

TD Economics

Special Report

June 1, 2009

U.S. EXPORTS: RISE OF THE MACHINES STARRING EMERGING MARKETS

Over the past half decade, the U.S. export sector has been the shining star of the U.S. economy. While the economy as a whole was growing at an average annual rate of 2.5%, exports were growing at an average annual rate of over 8%, more than three times faster. This phenomenal pace of growth that was propping up the American economy even three quarters after the recession had started was a combination of two factors: 1) a 23% depreciation of the real U.S. trade-weighted dollar between 2002 and 2008, and 2) sustained high levels of global demand, particularly from emerging market economies, and the capital flows that preceded it. However, this latter contributing factor stemmed from the fact that artificially low real interest rates and inexpensive credit allowed consumers in the industrialized world to financially extend themselves far beyond their means. Emerging markets like OPEC and China then rode the wave of the resulting demand for their



HIGHLIGHTS

- Severe retrenchment in industrial capacity and global demand sets the stage for poor performance in U.S. exports in the shortterm
- Longer-term outlook brighter given that the U.S. is in the process of solidifying its position as a primary supplier of capital goods to emerging markets with vast growth potential
- Risks remain surrounding the global imbalances that accelerated both emerging market and U.S. export growth prior to the global recession
- But downward pressure on U.S. dollar and rapidly growing domestic demand in emerging markets should help boost U.S. exports in the long-term

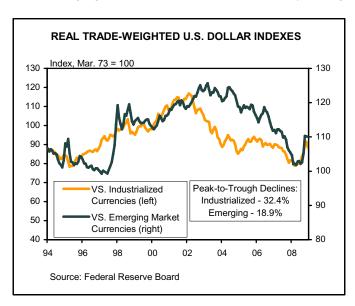
exports which allowed them to grow at equally phenomenal paces.

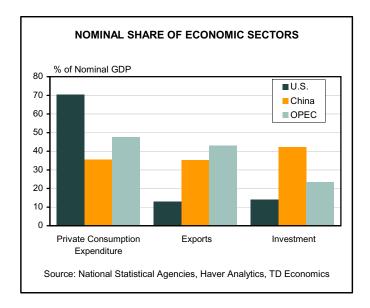
Unfortunately, the unsustainable nature of that entire system has now reared its ugly head; consumers around the world are in the midst of a severe retrenchment causing a significant imbalance between capacity and demand. Hence, with the global economy set to make its first contraction since World War II this year, it goes without saying that the short-term outlook for the export sector is rife with downside risk. For 2009, our current forecast is for the volume of U.S. exports to decline by 9.1%; however, recent data have shown the situation to be even more se-

vere. Figures for the first three months of the year recorded double-digit year-over-year declines, partially due to the greenback having appreciated by almost 15% in the past year, and with overall economic conditions expected to deteriorate further, export demand should follow suit.

The long-term outlook, on the other hand, is much brighter in our view. First, the recent upward momentum seen in the U.S. dollar is most likely a temporary phenomenon due to its dual position as the world's reserve currency and a safe-haven. However, its current value is inconsistent with the nation's sizeable fiscal and trade imbalances and the dollar should naturally depreciate over the next several years in order to correct this. In addition, there is the question of whether or not the "Bretton Woods II System" will continue to operate as it currently does; potentially, a number of prominent Asian emerging markets could choose to diversify their foreign reserves away from U.S. dollar-denominated assets. For further discussion of the Bretton Woods II system, see the following textbox. In this situation, the dollar is set for an even larger depreciation as the support for its current level will be stripped away¹. Thus, paralleling the 2002-2008 experience mentioned above, another future depreciation in the dollar will give American exporters an additional edge by increasing their competitiveness.

Second, which will be the focus of the remaining discussion of this paper, the U.S.-emerging market trade relationship will be the biggest factor in the long-term sustainability and growth of U.S. exports. Fundamentally, these emerging economies continue to have very strong





growth potential. Supporting this growth requires large amounts of investment in things like infrastructure, industrial capacity, and other hallmarks of industrializing economies. The structural trends delineated below provide early evidence that the United States has taken great strides in establishing itself as a prime supplier of capital and investment goods to these emerging markets. This implies not only a more sustainable rate of growth, but also one that is quite robust as American exporters will be meeting the needs of these rapidly growing economies rather than riding a wave of unsustainable demand.

What is the U.S. exporting?

Evidence of a structural shift in production within the U.S. export sector can be seen in the breakdown of what goods are actually being exported. Using trade-weighted and inflation-adjusted data, the shares of total real exports held by each of the six major categories of goods reveal that there has been a tangible trend towards concentrating production on capital goods (excluding autos). This category of goods ranges from electrical generating machinery, drilling and mining equipment, and industrial machinery, to computers and telecommunications equipment.

In 1994, the real export share of capital goods was over 34%, the highest of any sector. In 2008, that share skyrocketed to over 44%. Although the other five sectors represent smaller export shares relative to a decade ago, production itself has not been in decline. It is simply the case that it has not been growing as rapidly as that of capital goods. In fact, all six sectors have experienced growth

The Bretton Woods II system? Will it remain the way it is?

Towards the end of the Second World War, representatives from many of the world's largest economies agreed to a set of accords regarding international trade and exchange rate management designed to avoid the protectionist pitfalls that plagued the Great Depression. The resulting agreement was called the Bretton Woods System and it was very successful (for a time) in stabilizing growth and promoting trade. Basically, it involved the "periphery" countries pegging their national currencies against the U.S. (the "core") dollar, which was in turn pegged to gold. This necessitated in the periphery having to hold large amounts of U.S. dollar reserves because these countries would need to engage in large scale dollar transactions in order to maintain their currencies at the agreed upon levels.

The Bretton Woods II System is more of a de facto arrangement that involves a different set of periphery countries (the U.S. remains the core) but still results in them holding large amounts of U.S. dollar reserves. This is due to the fact that the periphery (located primarily in emerging Asia) are mostly engaged in export-led growth and run significant trade deficits with the United States. This produced two significant benefits for these markets: 1) the ability to tap into the nearly insatiable U.S. consumer equated to strong income gains for domestic manufacturers, and 2) capital inflows from international investors attracted to the periphery's strong growth potential were used to invest in things like industrial capacity and infrastructure. Unfortunately, this created problems for the U.S. as equally insatiable demand for dollar assets like Treasuries kept real interest rates artificially low, a factor that contributed to keeping credit inexpensive (in an exploitive way, this benefitted the periphery because cheap credit implied more consumption).

So essentially, the U.S. has been able to support its massive trade and fiscal deficits without an equally massive devaluation in the dollar because they can safely "borrow" an unlimited amount from periphery countries. The problem now is that the biggest recession since the

Great Depression has resulted in unprecedented U.S. fiscal deficits and there are rumblings about whether or not it is safe for the periphery to continue to 'put all of their eggs in one basket'. The loudest rumblings have been coming from China, the second largest holder of U.S. dollar assets next to Japan. And although they are not the only player, (OPEC and the Asian Tigers are also significant), there has been evidence that China has been directing policy towards having to hold less dollars.

There are two significant policy shifts occurring in China that point to downward pressure on the value of the U.S. dollar in the long-term. First, China has been diversifying its own trading partners by improving trade relations with a number of both developing and developed countries. This would naturally imply having to hold less dollars, but the problem is that the Renminbi currently has very limited convertibility and global manufacturers have no way of hedging exchange rate risk. The second trend is, thus, easing the restrictions on the availability and convertibility of the Renminbi. We see early evidence of this through the establishment of a number of bilateral currency arrangements with central banks around the world. When taken in tandem, these policies will effectively allow China to hold fewer dollars.

However, it is still very early and very ambiguous to quantify the potential effect on the level of the U.S. dollar since there are a number of contributing factors that are unknown. How far will China take this policy shift? They are still fully engaged in export-led growth and the U.S. remains their largest single consumer, second only to the European Union as a whole. Accumulating fewer dollars implies a stronger Reminbi and, therefore, likely weaker export growth, something the Chinese may not be able to swallow. And if they do end up diversifying, will this have a domino effect on the other periphery countries? Potentially, nothing could change even in the medium-to long-term and the Bretton Woods II System will be just as it was prior to the global recession.

that has outpaced the overall economy. U.S. real GDP growth averaged 3% on a year-over-year basis between 1994 and 2008; and while real exports excluding capital goods grew by an average of about 4-5% over that time period, capital goods exports have grown by more than 8%. The impact of this growth is even more dramatic given that the dollar value of the capital goods sector is about twice the size of the second largest export category and almost ten times the size of the smallest. Hence, growth in

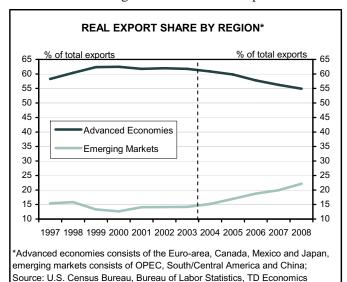
U.S. REAL EXPORT SHARES BY CATEGORY			
End-Use Category	Share (%	Share (% of total)	
	1994	2008	
1. Foods, Feeds, and Beverages	8.6	5.4	
2. Industrial Supplies & Materials	26.5	22.5	
3. Capital Goods excl. Autos	34.4	44.2	
4. Autos	12.5	10.8	
5. Non-Food Consumer Goods	12.9	13.8	
6. Other	5.8	3.8	
Source: U.S. Census Bureau			

excess of 8% implies an astounding expansion in the real dollar value of the actual exports to the tune of almost \$22 billion on average per year.

Who's buying?

The economic crises and geopolitical instability that spanned much of the 90's and early 2000's caused wild swings in which countries are important destinations for American exports². Events like the 1997 Asian Financial Crisis, the 1999-2000 Latin American Financial Crisis, the bursting of the tech bubble in 2001, and the wars in Iraq and Afghanistan (to name a few) all led to major shifts in the real shares of exports held by different countries, especially among the emerging markets.

But since 2004, the U.S. export sector recorded double-digit growth rates consistently leading up to the current global recession in three regions: South/Central America, OPEC and China. Their combined share of total exports as of 2000 was just over 12%; as of 2008, that share jumped to 22% at the expense of North America and Japan. However, it is not the case that exports to America's traditional trading partners such as the Euroarea, Japan, Canada and Mexico have declined; but again, they are simply being dwarfed by the growth in exports to these three emerging markets. Exports to almost every country (Japan being the exception here) have been growing over the past four years, but those destined for the three emerging markets above have simply been growing at a much faster pace. In fact, they only account for less than a quarter of the actual goods being shipped, yet they are accounting for about half of the growth in total U.S. shipments.



Exports to China alone experienced the most dramatic growth, posting average annual growth of 20% and tripling its share over 10 years, from 1.9% in 1997 to 5.7% in 2007. Exports to the OPEC nations grew at an average annual rate of 24%, while those to South/Central America grew by 15% annually between 2004 and 2008. At the same time, these three regions were experiencing extremely strong economic growth. Real GDP growth in South/Central America and OPEC was more than two times faster than Canada and the U.S. over the same time span, while China was growing more than four times faster. This necessarily implies strong import demand growth from these countries not only to satisfy their own consumption demand, but also to meet the needs of their growing economies via investment in things like infrastructure and industrial capacity.

Does 1+1=2 or 11?

So there are two clear trends. First, the U.S. export sector is concentrating production in capital goods. Second, emerging markets are gaining importance as export destinations. But are the two connected? Is the increased demand from emerging markets behind the shift of U.S. manufacturers towards capital goods? Intuitively, it seems consistent; with emerging market economic growth having been 2-5 times stronger than that of North America (depending on the region) year-after-year since 2004, it seems logical that they would need large amounts of investment goods to sustain that growth. Yet, if that's the case then they should only be accounting for the growth in capital goods exports starting in 2004; and indeed, this turns out to be exactly what occurred.

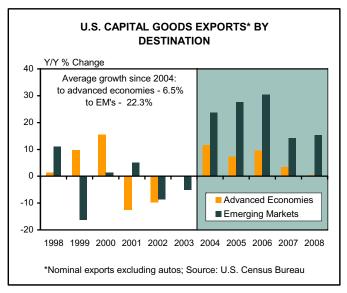
Firstly, data from the 8 subcomponents of capital goods reveal that beginning in 2004, growth in exports to the advanced economies has been utterly dwarfed by the emerging markets. In each category, the differences in average growth rates between 2004 and 2008 range from 10 to upwards of 40 percentage points; however, before that time, exports to the emerging markets had essentially stagnated with the only positive influence coming from China. Secondly, the timelines of the two trends measure up relatively nicely. The capital goods share of total exports had declined significantly following the huge run-up during the tech boom; it hit a low of about 40% at the tail-end of the recovery in early 2003. Between then and the end of 2007 when the U.S. recession began, the share had steadily in-

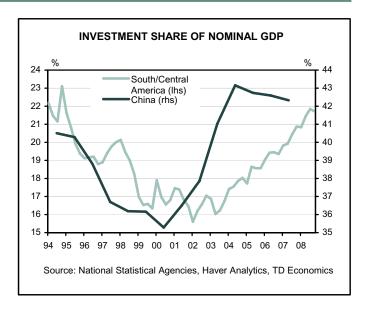
4

creased to 46%. Meanwhile, the share of U.S. exports held by the emerging markets together had fluctuated around 13-15% before steadily increasing from 13% in mid-2003 to a high of 24% in late 2008. This is clear evidence that a significant portion of growth in capital goods exports in the last half decade is being accounted for by the emerging markets.

Will the future mimic the past?

As any investor knows, past returns to not guarantee future results; it remains an open question if this U.S.emerging market relationship is sustainable. There were a number of factors that, working in conjunction, caused exports to grow at the rate they were. First, real interest rates in the industrialized world (the U.S., the Euro-area, Canada, etc) following the 2001 slowdown were at historical lows and this caused two things to happen. One was a rapid expansion of credit in the West that led to a proportionate increase in investment and consumption, and thus, economic growth in this region. The second was a massive outflow of capital into emerging markets in the search for higher yields because rates of return on traditional domestic assets were so low. Emerging market growth was, thus, propelled forward because not only was there extraordinary demand for their exports, but they also had large inflows of private capital available to invest heavily in industrial capacity and meet that demand. When taken in tandem, the global economy grew a full percentage point faster than the historical average: annual growth averaged 4.7% between 2003 and 20073 relative to 3.6% between 1970 and 2002.





So in part, the accelerated export and investment growth in the emerging markets was being supported by the industrialized world through the aforementioned capital flows and import demand. But the almost insatiable demand for U.S.-dollar denominated assets from China and other prominent Asian emerging markets was a major reason for the unsustainably low real interest rates in the industrialized world. As this unwinds, higher real interest rates will inevitably mean slower consumer spending growth. In turn, this implies that once a global recovery has taken hold that both the support for export and investment growth in the emerging markets will have diminished, at least in part; and for U.S. exporters to maintain their accelerated pace of growth, they need these markets to do so, as well.

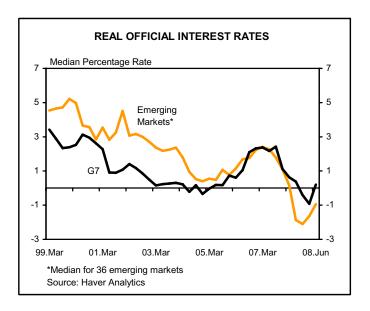
It is our view that the emerging markets will continue to grow rapidly because monetary policy conditions within these countries have been increasingly conducive to more organic growth. Real interest rates have been falling alongside those in the industrialized world for the past decade or so, both in levels and volatility. And better control of inflation is providing the benefits to emerging market domestic demand that the industrialized economies saw in the 80's and 90's. These lower interest rates are sustainable and will continue to support the investment spending & expansion of emerging market consumers in the future. In turn, this should support the capital intensity of U.S. exports to these emerging markets.

There is a question of when these emerging markets will develop their own domestic capacity to produce capital goods and if this will cause them to substitute away from having to import them. Though this is a legitimate contention given the astronomical rate at which their capacity to produce consumer and industrial goods has grown, it is yet, in our view, a far-off reality. Many emerging markets lack the essential ingredients necessary for an effective capital goods manufacturing sector; namely, they have yet to develop an adequate pool of skilled labour.

This requires widespread networks of both basic and advanced education institutions, healthcare, transportation, and other infrastructural necessities that are already well ingrained in the industrialized world. Without this skilled labour to both develop and utilize the technology necessary to converge domestic productivity with that of the U.S., they remain dependent on importing new technologies to account for a part of that productivity differential, with the rest being covered by lower labour costs. And yet, in countries like China, we see labour costs also rising very rapidly, resulting in an even higher importance on productivity gains. We may yet see the capital intensity of U.S. exports to China rise even further given these circumstances.

Conclusion

This is not a story of 'out with the old, in with the new', at least not entirely, and not yet. America's industrialized trading partners still account for about 65% of total U.S. exports and this will likely only change at a relatively slow rate. Most of the EM economies are still far from having a fully developed domestic economy and so it will be a lengthy process before they hold equal weight as U.S. export destinations relative to the industrialized economies. Nevertheless, these emerging markets will only continue to gain prominence, not just in trade flows, but overall eco-



nomic influence as well. So although the short-term outlook for American exporters is extremely poor, the fact that they are solidifying their position as a prime trading partner with markets that have vast growth potential provides support for their long-term sustainability. So then the final question is, if the short-term outlook is very poor and the long-term outlook is very bright, how do we get from point A to point B? The fact remains that it will take many months to unwind the capacity-demand imbalance. We forecast that a recovery in global demand will not take place until 2010; however, at that point, any growth will only serve to drawdown the excess capacity and inventories that have been built up. Only when demand has broken down those barriers will we see a full recovery in exports, which may not occur for 6-12 months following a recovery in the global economy.

> Francis Fong Economic Analyst 416-982-8066

Endnotes

- The failure of the Bretton Woods II system would have very significant ramifications for many facets of the global economy. However, this discussion is beyond the scope of this paper.
- It should be noted that an inherent difficulty in analyzing disaggregated trade flows is that it is difficult to disentangle the simultaneous effects of price, currency and demand movements. Here we account for price effects by using inflation-adjusted data; however, one could still argue that the growth in exports to these emerging markets was driven by currency swings. This is a legitimate contention considering that these timelines coincide very well with the 6-year depreciation of the real trade-weighted, U.S. dollar. However, consider the following: if the currency was the dominant driver of export growth, then it should be the case that the dollar depreciated disproportionately towards the emerging markets relative to their industrialized counterparts. Yet, in actuality, the opposite occurred. The dollar lost over 31% of its peak value against the major markets, while losing less than 14% against the emerging markets between 2002 and 2008. Hence, the double-digit growth in exports to the emerging markets is even more dramatic considering that the currency effects should technically have boosted the value of American-made goods towards the major markets.
- ³ Growth between 2003 and 2007 is referenced as there is typically a lag between demand growth and export growth; so one could relate a boom in demand in 2003 to a boom in U.S. exports in 2004.

This report is provided by TD Economics for customers of TD Bank Financial Group. It is for information purposes only and may not be appropriate for other purposes. The report does not provide material information about the business and affairs of TD Bank Financial Group and the members of TD Economics are not spokespersons for TD Bank Financial Group with respect to its business and affairs. The information contained in this report has been drawn from sources believed to be reliable, but is not guaranteed to be accurate or complete. The report contains economic analysis and views, including about future economic and financial markets performance. These are based on certain assumptions and other factors, and are subject to inherent risks and uncertainties. The actual outcome may be materially different. The Toronto-Dominion Bank and its affiliates and related entities that comprise TD Bank Financial Group are not liable for any errors or omissions in the information, analysis or views contained in this report, or for any loss or damage suffered.