	75	1.6	1.6	1.5	1.5	1.5	1.5	1.5	1.8	1.6	1.4
South America	362	1.3	1.2	1.2	1.2	1.2	1.1	1.1	1.6	1.3	1.1
Argentina	39	1.1	1.0	1.0	1.0	1.0	0.9	0.9	1.3	1.1	0.9
Brazil	182	1.2	1.1	1.1	1.1	1.0	1.0	1.0	1.5	1.2	0.9
Other	142	1.5	1.4	1.4	1.4	1.4	1.3	1.3	1.9	1.5	1.3
Europe	523	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.2	0.1
European Union-25	455	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.3	0.2	0.1
Other Europe	68	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.0
Former Soviet Union	280	-0.1	-0.1	0.0	0.0	0.0	0.1	0.1	0.0	-0.1	0.1
Russia	145	-0.5	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4	-0.1	-0.5	-0.4
Ukraine	48	-0.8	-0.8	-0.7	-0.6	-0.6	-0.6	-0.6	-0.5	-0.8	-0.6
Other	88	0.8	0.9	0.9	0.9	1.0	1.0	1.1	0.6	0.8	1.1
Asia and Oceania	3,533	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.4	1.3	1.0
East Asia	1,522	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.9	0.9	0.6
China	1,291	0.6	0.6	0.6	0.6	0.6	0.6	0.6	1.0	0.6	0.6
Hong Kong	7	0.7	0.7	0.6	0.6	0.6	0.5	0.5	1.6	0.7	0.5
Japan	127	0.1	0.1	0.1	0.0	0.0	0.0	-0.1	0.3	0.1	-0.1
Korea	48	0.5	0.5	0.4	0.4	0.4	0.4	0.4	1.0	0.5	0.3
Taiwan	23	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.9	0.7	0.5
Southeast Asia	557	1.4	1.4	1.4	1.3	1.3	1.3	1.3	1.7	1.4	1.2
Indonesia	235	1.5	1.5	1.5	1.4	1.4	1.4	1.3	1.8	1.5	1.3
Malaysia	23	1.9	1.9	1.8	1.8	1.8	1.8	1.7	2.2	1.9	1.7
Philippines	85	2.0	1.9	1.9	1.8	1.8	1.8	1.7	2.2	2.0	1.7
Thailand	63	0.7	0.7	0.7	0.7	0.7	0.7	0.6	1.1	0.7	0.6
Vietnam	82	1.1	1.1	1.1	1.0	1.0	1.0	1.0	1.6	1.1	1.0
South Asia	1,420	1.7	1.7	1.6	1.6	1.6	1.5	1.5	1.9	1.7	1.5
Bangladesh	138	2.1	2.1	2.1	2.1	2.1	2.1	2.0	1.7	2.0	2.0
India	1,050	1.5	1.5	1.4	1.4	1.4	1.3	1.3	1.8	1.5	1.3
Pakistan	156	1.8	2.0	2.0	2.1	2.1	2.0	2.0	2.5	2.1	1.9
Oceania	33	1.4	1.3	1.3	1.2	1.2	1.2	1.2	1.5	1.4	1.1
Australia	20	0.9	0.9	0.9	0.9	0.8	0.8	0.8	1.2	0.9	0.8
New Zealand	4	1.1	1.1	1.0	1.0	1.0	0.9	0.9	1.3	1.1	0.9
Other Asia and Oceania	181	2.3	2.1	2.0	1.7	1.5	1.5	1.5	2.1	1.9	1.5
Middle East	256	1.7	1.7	1.7	1.8	1.8	1.8	1.7	2.1	1.8	1.7
Iran	67	0.4	0.5	0.8	1.0	1.1	1.1	1.1	1.4	0.7	1.1
Iraq	25	2.8	2.8	2.8	2.7	2.7	2.6	2.6	2.3	2.8	2.5
Saudi Arabia	25	2.7	2.5	2.4	2.3	2.2	2.0	1.9	3.7	2.7	1.8
Turkey	68	1.2	1.2	1.1	1.1	1.1	1.0	1.0	1.6	1.2	1.0
Other	70	2.7	2.7	2.7	2.6	2.6	2.6	2.6	2.9	2.7	2.5
Africa	847	2.2	2.2	2.2	2.2	2.2	2.1	2.1	2.5	2.2	2.1
North Africa	148	1.7	1.6	1.6	1.6	1.5	1.5	1.5	2.1	1.7	1.4
Algeria	32	1.4	1.3	1.3	1.2	1.2	1.2	1.2	1.9	1.4	1.2
Egypt	75	1.9	1.9	1.8	1.8	1.7	1.7	1.7	2.2	1.9	1.6
Morocco	32	1.7	1.6	1.6	1.6	1.6	1.5	1.5	2.0	1.7	1.5
Tunisia	10	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.5	1.0	1.0
Sub-Saharan Africa	699	2.4	2.3	2.3	2.3	2.3	2.3	2.3	2.6	2.4	2.2
Republic of South Africa	44	0.1	-0.1	-0.2	-0.4	-0.4	-0.5	-0.5	1.4	0.1	-0.5
Other Sub-Saharan Africa	655	2.5	2.5	2.5	2.5	2.5	2.4	2.4	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, Bureau of the Census and U.S. Department of Agriculture, Economic Research Service. The population assumptions were completed in August 2005.