

Economics Group

Special Commentary

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Can America Double Its Exports in Five Years?

"So tonight, we set a new goal: We will double our exports over the next five years..."

- President Barack Obama, State of the Union Address, January 27, 2010

Executive Summary

One year ago, President Obama set a goal for the United States to double its exports over the course of five years. With the recent release of annual trade data for 2010, we have the opportunity to assess how the country is doing in meeting the president's goal. If the benchmark is real exports of both goods and services, then the 11.8 percent growth rate that the country achieved in 2010 is a bit short of the 15 percent per annum growth rate that is needed to double exports in five years.

If services are excluded and the benchmark is confined to real exports of goods only, then the country is on pace, at least after one year, to reach Obama's goal. Cyclically-sensitive goods, such as capital goods, industrial supplies and materials and autos account for three-quarters of American exports, and continued growth in the rest of the world bodes well for U.S. export growth. However, export growth was helped last year by the strong cyclical recovery in the rest of the world. Although we expect the global expansion will remain intact, we project that global GDP growth will be somewhat slower over the next two years than in was in 2010. The historical record and our statistical analysis show that maintaining 15 percent growth in real exports of goods for the next four years may be difficult. Doubling exports in five years may not be impossible, but it may be rather difficult to achieve.

Is It Realistic to Double Exports in Five Years?

During his State of the Union address in January 2010, President Obama set a goal for the United States to double its exports over the following five years. He followed up that challenge in his address in 2011, when he called for acceleration in American innovation, which would certainly help to boost exports. One year later, how is the country doing in meeting the goal the president laid out in January 2010?

We first need to define more explicitly what is meant by doubling exports. Does the math pertain to the value or volume of exports? And do exports include goods only or goods as well as services? Because rising prices help to lift values, it should be easier to double values rather than volumes over a five-year period. However, most economic policies at present are focused on raising employment, which tends to be more highly correlated with real variables. Therefore, we think it is appropriate to focus on export volumes rather than values, although government officials would likely declare victory if the nominal value of exports were to double over a five-year period. In addition, we think services need to be included in the definition of exports because the United States is a service-producing economy and services account for one-third of total U.S. exports.

To double over a five-year period, exports would need to grow about 15 percent per annum. Unfortunately, history shows that Obama's goal may be difficult to achieve. There has only been one period in the past eight decades in which exports doubled over a five-year period. In the

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Together we'll go far



The country is not on pace to double real exports of goods and services in five years.

However, real exports of goods grew 15 percent in 2010.

immediate aftermath of World War II, exports rose more than threefold (Figure 1). However, there were some special factors that contributed to the extraordinary growth in exports in the immediate post-World War II period. First, the war depressed global trade, making rapid growth from a low base relatively easy to achieve. Second, the Marshall Plan helped to finance foreign purchases of U.S. goods. Neither of these special factors applies today. The best the U.S. economy has been able to achieve in recent history is 70 percent growth in the late 1980s. In the most recent expansion, exports of real goods and services rose only 48 percent between 2003 and 2008.

So where are we after one year? Unfortunately, the country is not on pace to double real exports of goods and services in five years. Preliminary data show that real exports of goods and services rose 11.8 percent in 2010. Although a strong showing, last year's growth rate is below the 15 percent annualized rate that is needed to double exports in five years. Real exports of goods were up nearly 15 percent in 2010, but the 5.8 percent growth rate in real exports of services held back growth in overall exports last year. If total exports continue to grow at last year's pace of 11.8 percent then they will rise by 75 percent between 2009 and 2014, well short of the 100 percent increase that is needed to reach Obama's goal. To make up for last year's shortfall, real exports of goods and services would need to grow 17 percent per annum over the next four years, which history shows is not very likely.

So let's lower the bar somewhat and look at goods exports only. As noted above, real exports of goods grew nearly 15 percent in 2010, which is exactly the pace needed to double exports in five years (Figure 2). Moreover, every major category of exports posted solid growth rates in 2010, especially auto exports, which were up 36 percent relative to the previous year. Forty percent growth clearly will not be sustained, but could total real exports of goods continue to grow at the more modest, but more achievable, rate of 15 percent? To see if a doubling of real exports of goods over a five-year period is even remotely possible we proceed by drilling down a bit into the structure of U.S. trade.

Figure 1

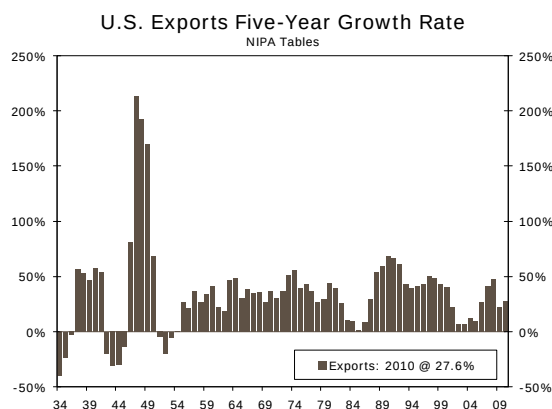
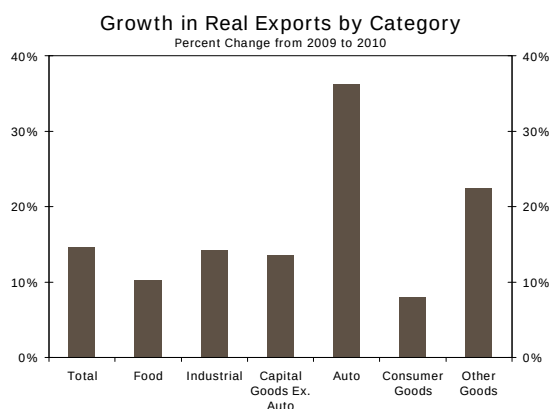


Figure 2



Source: U.S. Department of Commerce and Wells Fargo Securities, LLC

Three-quarters of U.S. goods exports are cyclically sensitive.

Cyclically-Sensitive Goods and Developing Economies

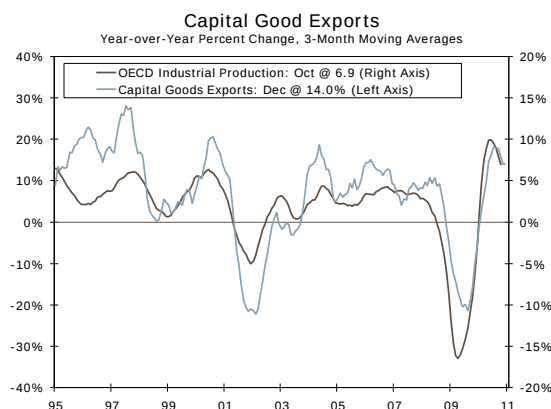
Let's start with the type of goods that America exports. Capital goods account for roughly 40 percent of U.S. exports, followed by industrial supplies and materials at more than 25 percent and auto exports at 10 percent (Figure 3). The hallmark of these three categories of goods, which together account for three-fourths of U.S. goods exports, is that they tend to be cyclically sensitive. For example, American exporters of capital goods do very well when global growth is expanding and business fixed investment spending abroad is growing (Figure 4). Conversely, American exports of capital goods drop sharply when the global business cycle turns down. Exports of industrial supplies and materials and automobiles are also highly cyclical. Therefore,

the outlook for real exports of American goods will depend, at least in part, on the global economic outlook.

Figure 3



Figure 4



Source: Department of Commerce, OECD and Wells Fargo Securities, LLC

In that regard, the developed economies of the world have historically been the most important trading partners of the United States and they remain so today. Thirteen of the top 20 export markets for the United States are considered “advanced economies” by the International Monetary Fund. Although we forecast that the recoveries that are in place in most advanced economies will continue in 2011, we also project that the pace of expansion will remain relatively muted. For example, we forecast that real GDP in the Eurozone, to which the United States sends 15 percent of its exports, will grow less than two percent in 2011.¹ Therefore, U.S. export growth to most advanced economies likely will remain relatively constrained over the next year or so.

However, developing economies, which generally have experienced a secular improvement in growth prospects over the past two decades, are becoming increasingly important export markets for American producers. Between 1995 and 2008, American exports of goods to advanced economies rose 85 percent. However, exports to developing economies more than trebled over that period. In 1995, developing economies accounted for only 30 percent of American exports. Today, they take in more than 40 percent (Figure 5). If, as we project, economic growth in the developing world remains strong for the foreseeable future, then American export growth should remain solid as well.² For example, the value of American exports to China grew more than 30 percent in 2010 to \$92 billion, making China the third largest destination for U.S. exports. Although another 30 percent year of growth in 2011 is not likely, American exports to China probably will continue to grow strongly for the foreseeable future.

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As we discuss in the appendix, export growth also depends inversely on the real value of the U.S. dollar versus the currencies of America’s trading partners. That is, U.S. export growth tends to strengthen, everything else equal, when the real value of the dollar weakens. The real value of the U.S. dollar versus major currencies is roughly unchanged on balance over the past 12 months, but it has declined about five percent versus a weighted-average basket of emerging market currencies (Figure 6). Although Wells Fargo’s currency strategy team forecasts that the U.S. dollar will strengthen somewhat against most major currencies over the next year or two, the team also projects that the greenback will continue to weaken versus the currencies of many developing countries. Therefore, modest dollar depreciation against these currencies should help to boost exports to increasingly important export markets for the United States. In addition, higher

¹ See our “Monthly Economic Outlook,” which is posted at www.wellsfargo.com/economics, for our macroeconomic forecasts.

² As shown in our “Monthly Economic Outlook,” we project that real GDP in the developing world will grow about 6 percent in both 2011 and 2012.

inflation in most developing economies relative to the United States should also improve the price competitiveness of American goods via real exchange rate depreciation.

Figure 5

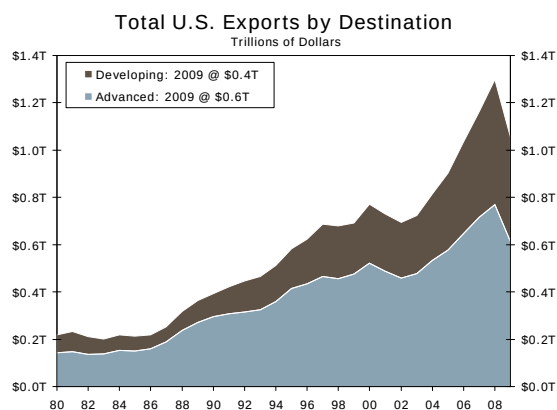
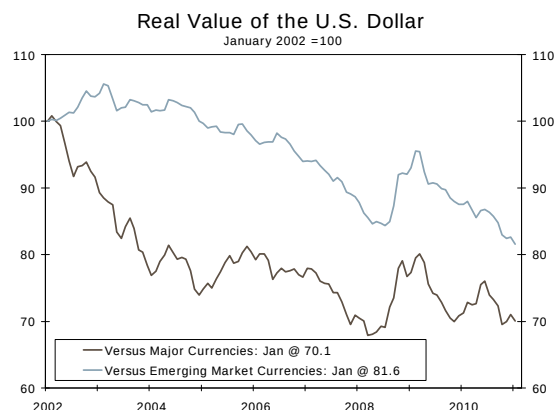


Figure 6



Source: International Monetary Fund, Federal Reserve Board and Wells Fargo Securities, LLC

Can Government Policies Help?

Before a joint session of Congress in 1961 President Kennedy proclaimed “that this nation should commit itself to achieving the goal, before this decade is out, of landing a man on the moon and returning him safely to the earth.” To achieve this goal, the country poured resources into the space program. Five decades later, President Obama has stated that the current generation faces its own “Sputnik moment.” Obama has called for a wave of innovation that presumably would also help to achieve the goal of doubling U.S. exports over a five-year period. Other than cheerleading, what levers does the president have to achieve this goal?

Unfortunately for Obama, most of the policies that he potentially has at his disposal are long-term in nature and probably would do little to boost exports in the near term. Even if Congress reforms the corporate tax code and approves the president’s agenda of higher infrastructure and education spending, which clearly is not foreordained in the Republican-controlled House of Representatives, these policy changes would do little to significantly affect exports over the next few years.

U.S. exports to South Korea totaled nearly \$40 billion in 2010, and the recently concluded Korea-U.S. Free Trade Agreement should eventually help to boost American exports to that important trading partner. However, neither the U.S. Congress nor the Korean National Assembly has ratified the agreement yet, and it could be a few years before it is fully in force. Concluding the long-delayed free trade agreements with Colombia and Panama would help American exports, at least on the margin, but neither country is currently a top 20 export destination for the United States. The Doha Round of multilateral trade talks, which aims to reduce tariffs and non-tariff barriers on trade in services and agricultural goods, remains stalled. Therefore, significant acceleration in American exports of services and agricultural goods, which probably would occur if other countries lowered their trade barriers on these goods and services, may need to wait a few more years.

Therefore, factors that are outside of the president’s control, namely, rates of economic growth in foreign economies and the value of the dollar vis-à-vis other currencies will largely determine whether his goal is achieved. The econometric results that are shown in the appendix suggest that the total volume of U.S. exports will grow about 4 percent per annum if OECD industrial production expands over the next few years at the 2.8 percent annual pace that characterized the 2003-2007 period. OECD industrial production in 2011 may actually grow faster than 2.8 percent and developing countries, which are becoming more important export destinations for American producers, probably will grow well in excess of 2.8 percent this year. Therefore, the forecast that

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is implied by the econometric results in the appendix may represent a lower bound for U.S. export growth in 2011.

However, we believe another year of 15 percent export growth may be difficult to achieve in 2011. The world was emerging from its deepest downturn in decades last year, so a strong increase from a low base was to be expected. Indeed, the 15 percent growth rate in U.S. exports that was achieved in 2010 simply made up for the 15 percent decline that occurred in 2009. Now that the global economy is transitioning from recovery to expansion, some deceleration in industrial production is to be expected. Overall exports could potentially grow 15 percent per annum if the value of the dollar were to decline significantly. If OECD industrial production grows 6 percent per annum, then the dollar would need to depreciate at an annual rate of 25 percent in real terms to achieve 15 percent export growth. However, it took six years (2002-2008) for the greenback to fall 25 percent in real terms. In other words, the combination of foreign economic growth and real exchange rate depreciation that are needed to achieve 15 percent export growth on a sustained basis look implausible, at least over the next few years.

Conclusions

Can America double its exports in five years? If the dollar value of exports is the benchmark, then the goal may not be especially challenging. A bout of global inflation would lift the prices of U.S. exports, helping to push up their dollar value. Although government officials may declare “victory” regarding the export goal, an increase in prices alone would do little to create new jobs, which seems to be the ultimate aim of most economic policies at present. Therefore, we think it is more relevant to focus on real exports of goods and services, which tend to be more highly correlated with employment growth, than on the dollar value of exports.

If history is a useful guide, then America may find it challenging to double its real exports of goods and services over a five-year period. Over the past eight decades the United States has managed the feat only once: in the years immediately after the Second World War when some special circumstance prevailed. Indeed, only one year after President Obama set a goal for America to double its exports, the country has already fallen off the pace. In order to double over a five-year period, real exports of goods and services would need to grow roughly 15 percent per annum. In 2010, real exports of goods and services rose nearly 12 percent, a solid number to be sure but not quite strong enough. Relatively slow growth in the services component held back the growth rate in overall exports of goods and services.

If services are excluded and the analysis confined to real exports of goods only, then the good news is that exports rose about 15 percent in 2010, which is exactly the pace needed to double exports over a five-year period. U. S. exports are concentrated in cyclically-sensitive goods such as capital goods, industrial supplies and materials and autos, and the sharp bounce-back in global industrial production helped to boost real export growth. In addition, the modest real depreciation of the U.S. dollar that occurred in 2010 also contributed to the acceleration in American exports last year.

The bad news, however, is that the global backdrop will probably not be quite as favorable in 2011 as it was last year. The global economy was recovering from its deepest recession in decades in 2010, so rapid export growth from a relatively low base was not a particularly impressive achievement. We believe the global expansion will remain intact for the foreseeable future, which should lead to further increases in the cyclically-sensitive goods that America exports. However, the five percent global GDP growth rate that was achieved in 2010 probably will not be repeated in 2011 or the following year. Therefore, the dollar would probably need to depreciate sharply to offset the effects of slower global growth on U.S. real exports of goods. Although the goal of doubling exports in a five-year period may not be impossible, history and our statistical analysis suggest that it may be difficult to achieve.

Appendix

Economic theory posits that demand for a good is a function of income and price. Everything else equal, an increase in income will lead to an increase in the demand for the good while an increase in price will lead to a decrease in quantity demanded. In that regard, theory holds that real exports are a function of real economic activity (i.e., real income) in foreign economies and the country's real exchange rate, which measures the price competitiveness of a country's goods vis-à-vis other countries.³ Because data on U.S. real exports by sector only start in 1994, we needed to use either monthly or quarterly data to insure that we had enough observations to run reasonable regressions. However, data on global economic activity (i.e., real GDP) are not readily available on a monthly or quarterly basis. Therefore, we used industrial production (IP) in the OECD economies as a proxy for global economic activity. Using quarterly data from 1994 to 2010 we estimated the following equation

$$\Delta \log x_t = \alpha + \beta_1 \Delta \log \text{OECD}_t + \beta_2 \Delta \log r_t + \varepsilon_t$$

where x_t = U.S. exports

OECD_t = industrial production in the OECD countries

r_t = real exchange rate defined as measured by the Federal Reserve's "Broad" real exchange rate index

and α , β_1 , and β_2 are parameters to be estimated. Regression results are shown in the table below with t-statistics in parentheses.

Table A1

	Total Exports	Capital Goods	Industrial Supplies & Materials	Autos	Consumer Goods	Food Products
α	0.01 (2.73)	0.01 (2.25)	0.00 (1.53)	-0.01 (-1.00)	0.01 (3.97)	0.01 (0.91)
$\Delta \log \text{OECD}_t$	1.41 (10.34)	1.75 (8.41)	1.13 (5.79)	3.23 (8.33)	0.87 (5.53)	--
$\Delta \log \text{OECD}_{t-1}$	--	--	--	--	--	0.38 (1.00)
$\Delta \log r_t$	-0.24 (-2.48)	--	-0.38 (-2.73)	--	-0.24 (-2.17)	-0.74 (-2.74)
$\Delta \log r_{t-1}$	--	--	--	-0.64 (-2.28)	--	--
$\Delta \log r_{t-3}$	--	-0.40 (-2.66)	--	--	--	--
R²	0.69	0.55	0.47	0.64	0.43	0.12
DW	1.73	1.52	2.33	2.15	1.69	2.08

The results in the first column show that growth in OECD IP has a highly significant effect on growth in total U.S. real exports. A one percentage point increase in OECD IP growth is associated with a 1.41 percentage point increase in real export growth, everything else equal. In addition, a one percentage point increase in the rate of appreciation of the real trade-weighted value of the dollar is associated with a 0.24 percentage point decline in the rate of real export growth.

³ For example, see Catherine Mann, Is the U.S. Trade Deficit Sustainable?, Institute for International Economics, 1999

The results from the other columns generally confirm the cyclically-sensitive nature of American exports of capital goods, industrial supplies and materials and autos that, as noted in the text, account for three-quarters of total U.S. exports. That is, in each case a one percentage point increase in the rate of OECD IP growth will lead to an increase in export growth that exceeds one percentage point. In contrast, American exports of food products show little cyclicalities. Not only is the coefficient on OECD IP growth in the food products equation only 0.38, but it is not significantly different from zero.

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