



TD Economics

Special Report

November 29, 2007

AMERICAN EXPORTS: THE QUIET REVOLUTION

The collapsing U.S. housing market has captured the attention of investors and media the world over. While market pundits speculate, estimate and contemplate whether the tightening noose around the housing market will strangle the broader economy, a quiet revolution has taken hold among American exporters. In terms of the contribution to GDP growth, a strong expansion in exports has more than offset the drawdown to GDP growth that has occurred from slumping residential investment – a first in fifty years. In fact, export growth has been so strong that it has significantly outstripped import growth and managed to fulfill what some had come to believe as a pipe dream...shrink the trade deficit. In just over a year, the real trade deficit as a share of GDP has narrowed a full percentage point, a feat not accomplished in 18 years. A number of export sectors have experienced outsized profit gains, which have even translated into job gains in some areas of the otherwise battered manufacturing sector. Over the next couple of years, we believe the U.S. economy will continue to benefit from the underpinnings of the export sector, which will help temper some of the economic fallout from the housing sector. But, if you're looking for further significant narrowing in the trade deficit that will meaningfully reduce America's reliance on foreign funds...don't bet on it.

What's going on in the trade sector?

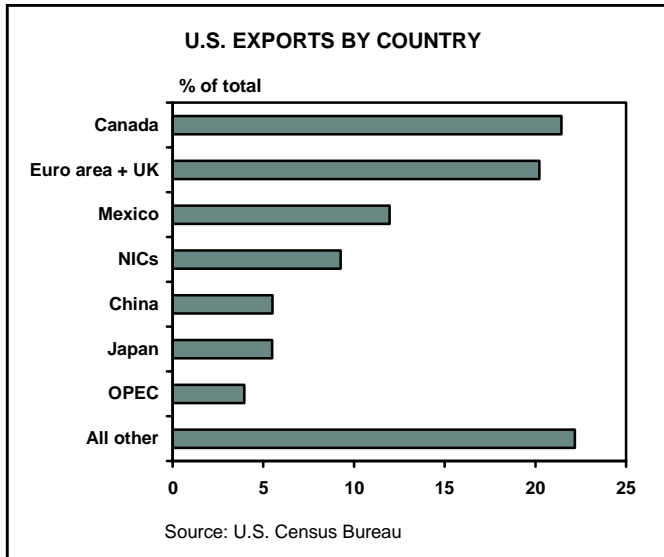
New life was breathed into the competitive position of American exporters when the greenback reversed course from its peak value in 2002. Relative to its major trading partners, the dollar in inflation-adjusted terms has since depreciated by 23%. There has been much criticism that the global currency adjustment currently underway is occurring disproportionately against many of the industrialized countries with freely floating currencies, like Canada

HIGHLIGHTS

- **Strong expansion in U.S. exports providing offset to weakness in residential investment**
- **Exports will continue to temper some of the economic fallout from housing**
- **However, the prospects for further narrowing in the U.S. trade deficit become more limited in 2009.**
- **Americans will remain vulnerable to the whims of international investor sentiment that could lead to ongoing bouts of market and currency volatility**

and the Euro area, as opposed to China, which tightly manages its currency and has become the dominant source of the American trade deficit. However, from purely an export competitive perspective, the U.S. dollar has depreciated the most against countries which represent the destination of the bulk of their exports, thereby resulting in a significant competitive advantage. For instance, Canada, the Euro area and the U.K. make up more than 40% of the American export market. Through the third quarter of this year, the real effective exchange rate against these countries had declined 25% or more since 2002. In contrast, the Asian NICs (Hong Kong, Korea, Singapore and Taiwan) along with China and Japan account for only 20% of the U.S. export market.

The true export benefits from the depreciated dollar start to show up two years later in 2004. Against its major trading partners, U.S. goods exports have been climbing at a double-digit pace since then, averaging 10% per year in OECD countries, with notable gains to the Euro area (+13%). Although country-specific trade data is only avail-



able on a nominal basis, given the size of the gains, it is highly unlikely that price-effects would unwind these performances.

While the depreciation of the U.S. dollar was a necessary condition to drumming up international demand for American goods, it was not the sole factor. The fact that world economic growth has averaged 5.2% annually from 2004-2007 (Q3) has also been a key factor, especially since this is two percentage points above the average historical pace. About one-third of world growth was driven by China over this period, which is why even though the U.S. gained less competitive advantage through the real exchange rate with China – the yuan has appreciated 10% against the greenback since China loosened the peg in 2005 – export growth to that country still averaged an annual pace of 22% over the last four years. Similarly, exports to the oil-rich OPEC region – also an area that manages its currency against the U.S. dollar – have increased at an average annual pace of nearly 30%. So from all sides of the globe, American exporters have been reaping the benefits from a potent combination of improved competitiveness under the greenback in combination with strong international economic growth.

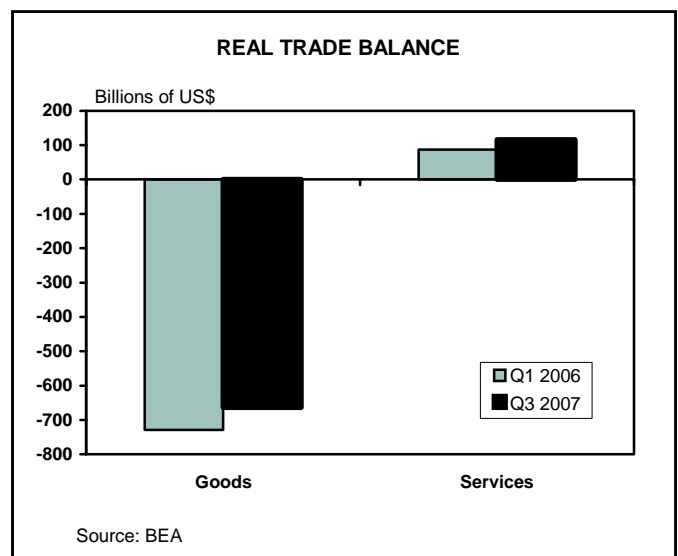
Who's got it, who needs it?

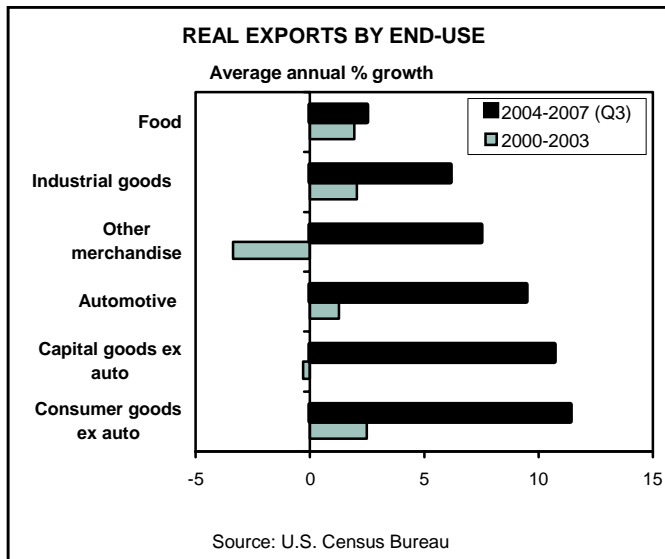
So what has the world been clamoring to buy from the U.S.? Everything. Every major goods category has experienced substantial growth in exports, be it industrial supplies, capital goods, automotive goods or consumer products. Likewise, the balance sheets of a number of industries within these sectors have performed exceptionally

well. While corporate profits for all domestic America industries has averaged about 22% annual growth over the past four years (Q2-04 to Q2-07), that for firms in fabricated metals and machinery have outperformed at 36% and 127%, respectively. Both of these performances followed lean years prior when export demand was contracting for these products.

The recovery in corporate profits is translating into a recovery in jobs. The troubles of manufacturing jobs are well documented. Payrolls in the industry as a whole have been in a secular downturn since 1999, and this year was no exception. However, there are some pockets of growth that are starting to peak through. All but two areas in manufacturing experienced job losses this year: fabricated metals and machinery. In fact, jobs in both industries have been on the rebound for several years. The fabricated metals industry has added 93,000 manufacturing jobs since 2004, while machinery has countered with 83,000 new positions since 2005. While these job gains are not sufficient to offset the extensive losses in prior years, it is, at least, an indication that momentum is shifting within some industries.

Lest we leave the impression that the improvement in the real trade balance is solely from the goods side of the ledger sheet, the net surplus position in the smaller services sector has also made a significant contribution. The volume of the services surplus hit a peak of \$117 billion at the end of 1996, and then proceeded to narrow for the six years that followed. By the first quarter of 2003, the surplus had been shaved by \$55 billion. However, it has since been restored to its former glory, thanks in large part to a





widening in the travel services surplus. No doubt the lower greenback has enticed foreign demand to this sector.

Exports boosting economic growth

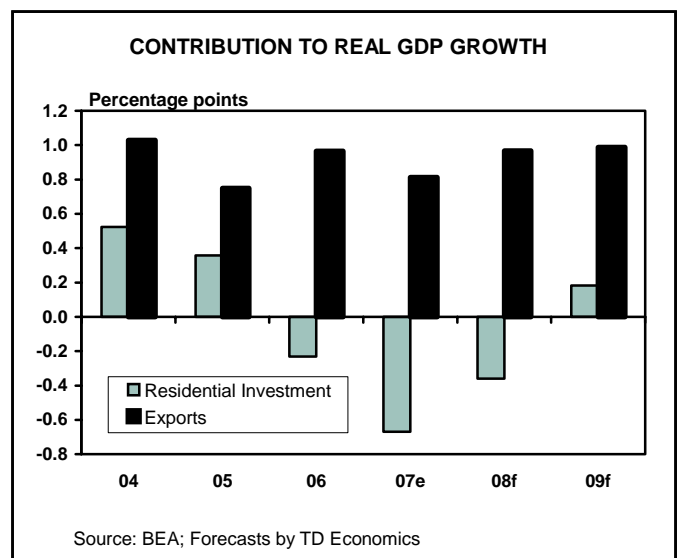
Why does a boom in exports matter? Much of the international focus has been on the economic drag the U.S. is experiencing from the much-deteriorated housing market. But the export sector is 12% of the American economy, nearly three times the size of residential investment. On average, over the past year-and-a-half, backsliding residential investment has shaved about 0.7 percentage points from GDP growth every quarter, but exports have added one full percentage point back every quarter. This is the first time in nearly 50 years that export growth was strong enough to offset weakness in residential investment when that sector was in a tailspin. And, because export growth has even out-muscled import growth, the trade balance as a whole has been adding to GDP growth in five of the past seven quarters. This is not an easy feat. Imports are one-and-a-half times bigger than exports, so growth in the latter must overwhelm the size disadvantage in order to narrow the trade deficit and make a net contribution to overall economic activity.

Of all the goods categories, industrial supplies and materials have made the biggest contribution in narrowing the real trade deficit. In 2006, the real industrial trade deficit narrowed by \$15 billion on a combination of falling import demand and rising shipments abroad. And again in the first three quarters of this year, the industrial trade deficit has narrowed a further \$21.5 billion. To a lesser extent, capital goods have also lent a helping hand with a com-

bined \$3.6 billion reduction in the trade deficit over the near-two year period. In fact, so far this year, every major category is tracking a smaller real trade deficit, with the exception of consumer goods.

How much longer can this go on?

The depreciation of the U.S. dollar over the last five years reflects the unwinding of global savings imbalance that had disproportionately sought shelter in U.S. dollar-dominated assets. As such, the dollar is unlikely to bounce back in a meaningful way and the competitive advantage that American exporters have gained through the currency will likely be sustained over the next couple of years. This raises the possibility that exporters in high-demand sectors like industrial supplies will be able to sustain above-average profit growth, which, in turn, could support further employment gains. The export sector will be the bright spot in an otherwise blemished landscape in the U.S. economy, providing some offset to weakness in the housing market and consumer spending. In fact, while residential investment is expected to drag U.S. GDP growth by almost half a percentage point in 2008, exports are expected to add about one percentage point. But this is likely only a partial remedy to what ails the U.S. economy, since negative housing wealth effects and the ongoing credit crunch could bite deeply into consumer spending and business investment. We believe real GDP growth will average only 1.9% in 2008, so the helping hand from exports will be quite significant in preventing economic growth from stagnating all together, but the impetus to growth won't be sufficient in preventing the cyclical slowdown. (For a more





detailed assessment on the U.S. economic outlook see TD Economics Special Report: Weaker U.S. Economic Outlook to Prompt Fed Cuts, October 27, 2007).

Pass the buck: exports more sensitive to greenback

Despite the ongoing strength we expect in exports, the bulk of the narrowing in the real trade deficit may already be in the past, or fast approaching. By the end of 2009, we believe the real trade deficit will still represent 4% of GDP, about 0.6 percentage points less than it is today, but most of that improvement will occur in 2008.

Economic theory predicts that the depreciation of the U.S. dollar should not only boost export demand, but it should also reduce import demand, as the cost of imports rises and consumers begin to find substitutes among newly affordable American goods. The concept is known formerly as expenditure switching. However, theory proves to be only half accurate when it comes to the American economy. As shown above, the dollar depreciation does boost exports, but it provides little incentive for import demand to ease.

Research by the Federal Reserve discovered that virtually all U.S. exports are invoiced in dollars (99%), so foreign purchasers benefit from an immediate drop in prices from a lower greenback relative to their domestic currencies. However, the price of foreign imports destined for the U.S. is more resilient to exchange rate changes because almost all imports (93%) are invoiced in U.S. dollars. No other country has trade so overwhelmingly invoiced in its own currency.¹ For instance, for euro-area countries, an average of 54% of imports and 59% of ex-

ports were invoiced in euros over the 2003-2004 periods. For Japan, the percentages were even lower at 26% and 38%, respectively.

Therefore, the immediate change in the exchange rate has limited influence on the price of imported goods in the United States. Even after a year following a depreciation, it was found that foreign producers resisted increasing the dollar price of their goods for fear of losing market share in the mighty American market. In fact, after one year, every 1% change in the exchange rate yielded only a 0.42% change in import prices. Once again this was far less than the experience of other countries. The OECD (excluding the U.S.) average for every 1% change in the exchange rate was estimated to have a 0.77% pass through to import prices. Regions like the Euro area experienced a pass through as high as 0.81%.

The difference in the exchange rate pass through between the U.S. and its trading partners means that when the greenback falls in value, it is more likely to elicit greater demand for American goods by foreigners, than reduce import demand by Americans. In other words, import prices are sticky relative to exports, thereby blunting the impact of foreign exchange rate movements on import demand in the United States.

Let's see if this theory holds up in practice. In Canada, there has been significant political and consumer pressure on retailers to lower prices in response to a Canadian dollar that has pushed above parity with the U.S. dollar. By extension, shouldn't the opposite be occurring among U.S. retailers? Looking at the consumer price subindex for apparel – highly tradable goods – prices remain deeply en-



trenched in negative territory, which has largely been the case over the past decade. In other areas like personal care goods, computers, medical commodities and vehicles, prices are either falling or showing no more than 2% growth at the upper end. In effect, the sharp depreciation in the U.S. dollar has not led to significant upward pressure on retail prices.

U.S. trade has a bad case of pessimism

In combination with a muted exchange rate pass through to import prices, the U.S. has an affliction known as elasticity pessimism. The term ‘elasticity’ reflects the percentage change in the quantity of a traded good demanded for a given percentage change in the price of that good. Forty years ago, it was discovered that demand for U.S. exports reacts more than proportionally to changes in exports prices, while U.S. demand for imports reacts less than proportionally to price changes. So, in effect, elasticity of demand for traded goods in the U.S. is asymmetric, causing economists to coin the term ‘elasticity pessimism’. Numerous economists have tested this notion over the years, using different data samples and estimation techniques, but the theory has held up every time, even though exact estimates can vary from study to study. In general, for every 1% drop in export prices, foreign demand rises by 1.5%. In contrast, for every 1% drop in import prices, domestic demand increases by only 0.3%. These elasticities are generally found to hold for the first 4-6 quarters from the depreciation and then import/export responsiveness might change as producers alter their production mix to allow for greater substitution of domestic goods for imports. While this asymmetry in trade prices is present for most countries in the world, it is found to be most pronounced in the United States.

Combining the effects of a low exchange rate pass-through to import prices with asymmetric elasticity in import demand makes it unlikely that the sole influence of a lower valued greenback would be sufficient to significantly impact the trade deficit on a long-term basis. For instance, using the exchange rate pass-through figures cited above, if we assume 20% depreciation in the greenback relative to the OECD average, this would lower export prices by 15% and raise import prices by 9%. Applying the price elasticity figures, foreign demand of U.S. exports would rise 22%, while U.S. demand for imports would decrease by only 3% in the four-six quarters after depreciation.

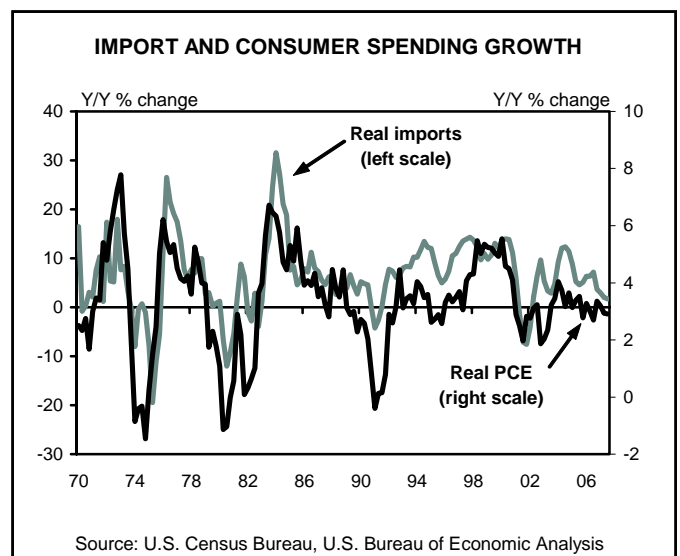
From this example, it is easy to see that U.S. dollar

depreciation is unlikely in itself to bring about a major correction in the trade deficit. The far more effective solution tends to come from a reduction in U.S. income or a combination of both income and exchange rate movements.

U.S. incomes matter more to narrow trade deficit

Returning to the concept of elasticities, asymmetric demand for exports and imports is not only evident when it comes to the influence of price movements, but it also exists for changes in national income. For a given level of income, Americans tend to have a greater appetite for imports than foreigners have for U.S. exports. While estimates vary, it is generally found that for every 1% increase in foreign income, demand for U.S. exports increases by roughly 1.4%. However, for every 1% increase in U.S. income, import demand increases by about 2.2%. The implication is clear. If the U.S. and the rest of the world grow at the same pace, the U.S. trade deficit would continue to increase. Alternatively, boosting foreign incomes is less effective at expanding U.S. exports than lowering U.S. income is at dampening import demand. As we now know, the reason the U.S. trade deficit has narrowed in the past two years is because the U.S. economy has greatly underperformed world growth and relative prices have moved in favour of U.S. products with the depreciation of the greenback. In this environment, imports are still expanding at an annual pace of just over 2% this year, well below that of prior years, but still providing some resistance to a narrowing deficit.

The question then becomes: how much longer are these influences likely to continue? If there is one word that can



What about the 1980s experience?

The last time the real trade deficit hit a cyclical peak was in 1986, when the deficit was -2.5% of GDP growth. At the time, that was the largest U.S. trade deficit ever recorded. Much like today, concern over global imbalances caused the U.S. dollar to depreciate. Over a three year period (1985-1988), the real trade-weighted dollar fell by 36% against its major trading partners. The much-improved competitive position of American exporters caused export growth to surge ahead at a double digit pace from 1987-1989 and the trade deficit narrowed to 1% of GDP. In the years that followed, export growth slowed to a 4.5% quarterly pace, but other influences

came into play that further shrank the trade deficit. Real consumer spending started to sputter in 1989. Spending growth in three of four quarters was below 2% and the same was true in 1990. By the end of that year, consumer spending growth contracted and the economy was officially launched into a recession. In response, import growth paralleled these developments, contracting sharply for several quarters. The trade deficit subsequently shrunk to near balance (-0.1% of GDP) by the end of 1991. As the economy recovered in 1992 and consumer demand rebounded, so too did imports and the trade deficit was back to 1% of GDP within two years.

describe the U.S. economy, it is resilience. While the near-term economic landscape is littered with downside risks, stemming from the housing market and the credit crunch, these cyclical influences will lift in 2009. A recovery in U.S. economic growth will present a speed bump to further improvements in the trade deficit because import demand will rise disproportionately to the economic expansion. In addition, world growth is expected to slow from a current tracking of 5.1% in 2007 to 4.4% by 2009. In a nutshell, the dynamics required to narrow the U.S. trade deficit will be moving in the opposite direction – U.S. income will be accelerating, while world income will be decelerating. Without further downward pressure on the greenback, it would be hard to attain a significant improvement in the real trade deficit. For 2009, we believe the trade balance will have a net neutral impact on GDP growth, with the deficit edging down to about -4% of real GDP by the end of that year. This means that the American economy will remain reliant on foreigners to continue to fund their expenditures, to the tune of about \$1.4 billion per day. As a result, Americans will remain vulnerable to the

whims of international sentiment that could lead to ongoing bouts of market and currency volatility.

Conclusion

There are two dimensions to the U.S. trade balance. First, the global environment should remain supportive for American exporters and, therefore, profitability. Our view is that the trade-weighted dollar will be little different in 2009 than it is today. The low U.S. dollar will thus enable exporters to maintain a competitive advantage over other countries, which will more than offset the potential for slightly softer export demand in an environment of slowing global growth. Second, a large improvement in the trade deficit will be much more difficult to come by once the U.S. economic expansion regains momentum in 2009. The recent improvement in the trade deficit had less to do with the fact that import demand had disappeared, and more to do with the fact that export demand had reappeared. Once domestic economic conditions start to strengthen, so too will imports, and further improvements in the trade deficit will be harder to come by.

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Endnotes

- ¹ Goldberg, Linda and Eleanor Wiske Dillon, Why a Dollar Depreciation may not Close the U.S. Trade Deficit, Federal Reserve Bank of New York, June 2007.

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