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U.S. International Trade: Trends and Forecasts

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Summary

The global financial crisis and the U.S. recession, during the 19 months from December 2007 through June 2009, caused the U.S. trade deficit to decrease, or lessen, from August 2008 through May 2009. Since then it has begun to increase again as recovery has commenced. The financial crisis caused U.S. imports to drop faster than U.S. exports, but that trend has reversed as U.S. demand for imports recovers.

Exports of goods of $1,497 billion in 2011 increased from 2010 by $209 billion or 16%, while *imports of goods* of $2,236 billion in 2011 increased by $302 billion, also 16%, over 2010. Though both exports and imports increased by 16%, this led to an increase in the overall merchandise *trade deficit* (i.e., the trade balance became more negative) for 2011 of $93 billion or 15% over 2010. Because imports are greater than exports, exports must increase at a greater percentage than imports to maintain the current trade balance.

In 2011, the *trade deficit in goods* reached $738 billion on a balance of payments (BoP) basis, still lower than the previous peak of $836 billion in 2006, but greater than the deficits in 2009 and 2010 of $506 billion and $645 billion. The 2011 U.S. deficit on merchandise trade (Census basis) with China was $295.4 billion, with the European Union (EU27) was $99.9 billion, with Canada was $34.5 billion, with Japan was $63.2 billion, and with Mexico was $64.5 billion. With the Asian Newly Industrialized Countries (Hong Kong, South Korea, Singapore, and Taiwan), the trade balance moved from a deficit of $5.5 billion in 2007 to surpluses increasing from $2.2 billion in 2008 to $15.4 billion in 2011.

Related to the goods trade balance is the balance on the current account, which includes merchandise and services trade plus investment income and unilateral transfers. The deficit on the current account grew in 2011 to $466 billion from $442 billion in 2010. This smaller increase in the current account deficit ($24 billion), as compared to the increase in the goods trade deficit ($93 billion), reflects an increase in the U.S. surplus in both services trade and investment income.

Trade deficits are a concern for Congress because they may generate trade friction and pressures for the government to do more to open foreign markets, to shield U.S. producers from foreign competition, or to assist U.S. industries to become more competitive. Overall U.S. trade deficits reflect excess spending (a shortage of savings) in the domestic economy and a reliance on capital imports to finance that shortfall. Capital inflows serve to offset the outflow of dollars used to pay for imports. Movements in the exchange rate help to balance trade. The rising trade deficit (when not matched by capital inflows) places downward pressure on the value of the dollar, which, in turn, helps to shrink the deficit by making U.S. exports cheaper and imports more expensive. However, interventions in foreign exchange markets by countries such as China and South Korea can keep the value of their currencies from rising too fast, thus keeping the dollar strong and imports cheaper.

Areas to watch in 2012 in international trade include the energy and transportation sectors. In energy, unconventional oil and gas production are increasing U.S. domestic supply, reducing imports, and increasing exports. In transportation, U.S. automakers appear to be exporting well to growth markets such as China.

Note: This report is current through U.S. Department of Commerce annual data revisions, published June 8, 2012, and Bureau of Economic Analysis revisions published June 14, 2012.

Contents

Introduction 1
Most Recent Developments 2
Trade in Goods 4
Trade in Services 5
Trade in Goods and Services 6
The Trade Deficit and the Dollar 7
U.S. Merchandise Trade Balance 11
Current Account Balance 14
Forecasts 17
U.S. Trade with Selected Nations 17
Trade Balances with Free Trade Agreement Nations 21
U.S. Current Account Balances-Selected Nations 23
Advanced Technology, Transportation, and Energy 24
High Technology Trade 24
Motor Vehicle Trade 26
Energy Trade 28
International Trade Statistics Web Resources 31

Figures

Figure 1. Percent Change in Real Exports and Imports of Goods and Services 3
Figure 2. Monthly U.S. Goods Trade 4
Figure 3. Monthly U.S. Services Trade 5
Figure 4. U.S. Trade in Goods and Services as Percentage of GDP 7
Figure 5. Month-End Trade-Weighted U.S. Dollar Against Broad, Major Currencies, and Other Important Trading Partner Indices, ... 9
Figure 6. The Exchange Value of the U.S. Dollar Compared with the Chinese Renminbi, Japanese Yen, EU Euro, and South Korean Won 10
Figure 7. U.S. Merchandise Exports, Imports, and Trade Balance 12
Figure 8. Annual Growth in U.S. Merchandise Exports and Imports 14
Figure 9. U.S. Current Account and Merchandise Trade Balances 15
Figure 10. U.S. Merchandise Trade Balances With Selected Nations 18
Figure 11. U.S. Merchandise Trade Balance with FTA Partners 22
Figure 12. U.S. Trade in High Technology Products 25
Figure 13. U.S. Vehicle Trade by Major Segment 28
Figure 14. U.S. Trade Balances: Total Trade, Energy Trade, and No-Energy Trade 29

Tables

Table 1. U.S. Goods Trade 5
Table 2. U.S. Services Trade 6

Table 3. U.S. Total Goods and Services Trade 6
Table 4. U.S. Merchandise Exports, Imports, and Trade Balances on Census and Balance of Payments Bases 13
Table 5. U.S. Current Account Balances 16
Table 6. U.S. Merchandise and Current Account Trade 17
Table 7. U.S. Merchandise Trade Balances with Selected Nations and Groups 19
Table 8. Top 25 U.S. Merchandise Deficit Trading Partners 20
Table 9. Top 15 U.S. Trading Partners Ranked by Total Merchandise Trade 21
Table 10. U.S. Current Account Balances With Selected Countries and Groups 23
Table 11. U.S. Trade in High Technology Products 25
Table 12. U.S. Trade in Motor Vehicles, Passenger Cars, Trucks, and Parts by Selected Countries 27
Table 13. U.S. Energy Trade with the World, 2009-2011 29
Table 14. U.S. Imports of Crude Oil from Top 20 Countries, 2009-2011 30

Contacts

Author Information 32

Introduction

International trade in goods and services along with flows of financial capital affect virtually every person living in the United States. Whether one buys imported clothes, gasoline, computers, or cars; works in an industry that competes with imports; or sells products abroad, the influence of international trade on economic activity is pervasive. Although the United States is one of the three largest exporters in the world (China and Germany are the other two), U.S. sales abroad are overshadowed by the huge demand by American consumers and industry for imported products. Since 1976, the United States has incurred continual merchandise trade deficits with annual amounts increasing steadily until the plateau of years 2005 through 2008. Then in 2009 the U.S. trade deficit on goods declined roughly 39%, as U.S. imports fell much faster than exports during the recession. As the economy recovered the trade deficit began increasing again, by 28% in 2010 and 15% in 2011 (**Table 1**).

For Congress, the trade deficit and other aspects of international trade enter into public policy considerations through many portals.

- At the macroeconomic level, trade deficits are a concern because they affect U.S. economic growth, interest rates, labor, and the debt load of the economy. As the trade deficit rises relative to the total economy, the risk increases that the dollar will weaken, prices will rise, financial markets will be disrupted, and the economic well-being of the population will be reduced. A large trade deficit, however, naturally follows a booming economy as robust domestic demand generates purchases of both domestic and imported goods.
- At the strategic level, trade ties often lead to a deepening of bilateral relations with other nations that can develop into formal free trade agreements (FTAs) or political and security arrangements. Trade also can be used as a tool to accomplish strategic objectives—particularly through providing preferential trading arrangements or by imposing trade sanctions.
- At the microeconomic level, imports of specific products can generate trade friction and pressures from constituent interests for the government to shield U.S. producers from foreign competition, provide adjustment assistance, open foreign markets, or assist U.S. industries to become more competitive.
- At the household level, rising trade deficits and free trade agreements are often associated with employment, particularly concerns over a loss of jobs, a highly relevant issue for the American public.[1]

This report provides an overview of the current status, trends, and forecasts for U.S. import and export flows as well as certain trade balances. The purpose of this report is to provide current data and brief explanations for the various types of trade flows, along with a brief discussion of trends that help inform the discussion of the various policy issues mentioned above. However, an analysis of trade policy as an economic or strategic tool is beyond the scope of this report but can

[1] For example, in November 2009, the Pew Research Center found that 85% of the respondents in a survey said that protecting jobs should be a top foreign policy priority and that economic issues were the greatest international problem confronting the United States. In the Pew survey, 53% thought free trade agreements lead to job losses, 49% to lower wages, and 42% to slower economic growth. Pew Research Center for the People and the Press. "U.S. Seen as Less Important, China as More Powerful, Isolationist Sentiment Surges to Four-Decade High," *Survey Reports*, December 3, 2009.

be found in various other CRS reports.[2] Further detail on trade in specific commodities, with particular countries or regions, or for different time periods can be obtained from the Department of Commerce,[3] from the U.S. International Trade Commission.[4] Congressional clients may contact the authors of this report.

Types of Trade Data

The U.S. government compiles trade data in four different ways. The data on merchandise or goods trade are first compiled on a Census basis. Bilateral trade with countries and sectoral data are reported only on a Census basis. The Census numbers are then adjusted and reported monthly on a balance of payments (BoP) basis that includes adjustments for valuation, coverage, and timing, and excludes military transactions. The data are finally reported in terms of national income and product accounts (NIPA). The NIPA data also can be further adjusted to include correcting for inflation to gauge movement in trade volumes as distinct from trade values. Conceptually, this procedure is analogous to adjusting macroeconomic data from nominal to real values. Specific values can help in understanding the concepts involved (**Table 4**).

Valuation methods are very important in trade data evaluation. The Census Bureau also reports imports on a c.i.f. (cost, insurance, and freight) basis which includes the value of insurance, international shipping, and other charges incurred in bringing merchandise to U.S. ports of entry. The customs (or f.a.s.—free alongside ship) data do not include these supplementary costs. U.S. import data are reported on a customs basis with insurance and freight charges counted in U.S. services trade. Other countries, however, commonly report merchandise import figures that include insurance and freight charges. This tends to overstate their imports and understate their trade surpluses with the United States.

For analysis of specific industries or sectors, the classification system used is also important. The U.S. Harmonized Tariff Schedule (HTS) identifies products by a 10-digit number in order to assign duty rates. Each additional digit adds to the specificity of the classification. For example, the 2-digit level includes broad categories such as aircraft (88), electrical machinery (85), and meat (02). For the purpose of examining trade trends, the 2- or 4-digit classification is typically sufficient. There are a number of other classification systems that are also useful for different types of analysis. The North American Industry Classification System (NAICS), for example, is organized by production type (agriculture, manufacturing, retail trade, etc.).

Note: For more information on types of trade data see http://www.census.gov/foreign-trade/guide/sec2.html.

Most Recent Developments

For January-July 2012 merchandise exports increased 6% over the same period in 2011, imports increased 5%, and the U.S. trade deficit with the world increased, or became more negative, by 2%. These changes are lower than those from the same seven-month period in 2011, when exports increased by 18%, imports increased by 17%, and the trade deficit increased by 16%.

For the year 2011, U.S. merchandise exports to the world rose 16%, U.S. merchandise imports also rose 16%, and the U.S. trade deficit rose 15%, from $645 billion in 2010 to $738 billion in 2011. Because imports are greater than exports, exports must increase at a greater percentage than imports to maintain the current trade balance. In 2011, as the U.S. economy continued to recover from the financial crisis, U.S. merchandise exports and imports finally surpassed their previous 2008 peaks. Another sign of the continued recovery was the 18% increase in the fuel deficit.

[2] See, for example, CRS Report RL33743, *Trade Promotion Authority (TPA) and the Role of Congress in Trade Policy*, by J. F. Hornbeck and William H. Cooper; CRS Report RL31356, *Free Trade Agreements: Impact on U.S. Trade and Implications for U.S. Trade Policy*, by William H. Cooper; CRS Report RS20088, *Dispute Settlement in the World Trade Organization (WTO): An Overview*, by Jeanne J. Grimmett; or CRS Report RL33274, *Financing the U.S. Trade Deficit*, by James K. Jackson.

[3] Commerce Department data are available at http://www.bea.gov/.

[4] U.S. International Trade Commission data are available at http://dataweb.usitc.gov/.

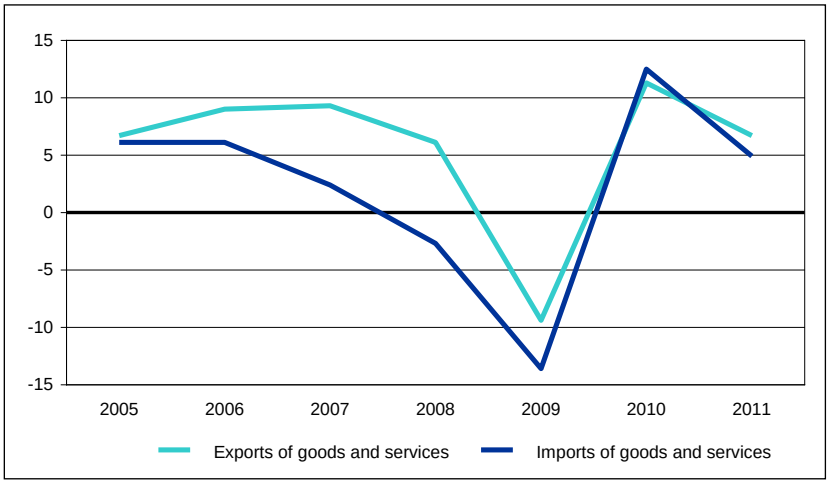
Though down from 26% growth in 2010, it sharply contrasts the 48% decline in the fuel deficit in 2009.

The U.S. top export commodity in 2011 changed from the historic top export of civilian aircraft, engines, and equipment, which increased 11.4% from 2010, to refined petroleum products, up 70%. The top import commodity remained crude oil and mineral fuels, up 29% in 2011, compared to an increase of 35% in 2010. The second leading U.S. import commodity was motor vehicles, up 7%. Total trade with China—the second-largest U.S. trade partner—continued to increase: U.S. exports to China rose 13%, U.S. imports from China rose 9%, and the U.S. trade deficit with China grew by 8%.

In 2009, as the global financial crisis worsened and the United States and other developed countries dropped into recession, the declining U.S. trade deficit contributed positively to the growth in the U.S. economy. The U.S. recession would have been worse without the shrinking U.S. trade deficit. However, the faltering global economic conditions that caused the declining U.S. demand for imports, and hence the fall in the trade deficit, also caused a decline in demand for U.S. domestic goods and services. While U.S. imports declined in 2009, they rose in 2010 and 2011, forcing companies competing with imports to continue to face diminished demand as the domestic economy remained sluggish. These conditions create increased pressures on political forces to protect domestic industry from imports, not only in the United States, but around the world. As the world is recovering from the great recession countries are vying to capture the increase in global trade by keeping the value of their currencies low, particularly China.

The global financial crisis made 2009 a very difficult and negative year for the United States and other developed countries' trade by any measurement metric. This sharp decline greatly contrasts the general trend over recent decades of large increases in U.S. and world trade. Even in real terms—movements net of price changes—trade in both goods and services fell dramatically in 2009 (**Figure 1**). However, U.S. goods trade saw the most fluctuations. In 2009, U.S. merchandise exports to the world declined by 18%, while U.S. imports from the world declined 26% relative to 2008 values. Both flows reversed in 2010, with U.S. exports increasing by 21% and U.S. imports increasing by 23%. In 2009, the U.S. deficit in merchandise trade dropped by more than one-third, relative to 2008, to $506 billion, as the U.S. recession caused imports to decline faster than exports. As the U.S. economy began to recover in 2010, the U.S. merchandise deficit grew more negative by 28%. The deficit continued to grow in 2011 by 15%.

Figure 1. Percent Change in Real Exports and Imports of Goods and Services



Source: CRS with data from U.S. Department of Commerce, Bureau of Economic Analysis.

Notes: Balance of Payments basis data. Goods and services measured with inflation adjustment.

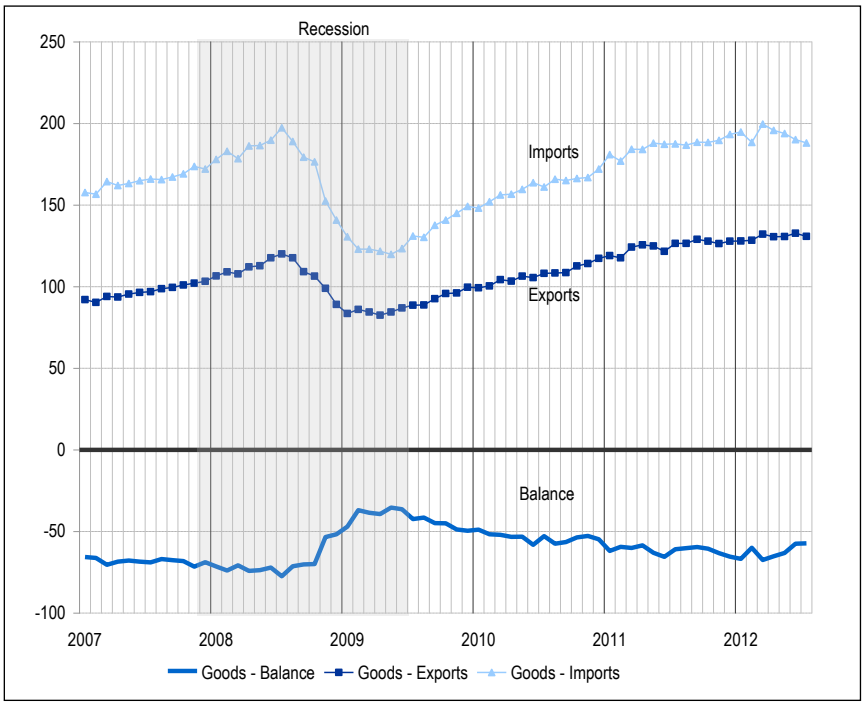
Trade in Goods

Exports of goods of $1,497 billion in 2011 increased by $208 billion or 16% over the $1,289 billion in 2010. This places the growth in exports on track to achieve a doubling over the five-year period 2010-2015, a goal outlined in the President's National Export Initiative. Increases in major export sectors were refined petroleum products up $38 billion or 70%; civilian aircraft, engines, and equipment up $8 billion or 11%; and motor cars up $9 billion or 23%. *Imports of goods* of $2,236 billion increased by $302 billion or 16% over 2010. Increases in major import sectors were crude oil up $77 billion or 29%, motor cars up $8 billion or 7%, and refined petroleum products up $25 billion or 37%.

The impact of the global financial crisis on U.S. goods trade and the slow recovery can be seen in both **Figure 2** and **Table 1**. U.S. exports and imports of goods began to decline in August 2008. This trend continued until exports of goods began to increase in May 2009 and imports began to increase in June. Monthly exports had dropped from $115 billion in August 2008 to $80 billion in April 2009. More drastically, monthly U.S. goods imports dropped from $187 billion in August 2008 to $119 billion in May 2009. Exports have generally continued increasing since the end of the recession. Imports also increased for much of that period, but have recently declined since March 2012.

Figure 2. Monthly U.S. Goods Trade

(in billions of current U.S. dollars)



Source: CRS with data from U.S. Department of Commerce, Bureau of Economic Analysis and National Bureau of Economic Research.

Notes: Balance of Payments Basis. Data adjusted for seasonal variation.

Table 1. U.S. Goods Trade

(in billions of current U.S. dollars)

Description	2008	2009	2010	2011	% Change 2009/08	% Change 2010/09	% Change 2011/10
Exports	1,307.5	1,069.7	1,288.9	1,497.4	-18.2	20.5	16.2
Imports	2,137.6	1,575.5	1,934.0	2,235.8	-26.3	22.8	15.6
Balance	-830.1	-505.8	-645.1	-738.4	39.1	-27.5	-14.5

Source: CRS with data from U.S. Department of Commerce, Bureau of Economic Analysis.

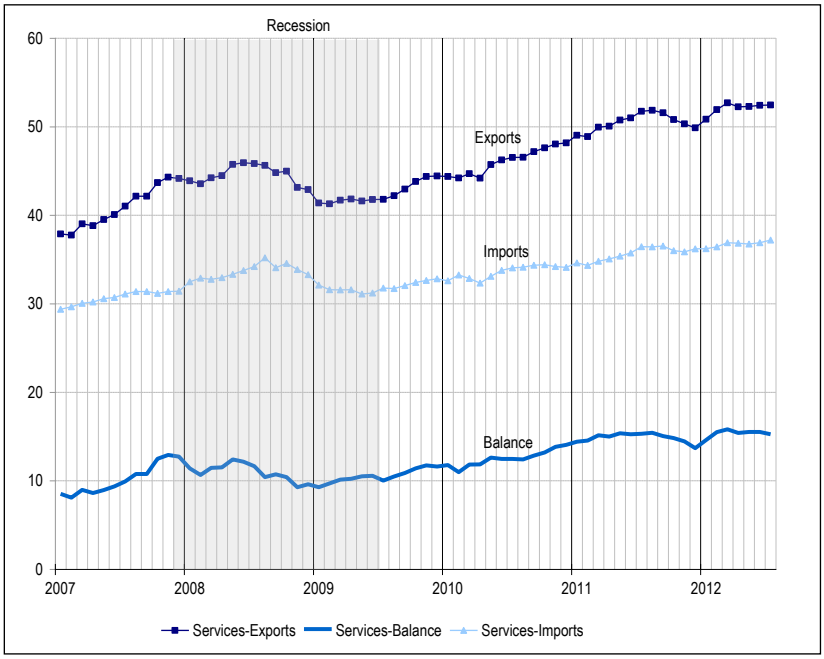
Note: Balance of Payments basis.

Trade in Services

In 2011, total annual imports of services of $427 billion and exports of $606 billion yielded a surplus in U.S. services trade of $179 billion. The U.S. service industries, particularly financial services, tourism, shipping, and insurance, tend to compete well in international markets. U.S. services trade was also impacted by the global financial crisis but to a lesser extent than goods trade (**Table 2**). Monthly services exports have mostly increased since the end of the recession, but fell in the last months of 2011 (**Figure 3**). They have since recovered, remaining around $53 billion since May 2012. U.S. services imports have increased consistently since the end of the recession.

Figure 3. Monthly U.S. Services Trade

(in billions of current U.S. dollars)



Source: CRS with data from U.S. Department of Commerce, Bureau of Economic Analysis and National Bureau of Economic Research.

Notes: Balance of Payments Basis. Data adjusted for seasonal variation.

Table 2. U.S. Services Trade

(in billions of current U.S. dollars)

Description	2008	2009	2010	2011	% Change 2009/08	% Change 2010/09	% Change 2011/10
Exports	535.2	509.2	553.6	606.0	-4.9	8.7	9.5
Imports	403.4	382.6	403.2	427.4	-5.2	5.4	6.0
Balance	131.8	126.6	150.4	178.5	-3.9	18.8	18.7

Source: CRS with data from U.S. Department of Commerce, Bureau of Economic Analysis.

Note: Balance of Payments basis.

Trade in Goods and Services

Since the United States runs a surplus in trade in services and a deficit in trade in goods, the combined deficit on goods and services is lower (less negative) than the deficit on goods alone. In 2011, exports of goods and services of $2,103 billion and imports of $2,663 billion resulted in a deficit of $560 billion.

Table 3. U.S. Total Goods and Services Trade

(in billions of current U.S. dollars)

Description	2008	2009	2010	2011	% Change 2009/08	% Change 2010/09	% Change 2011/10
Exports	1,842.7	1,578.9	1,842.5	2,103.4	-14.3	16.7	14.2
Imports	2,541.0	1,958.1	2,337.2	2,663.2	-22.9	19.4	13.9
Balance	-698.3	-379.2	-494.7	-559.9	45.7	30.5	13.2

Source: CRS with data from U.S. Department of Commerce, Bureau of Economic Analysis.

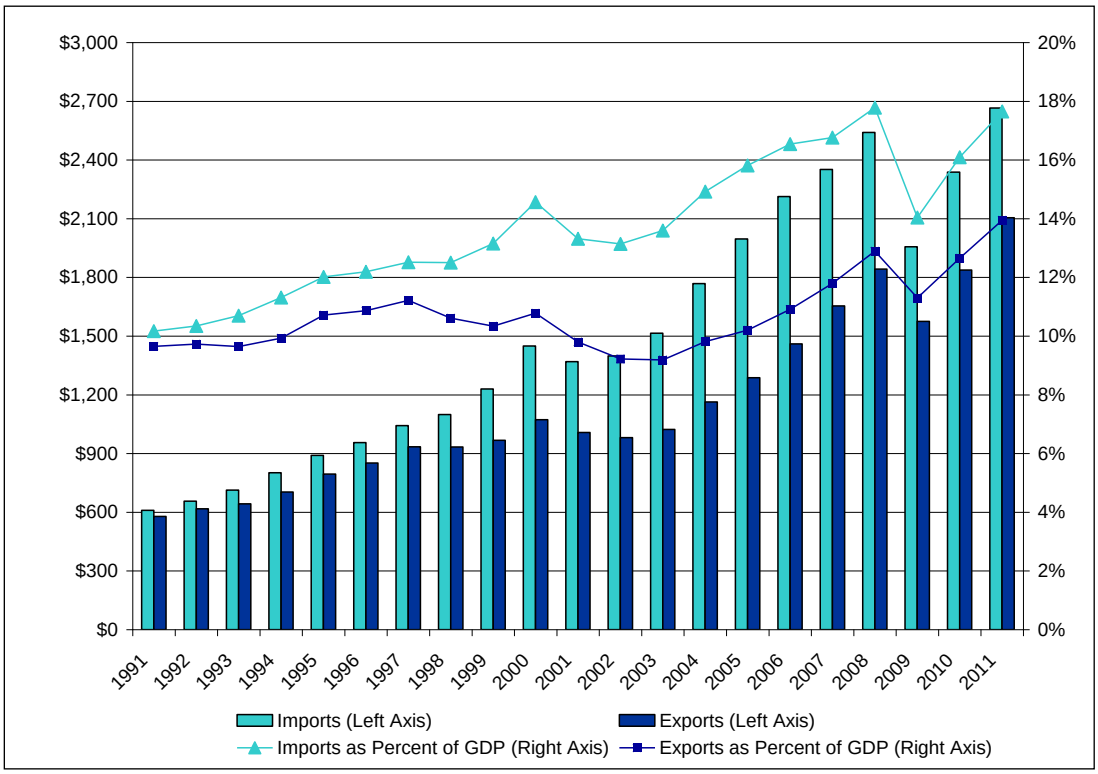
Note: Balance of Payments basis.

Trade in goods and services has risen in importance in the U.S. economy over the past two decades. **Figure 4** below shows imports and exports of goods and services, both in U.S. dollars and as a percentage of gross domestic product (GDP). By both measures trade is on the rise in the United States. In 1991 total trade was equal to about 20% of GDP and grew to more than 30% of GDP by 2011.

While total trade has increased, imports have grown faster than exports, causing an increase in the trade deficit. In the most recent years it has fallen slightly, concurrent with the U.S. recession and global financial crisis. In 2011 the annual trade deficit on goods and services amounted to approximately 3.7% of U.S. GDP (U.S. GDP was $15,076 billion in 2011), up from 3.4% in 2010 but down from 4.8% in 2008, 5.1% in 2007, and 5.8% in 2006. A level of 5% for countries is considered to be cautionary by economic observers. At that level, other countries have experienced problems paying for imports and maintaining the value of their currency. Given the "safe haven" effect (investors seeking a safe investment) associated with U.S. Treasury securities, however, foreign investors continue to buy U.S. securities. As a result, U.S. interest rates have remained relatively low and the United States remains able to finance the excess of imports over exports. The U.S. trade deficit, however, does cause a weakening of the exchange value of the dollar.

Figure 4. U.S. Trade in Goods and Services as Percentage of GDP

(in billions of current U.S. dollars and percentage of GDP)



Source: CRS with data from U.S. Department of Commerce, Bureau of Economic Analysis.

The Trade Deficit and the Dollar

Overall U.S. trade deficits reflect a shortage of savings in the domestic economy and a reliance on capital imports to finance that shortfall. A savings shortfall is the analogue of excessive spending that is financed by borrowing. Households borrow for consumption; businesses borrow to invest; and the government borrows to cover its budget deficit. At the international transaction level, the savings shortfall is manifest when foreign capital flows into the United States to pay for its excess of imports (trade deficit).

Whether this foreign borrowing is beneficial for the U.S. economy depends on how the imports of capital are used. If they are used to finance investments that generate a future return at a sufficiently high rate (they raise future output and productivity), then they may increase the well-being of current and future generations. However, if the imports are used only for current consumption, the net effect of the borrowing will be to shift the burden of repayment to future generations without a corresponding benefit to them.

U.S. trade balances are macroeconomic variables that may or may not indicate underlying problems with the competitiveness of particular industries. The reason is that overall trade flows are determined, within the framework of institutional barriers to trade and the activities of individual industries, primarily by macroeconomic factors such as rates of growth, savings and

investment behavior (including government budget deficits/surpluses), international capital flows, and exchange rates.[5]

Changes in the trade balance (defined as exports minus imports) are a component in deriving the nation's GDP. In the U.S. economy, where consumer spending and business investment are the largest components of the annual change in economic growth, changes in the trade balance generally reflect changes in these other, much larger, components of the economy. According to GDP accounting, the trade balance can be represented as contributing positively or negatively to the overall rate of growth in the economy, depending on activity in the other components in the accounts. For instance, in the late 1980s and early 1990s, when spending by consumers and businesses waned, growth in exports provided a boost to the overall rate of growth in the economy. Again in 2008, when consumer spending and business investment were weak, exports provided a comparatively large contribution to the rate of GDP growth. In 2008, exports accounted for about 9% of the rate of growth in national GDP, compared with the 5.9% contribution recorded in 1990. In 2009, as U.S. GDP declined by 3.5%, exports provided some impetus for growth, primarily due to a 30% drop in imports. The effects of exports, imports, and trade balance exert complex forces on the domestic economy. For instance, a large trade deficit naturally follows a booming economy, as increases in domestic demand lead to more purchases of imported goods.

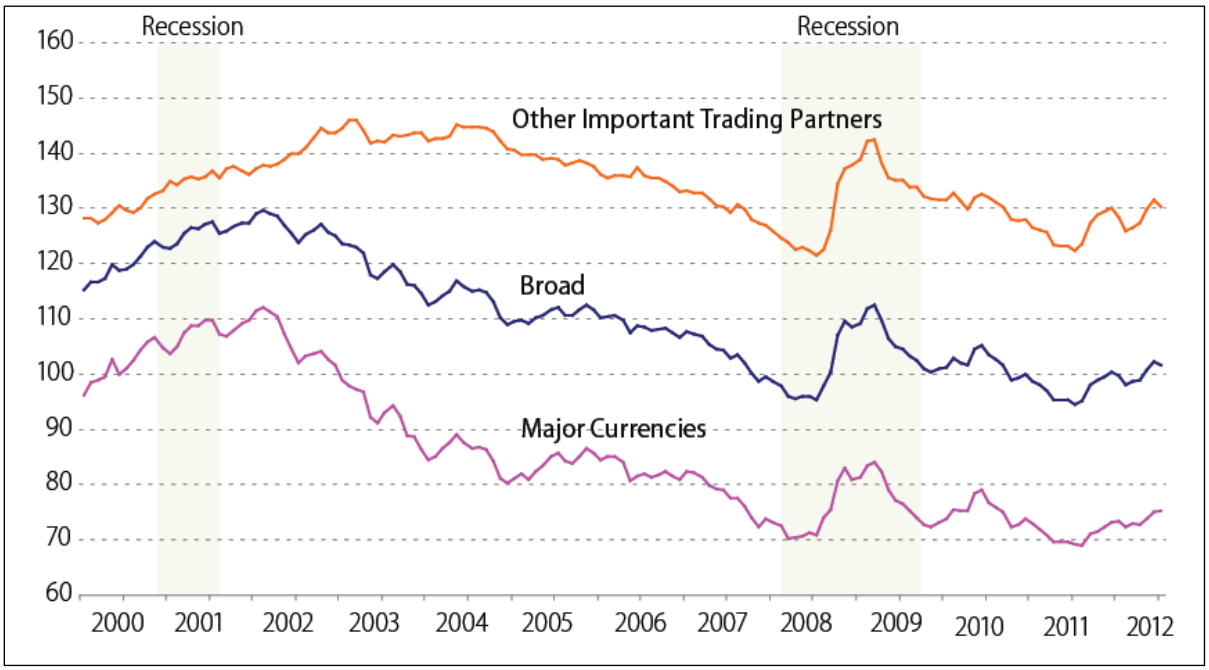
Many economists fear that the rising U.S. trade and current account[6] deficits could lead to a large drop in the value of the U.S. dollar. The current account deficit has placed downward pressure on the dollar, although the "safe haven" effect comes into play to have the opposite effect. A weaker dollar boosts exports by making them cheaper, narrowing the U.S. trade deficit. Compared to a Federal Reserve index of major currencies weighted by importance to U.S. trade, the dollar has lost nearly one-third of its value since 2002, but has been rising in 2012 (see **Figure 5**). The dollar had fallen against the euro, yen, British pound, Australian dollar, and Canadian dollar. In fact, the U.S. dollar fell to parity with the Canadian dollar in September 2007 for the first time in 30 years, but between July and November 2008, the U.S. dollar strengthened against other currencies as the global financial crisis increased "safe haven demand" for the dollar. Since November 2009, the dollar lost some value, partly due to the Federal Reserve's lowering of interest rates. However, as the Eurozone debt crisis developed in 2010, global investors again sought the safety of U.S. Treasury securities and bid up the price of dollars.

[5] For further information on trade deficits and the macroeconomy, see CRS Report RL33274, *Financing the U.S. Trade Deficit*, by James K. Jackson, and CRS Report RL33186, *Is the U.S. Current Account Deficit Sustainable?*, by Marc Labonte.

[6] U.S. trade in goods and services plus net flows of investment income and remittances.

Figure 5. Month-End Trade-Weighted U.S. Dollar Against Broad, Major Currencies, and Other Important Trading Partner Indices,

(January 2000 – July 2012)



Source: Federal Reserve Bank of St. Louis, http://research.stlouisfed.org/.

Notes: Broad Index (January 1997 = 100): Euro Area, Canada, Japan, Mexico, China, United Kingdom, Taiwan, South Korea, Singapore, Hong Kong, Malaysia, Brazil, Switzerland, Thailand, Philippines, Australia, Indonesia, India, Israel, Saudi Arabia, Russia, Sweden, Argentina, Venezuela, Chile and Colombia.

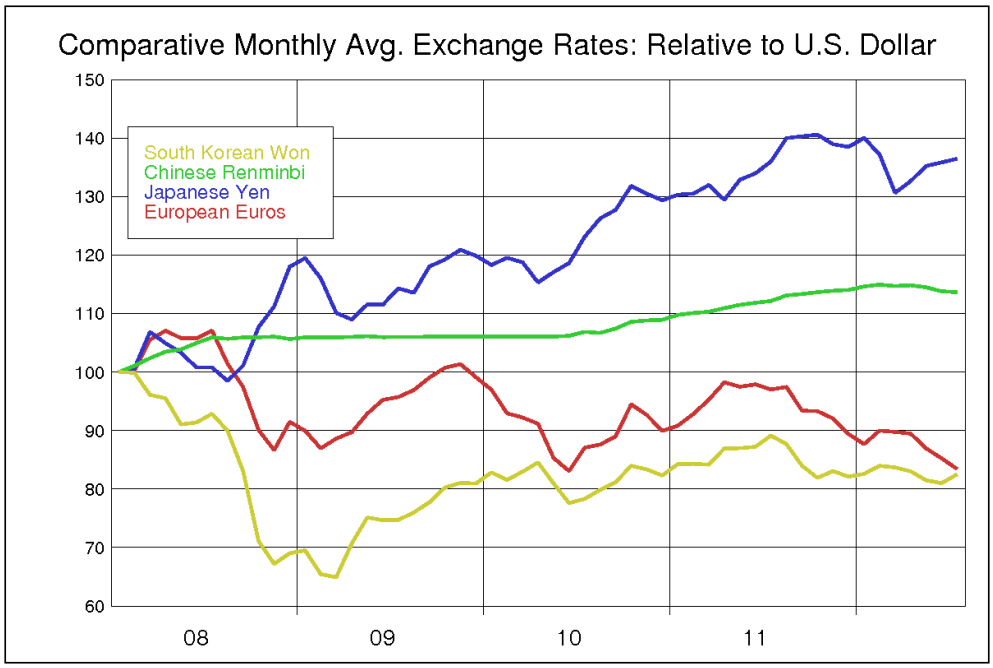
Major Currencies Index (January 1973 = 100): Euro Area, Canada, Japan, United Kingdom, Switzerland, Australia, and Sweden.

Other Important Trade Partners Index (January 1997 = 100): Mexico, China, Taiwan, South Korea, Singapore, Hong Kong, Malaysia, Brazil, Thailand, Philippines, Indonesia, India, Israel, Saudi Arabia, Russia, Argentina, Venezuela, Chile and Colombia.

Although a weakened dollar helps to reduce U.S. trade imbalances, it also may reduce the dollar's attractiveness to foreign investors. If foreign investors stop offsetting the deficit by buying dollar-denominated assets, the value of the dollar could drop—possibly precipitously. In that case, U.S. interest rates would have to rise to attract more foreign investment; financial markets could be disrupted; and inflationary pressures could increase. As shown in **Figure 6**, in terms of individual currencies, since January 2008, the dollar has been weakening with respect to the Japanese yen and Chinese renminbi but strengthening with respect to the euro and South Korean won.

Figure 6. The Exchange Value of the U.S. Dollar Compared with the Chinese Renminbi, Japanese Yen, EU Euro, and South Korean Won

(January 2008 – July 2012)



Source: © 2012 by Prof. Werner Antweiler, University of British Columbia, Vancouver BC, Canada. Permission is granted to reproduce the above image provided that the source and copyright are acknowledged. On the internet at http://fx.sauder.ubc.ca/plot.html.

Currently, foreign investment in dollar assets along with purchases of securities by investors seeking a safe haven as well as from central banks of countries such as China have bolstered the value of the dollar. China's central bank has intervened in currency markets to keep its exchange rate relatively stable.[7]

A recent development in foreign country holdings of dollars and other reserve currencies is that some governments are turning toward creating sovereign wealth funds (SWFs). These are funds owned by governments that are invested in stocks, bonds, property, and other financial instruments denominated in dollars, euros, or other hard currency. For China, Japan, South Korea, Russia, and the oil-exporting nations of the Persian Gulf, the source of capital for these funds is coming from governmental holdings of foreign exchange. For China and Japan, for example, foreign exchange reserves have traditionally been invested by their respective central banks primarily in low-yielding but low-risk government bonds (i.e., U.S. Treasury securities). The purpose of sovereign wealth funds is to diversify investments and to earn a higher rate of return. For example, in September 2007, China created a sovereign wealth fund—the China Investment Corporation (CIC)—with initial capital of $200 billion. Depending on how these funds are managed and what leverage they acquire, they could affect U.S. interest rates (foreign purchases of U.S. Treasury securities tend to reduce U.S. interest rates), corporate activities (if funds buy

[7] Statistics on Chinese international reserves are available from the Chinability website, a non-profit website that provides Chinese economic and business data and analysis, at http://www.chinability.com/. Statistics on foreign holdings of U.S. Treasury securities are available at http://www.treasury.gov/tic/mfh.txt. For further information, see CRS Report RS22331, *Foreign Holdings of Federal Debt*, by Justin Murray and Marc Labonte.

significant voting shares of companies), and foreign access to technology and raw materials. The U.S. trade deficit provides some of the foreign exchange that goes to finance these sovereign wealth funds.[8]

How long can the United States keep running trade deficits? U.S. deficits in trade can continue for as long as foreign investors are willing to buy and hold U.S. assets, particularly government securities and other financial assets.[9] Their willingness depends on a complicated array of factors including the perception of the United States as a safe haven for capital, relative rates of return on investments, interest rates on U.S. financial assets, actions by foreign central banks, and the savings and investment decisions of businesses, governments, and households. The policy levers that influence these factors affecting the trade deficit are held by the Federal Reserve[10] (interest rates) as well as both Congress and the Administration (government budget deficits and trade policy), and their counterpart institutions abroad.

In the 112th Congress, legislation directed at the trade deficit has been taking several strategies. Some bills address trade barriers by particular countries, particularly China. Others are aimed at preventing manipulation of exchange rates or at imposing import duties to compensate for the arguably undervalued Chinese currency, as tracked in greater detail by other CRS reports.[11]

U.S. Merchandise Trade Balance

The merchandise (goods) trade balance is the most widely known and frequently used indicator of U.S. international economic activity. Also important is the concept of total merchandise trade, total exports plus total imports. In 2011, total merchandise trade reached $3,688 billion, a 16% increase over the 2010 value. This follows a 22% increase in 2010 (to $3,191 billion) and a 23% decrease in 2009 (to $2,616 billion).

Merchandise exports in 2011 totaled $1,480 billion, while imports reached $2,208 billion (Census basis). The U.S. merchandise trade deficit fell massively from $816 billion in 2008 to $504 billion in 2009 but then increased to $635 billion in 2010 and $727 billion in 2011 (**Figure 7**).

[8] For more information on sovereign wealth funds, see CRS Report RL34336, *Sovereign Wealth Funds: Background and Policy Issues for Congress*, by Martin A. Weiss, CRS Report RL34337, *China's Sovereign Wealth Fund*, by Michael F. Martin.

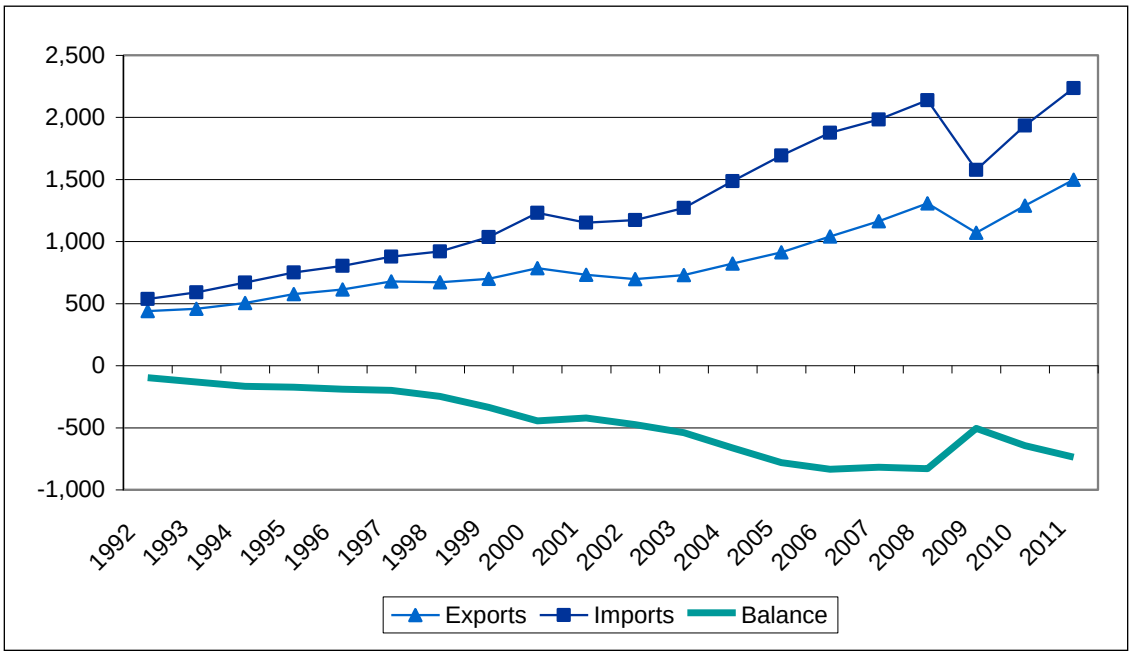
[9] See Mann, Catherine L. *Is the U.S. Trade Deficit Sustainable?* Washington, Institute for International Economics, 1999. 224 p. See also CRS Report RL33274, *Financing the U.S. Trade Deficit*, by James K. Jackson, and CRS Report RS21951, *Financing the U.S. Trade Deficit: Role of Foreign Governments*, by Marc Labonte.

[10] For details, see CRS Report RS20826, *Structure and Functions of the Federal Reserve System*, by Marc Labonte.

[11] For legislation related to trade with China and the Chinese currency, see CRS Report RL33536, *China-U.S. Trade Issues*, by Wayne M. Morrison, and CRS Report RL32165, *China's Currency: Economic Issues and Options for U.S. Trade Policy*, by Wayne M. Morrison and Marc Labonte.

Figure 7. U.S. Merchandise Exports, Imports, and Trade Balance

(in billions of current U.S. dollars)



Source: CRS with data from U.S. Department of Commerce, Bureau of Economic Analysis.

Notes: Balance of Payments basis.

U.S. merchandise exports decreased in 2001 and 2002 in response to the global slowdown, but then generally increased each year until 2009 (**Table 4**). As shown in **Figure 8**, the growth of imports has also been steady, although they too fell by 6.4% in 2001 before recovering in 2002. In 2003, import growth was nearly double export growth, although in 2004, export growth almost caught up with that of imports, and in 2005, the rate of increase for both dropped slightly. Growth in exports and imports slowed in 2007 with exports rising by 12.3% and imports by 5.7%. Likewise in 2008, exports grew faster than imports (12.4% versus 7.3%), but the trade deficit still increased. This is because U.S. imports are greater than U.S. exports, so exports must grow significantly faster than imports just for the deficit to remain constant. Then in 2009, with the full force of the financial crisis, exports decreased more slowly than imports (-17.9% versus -25.9%), before each took a sharp upward turn in 2010 as recovery began. In 2010 exports rose by 21%, followed by a slowing to 16% growth in 2011. U.S. imports grew 23% in 2010 followed by 15% in 2011.

Table 4. U.S. Merchandise Exports, Imports, and Trade Balances on Census and Balance of Payments Bases

(in billions of current U.S. dollars)

	Census basis			Balance of Payments basis		
	Exports	Imports		Exports	Imports	
Year	(f.a.s.)[a]	(customs)[b]	Trade Balance	(f.a.s.)[a]	(customs)[b]	Trade Balance
2001	729.1	1,141.00	-411.9	731.2	1,152.50	-421.3
2002	693.1	1,161.40	-468.3	697.4	1,171.90	-474.5
2003	724.8	1,257.10	-532.4	729.8	1,270.20	-540.4
2004	814.9	1,469.70	-654.8	822	1,485.50	-663.5
2005	901.1	1,673.50	-772.4	911.7	1,692.40	-780.7
2006	1,026.00	1,853.90	-828	1,039.40	1,875.10	-835.7
2007	1,148.20	1,957.00	-808.8	1,164.00	1,982.80	-818.9
2008	1,287.40	2,103.60	-816.2	1,307.50	2,137.60	-830.1
2009	1,056.00	1,559.60	-503.6	1,069.70	1,575.50	-505.8
2010	1,278.30	1,913.20	-634.9	1,288.90	1,934.00	-645.1
2011	1,480.40	2,207.80	-727.4	1,497.40	2,235.80	-738.4

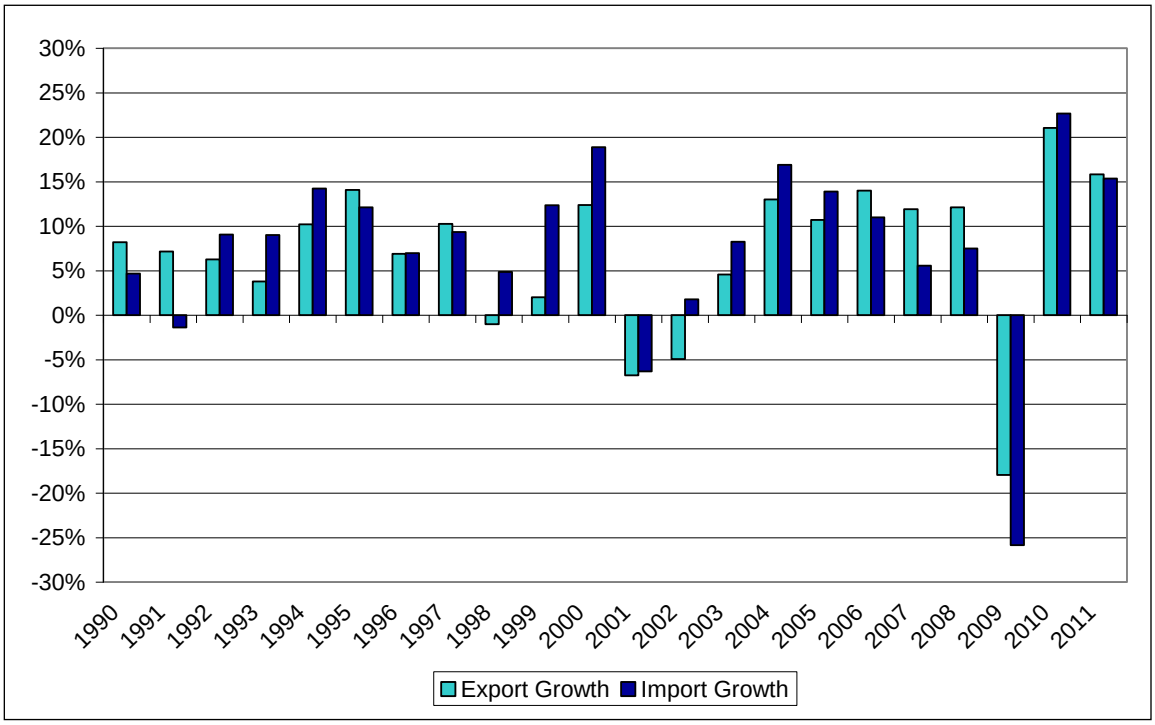
Source: CRS with data from U.S. Department of Commerce, Bureau of Economic Analysis, U.S. International Transactions Accounts Data.

Note: Goods on a Census basis are adjusted to a BoP basis to include changes in ownership that occur without goods passing into or out of the customs territory of the United States, to eliminate duplication, and to value transactions according to a standard definition. Export adjustments include counting military sales as services not goods, adding private gift parcels, and foreign official gold sales from U.S. private dealers. Import adjustments include adding in inland freight in Canada and foreign official gold sales to U.S. private dealers, and subtracting imports by U.S. military agencies.

a. Exports are valued on an f.a.s. basis, which refers to the free alongside ship value at the port of export and generally include inland freight, insurance, and other charges incurred in placing the goods alongside the carrier at the port of exportation.

b. Imports are valued as reported by the U.S. Customs Service, known as Customs basis, and exclude import duties, the cost of freight, insurance, and other charges incurred in bringing merchandise to the United States.

Figure 8. Annual Growth in U.S. Merchandise Exports and Imports



Source: CRS with data from U.S. Department of Commerce, accessed through the International Trade Commission (ITC) dataweb.

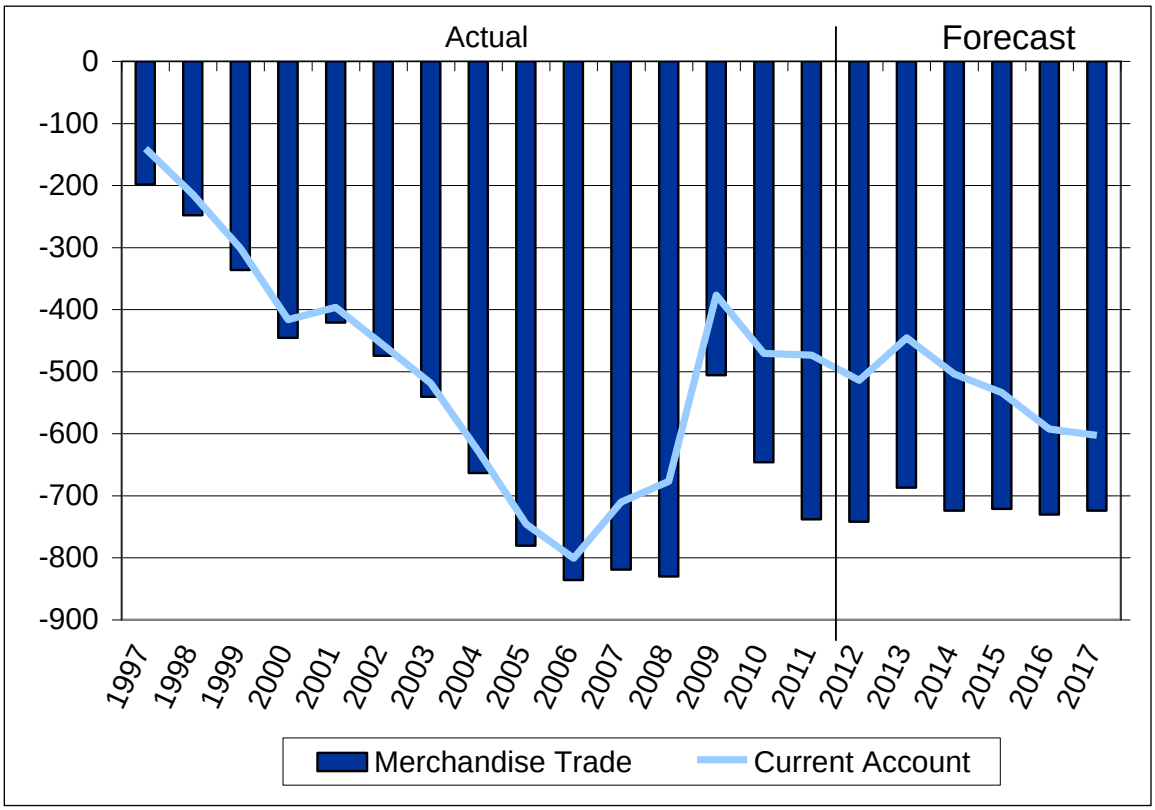
Current Account Balance

The current account provides a broader measure of U.S. trade because it includes services, investment income, and unilateral transfers in addition to merchandise trade (**Table 5**). The balance on services includes travel, transportation, fees and royalties, insurance payments, and other government and private services. The balance on investment income includes income received on U.S. assets abroad minus income paid on foreign assets in the United States. Unilateral transfers are international transfers of funds for which there is no *quid pro quo*. These include private gifts, remittances, pension payments, and government grants (foreign aid). Data on the current account are announced several months later than those on trade in goods and services.

Because the merchandise trade balance comprises the greater part of the current account, the two tend to track each other (**Figure 9**). Unlike the merchandise trade balance, however, the services account has registered surpluses. Since Americans are such large investors in foreign economies, the United States traditionally also has a surplus in its investment income, $184 billion in 2010 and $227 billion in 2011, but the deficit in unilateral transfers (primarily dollars sent abroad by foreign workers and recent immigrants) totaled $131 billion in 2010 and $133 billion in 2011. Unilateral transfers have now reached more than triple the level of the late 1980s.

Figure 9. U.S. Current Account and Merchandise Trade Balances

(in billions of current U.S. dollars)



Sources: CRS with data from U.S. Department of Commerce, Bureau of Economic Analysis. Forecasts from IHS Global Insight.

Note: Balance of Payments basis.

Table 5 summarizes the components of the U.S. current account. In 2011, the U.S. deficit on current account rose to $466 billion from $442 billion in 2010. It was down considerably, however, from $801 billion in 2006. The 2011 deficit on current account, at 3.1% of GDP, closely followed the 2010 deficit on current account of 3.0% of GDP. These figures are well below the 5% level of caution used by the International Monetary Fund. Since the dollar is used as an international reserve currency, the United States can run trade deficits without the same downward pressure on the value of the dollar as other nations.

Historically, the current account deficit fell from a then record-high $161 billion in 1987 to $79 billion in 1990, and switched to a $4 billion surplus in 1991 (primarily because of payments to fund the Gulf War by Japan and other nations). However, since a slight decline in 1995, the current account deficit increased significantly through 2006 except for a slight dip in 2001 (**Figure 9**). The U.S. current account deficit decreased from 2007 through 2009, which largely reflected the decline in the trade deficit during the financial crisis, though due to an increase in investment income receipts from abroad the current account deficit began declining earlier than the merchandise trade deficit. The current account deficit then increased in 2010 and remained mainly flat in 2011. From 2012 to 2017 the current account deficit is forecasted to increase, mostly due to an increase in outgoing investment income payments, while the merchandise trade deficit is forecasted to remain relatively stable.

Table 5. U.S. Current Account Balances

(in billions of current U.S. dollars)

Calendar Year	Merchandise Trade Balance[a]	Services Balance[b]	Investment Income Balance[c]	Net Unilateral Transfers[d]	Current Account Balance[e]
1987	-159.6	7.9	14.3	-23.3	-160.7
1988	-127.0	12.4	18.7	-25.3	-121.2
1989	-117.7	24.6	19.8	-26.2	-99.5
1990	-111.0	30.2	28.6	-26.7	-79.0
1991	-76.9	45.8	24.1	9.9	2.9
1992	-96.9	57.7	24.2	-36.6	-51.6
1993	-132.5	62.1	25.3	-39.8	-84.8
1994	-165.8	67.3	17.1	-40.3	-121.6
1995	-174.2	77.8	20.9	-38.1	-113.6
1996	-191.0	86.9	22.3	-43.0	-124.8
1997	-198.4	90.2	12.6	-45.1	-140.7
1998	-248.2	82.1	4.3	-53.2	-215.1
1999	-336.2	73.0	11.9	-50.4	-301.7
2000	-445.8	69.0	19.2	-58.8	-416.3
2001	-421.3	59.5	29.7	-64.6	-396.6
2002	-474.5	57.1	25.2	-65.0	-457.2
2003	-540.4	49.4	43.7	-71.8	-519.1
2004	-663.5	58.2	65.1	-88.2	-628.5
2005	-780.7	72.1	68.6	-105.7	-745.8
2006	-835.7	82.4	44.2	-91.5	-800.6
2007	-818.9	122.2	101.5	-115.1	-710.3
2008	-830.1	131.8	147.1	-125.9	-677.1
2009 r	-505.8	126.6	119.7	-122.5	-381.9
2010 r	-645.1	150.4	183.9	-131.1	-442.0
2011 r	-738.4	178.5	227.0	-133.1	-465.9

Source: CRS with data from U.S. Department of Commerce, Bureau of Economic Analysis.

Notes: "r" indicates revised data.

a. On a Balance of Payments basis.

b. Includes travel, transportation, fees and royalties, insurance payments, other government and private services, and investment income.

c. Income receipts on U.S. assets abroad minus income payments on foreign assets in the United States.

d. International transfers of funds, such as private gifts, pension payments, and government grants for which there is no quid pro quo.

e. The trade balance plus the service balance plus investment income balance plus net unilateral transfers, although conceptually equal to the current account balance, may differ slightly as a result of rounding.

Forecasts

According to IHS Global Insight, Inc., a leading U.S. economic forecasting firm, in 2012 the U.S. merchandise (goods) trade deficit is projected to reach about $742 billion on a balance of payments basis. It is then forecasted to decline (become less negative) in 2013 to $687 billion and then increase again in 2014 to $724 billion (see **Table 6** and **Figure 9**). The current account deficit is forecasted to reach $514 billion for 2012, and like the merchandise deficit, it is forecasted to decline (become less negative) to $446 billion in 2013 and then increase to $503 billion in 2014.

Table 6. U.S. Merchandise and Current Account Trade

(in billions of current U.S. dollars)

	2007	2008	2009	2010	2011	2012F	2013F	2014F
Merchandise Trade								
Exports	1,164.0	1,307.5	1,069.7	1,288.9	1,497.4	1,570.4	1,644.9	1,744.0
Imports	1,982.8	2,137.6	1,575.5	1,934.0	2,235.8	2,312.4	2,331.9	2,468.3
Trade Balance	-818.9	-830.1	-505.8	-645.1	-738.4	-742.0	-687.0	-724.3
Service Trade Balance	122.2	131.8	126.6	150.4	178.5	174.8	176.8	182.8
Current Account Balance	-710.3	-677.1	-381.9	-442.0	-465.9	-514.2	-445.5	-503.8

Sources: CRS with data from U.S. Department of Commerce, Bureau of Economic Analysis. Forecasts from IHS Global Insight.

Note: Balance of Payments basis. "F" indicates forecast.

U.S. Trade with Selected Nations

The overall U.S. merchandise trade balance consists of deficits or surpluses with each trading partner. Many economists view the overall figure as more significant than bilateral trade balances, since rising deficits with some nations are often offset by declining deficits or growing surpluses with others. Nonetheless, abnormally large or rapidly increasing trade deficits with particular countries are often viewed as indicators that underlying problems may exist with market access, the competitiveness of particular industries, currency misalignment, or macroeconomic adjustment. **Figure 10** and **Table 7** and **Table 8** show U.S. trade balances with selected nations.

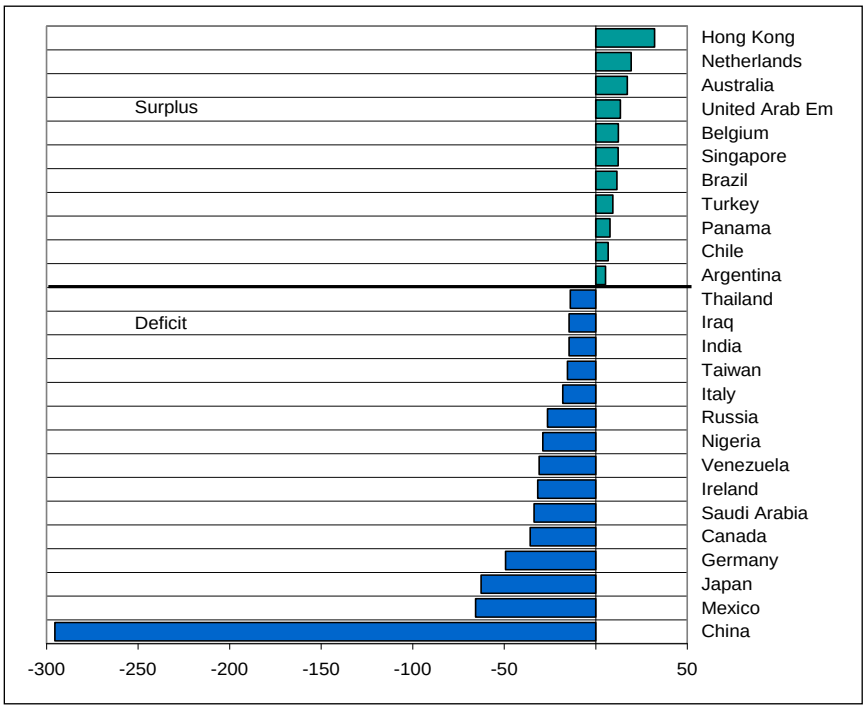
Most of the U.S. trade deficit can be accounted for by trade with China, Mexico, Japan, Germany, Ireland, and Canada. Trade with the oil exporting countries, particularly Venezuela, Nigeria, and Saudi Arabia, also contributes to the U.S. trade deficit. U.S. trade surpluses occur in trade with Hong Kong, the Netherlands, Australia, and the United Arab Emirates.

The U.S. trade deficit with China has soared over the past decade: from $32 billion in 1995 to $100 billion in 2000 and $295 billion in 2011. The negative net balance in trade with China has grown to account for about 40% of the total U.S. trade deficit.[12] The U.S. trade deficit with China exceeded that with Japan for the first time in the year 2000 and now is almost five times as large.

[12] For details and policy discussion, see CRS Report RL33536, *China-U.S. Trade Issues*, by Wayne M. Morrison.

Figure 10. U.S. Merchandise Trade Balances With Selected Nations

(in billions of U.S. dollars, 2011)



Source: CRS with data from the U.S. Department of Commerce, Census Bureau.

Note: Census basis data.

China claims that its trade is less imbalanced than U.S. data indicate. Chinese and U.S. trade data differ primarily because of the treatment of Hong Kong as an *entrepot*. Although Hong Kong reverted back to China in 1997, it is a separate customs area from mainland China, and Beijing counts Hong Kong as the destination for its exports sent there, even though the goods may be transshipped to other markets. For example, China would count a laptop computer that is assembled in Shanghai but shipped through Hong Kong before being exported to the United States as a sale to Hong Kong. By contrast, the United States and many of China's other trading partners count Chinese exports that are transshipped through Hong Kong as products from China, not Hong Kong, including goods that contain Hong Kong components or involve final packaging in Hong Kong. The United States also counts Hong Kong as the destination of U.S. products sent there, even those that are then reexported to China. However, Chinese statistics include many of such reexported goods as U.S. exports to China. So by U.S. figures, U.S. exports to China tend to be understated, while by Chinese figures, Chinese exports to the United States tend to be understated. The net result in 2011, for example, is that the trade surplus with the United States that China reported, $206 billion, was about two-thirds the U.S. deficit with China of $295 billion reported by the United States.[13]

[13] Chinese trade statistics accessed through the International Monetary Fund's Direction of Trade Statistics.

Table 7. U.S. Merchandise Trade Balances with Selected Nations and Groups

(in millions of current U.S. dollars)

Country	2006	2007	2008	2009	2010	2011
World	-827,971	-808,763	-816,199	-503,582	-634,897	-727,392
BRICS	-271,905	-284,646	-295,122	-239,870	-294,152	-325,199
China	-234,101	-258,506	-268,040	-226,877	-273,063	-295,422
Greater China/HK/Macau	-239,808	-258,079	-264,424	-219,274	-260,592	-263,196
OPEC	-121,408	-128,769	-177,699	-69,577	-105,131	-138,580
EU 27	-119,325	-110,243	-95,807	-61,202	-79,611	-99,881
NAFTA	-136,313	-142,964	-143,063	-69,353	-94,977	-98,944
Eurozone 16	-94,199	-89,595	-78,426	-50,555	-65,629	-88,386
Mexico	-64,531	-74,796	-64,722	-47,762	-66,435	-64,487
Japan	-89,722	-84,304	-74,120	-44,669	-60,060	-63,219
Germany	-47,923	-44,744	-42,991	-28,192	-34,268	-49,507
Canada	-71,782	-68,169	-78,342	-21,590	-28,542	-34,457
Saudi Arabia	-24,049	-25,230	-42,263	-11,261	-19,857	-33,647
Venezuela	-28,131	-29,709	-38,814	-18,744	-22,058	-30,913
Nigeria	-25,630	-29,992	-33,966	-15,441	-26,448	-28,942
Russia	-15,128	-12,031	-17,448	-12,868	-19,685	-26,333
Italy	-20,109	-20,878	-20,674	-14,162	-14,286	-17,944
Taiwan	-15,502	-12,449	-11,400	-9,877	-9,803	-15,516
Iraq	-10,055	-9,835	-20,010	-7,491	-10,501	-14,549
South Korea	-13,584	-13,161	-13,400	-10,604	-10,029	-13,247
France	-13,528	-14,877	-15,209	-7,743	-11,386	-12,237
Colombia	-2,557	-876	-1,656	-1,872	-3,590	-8,793
Iran	-71	-28	579	216	114	228
United Kingdom	-8,103	-6,876	-4,988	-1,776	-1,361	4,645
Argentina	797	1,369	1,714	1,679	3,592	5,415
Panama	2,281	3,304	4,508	3,991	5,682	7,859
Brazil	-7,480	-1,472	1,846	6,026	11,467	11,208
Singapore	6,057	7,225	11,969	6,527	11,590	12,110
Netherlands	13,617	14,434	18,597	16,143	15,884	18,899
Hong Kong	9,795	12,876	15,015	17,480	22,274	32,048

Source: CRS with data from U.S. Department of Commerce, Census Bureau and U.S. Bureau of Economic Analysis. *U.S. International Trade in Goods and Services*, FT-900.

Notes: BRICS countries are Brazil, Russia, India, China, and South Africa. This grouping is only based on their commonality as large "emerging economies," and does not imply any common trade policy. Data are on a Census basis.

Table 8 lists the U.S. top deficit trading partners in merchandise trade, on a Census basis, with U.S. export and U.S. import data for additional insight. In 2000, China not only overtook Japan as the top U.S. deficit trading partner, but its continuing growth in annual U.S. trade deficits since 2000 has been notable. In 2011 the U.S. trade deficit with China increased by 8%, with Japan 5%, and fell (became less negative) with Mexico by 3%. These countries were the top U.S. deficit trading partners. They were followed by Germany, Canada, Saudi Arabia, and Ireland.

Table 8. Top 25 U.S. Merchandise Deficit Trading Partners

(in millions of U.S. dollars and percent change, 2011)

Rank	Country	U.S. Balance	% Change	U.S. Exports	% Change	U.S. Imports	% Change
	WORLD	-727,392	14.6	1,480,552.1	15.8	2,206,929.0	15.4
1	China	-295,422	8.2	103,878.6	13.1	399,335.1	9.4
2	Mexico	-64,487	-2.9	197,543.7	20.8	263,105.8	14.4
3	Japan	-63,219	5.3	66,168.3	9.4	128,811.3	6.9
4	Germany	-49,507	44.5	49,134.2	2.0	98,400.5	19.4
5	Canada	-34,457	20.7	280,764.3	12.7	316,510.7	14.0
6	Saudi Arabia	-33,647	69.5	13,819.5	19.6	47,476.3	51.1
7	Ireland	-31,725	19.4	7,607.7	4.6	39,220.3	15.9
8	Venezuela	-30,913	40.1	12,350.6	16.0	43,253.4	32.2
9	Nigeria	-28,942	9.4	4,814.9	18.4	33,738.3	10.6
10	Russia	-26,333	33.8	8,285.5	37.9	34,572.6	34.6
11	Italy	-17,944	25.6	15,991.3	12.5	33,968.4	19.2
12	Taiwan	-15,516	58.3	25,898.4	-0.6	41,327.8	15.3
13	India	-14,652	42.5	21,627.6	12.4	36,167.4	22.5
14	Iraq	-14,549	38.5	2,431.2	48.1	16,955.6	39.6
15	Thailand	-13,931	1.6	10,927.6	21.7	24,826.1	9.4
16	Vietnam	-13,178	18.1	4,340.7	17.0	17,485.2	17.6
17	South Korea	-13,247	32.0	43,505.0	12.0	56,635.5	15.9
18	Algeria	-13,014	-2.3	1,590.3	33.1	14,609.3	0.6
19	France	-12,237	7.5	27,844.3	3.3	39,983.4	4.3
20	Angola	-12,095	13.6	1,500.9	16.0	13,597.5	13.9
21	Indonesia	-11,697	22.7	7,414.9	6.8	19,111.3	16.0
22	Malaysia	-11,530	-2.5	14,217.9	1.0	25,771.8	-0.5
23	Israel	-9,103	-6.0	13,955.9	23.6	23,027.4	9.8
24	Colombia	-8,793	144.9	14,314.6	18.6	23,115.9	47.6
25	Austria	-6,593	49.6	2,886.6	18.9	9,482.6	38.7

Source: CRS with data from U.S. Department of Commerce, Census Bureau and U.S. Bureau of Economic Analysis. *U.S. International Trade in Goods and Services*, FT-900.

Notes: Data are on a Census basis. Exports are valued f.a.s.; imports are valued Customs.

Total merchandise trade, exports plus imports, presents a clearer picture of countries' overall importance in U.S. trade relations than any other flow. As seen in **Table 9** Canada continues to be the United States' largest total merchandise trading partner. Canada was followed by China, Mexico, Japan, Germany, the United Kingdom, South Korea, Brazil, and France. Canada was historically the largest supplier of U.S. imports, until 2007 when China's exports to the United States first surpassed those from Canada. Canada is by far the top purchaser of U.S. exports with Mexico second. In 2007 China surpassed Japan to become the third-largest U.S. export market.

Table 9. Top 15 U.S. Trading Partners Ranked by Total Merchandise Trade

(in millions of U.S. dollars, 2011)

Rank	Country	Total trade	% Share	U.S. Exports	U.S. Imports	U.S. Balance
	World	3,688,256	100.0	1,480,432	2,207,824	-727,392
1	Canada	596,236	16.20	280,890	315,347	-34,457
2	China	503,301	13.65	103,939	399,362	-295,422
3	Mexico	461,242	12.49	198,378	262,864	-64,487
4	Japan	194,631	5.29	65,706	128,925	-63,219
5	Germany	147,818	4.00	49,156	98,663	-49,507
6	United Kingdom	107,117	2.91	55,881	51,236	4,645
7	South Korea	100,076	2.72	43,415	56,661	-13,247
8	Brazil	74,680	2.02	42,944	31,736	11,208
9	France	67,843	1.84	27,803	40,040	-12,237
10	Taiwan	67,293	1.82	25,889	41,405	-15,516
11	Netherlands	65,802	1.80	42,351	23,451	18,899
12	Saudi Arabia	61,306	1.66	13,830	47,476	-33,647
13	India	57,654	1.57	21,501	36,153	-14,652
14	Venezuela	55,600	1.51	12,343	43,256	-30,913
15	Singapore	50,337	1.37	31,223	19,113	12,110

Source: CRS with data from U.S. Department of Commerce, Census Bureau via Global Trade Atlas.

Notes: Total trade = exports + imports. Data are on a Census basis. Exports are valued f.a.s.; imports are valued Customs.

Trade Balances with Free Trade Agreement Nations

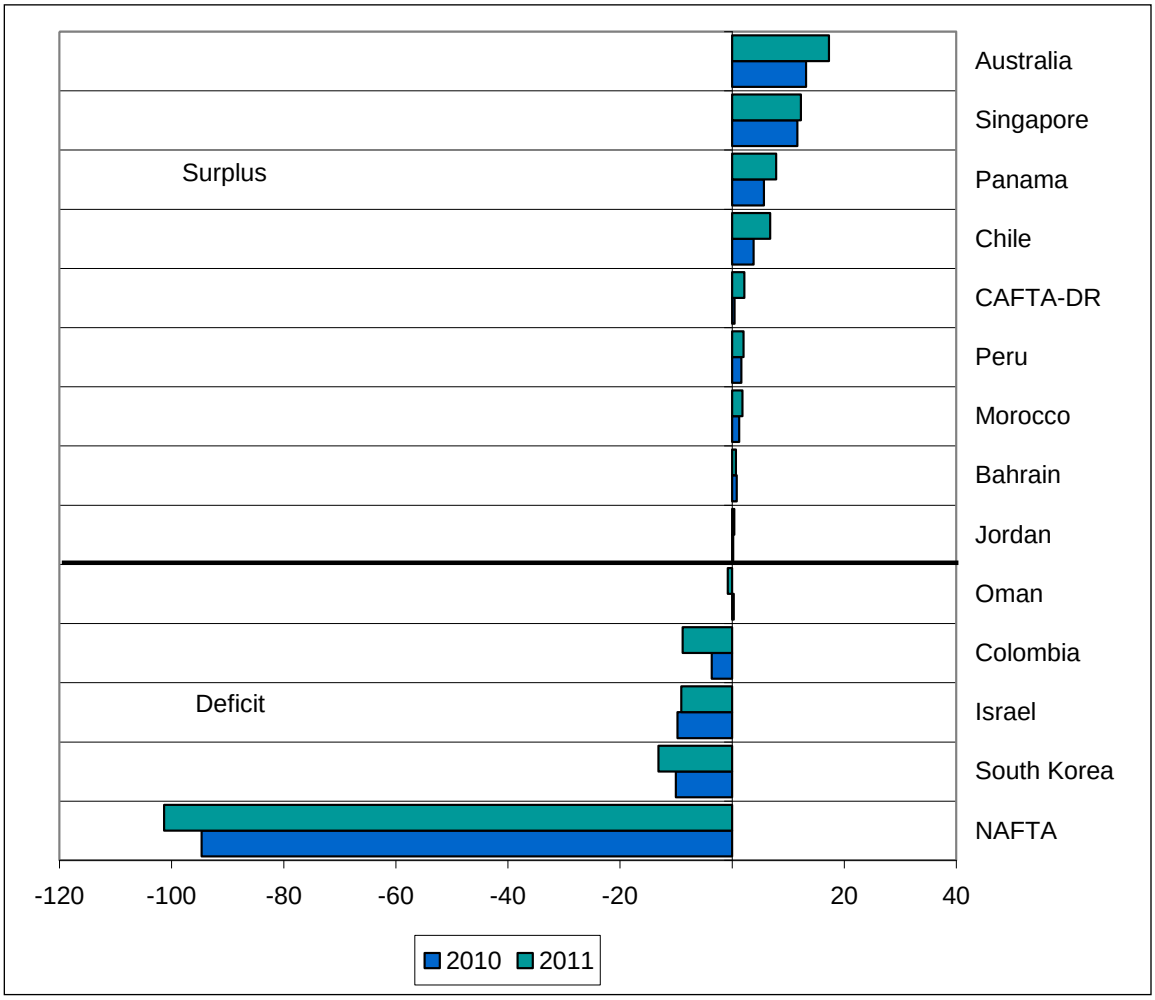
There is a commonly held perception that free trade agreements (FTAs) lead to larger U.S. deficits in trade. The perception seems to be generated mostly by U.S. trade with its immediate neighbors, Canada and Mexico, the U.S. partners in the North American Free Trade Agreement (NAFTA). Research indicates that the United States runs both surpluses and deficits with FTA partners. As shown in **Figure 11**, in both 2010 and 2011, the United States ran trade surpluses with Australia, Singapore, Chile, Peru, Morocco, Bahrain, Jordan, and collectively with the group of countries in the U.S-Central America-Dominican Republic Free Trade Agreement (CAFTA-DR). The United States ran deficits with NAFTA partners and Israel in both 2010 and 2011, and with Oman in 2011. **Figure 11** also shows the U.S. merchandise trade balance with the three new U.S FTA partners, Colombia, Peru, and South Korea. These three FTAs, however, were not in

effect in 2010 or 2011, so the trade balances should not be interpreted as a result of these agreements.

U.S. FTA partners in total represented 35% of U.S. trade in 2011.[14] Due to Canada and Mexico's great importance in overall U.S. trade, NAFTA alone accounts for over 80% of all U.S. trade with FTA partners. Total U.S. goods trade with Canada and Mexico was over $1 trillion in 2011.

Figure 11. U.S. Merchandise Trade Balance with FTA Partners

(in millions of U.S. dollars, 2010-2011)



Source: CRS with data from U.S. Department of Commerce, Census Bureau.

Note: The recently passed U.S. FTAs with Colombia, Panama, and South Korea were not in effect in 2010 or 2011. CAFTA-DR includes Costa Rica, Dominican Republic, El Salvador, Guatemala, Honduras, and Nicaragua. NAFTA includes Canada and Mexico.

[14] This excludes the new FTA partners, Colombia, Panama, and South Korea. Including these countries U.S. FTA partners accounted for 39% of U.S. merchandise trade in 2011.

U.S. Current Account Balances-Selected Nations

Table 10 lists the current account and its components—trade balances on goods, services, income, net unilateral transfers—for selected U.S. trading partners. While trade in services, flows of income from investments, and remittances home by foreign workers are considerably smaller than merchandise flows, as the U.S. economy has become more globalized and service-oriented, these components of the current account have become more important. In many cases, the bilateral current account balances are quite different from bilateral balances on merchandise trade only. For example, the U.S. surplus in services and investment income with Canada turns a $38 billion deficit on goods into a $27 billion surplus on current account.

Table 10. U.S. Current Account Balances With Selected Countries and Groups

(in billions of U.S. dollars, 2011)

Country	Merchandise Trade Balance[a]	Services Balance[b]	Investment Income Balance[c]	Net Unilateral Transfers[d]	Current Account Balance[e]
All Countries	-738.4	178.5	227.0	-133.1	-465.9
Canada	-38.3	27.8	39.7	-2.2	27.1
Mexico	-68.6	11.3	2.6	-14.6	-69.3
Brazil	11.3	14.8	13.8	-0.4	39.4
Asia and Pacific	-400.8	60.2	-13.9	-40.9	-395.3
China	-295.4	15.3	-33.0	-3.0	-315.0
Japan	-64.6	17.5	-32.4	-2.1	-81.7
South Korea	-12.3	5.7	2.9	-1.2	-4.8
European Union	-100.1	40.4	55.2	-2.5	-7.1
Euro Area	-90.9	29.0	52.6	-1.1	-10.4
Germany	-49.8	-5.1	-10.6	1.9	-63.6
United Kingdom	5.2	7.3	2.7	-0.7	14.5
Latin America	-74.5	29.6	78.5	-17.6	16.0
Middle East	-47.1	5.1	8.6	-11.5	-45.0
OPEC	-128.6	14.5	9.6	-4.8	-109.2

Source: CRS with data from U.S. Department of Commerce, Bureau of Economic Analysis, International Transactions Account Data.

a. On a Balance of Payments basis.

b. Includes travel, transportation, fees and royalties, insurance payments, other government and private services, and investment income.

c. Income receipts on U.S. assets abroad minus income payments on foreign assets in the United States.

d. International transfers of funds, such as private gifts, pension payments, and government grants for which there is no *quid pro quo*.

e. The trade balance plus the service balance plus investment income balance plus net unilateral transfers, although equal to the current account balance, may differ as a result of rounding.

Flows of investment income vary largely by country. In 2011, the United States had a large investment income surplus with the European Union and Canada, but large investment income deficits with China and Japan. Since Japan has invested considerable amounts in securities,

equities, and factories in the United States, the United States ran a deficit of $32 billion in investment income with that country in 2011. This more than offset the surplus of $18 billion in trade in services with Japan. As a result, the current account deficit with Japan of $82 billion in 2011 exceeded the bilateral merchandise trade deficit of $65 billion. Likewise with China; the U.S. deficit on investment income of $33 billion far overshadowed the U.S. surplus of $15 billion in services.

The rising deficit with many countries in investment income reflects the accumulating debt of the United States relative to various countries and country groups of the world. Inflows of capital to compensate for the U.S. trade deficit and a low U.S. savings rate help to maintain the value of the dollar, but interest paid and other income that accrues to that capital is often repatriated to the home countries. That means more capital must be invested in the United States or the United States must export more to compensate for the outflows of investment income.

Despite increasing debts, again, in 2011, the United States ran an overall surplus of $227 billion in investment income with the rest of the world. The U.S. surplus in services at $179 billion also continued to grow. The deficit of $133 billion in unilateral transfers reflects the many workers in the United States who remit funds back to their home countries.

Advanced Technology, Transportation, and Energy

High Technology Trade

Table 11 shows U.S. trade in advanced technology products. This includes about 500 commodity classification codes representing products whose technology is from a recognized high technology field such as aerospace, biotechnology, optoelectronics, and information and communications, or that represent the leading technology in a field. The United States long ran a surplus in these products, but that surplus dropped sharply in 2000 and turned into a deficit in 2002. The U.S. trade balance in high technology products was last in surplus in 2001.

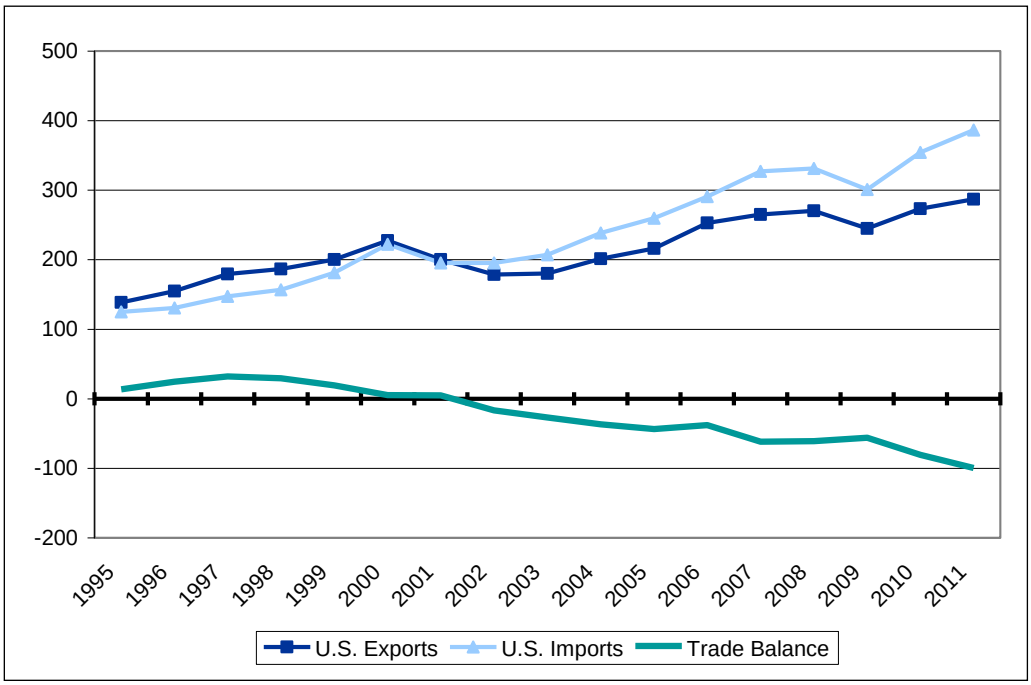
From 2002 to 2005, the United States ran a trade deficit in high technology products which grew roughly $10 billion dollars per year. In 2006 this deficit dropped to $38 billion, but in 2007 resumed its former growth path, jumping to $61.9 billion. In 2008, the U.S. advanced technology deficit stabilized at $61 billion, in 2009 decreased to $56 billion, and in 2010 jumped to $81 billion. The 2011 deficit then grew to $100 billion. This deficit does not necessarily imply that the United States is losing the high technology race, since many of the high technology imports are from U.S. companies or U.S. corporate affiliates, particularly in information and communications and optoelectronics, who assemble the products overseas. However, this growing deficit may warrant closer policy scrutiny.[15]

Figure 12 illustrates both our current deficit in high technology products and our continuing strong exports in these diverse areas.

[15] For information on the activities of multinational corporations in international trade, see CRS Report R40167, *Globalized Supply Chains and U.S. Policy*, by Dick K. Nanto.

Figure 12. U.S. Trade in High Technology Products

(in billions of current U.S. dollars)



Source: CRS with data from U.S. Department of Commerce, Census Bureau and Bureau of Economic Analysis. *U.S. International Trade In Goods and Services.*

Notes: Census basis data.

Table 11. U.S. Trade in High Technology Products

(in billions of current U.S. dollars)

Year	U.S. Exports	U.S. Imports	Trade Balance
1995	138.4	124.8	13.6
1996	154.9	130.4	24.5
1997	179.5	147.3	32.2
1998	186.4	156.8	29.6
1999	200.3	181.2	19.1
2000	227.4	222.1	5.3
2001	200.1	195.3	4.8
2002	178.6	195.2	-16.6
2003	180.2	207.0	-26.8
2004	201.4	238.3	-36.9
2005	216.1	259.7	-43.6
2006	252.7	290.8	-38.1
2007	264.9	326.8	-61.9
2008	270.1	331.2	-61.1

Year	U.S. Exports	U.S. Imports	Trade Balance
2009	244.7	300.9	-56.2
2010	273.3	354.2	-80.9
2011	286.8	386.4	-99.6

Source: CRS with data from U.S. Department of Commerce, Census Bureau and Bureau of Economic Analysis. *U.S. International Trade in Goods and Services*.

Notes: Includes about 500 of some 22,000 commodity classification codes that meet the following criteria: (1) contains products whose technology is from a recognized high technology field (e.g., biotechnology), (2) represent leading edge technology in that field, and (3) constitute a significant part of all items covered in the selected classification code. Data are on a Census basis.

Motor Vehicle Trade[16]

Table 12 and **Figure 13** provide data on U.S. trade in all vehicles, passenger cars, trucks, and parts with the world and major automobile producing nations for 2011. This includes cars assembled in the United States by U.S. affiliates of foreign companies (counted as U.S. exports if shipped abroad), and cars assembled abroad by foreign affiliates of U.S. companies (counted as U.S. imports if shipped into the United States). The United States incurs the largest deficits in total vehicle trade with Japan, Mexico, Germany, and South Korea. Vehicle trade is a very important segment in U.S. trade, with exports valued at $139 billion and imports valued at $256 billion in 2011. This represents an increase of 20% for U.S. exports and 13% for U.S. imports of vehicles in 2011 compared with 2010.

Different trade patterns occur in different vehicle segments. In 2011 the United States had a surplus in automotive trade with several partner nations, though none of the major partners shown in **Table 12**. In 2011, U.S. exports of automobiles totaled $47 billion, an increase of 24% from 2010. Major car export partners in 2011 were Canada, Germany, China, Saudi Arabia, and Mexico. Neither Japan nor South Korea imported large values of U.S. automobiles in 2011. Imports of automobiles in 2011 totaled $123 billion, a 7% increase over 2010 imports from the world. Major source countries for automobiles in 2011 were Canada, Japan, Germany, Mexico, and South Korea. The U.S. trade balance in automobiles improved from a $76 billion deficit in 2010 to a $75 billion deficit in 2011, a 1.4% deficit decrease.[17]

U.S. motor truck exports registered a record $24 billion in sales in 2011, while the United States imported $20 billion in trucks from all nations. These figures represent a 25% increase in export sales and a 24% increase in imports. The major supplier for truck imports was Mexico in 2011. The U.S. truck trade surplus in 2011 was $4.5 billion, a 34% increase in surplus from 2010.

[16] The classification for motor vehicles used here follows that used in the Census Bureau publication *U.S. International Trade in Goods and Services*. It differs somewhat from the 2-digit Harmonized Tariff Schedule (HTS) vehicle category (87) in that it excludes vehicles such as motorcycles and buses. The "parts" categorization, however, is broader than that found in HTS 87.

[17] For information on the automobile industry, see CRS Report RL32883, *U.S. Automotive Industry: Recent History and Issues*, by Stephen Cooney and Brent D. Yacobucci.

Table 12. U.S. Trade in Motor Vehicles, Passenger Cars, Trucks, and Parts by Selected Countries

(in millions of U.S. dollars, 2011)

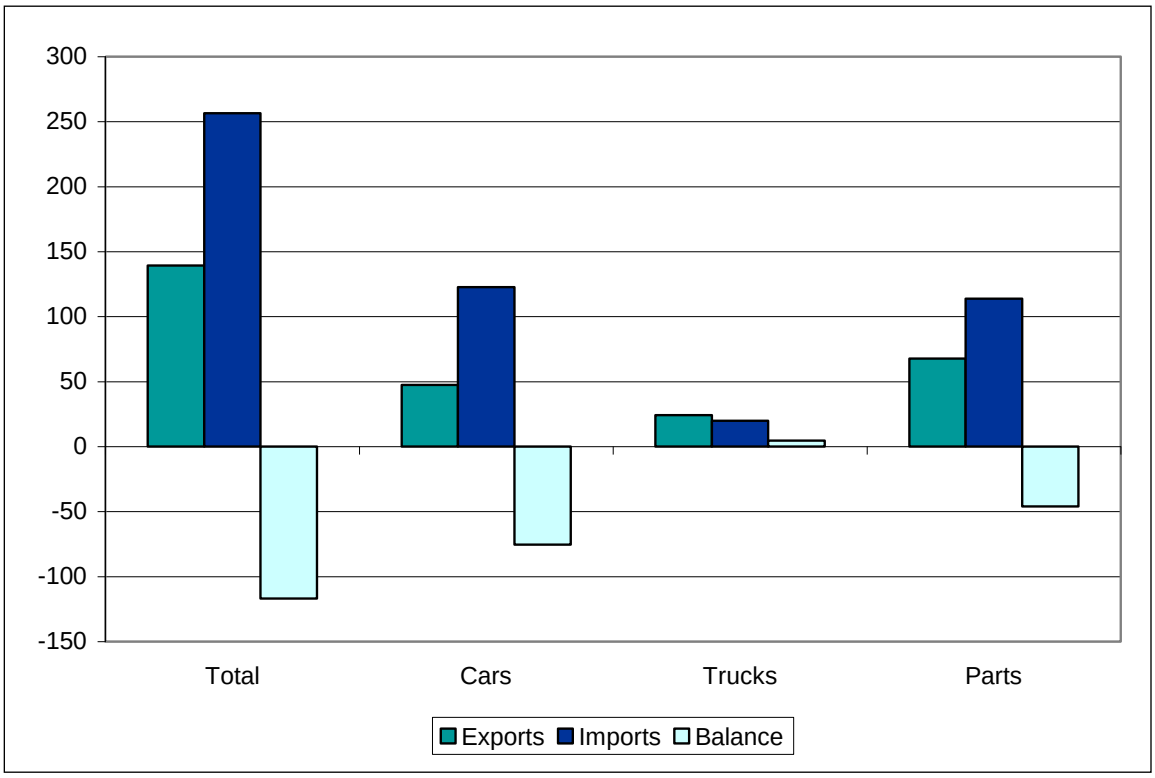
Country	Total	Cars	Trucks	Parts
U.S. Exports				
WORLD	139,378	47,361	24,249	67,769
Canada	55,615	12,275	14,709	28,631
Germany	7,437	5,611	76	1,750
Japan	2,110	626	57	1,428
South Korea	1,284	413	36	834
Mexico	25,876	3,304	864	21,709
U.S. Imports				
WORLD	256,346	122,715	19,770	113,861
Canada	56,296	38,317	1,825	16,154
Germany	28,008	19,640	215	8,152
Japan	45,799	29,977	580	15,242
South Korea	15,429	8,613	2	6,814
Mexico	67,306	15,278	16,165	35,863
U.S. Balance				
WORLD	-116,968	-75,354	4,479	-46,092
Canada	-681	-26,042	12,884	12,477
Germany	-20,571	-14,029	-139	-6,402
Japan	-43,689	-29,351	-523	-13,814
South Korea	-14,145	-8,200	34	-5,980
Mexico	-41,430	-11,974	-15,301	-14,154

Source: CRS with data from U.S. Department of Commerce, Census Bureau and Bureau of Economic Analysis. *U.S. International Trade in Goods and Services*.

Note: Census basis data. The categorization of vehicles and parts is taken from the *U.S. International Trade in Goods and Services* publication. The "total" vehicles column only includes passenger cars, trucks, and parts. The 2-digit Harmonized Tariff Schedule (HTS) vehicles category (87) includes additional vehicles such as buses and motorcycles not included here. The parts category used here, however, includes a broader range of vehicle parts than those included in HTS 87.

Figure 13. U.S. Vehicle Trade by Major Segment

(in billions of U.S. dollars, 2011)



Source: CRS with data from U.S. Department of Commerce, Census Bureau and Bureau of Economic Analysis. *U.S. International Trade in Goods and Services.*

Energy Trade

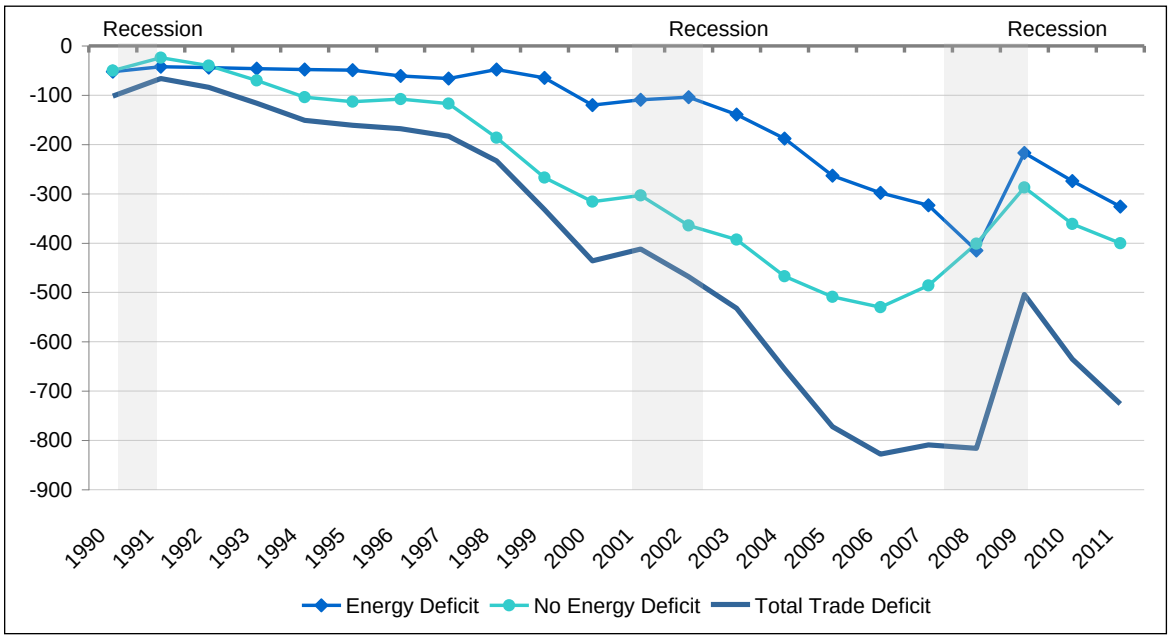
The magnitude of U.S. energy trade relative to other U.S. traded products as well as the environmental, geopolitical, and strategic implications inherent to energy products and the countries that produce them, make U.S. energy trade of continuing concern to Congress. The United States is the world's top energy importer, and at $455 billion, energy is the top U.S. import at the most general commodity level.

Energy products make up such a large portion of U.S. trade, particularly imports, that the overall U.S. trade balance looks quite different when energy products are removed. **Figure 14** illustrates the size and scope of the United States energy balance relative to the overall U.S. trade balance. The solid, dark blue line graphs the actual U.S. merchandise trade deficit with the world in all commodities. The lines labeled "energy" and "no-energy" split that deficit into two components—energy products and everything else. In 2011, the energy trade deficit of $324 billion represented about 45% of the overall U.S. trade deficit of $727 billion.

Energy trade differs considerably by product type. For example, although the United States has an overall deficit in energy trade, it has a small trade surplus in coal. This surplus offsets the deficits in other energy products, such that the U.S. trade deficit in crude oil ($335 billion) is actually larger than the overall energy trade deficit ($324 billion). **Table 13** shows U.S. exports, imports, and trade balance for the primary forms of energy.

Figure 14. U.S. Trade Balances: Total Trade, Energy Trade, and No-Energy Trade

(in billions of U.S. dollars)



Source: CRS with data from U.S. Department of Commerce, Census Bureau, and the National Bureau of Economic Research.

Notes: Census basis data. Energy is broadly defined using Harmonized Tariff System classification HTS 27.

Table 13. U.S. Energy Trade with the World, 2009-2011

	Total in Millions of U.S. Dollars			% Change
Description	**2009**	**2010**	**2011**	**2011/2010**
Total Energy Exports	55,059.2	81,522.5	130,137.3	59.6
Total Energy Imports	271,798.0	355,056.4	453,966.6	27.9
Total Energy Balance	-216,738.8	-273,533.8	-323,829.3	18.4
Crude Oil Exports	1,767.6	1,772.1	1,699.7	-4.1
Crude Oil Imports	194,603.4	260,105.4	336,687.5	29.4
Crude Oil Balance	-192,835.8	-258,333.3	-334,987.8	29.7
Refined Exports	36,456.5	53,948.8	91,526.5	69.7
Refined Imports	52,593.1	67,419.8	92,293.3	36.9
Refined Balance	-16,136.6	-13,471.0	-766.7	-94.3
Nat. Gas Exports	5,006.3	7,751.7	10,272.1	32.5
Nat. Gas Imports	18,874.0	21,131.2	17,857.8	-15.5
Nat. Gas Balance	-13,867.7	-13,379.5	-7,585.7	-43.3
Electricity Exports	561.9	626.6	374.6	-40.2
Electricity Imports	2,074.7	2,071.5	2,015.4	-2.7
Electricity Balance	-1,512.8	-1,444.9	-1,640.8	13.6
Coal Exports	6,018.5	9,836.5	15,967.4	62.3

Description	Total in Millions of U.S. Dollars			% Change
	2009	2010	2011	2011/2010
Coal Imports	1,431.0	1,376.4	1,338.6	-2.7
Coal Balance	4,587.5	8,460.2	14,628.8	72.9

Sources: CRS with data from U.S. Department of Commerce, Census Bureau via World Trade Atlas.

Note: Census basis data. Harmonized Tariff Schedule (HTS) 27 classification for total energy, HTS 2709 for crude oil, HTS 2710 for refined product, HTS 2711 for natural gas, HTS 2716 for electricity, and HTS 2701 for coal.

Though the energy deficit often dominates policy discussions, both energy imports and exports are important in overall U.S. trade. The major sectors in U.S. exports of energy are refined petroleum products, coal, and natural gas. U.S. exports of refined petroleum products were in fact the top overall U.S. export in 2011 (using 4-digit HTS classification), replacing civilian aircraft, engines, and parts, the top export category in 2010. Major markets for U.S. refined petroleum products are Mexico, the Netherlands, Canada, Singapore, and Chile. In 2011, refined petroleum products constituted 70% of total U.S. energy exports, while coal represented 12% and natural gas 8%. These sectors grew at 70% for refined petroleum products, 62% for coal, and 33% for natural gas.

Crude oil, however, remains the major driver of U.S. energy trade. It accounted for 74% of U.S. energy imports in 2011 and at $335 billion, the U.S. trade deficit in crude oil accounted for 46% of the overall U.S. trade deficit. Crude oil import values dropped from $354 billion in 2008 to $195 billion in 2009, then rebounded to $260 billion in 2010 and $337 billion in 2011.

Table 14 shows the source countries for U.S. crude oil imports. Canada surpassed Saudi Arabia as the primary crude oil supplier to the United States in 2006. Although Canada is the major single U.S. supplier, roughly half of U.S. crude oil imports continue to come from members of the Organization of the Petroleum Exporting Countries (OPEC), with Saudi Arabia, Venezuela, and Nigeria the predominant suppliers. Imports from Iraq are recovering with $17 billion in 2011.[18] In **Table 14**, U.S. crude oil imports from OPEC nations are shown in bold.

Table 14. U.S. Imports of Crude Oil from Top 20 Countries, 2009-2011

(value in millions of U.S. dollars; quantity in millions of barrels (bbl))

Source Country	2009		2010		2011	
	US $	BBL	US $	BBL	US $	BBL
World	194,603	3,428	260,105	3,481	336,795	3,374
OPEC	**99,701**	**1,740**	**135,876**	**1,784**	**170,423**	**1,628**
Canada	37,067	681	49,439	695	68,106	789
Saudi Arabia	**21,002**	**373**	**29,974**	**395**	**45,839**	**437**
Mexico	22,206	386	29,590	411	39,777	404
Venezuela	**24,619**	**445**	**29,023**	**406**	**37,478**	**386**
Nigeria	**18,288**	**282**	**29,069**	**362**	**31,660**	**281**
Iraq	**9,128**	**165**	**12,126**	**160**	**16,930**	**162**

[18] For policy discussion, see CRS Report RS22204, *U.S. Trade Deficit and the Impact of Changing Oil Prices*, by James K. Jackson.

Source Country	2009		2010		2011	
	US $	BBL	US $	BBL	US $	BBL
Colombia	5,153	90	8,833	120	14,647	147
Angola	**9,017**	**163**	**11,514**	**147**	**12,929**	**117**
Brazil	5,801	106	7,259	95	9,272	87
Algeria	**7,878**	**133**	**10,856**	**137**	**9,078**	**83**
Russia	4,884	82	7,480	96	8,596	78
Kuwait	**3,654**	**65**	**5,152**	**69**	**7,585**	**72**
Ecuador	**3,438**	**66**	**5,578**	**75**	**7,297**	**74**
Gabon	1,139	21	2,124	27	4,440	41
Chad	1,839	34	1,775	25	3,080	31
Norway	1,239	21	924	11	2,535	22
Azerbaijan	1,955	31	1,983	25	2,416	21
Congo	2,971	48	3,127	40	2,071	19
United Kingdom	2,406	40	3,402	43	1,781	16
Oman	767	14	379	5	1,646	15

Source: CRS with data from U.S. Department of Commerce, Census Bureau via World Trade Atlas.

Notes: Census basis data. Countries in **bold** are members of **OPEC**. Countries and groups are ranked by 2011 values.

International Trade Statistics Web Resources

Listed below are a list of resources available online for international trade statistics.

The single most authoritative, comprehensive, and frequently-published trade data statistical source is the monthly "FT900." Its actual title is *U.S. International Trade in Goods and Services*. The FT-900 is issued monthly by the U.S. Census Bureau and the U.S. Bureau of Economic Analysis of the U.S. Department of Commerce. It provides information on U.S. trade in goods and services (balance, exports, and imports) in specific commodities and end-use categories and with selected countries. The report also provides information on trade in advanced technology, petroleum, and motor vehicle products. The report is available from the U.S. Bureau of Economic Analysis at http://www.bea.gov/newsreleases/rels.htm. Under "International" click on latest news release.

Information on trade in specific commodities, with particular regions, or for different time periods also can be obtained from the U.S. International Trade Commission at http://dataweb.usitc.gov/ (registration is free but required).

Historical and current U.S. exchange rate data are available from the Federal Reserve Bank of St. Louis at http://research.stlouisfed.org/fred2/.

Information on foreign country holdings of U.S. Treasury securities are available at http://www.treasury.gov/tic/.

Author Information

Brock R. Williams
Analyst in International Trade and Finance

J. Michael Donnelly
Information Research Specialist

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