

U.S. Exports and Foreign Economic Growth: Which Regions Matter Most?

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U.S. export growth, which relies primarily on foreign demand, has played an important role in the U.S. economic recovery. When foreign growth increases, foreign demand strengthens, boosting the growth of U.S. exports and raising their contribution to U.S. GDP. Some regions' growth rates, however, have greater impact than others' on U.S. exports.

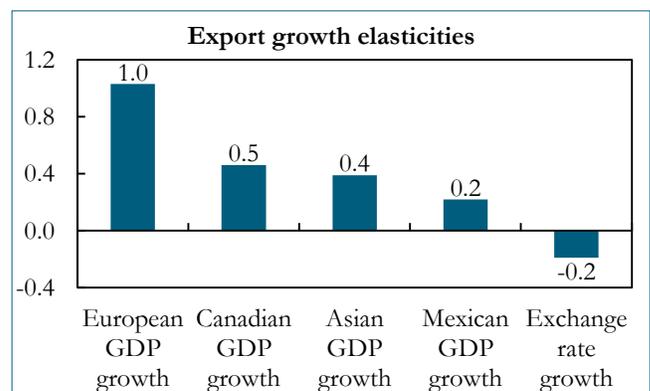
Economic growth is generally expected to pick up in many regions across the world in 2014. With the improving outlook, U.S. exports are likely to contribute positively to U.S. real GDP growth in the year ahead. However, recent downward revisions to some commonly-followed projections for world growth, such as those produced by the International Monetary Fund,¹ prompt questions about the size of the contribution. Using statistical methods to analyze historical data, we update our previous analysis² to assess how revisions to the world growth projections may affect the outlook for U.S. exports.

Although U.S. growth is expected to improve next year, the downward revisions in overseas growth forecasts may be associated, based on our analysis, with a 0.2-percentage-point reduction in the year-over-year U.S. growth rate in 2014, due to a smaller contribution from exports than had been previously expected. For example, suppose real exports were previously forecast to contribute 0.7 percentage point to U.S. growth in 2014, matching their average annual contribution over the past two years. Based on the recent downward revisions to world growth forecasts, their contribution would now be reduced to 0.5 percentage point. Effectively, the contribution from exports to real GDP growth, though still projected to increase next year compared with this year, is likely to increase less than was previously anticipated.

The chart below shows the magnitude of changes in U.S. exports related to shifts in growth across different regions in the world. The greatest changes in U.S. export growth are associated with changes in European economic growth. For example, if the year-over-year European growth rate were expected to increase by 1.0 percentage point next year, then our analysis indicates the growth rate of U.S. exports would also be expected to increase by 1.0 percentage point. An increase of the same size in Canadian growth is associated with only a 0.5-percentage-point increase in U.S. export growth. The increases in U.S. export growth associated with 1.0-percentage-point increases in Asian and Mexican growth are yet smaller, at 0.4 and 0.2 percentage point.

The chart also shows export growth is related to foreign exchange rates. In a given period, for each percentage point that the dollar appreciates against a trade-weighted basket of foreign currencies, U.S. export growth is reduced by 0.2 percentage point, holding constant the economic growth rates in foreign regions.

Additional factors, including not only a region's economic size but also its share of U.S. exports, can help



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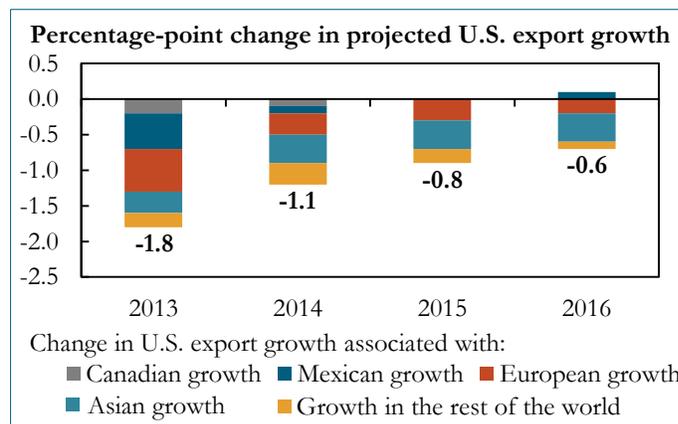
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explain the relative importance of different regions to U.S. export growth. For example, if the size of a foreign region's economy were the only important factor, one would expect U.S. export growth to have a much stronger relationship with Asian growth than with Canadian growth, since Asian GDP is nearly 10 times the level of Canadian GDP. However, Asia and Canada account for similar shares of U.S. exports, helping explain their similar relationship with U.S. export growth.

The results of this analysis have distinct implications regarding the prospects both for the United States' real export growth and, in turn, for its real GDP growth. In the past several years, the IMF has consistently revised downward its estimates for growth prospects across different regions. For example, compared with the IMF's forecast a year ago in October 2012, its current October 2013 forecast for average, annual, global growth over the 2013-2016 period has been lowered by 0.6 percentage point. Average growth rates projected for Europe and Asia, two important U.S. export markets, were revised down by 0.4 percentage point and 0.8 percentage point, respectively. Downward revisions for Mexican growth over the same period averaged 0.5 percentage point, with the most substantial downward revision occurring in 2013, while expected growth in Canada from 2013 to 2016 was little changed.

The chart to the right shows the projected changes in U.S. export growth associated with these downward revisions of foreign growth forecasts. U.S. export growth is projected to be 1.8 percentage points lower in 2013 and 1.1 percentage points lower in 2014 than previously estimated. The expected reduction diminishes somewhat to 0.8 percentage point in 2015 and 0.6 percentage point in 2016.

Most of the reduction in projected U.S. export growth can be attributed to lower growth expectations in Europe and Asia, while the share of the reduction attributable to Canada and Mexico is much smaller. A 0.9-percentage-point reduction in U.S. export growth is attributable to downwardly-revised growth in Europe and Asia combined, in 2013. The reduction attributable to Mexico's growth revision that year is also substantial, at 0.5 percentage point, but growth reductions attributable to Mexico dissipate beyond 2014. Because revisions to Canadian growth estimates are generally small over the forecast horizon, the associated changes in predicted U.S. export growth are also quite small.



Thus although U.S. export growth and its contribution to GDP growth are expected to increase next year and beyond, the downward revisions in foreign growth forecasts suggest the increase may be less than previously anticipated. Because U.S. exports account for nearly 13.5 percent of total U.S. GDP, weaker export growth is expected to reduce the contribution of exports to real GDP growth by 0.2 percentage point in 2014.

¹ *World Economic Outlook, International Monetary Fund, October 2013.*

² For more, see Nie, Jun and Lisa Taylor, 2013. "Economic Growth in Foreign Regions and U.S. Export Growth," *Federal Reserve Bank of Kansas City, Economic Review, second quarter.* The views expressed are those of the authors and do not necessarily reflect the positions of the Federal Reserve Bank of Kansas City or the Federal Reserve System.