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Special Commentary

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How Much Does Slower Chinese Growth Matter?

Executive Summary
Some investors are all aflutter over signs of slower economic growth in China. But would a modest slowdown in the trend rate of Chinese economic growth have a significant detrimental effect on global GDP growth? After all, China is a much larger economy today than it was even a few years ago. Does it still need to grow at the same rate as it once did to have the same effect on global GDP growth?

Today, China is nearly as important to the global economy, in terms of the effect of its final domestic demand on global value-added, as Japan was in 1995. Although the rate of Chinese economic growth surely will be slower over the next few years than it has been over the past two decades, it likely will not suffer the stagnation the Japanese economy has experienced since the mid-1990s.

In order to have the same effect on global value-added as the United States, China needs to grow roughly 2.5 times as fast as the U.S. economy. Specifically, the 7.5 percent real GDP growth rate that the Chinese government is targeting for the next few years would give China the same global economic impact as an American economy that is growing at 3 percent per annum. Unless the Chinese economy completely crashes and burns, which we do not expect in the foreseeable future, the growth rates that it likely will register over the next few years will likely be strong enough to make a meaningful contribution to global GDP growth.

Is Slower Economic Growth in China a "Bad Thing"?
The rate of economic growth in China has clearly slowed over the past two years, and it is becoming increasingly evident that the days of supercharged double-digit Chinese real GDP growth are probably a thing of the past. Indeed, we forecast that Chinese real GDP will grow at a sub-8 percent rate for the next year or so (Figure 1). Consequently, financial markets have been all aflutter this year due to these evident signs of slower economic growth in China. Whereas the S&P 500 has risen about 15 percent on balance since the beginning of the year, the Shanghai Composite index is off more than 10 percent over the same period. Because China accounts for significant proportions of global demand for some commodities, prices of these commodities have trended lower in recent months. In addition, "commodity-based" currencies, such as the Australian dollar, the Canadian dollar and the South African rand have also lost value this year.[1]

The rate of economic growth in China has clearly slowed over the past two years.

A "hard landing," in which the Chinese economy slows sharply or even contracts, obviously would have negative implications not only for China but also for the global economy. But would a modest slowdown in the trend rate of Chinese economic growth, as most analysts project, have a significant detrimental effect on global GDP growth? Would it be a "bad thing" if the Chinese economy grows, say, 7 percent over the next few years rather than 10 percent?

[1] **The CRB commodity price index has dropped nearly 5 percent this year. The Canadian dollar is down about 5 percent against the U.S. dollar since the beginning of the year, and the Australian dollar and the South African rand have each depreciated by more than 10 percent vis-à-vis the greenback.**

This report is available on wellsfargo.com/economics and on Bloomberg WFRE.

Figure 1

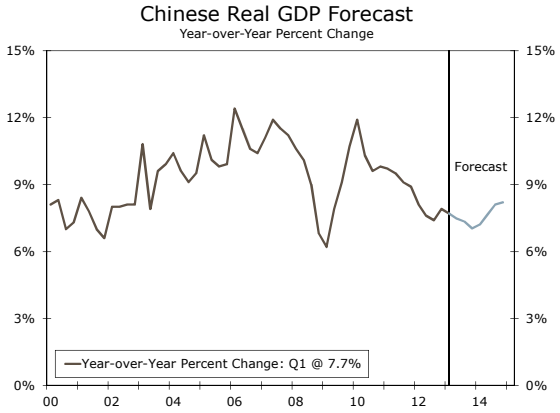
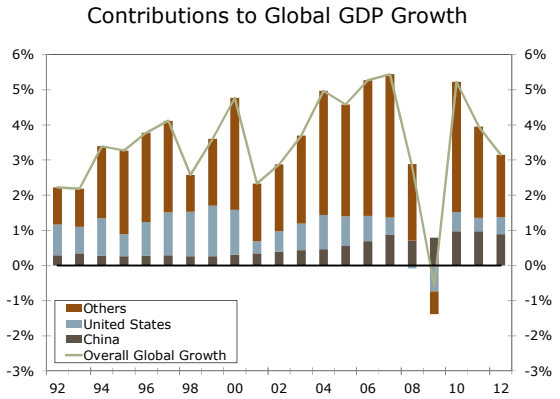


Figure 2



Source: Bloomberg LP, International Monetary Fund and Wells Fargo Securities, LLC

China Is An Important Export Market For Some Regions

China accounted for less than one-tenth of the 3.1 percent per annum growth rate that global GDP averaged during the 1990s.

Chinese real GDP growth did indeed average a supercharged rate of 10 percent per annum during the 1990s. However, because the level of real GDP in China had started from such a low base, the size of the Chinese economy had grown to only 3 percent of the global total by 1999. Consequently, China accounted for less than one-tenth of the 3.1 percent per annum growth rate that global GDP averaged during the 1990s (Figure 2). Although the U.S. economy grew at a much slower rate—U.S. real GDP growth averaged 3.2 percent per annum during the 1990s—its much larger size gave it a significantly greater contribution (about one-quarter) to the average global growth rate during that period.

Because China continued to grow more rapidly than most other economies during the past decade, the country's contribution to total global GDP growth trended higher. Last year, the Chinese economy grew "only" 7.8 percent, which was its slowest rate of economic growth since 1999. However, China's share of overall global GDP had risen to more than 10 percent in 2012, giving it much more "pull" in the world than it had a decade earlier. Indeed, China contributed more than one full percentage point to the 3.2 percent global GDP growth rate in 2012, significantly higher than the 0.4 percentage point contribution from the United States last year.

Looking at these simple contributions to global GDP growth is really not very instructive, however. Even if China were a completely isolated economy, it would still make a positive contribution to global economic growth via the simple inclusion of its GDP in the overall global aggregate. In this extreme case, however, the Chinese economy would have no economic effect on other economies due to its isolation. China is obviously not economically isolated, and it is very much intermeshed in the global economy via the country's trading relationships with the rest of the world. One way to measure China's economic effect on other countries is via the exports those countries send to China as a percent of their respective GDPs. Figure 3 shows how these ratios have changed over time for North America, the European Union (EU), Latin American and Asia.[2]

There are a number of interesting observations in Figure 3. First, the ratios have risen for each region over the past 15 years. That is, each region shown in Figure 3 has seen its export exposure to China rise over time, which is intuitively appealing in light of the sharp increase in the size of the Chinese economy over the past few decades that we have already described. Second, North America and the European Union have the smallest exports-to-GDP ratios among the four regions shown in Figure 3, whereas Latin America and Asia (especially the latter) have the highest

[2] We follow convention and define North America as Canada, Mexico and the United States. We define "Asia" as Australia, Brunei Darussalam, Cambodia, Hong Kong, India, Indonesia, Japan, South Korea, Malaysia, New Zealand, the Philippines, Singapore, Taiwan, Thailand and Vietnam. Data limitations confine our analysis for "Latin America" to only Argentina, Brazil and Chile. However, those three countries account for nearly 70 percent of GDP in Central and South America and the Caribbean.

ratios at present. The relatively high ratios for these two regions should not be surprising in light of the significant increase in Chinese purchases of Latin American commodities and the extensive intra-Asian supply chains that have been assembled over the past few decades.

Figure 3

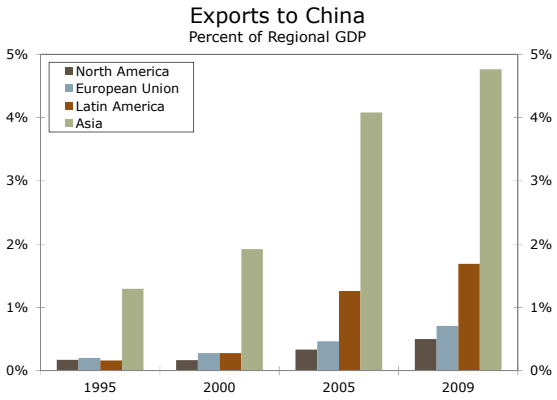
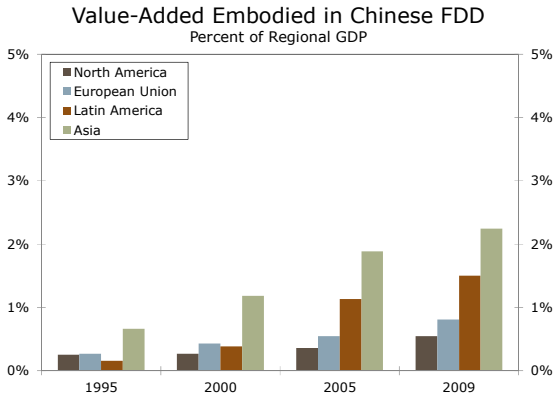


Figure 4



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

How Much Economic "Pull" Does China Have Today?

However, simple exports-to-GDP ratios may not accurately reflect the true effect that China has on an individual country or region. For example, electronics that are produced in Japan and South Korea may be initially exported to China, helping to push up the ratios of exports to China as a percent of Japanese and South Korean GDP. However, these electronic products may exclusively be used as inputs into computers that are simply assembled in China and then re-exported to their final destinations in other regions of the world such as the European Union and the United States. In this case, export-to-GDP ratios would overstate the "true" economic effect that China has on Japan and South Korea while understating the effects of the European Union and the United States on the Japanese and South Korean economies.

On the other hand, goods from one country may initially be sent to a second country where they are assembled into a product before being shipped to the final destination in China. In this case, trade data would show that the exports of the first country would go to the second country when in fact they ultimately ended up in China. Consequently, the ratio of exports to China as a percent of GDP would understate the true economic effect that China has on the first country.

What we really want to measure then is the effect that Chinese final domestic demand (FDD) has on value added in individual countries or regions. In other words, we want to know how much effect final sales to Chinese consumers, businesses and government has on value added (i.e., wages and salaries, and profits) in individual foreign economies. Trying to determine the final destination for products in today's world of complex supply chains and global trade is no simple task, but fortunately the Organisation of Economic Cooperation and Development (OECD) and the World Trade Organization (WTO) have jointly compiled such a database.[3] The ratios of value-added as a percent of GDP that is embodied in Chinese FDD are shown in Figure 4 for the same regions that are shown in Figure 3.

The percentage of value-added that is attributable to Chinese FDD has risen over the past two decades for all four regions.

There are a few noteworthy points in Figure 4. First, the percentage of value-added that is attributable to Chinese FDD has risen over the past two decades for all four regions, which is consistent with the message from the export-to-GDP ratio shown in Figure 3. In North America, the value-added effect of Chinese FDD has doubled since 1995, whereas the effect has shot up about seven-fold for Latin America over that period. Chinese FDD today accounts for more than

[3] **Due to the complexity of the methodology, the OECD and the WTO do not calculate statistics for every country on an annual basis. Data currently exist for 56 individual countries for 1995, 2000, 2005, 2008 and 2009.**

2 percent of value-added in other Asian economies, making it the region that is most affected by the Chinese economy.

Second, the data support the notion that China is something of a conduit through which the exports of some regions, especially the non-China Asia region, are simply assembled into final products in China and then ultimately end up in other regions of the world. The simple exports-to-GDP ratio for Asia is close to 5 percent (Figure 3), whereas the value-added effect is only 2.2 percent (Figure 4). For the specific example of South Korea, the country's exports to China are equivalent to more than 10 percent of its GDP. However, Chinese FDD accounts for only 4 percent of South Korean value-added.

How Does China Compare to the United States and Japan?

Figure 4 clearly shows that Chinese FDD has become a more important source for value-added for most regions of the world over the past two decades. Figure 5 puts into context the effect of the Chinese economy on the global economy by comparing China to the United States. In 1995, U.S. FDD accounted for 2.4 percent of value-added in the 46 foreign economies in our sample, which was about six-fold larger than the effect that Chinese FDD had on global value-added in that year.[4] The U.S. economy was still significantly more important than China to foreign value-added in 2009, but the gap had narrowed markedly. Indeed, Chinese FDD accounted for about 1 percent of global value-added in 2009. The Chinese economy may not have quite the economic heft as the United States, but its "pull" on the rest of the world has clearly become more important over the past two decades.

Figure 5

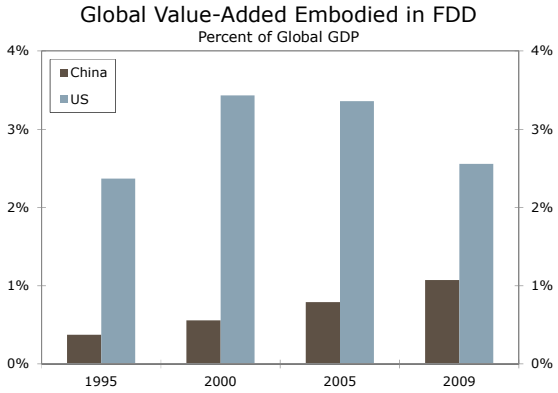
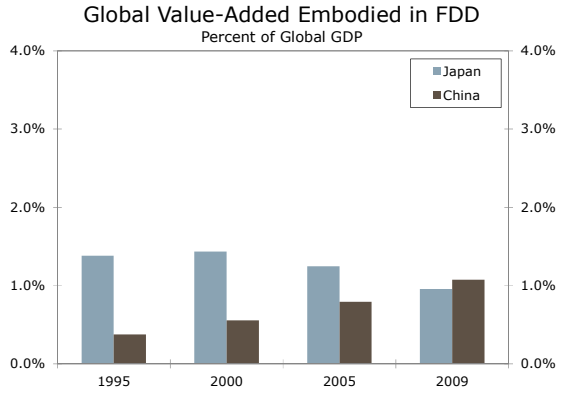


Figure 6



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

Following its growth explosion that lasted from the mid-1950 until the late 1980s, Japan began to suffer from a significant economic slowdown starting in the 1990s.

If China is still not the United States in terms of its economic impact on the rest of the world, are there any other economies that China approximates? Some analysts like to compare China and Japan as both economies have experienced phases of very rapid economic growth. Following its growth explosion that lasted from the mid-1950 until the late 1980s, Japan began to suffer from a significant economic slowdown starting in the 1990s.[5] However, by the time it started to experience its sharp slowdown, Japan had grown into the world's second largest economy and Japanese FDD accounted for 1.4 percent of global value-added in 1995 (Figure 6). Although not nearly as important to the global economy as the U.S. economy was in 1995—U.S. FDD accounted for 2.4 percent of global value-added that year—the Japanese economy clearly had much more heft than the Chinese economy did in 1995.

[4] **These 46 economies represent nearly 80 of non-U.S. global GDP.**

[5] **Between 1970 and 1989, Japanese real GDP growth averaged 4.5 percent per annum. (Double-digit growth rates were the norm during the previous two decades.) Subsequently, real GDP growth in Japan has averaged roughly 1 percent per annum.**

However, China has experienced robust economic growth over the past two decades while Japan has largely stagnated. By 2009, the effect of Chinese FDD on global value-added that year exceeded the effect of Japanese FDD (1.1 percent versus 1.0 percent). Moreover, China was roughly as important to the global economy in 2009 as Japan had been in 1995. Unlike Japan, however, which has become relatively less important to the global economy over the past two decades, China's importance likely will continue to grow. Between 1995 and 2012, Japanese real GDP growth averaged only 0.9 percent per annum. Although the Chinese economy may not grow at a double-digit pace ever again, a growth experience that is similar to Japan's over the past two decades seems unlikely as well.

So how fast does China need to grow? Figure 5 shows that the effect that U.S. FDD has on global value added is about 2.5 times greater than Chinese FDD. Therefore, if China can grow 2.5 times faster than the United States, then it would have roughly the same effect on global GDP growth as the U.S. economy. Between 1992 and 2007, U.S. real GDP growth averaged roughly 3 percent per annum, and many investors would be overjoyed if the U.S. economy could achieve that type of growth in the near term.[6] If 7.5 percent real GDP growth in China is roughly equivalent, in terms of its effect on global value-added, to 3 percent real GDP growth in the United States, then why are investors despondent about the acknowledgement by the Chinese government that real GDP will probably grow somewhere between 7 percent and 8 percent over the next few years?

It appears that net exports have actually been a drag on Chinese real GDP growth over the past few years.

Moreover, Chinese real GDP growth over the past few years appears to have been driven by FDD rather than by net exports. Although a breakdown of Chinese real GDP into its underlying demand components is not readily available, it appears that net exports have actually been a drag on Chinese real GDP growth over the past few years.[7] In other words, Chinese real GDP growth has been driven by growth in consumer spending, business fixed investment spending and government spending (i.e., FDD) over the past few years. Although Chinese investment spending may not grow as rapidly in the future as it has in the past, it is the goal of the Chinese government to accelerate consumer spending to rebalance the economy. Therefore, we expect that Chinese FDD will continue to grow at a solid rate over the next few years, which should continue to support growth in global value-added. Stronger growth in Chinese consumer spending surely would bring with it more imports and more value-added from abroad.

Conclusion

Although China has long been the most populous country in the world, low per capita income meant that the size of the Chinese economy was rather small when it began its ascent up the economic league tables a few decades ago. Even after years of robust growth throughout the 1980s and 1990s, the Chinese economy still accounted for only 3 percent of global GDP in 1999, which restrained its overall effect on the global economy. Double-digit growth rates helped to lift living standards quickly in China during these decades, but they did not mean much in terms of overall global economic growth.

Because China continued to grow at a robust rate during the past decade, it increasingly became a more important contributor to overall global GDP growth. Today, China is nearly as important to the global economy, in terms of the effect of its FDD on global value-added, as Japan was in 1995. Although the rate of Chinese economic growth surely will be slower over the next few years than it has been over the past two decades, it likely will not suffer the stagnation the Japanese economy has experienced since the mid-1990s.

China is the second largest economy in the world today, and it no longer needs to grow 10 percent per annum to have a marked effect on the overall rate of global GDP growth. In order to have the

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[6] **U.S. real GDP has grown at an average annual rate of 2.1 percent over the past three years. The Blue Chip consensus forecast looks for GDP growth of 1.8 percent in 2013 and 2.7 percent next year. Our forecast calls for 1.7 percent growth this year and 2.4 percent in 2014. For details, see our *Monthly Economic Outlook*, which is posted on our website.**

[7] **The Chinese trade surplus peaked near $300 billion in 2008 before trending down to $155 billion in 2012. This decline in the trade surplus implies that imports have been growing faster than exports, or that net trade has been a drag on overall GDP growth.**

same effect on global value-added as the United States, China needs to grow roughly 2.5 times as fast as the U.S. economy. Specifically, the 7.5 percent real GDP growth rate that the Chinese government is targeting for the next few years would give China the same global economic impact as an American economy that is growing at 3 percent per annum. Unless the Chinese economy completely crashes and burns, which we do not expect in the foreseeable future, the growth rates that it likely will register over the next few years will likely be strong enough to make a meaningful contribution to global GDP growth.

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