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Economics Group

Special Commentary

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Will Dollar Strength Scuttle U.S. Exports?

Executive Summary

In the first of a series of reports, we analyze the effect that the appreciation of the U.S. dollar, which is up 15 percent on a trade-weighted basis since last summer, is likely to have on American exports. For some insights, we examine the 1995-2000 period, when the price competiveness of U.S. exports of goods and services was eroded by the significant appreciation of the dollar that occurred during those years. Despite the 20 percent rise in the real trade-weighted value of the dollar, U.S. exports rose 20 percent during that period because global economic growth remained solid. As long as growth in the rest of the world remains positive in coming quarters, which we expect, then growth in American exports likely will remain positive as well.

We do not mean to casually dismiss the effects of dollar appreciation. Dollar strength may not completely scuttle U.S. exports, but our statistical analysis confirms that export growth will be slower relative to a situation in which the value of dollar remains unchanged. In addition, global trade appears to be growing less rapidly today than it did in previous decades. Therefore, dollar appreciation could be less benign for export growth today than it apparently was during the 1990s. Finally, there could be some indirect effects of dollar appreciation on the U.S. economy via weaker capex spending by exporters and less foreign direct investment. We intend to address these topics in future reports.

Foreign Economic Growth Matters More Than Exchange Rates

The U.S. dollar has experienced an impressive rally in recent months. Since last July, the greenback has climbed about 15 percent against the British pound, 20 percent versus the Japanese yen and 30 percent vis-à-vis the euro. On a trade-weighted basis, the dollar has risen about 15 percent over the past nine months (Figure 1).[1] Although the dollar's appreciation will be a boon to American tourists who plan to travel abroad this summer, it could also be a bane to American businesses that export goods and services. Will the greenback's newfound vigor kill off U.S. export growth?

The dollar has risen about 15 percent on a trade-weighted basis over the past nine months.

The experience of the late 1990s may be instructive. Between April 1995 and August 1998 the dollar shot up 80 percent against the Japanese yen. The euro did not yet exist, but the greenback rose nearly a similar amount vis-à-vis the German mark between April 1995 and late 2000. On a broader basis, the real trade-weighted value of the dollar trended up 20 percent between early 1995 and late 2000. Because the real exchange rate is adjusted for price changes, it measures changes in the overall price competitiveness between a country and its trading partners and, therefore, should have a higher correlation with export growth than simple nominal exchange rates.

[1] Although the dollar has registered double-digit gains against many major currencies, it is up only 1 percent on balance versus the Chinese renminbi since early July.

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U.S. exports continued to grow in the late 1990s despite dollar appreciation.

Despite this 20 percent erosion in the price competitiveness of U.S. goods and services between early 1995 and late 2000, real exports of U.S. goods and services rose more than 40 percent during that period (Figure 2). The reason that U.S. exports continued to trend higher in the late 1990s was that foreign economic growth remained positive. As Figure 2 also shows, global industrial production (IP) rose 20 percent between early 1995 and late 2000. Indeed, it was not until 2001, when global IP started to contract, that U.S. exports of goods and services started to decline on a sustained basis. Once global IP stabilized and started to move higher in late 2002/early 2003, U.S. export growth turned positive again.

Figure 1

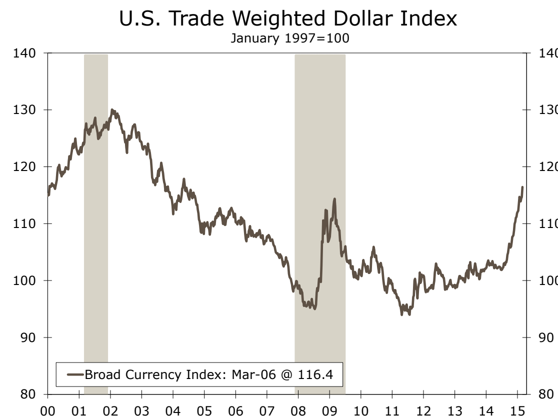
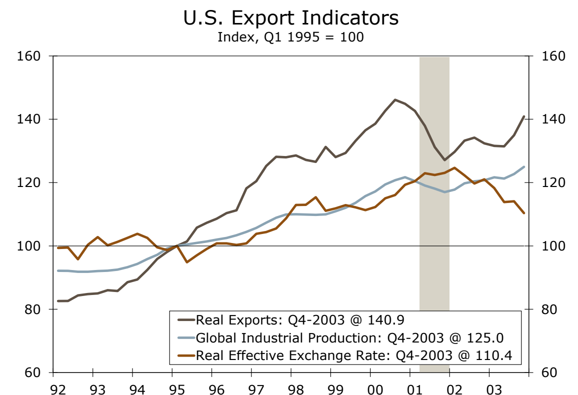


Figure 2



Source: Federal Reserve Board, IHS Global Insight and Wells Fargo Securities, LLC

Foreign economic growth is more important to export growth than changes in the value of the dollar.

Therefore, it seems that the key to U.S. export growth lies more in the state of global economic growth rather than in changes in the value of the dollar. This finding has long been known to researchers who study export growth. Statistical analysis—not only ours but the analysis of countless other researchers—shows that there is an inverse correlation between the real value of the dollar and growth in U.S. exports.[2] That is, real exchange rate appreciation, everything else equal, is associated with slower growth in U.S. exports, and vice versa. There also is a direct correlation between economic growth in the rest of the world, everything else equal, and U.S. export growth (i.e., stronger growth in the rest of the world is associated with stronger growth in American exports).

However, growth in the rest of the world has a much larger influence on U.S. export growth than changes in the real value of the dollar. As long as growth in the rest of the world remains positive in coming quarters, which we expect, then growth in American exports likely will remain positive as well, although not as strong as a situation in which the value of the dollar were unchanged.

Could Dollar Strength Hurt Some Individual Sectors?

Although the overall rate of U.S. export growth may not be overly sensitive to changes in the value of the dollar, are there certain products or industries that may more affected by exchange rate appreciation than others? That is, could the overall export performance that is shown in Figure 2 mask some declines in individual export sectors that occurred due to dollar appreciation?

[2] Our statistical analysis shows that between Q1-1992 and Q4-2002, a 1.0 percentage point increase in global industrial production growth was associated with a 1.8 percentage point increase in U.S. export growth, everything else equal. There is more of a lagged effect on export growth associated with exchange rate changes. A 1.0 percentage point appreciation in the real trade-weighted value of the dollar is associated with a 0.4 percentage point reduction in U.S. export growth that occurs over four quarters, everything else equal. In other words, the effect that foreign economic growth has on U.S. export growth during that period was more than four times as powerful as changes in the value of the dollar were.

The historical record may again offer some useful insights. Figure 3 focuses again on the 1992-2002 period, and it decomposes overall U.S. exports into four components: industrial supplies and materials, capital goods, automotive vehicles and parts, and consumer goods. The component of capital goods includes computers, semiconductors and telecommunications equipment, and exports of these products more than doubled between 1995 and 2000 because the tech industry was booming during that period. Super-charged growth in capital goods exports helped to lift overall exports by more than 40 percent between 1995 and 2000. However, each of the other three export components grew between 20 percent and 40 percent from early 1995 to late 2000, despite the 20 percent rise in the real trade-weighted value of the dollar.

Individual components of exports tend to exhibit the same general characteristic as overall exports.

The main takeaway from Figure 4 is that individual components of exports tend to exhibit the same general characteristic as overall exports. That is, foreign economic growth appears to be more important to export growth than exchange rate changes, and the visual conclusion from Figure 4 was confirmed by the statistical analysis we performed on the four individual components of exports. Unfortunately, our empirical findings were not robust enough to make general conclusions regarding the relative sensitivity of the four individual export components to exchange rate changes.

Does the analysis up to this point mean that the value of the dollar is not important for U.S. export growth? Not necessarily. As we pointed out in a report last year, a structural change appears to have occurred in global trade patterns in recent years.[3] As shown in Figure 4, American exports generally grew significantly in excess of global IP in the years leading up to the global financial crisis. Since 2009, however, U.S. exports have grown more or less in line with global IP. If this pattern continues, U.S. exports will continue to get less lift from foreign economic growth than in the past. Therefore, dollar appreciation could have more of a slowing effect on American export growth in the next year or so than it appears to have had in the 1990s.

Figure 3

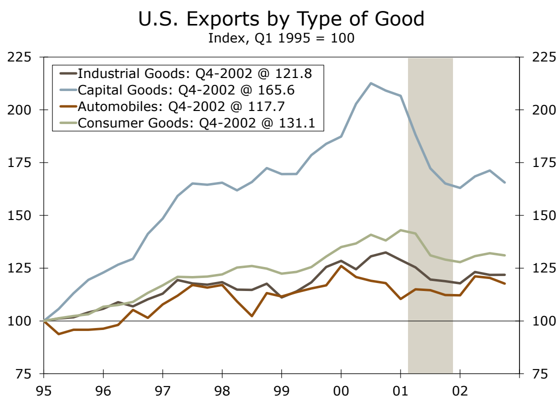
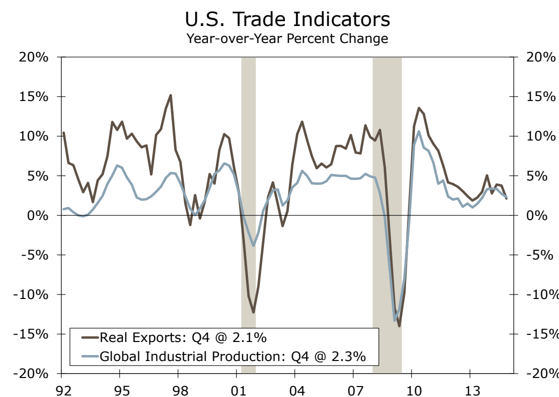


Figure 4



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

There also could be some indirect effects on U.S. economic growth from dollar appreciation. If export growth in certain industries slows down, even if at the margin, managers in those industries may be less inclined to invest to expand capacity and/or hire additional workers. Therefore, growth in business fixed investment spending could be slower than otherwise. In addition, dollar appreciation makes it more expensive in foreign-currency terms for foreign businesses to invest in the United States. Consequently, foreign direct investment in the United States could be weaker than otherwise. We intend to address these topics in future reports.

[3] **See *"Why is Global Trade Growing So Slowly?"* (August 25, 2014), which is available upon request.**

Conclusion

In our view, handwringing about the fallout of dollar appreciation on U.S. export growth is largely overblown. That is not to say that the effects on dollar appreciation on export growth are entirely meaningless. Exchange rate depreciation reduces export growth, everything else equal, and vice versa. However, the historical record shows, and countless researchers have confirmed, that foreign economic growth tends to have a more powerful effect on U.S. export growth than do changes in the value of the dollar. American exports will continue to grow as long as foreign economic growth remains positive, as we expect in coming quarters.

We acknowledge that there may be some indirect effects of dollar appreciation on overall U.S. economic growth that operate via weaker capex spending and foreign direct investment. We intend to address these issues in future reports.

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