

Special Commentary

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Slow Foreign Growth: Should America Worry?

Executive Summary

The economic expansion that has been underway in the United States over the past five years is increasingly becoming self-sustaining. However, some major foreign economies are not faring as well at present. The Eurozone economy has essentially stalled, and the rate of economic growth in China continues to slow. Could a slowdown in the rest of the world have significant knock-on effects on the U.S. economy?

Although there is a high degree of correlation between growth in global industrial production (IP) and growth in U.S. IP, services, which largely are produced and consumed domestically, account for the vast majority of value added in the American economy. Thus, it likely would require a very pronounced decline in foreign economic activity to produce a mild recession in the United States. In other words, the economic expansion that has been underway in the United States likely will not be tripped up by foreign economic growth in the foreseeable future.

Strong Linkages in Industrial Production Across Countries

There have been numerous indications lately of slow economic growth in some foreign economies. For example, the Eurozone economy stalled in the second quarter and monthly data indicate that momentum remained weak in the third quarter. In China, growth in IP slumped to only 6.9 percent in August, the slowest year-over-year rate of IP growth in China since the depths of the global financial crisis. Although real GDP in the United States shot up 4.6 percent in Q2-2014, which was the strongest annualized rate of growth in nearly three years, can the U.S. economy continue to enjoy robust growth if the rest of the world is struggling? Due to the high correlation between growth in global IP and growth in U.S. IP (Figure 1), is it time to start fretting about the U.S. economic outlook?¹

Exports are the channel through which the high correlation between global IP growth and U.S. IP growth that is evident in Figure 1 arises. Exports of goods are equivalent to about 27 percent of the value of manufacturing shipments at present, so fluctuations in foreign economic growth are quickly transmitted to export growth and ultimately to growth in U.S. IP.²

However, the manufacturing sector is a relatively small part of the U.S. economy, accounting for only 12 percent of value added. Services are the overwhelming largest sector in the American economy, accounting for two-thirds of all the value added created in the economy, and only a small proportion of services are exported.³ Perhaps the high correlation between global IP growth and U.S. IP growth that is shown in Figure 1 overstates the overall sensitivity of the U.S. economy

Can the U.S. economy continue to enjoy robust growth if the rest of the world is struggling?

The vast majority of services are not exported.

¹ Between January 1992 and July 2014 the correlation coefficient between the year-over-year growth rates in global IP and U.S. IP was 0.82. The global IP aggregate that is shown in Figure 1 includes U.S. IP, because we are unable to isolate the non-U.S. part of the index due to the way it is constructed. Therefore, the correlation coefficient between U.S. IP growth and the non-U.S. portion of global IP growth likely would be a bit less than 0.82.

² The correlation coefficient between year-over-year growth in global IP and year-over-year growth in real U.S. exports of goods is 0.87.

³ Exports of services totaled \$687 billion in 2013, which was equivalent to only 6 percent of the value added that was created in the service sector during that year.



to growth in the rest of the world. Indeed, Figure 2 shows that U.S. real GDP growth and global IP growth do have some degree of co-movement, but that the former is not as volatile as the latter.⁴

Figure 1

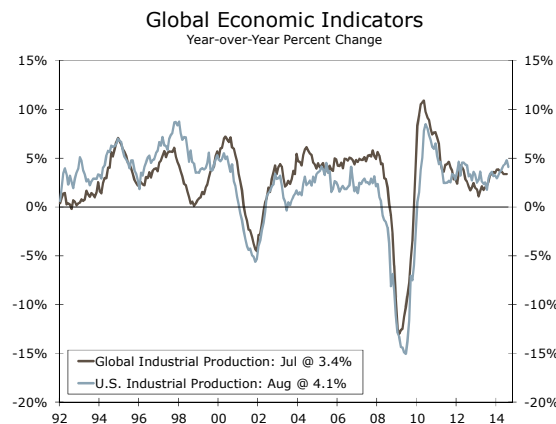
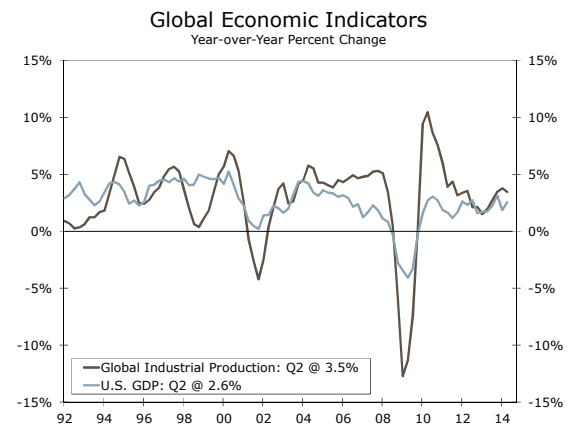


Figure 2



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

Exposure of U.S. Economy to the Rest of the World Is Relatively Small

To measure the effect that economic activity in the rest of the world may have on the U.S. economy, we turn to a database that has been jointly compiled by the Organisation of Economic Cooperation and Development (OECD) and the World Trade Organization (WTO). Among other things, the database measures the effect that final domestic demand (FDD), which is final sales to consumers, businesses and the government, in foreign countries has on value added in an individual economy. As we explained in a report last year, the value of a country's exports may not be the best way to measure the true effect that the rest of the world has on an individual economy.⁵ Namely, a country's exports of raw materials and intermediate inputs may end up being re-exported to that same economy in the form of finished products. Therefore, one wants to capture the final destination of a country's exports, which is best measured by FDD, when attempting to measure the effect that the rest of the world has on an individual economy.

Figure 3 shows that FDD in China accounted for only 0.5 percent of value added in the U.S. economy in 2009.⁶ American exports to China in that year totaled about \$70 billion, which was equivalent to about 0.5 percent of U.S. GDP. Thus, the value added that was embedded in exports to China represented roughly 0.5 percent of total value added in the U.S. economy in 2009. American exports to China grew to more than \$120 billion last year, so the value added to the U.S. economy (as a share of total value added) that is generated by Chinese FDD likely has edged up since 2009. In general, however, the direct exposure of the U.S. economy to the Chinese economic activity appears to be rather small. The United States has a bit more exposure to other NAFTA economies (Canada and Mexico) and the Eurozone, which each accounted for roughly 1.5 percent of total value added in the American economy in 2009. In aggregate, the rest of the world accounted for 8.3 percent of total U.S. value added in 2009.

Figure 4 places American exposure to the rest of the world in context by comparing it to the respective foreign exposures of some other major economies in the world. The chart shows that the Japanese economy is a bit more exposed to the rest of the world than the U.S. economy as FDD in foreign countries accounts for 10 percent of value added in Japan. About 17 percent of value added in China is accounted for by FDD in other countries. The ratios for Canada and Germany each exceed 20 percent, which is not totally surprising given the extensive trade ties that

The rest of the world accounted for only 8.3 percent of total U.S. value added in 2009.

⁴ Between Q1-1992 and Q2-2014 the correlation coefficient between year-over-year growth in global IP and year-over-year growth in U.S. real GDP was 0.66.

⁵ See "How Much Does Slower Chinese Growth Matter?" (July 10, 2013), which is available upon request.

⁶ As we explained in the report that is referenced in footnote #5, the OECD and the WTO do not calculate statistics for every country on an annual basis due to the complexity of the database.

the former has with the United States and the latter has with other economies in western Europe. The bottom line is that the U.S. economy is not very exposed to the rest of the world, at least not relative to the standards of other major economies.

Figure 3

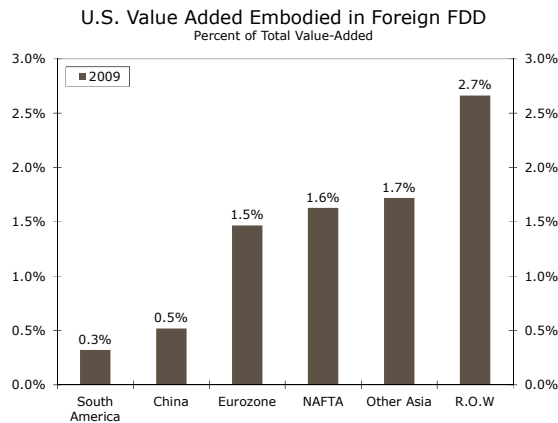
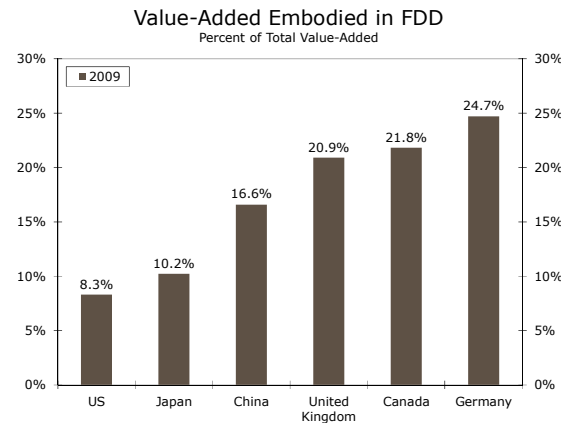


Figure 4



Source: Organisation for Economic Cooperation and Development and Wells Fargo Securities, LLC

Could the Rest of the World Pull the U.S. Economy Under?

Just because the United States has less trade exposure than some of the other major economies of the world does not necessarily mean that it would not be adversely affected by slower economic growth, if not an outright downturn, in the rest of the world. Figure 4 simply implies that other major economies likely would suffer even more than the United States from a generalized global slowdown/downturn.

To benchmark how much the American economy could be affected by a global slowdown, we used our U.S. macro model to run two simulations.⁷ In the first scenario, we assumed that global IP over the next six quarters would follow the path that is shown by the light blue bars in Figure 5. Under this hypothetical path, global IP would decline 9 percent over the next four quarters before starting to bounce back in the last two quarters of the period. The severity of this decline would make it deeper than the 2000-2001 downturn but not as catastrophic as the 2008-2009 nosedive in global IP. The sequential growth rate in U.S. real GDP would slow from the 4.6 percent rate that was registered in Q2-2014 to roughly 1.5 percent per quarter over the next four quarters. In other words, the sharp decline in global IP would cause U.S. real GDP growth to slow, but it would not push the U.S. economy back into recession.

In an effort to corroborate the simulation results shown in Figure 5, we “shocked” U.S. exports directly in our model with the assumed path shown by the light blue bars in Figure 6. Under this assumption real exports of goods and services would decline about 10 percent in aggregate over the next four quarters. Our model suggests that overall real GDP growth would slow to a range of 1.5 percent–2.0 percent over the next four quarters but that it would not turn negative.

The modest effects exerted on U.S. GDP growth by these sizeable declines in global IP and real exports of goods and services may seem implausible at first blush. We acknowledge that our simple model may not adequately capture some negative feedback channels on U.S. real GDP growth from a deep downturn in global IP/American exports. For example, the U.S. stock market likely would experience some selling pressure by a marked decline in foreign economic activity that could cause growth in consumer spending to slow via negative wealth effects. A tightening in financial market conditions via an increase in corporate bond yields relative to yields on U.S. Treasury securities could also cause U.S. growth to slow more than our simple model suggests.

The U.S. economy is not very exposed to the rest of the world, at least not on a relative basis.

The U.S. economy likely would not fall back into recession unless foreign economic activity were to fall very sharply.

⁷ We would like to thank Azhar Iqbal for running the simulations.

Figure 5

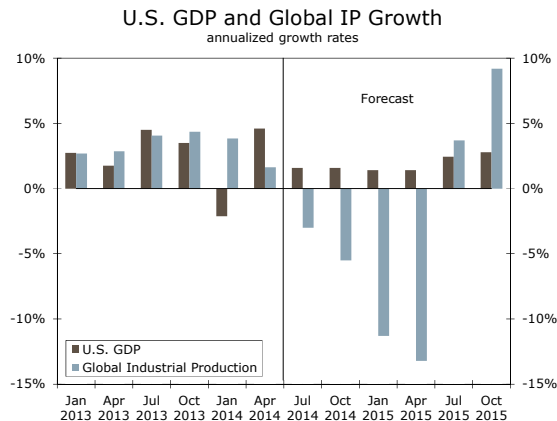
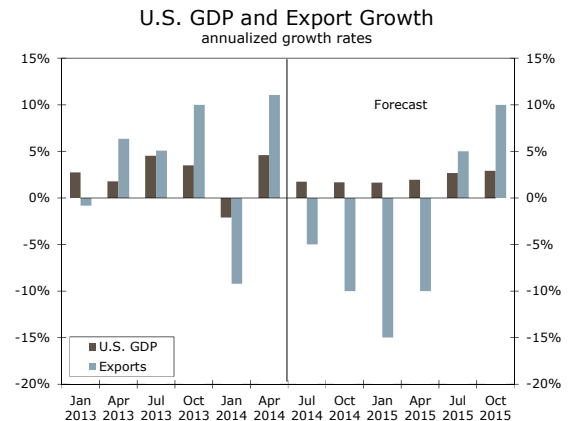


Figure 6



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

The Asian economic crisis had very little effect on the U.S. economy in the late 1990s.

That said, a slowdown in foreign economic activity—even a modest downturn abroad—likely would not trigger an outright U.S. recession. As noted above, the U.S. economy today is largely service based, and American economic exposure to the rest of the world is just not that extensive. Furthermore, the relative insulation of the U.S. economy to slow foreign growth is not without precedent. During the 1997-1998 Asian economic crisis, global IP growth slowed sharply and U.S. IP decelerated (Figure 1). The S&P 500 index fell 20 percent between July 1998 and October 1998, and corporate bond spreads widened. As shown in Figure 2, however, overall real GDP growth in the United States was not affected at all during that period.

Conclusion

The economic expansion that has been underway in the United States over the past five years is increasingly becoming self-sustaining. However, some major foreign economies are not faring as well at present. The anemic recovery in the Eurozone is fragile, and the rate of economic growth in China has slowed over the past few years with further deceleration over the next year or two appearing likely. Moreover, the probability of a “hard landing” in China that is caused by a sharp decline in property prices is not insignificant.⁸ Could the United States continue to enjoy solid economic growth if some major foreign economies were to slow sharply or even experience a downturn?

The U.S. economy is by no means insulated from the rest of the world, so U.S. exports would be adversely affected if economic growth in the rest of the world were to slow sharply. That said, the U.S. economy is not extensively exposed to the rest of the world, at least when compared to the foreign exposure that some of America’s major trading partners have. Final domestic demand in foreign economies account for less than 10 percent of the value added in the U.S. economy, so it likely would require a significant downturn in foreign economic activity to produce another recession in the United States. If economic activity in the rest of the world does not fall sharply, then the economic expansion that has been underway in the United States likely will continue for the foreseeable future.

⁸ For further reading see “Implications of a House Price Collapse in China” (August 28, 2014) and “Is Real Estate the Achilles’ Heel of China” (September 15, 2014). Both reports are available upon request.

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