PERSPECTA TRUST

November 2016

Good Times

Who wants to talk about the election? Things hit a new low for me last week when I attended a third grade theatrical performance that was an hour-long comedy on building a wall, deleting emails, and the nonsensical idea of wanting to run for Congress. Once upon a time, third graders dreamed about the prospects of running for public office – now they joke about it. Interesting times. Apart from the big personalities and storylines better fit for a reality show, the main takeaway (for me anyway) is how *angry* people are. The anger isn't limited to the United States or towards US politicians but is much broader and more pervasive. In my last letter, I discussed Brexit and the limited near-term market implications of the "leave" vote but failed to acknowledge the broader, more secular anger that people feel towards their general current state of being. Why are people so angry?

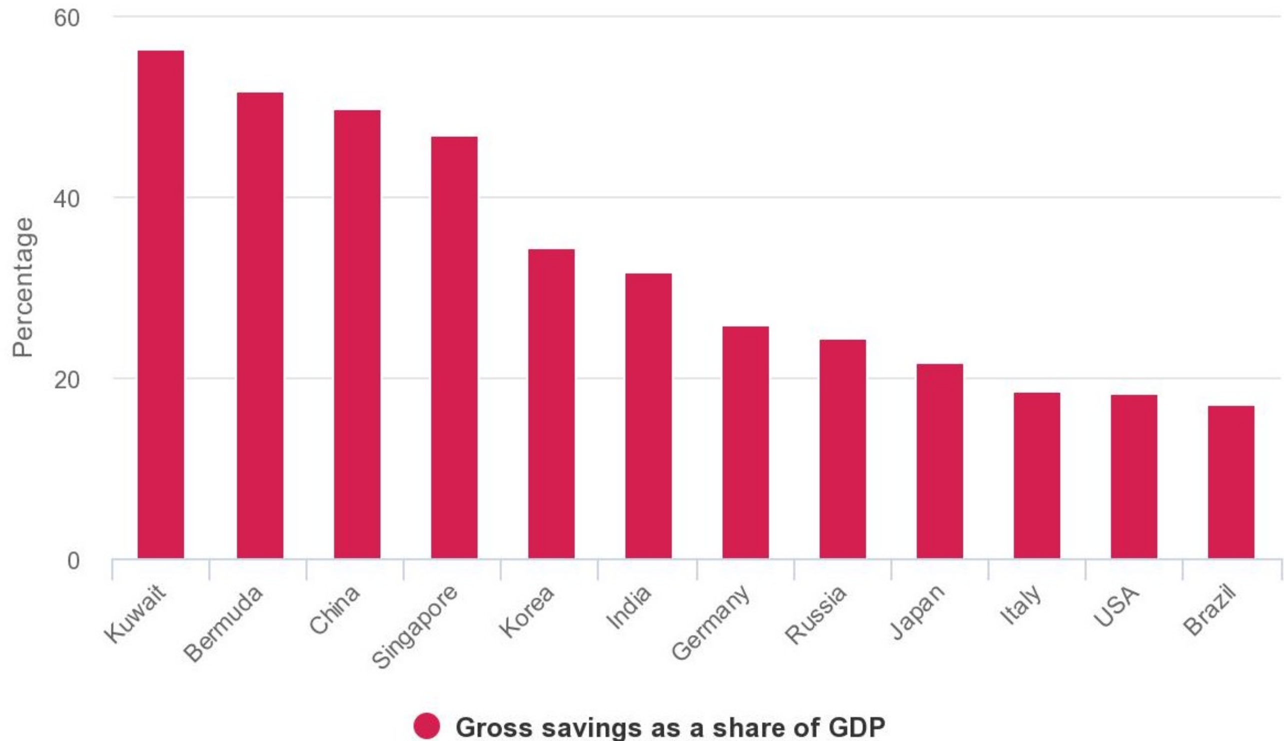
Comparative Advantage

Most readers likely recall the theory of comparative advantage from an Economics 101 class in high school. The theory goes something like this – if two countries, each of which specializes in the production of a good in which it has a comparative advantage, engage in free trade, then each country is able to increase its overall consumption. Obviously there are nuances, but it is generally accepted by the academics (and historically the general public) that trade is a good thing, benefits all parties involved, and is best for the good of society over the long term. Paul Krugman summarizes this view succinctly in his 1997 Journal of Economic Literature article by stating "if economists ruled the world, there would be no need for the World Trade Organization. The economist's case for trade is essentially a unilateral case: a country serves its own interests by pursuing free trade regardless of what other countries may do."[1] Further, it was generally agreed that workers employed in regions specializing in import-competing sectors could readily relocate to other regions if displaced by trade.[2]

Enter China. The behemoth from the Far East entered global trade without much fanfare. In mid-1989, the Wall Street Journal predicted that the growth leaders over the next 25 years would be Bangladesh, Thailand, and Zimbabwe, while thinking China would be a laggard. Over the ensuing ~25 years, China's share of global manufacturing exports grew from 2% to almost 20%. Its GDP is up more than thirtyfold. An estimated 250 million Chinese workers migrated from farms to cities in search of labor-intensive employment.[3] Standard theory would suggest that the increase in demand for Chinese labor and exports would result in corresponding demand for goods and services from China's trading partners.

1 Krugman, Paul. *What Should Trade Negotiators Negotiate About?* Journal of Economic Literature, 1997
2 Autor, Dorn, and Hanson. *The China Shock: Learning from Labor Market Adjustment to Large Changes in Trade*. National Bureau of Economic Research, 1/2016 ("Autor, Dorn, and Hanson").
3 Ibid

Following is a chart from CNBC that shows the *savings rate* amongst various countries for 2015:

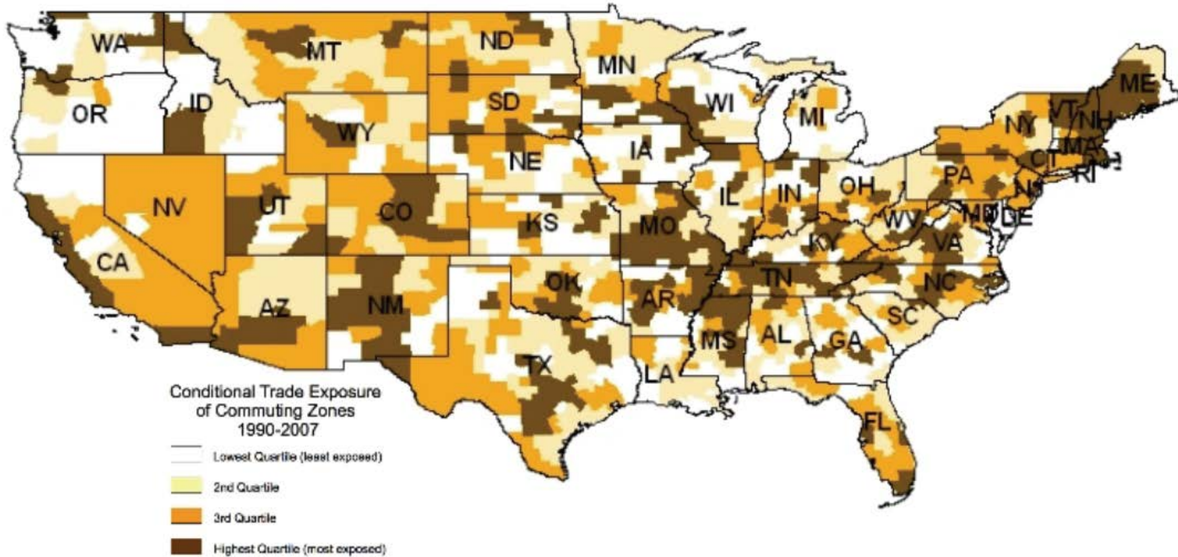


The missing variable in standard economic theory is savings. Instead of ploughing earnings back into products and services (some of which would be demand from trading partners), the Chinese save more of their hard earned income than almost any nation on earth. Further, the savings rate has been increasing – since 2004, the savings rate amongst the Chinese is up almost 50%. What this savings creates is effectively a one-way flow of demand, thereby benefitting the Chinese at the expense of trading partner labor.

Amongst the various counterarguments, there is the concept that, in the aggregate, the US benefits from lower-priced (primarily manufacturing) goods, which is fair. Those lower prices, however, are effectively a reduction in the potential earning power for swaths of American workers. Following is a chart[4] that shows the trade exposure of various US commuting zones[5] to manufacturing competition from the Chinese:

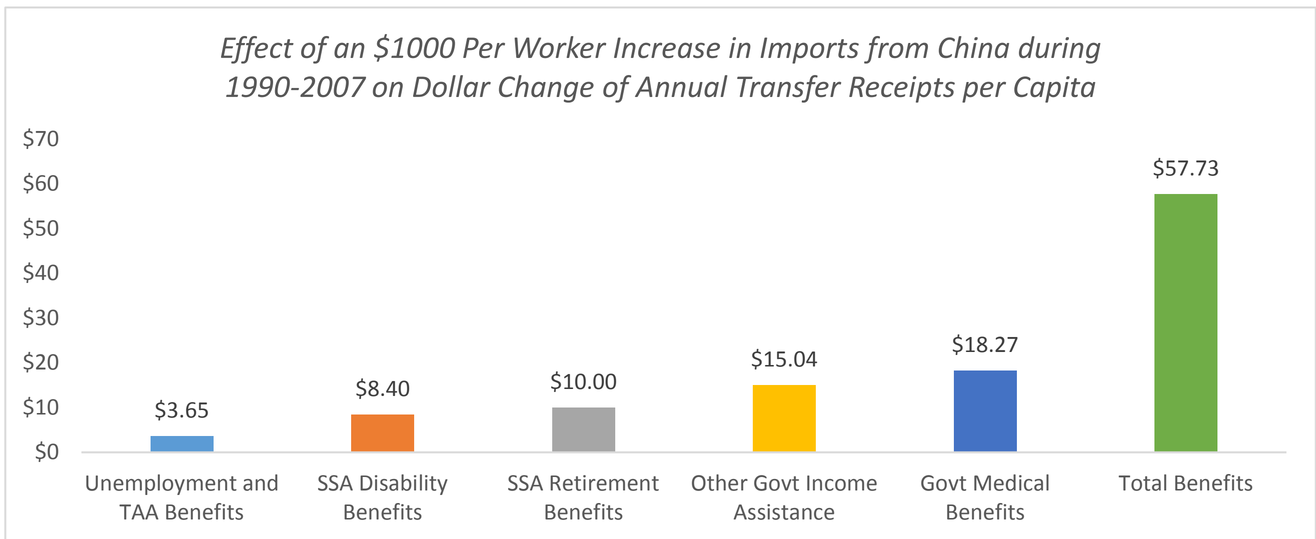
[4] Autor, Dorn, and Hanson

[5] Commuting Zones are geographic areas intended to reflect the local economy where people live and work. You can learn more at https://www.ers.usda.gov/data-products/commuting-zones-and-labor-market-areas/.



You could think about the benefits of lower prices from Chinese imports as loans from workers in the brown regions of the map. Those loans will be repaid if and when the Chinese excess savings turns into demand for US goods and services. The longer time goes on and the Chinese savings rate not only persists but increases, the more those loans seem like a permanent shift in resources.

The reduction in value has consequences beyond reduced purchasing power for the average worker competing with China. The following chart[6] is from a study that tries to assess the added cost to US government programs for providing assistance to those displaced by trade:



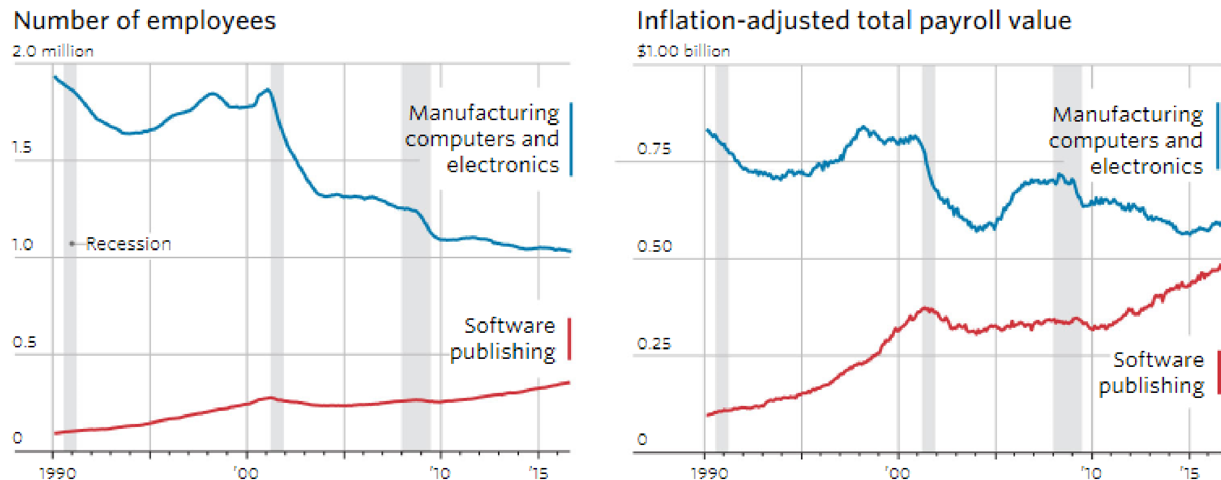
[6] Autor, Dorn, and Hanson

There is roughly a 6% increase in dollar cost to US programs resulting from trade with China. In absolute dollar terms it's a "yuge" number. Perhaps more important than the dollar cost is the immediate and longer-term impact on worker psyche (more on that below).

Technology

China is not entirely to blame for the changes in circumstance. In *Rise of the Robots*, Martin Ford compares technological advances since the advent of the integrated circuit to the speed of a car. Research suggests that the progress of technology and processing power roughly doubles every eighteen months. Assume you get into your car and begin driving at five miles per hour, drive one minute, then double to ten miles per hour. Since 1958 (advent of the integrated circuit), technological progress has doubled around 27 times. In the 28th minute of driving, you would be going more than *670 million* miles per hour. In that single minute, you would go eleven million miles, and five minutes at that speed would get you to Mars. That's the essence of the technological revolution and speed of progress today vis-à-vis history.

At one time, prognosticators (and economists) envisioned a nearly-real-time reallocation of workers from manufacturing to technology. President Bill Clinton said in his last State of the Union address: "America will lead the world toward shared peace and prosperity and the far frontiers of science and technology." His economic team claimed that "the ferment of rapid technological change" would be one of the U.S. economy's principal growth engines. While the US may be a leading player in science and technology, that lead and the rapidly-advancing nature of technology hasn't created the economic growth or broad-based human utility that the former president envisioned. Following are two charts from the Labor Department that show both job creation (destruction) and payroll value of the technological revolution since the early 1990s:



Note: Publishing figures are through August; manufacturing figures are through September.

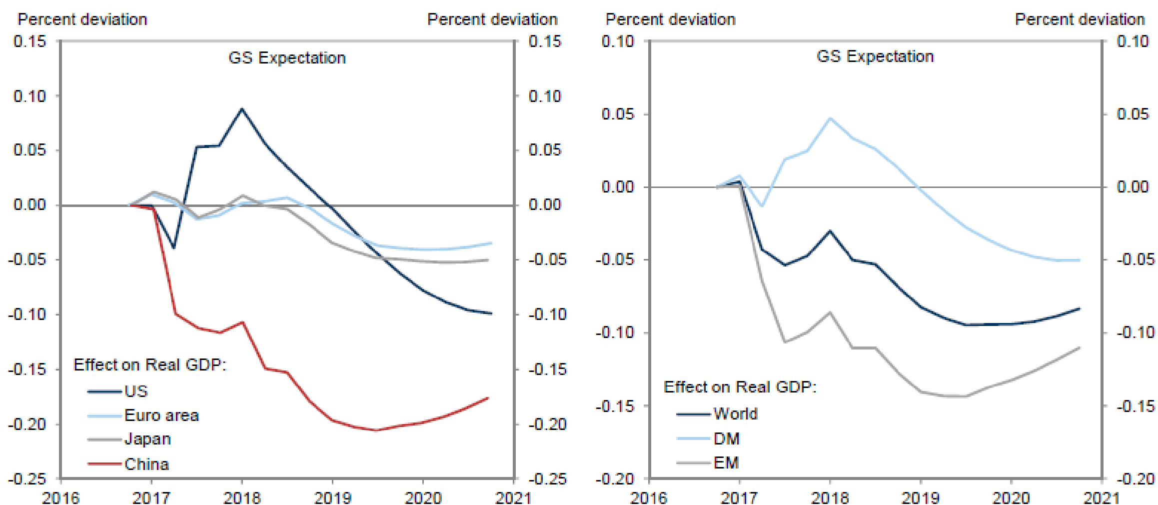
Source: Labor Department

More recently, the Labor Department estimates that total employment at computer and electronics firms in the US sank from 1.9 million to 1.0 million from 2001 to 2016. Those declines have been partially offset by fewer but higher paying jobs in the software publishing space. Generally speaking, those higher paying software positions are located on the US coasts (Boston, San Francisco, etc.) and not along the rust belt once home to the industrial and manufacturing positions most affected by the technology revolution. A case study in the above dynamics can be seen with Micron Technology starting in the 90s. Founded by Idaho farmers and businessmen, the company's workforce quadrupled to 18,800 between 1994 and 2000, and those workers were predominately in the United States. Over the ensuing decade, the company's US workforce was roughly halved while its Asian workforce quadrupled. As a percentage, domestic workers fell from 74% to 37% before the company stopped reporting the figures in 2014.

Putting Things in Perspective

Let's say you live in the Midwest and were making $20k per year in the mid-1980s. That rate had steadily risen through the 70s, and you were accustomed to annual real increases in standard of living for the better part of a decade. Over time, annual pay increases cease, and your company experiences layoffs. Friends and co-workers on the short end of the stick end up taking positions at nearby factories at a 30% discount. You ultimately end up in the same position. Your standard of living decreases, familial discontent increases, and you end up bouncing around from job-to-job with roughly no improvement in standard of living for multiple decades. Over those decades you become increasingly reliant on the government to maintain your standard of living, all the while blaming it for the aforementioned changes in standard of living and familial circumstances.

On November 8, the American people voted against the last twenty years. They voted that the efficiencies, margin improvements, and stock market gains accruing primarily to a small subset of the population were not in their best interest. Isolationist rhetoric dressed in the guise of "America First" has the potential for some near-term stimulus to the US economy, but much like artificially low rates borrow returns from the future, any near-term stimulus from closing our borders likely limits both US and global growth potential for years if not decades to come. The following chart from Goldman Sachs estimates the deviation in real GDP from the Trump agenda:



Source: Goldman Sachs Global Investment Research.

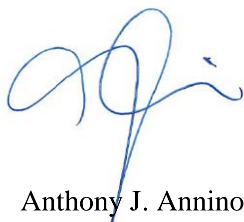
Despite a nominal near-term bump from Trump's various proposals, Goldman anticipates the longer-term impact will be broadly negative to both the US and global economy. Further, the tail-risk of a geopolitical event resulting from the anticipated longer-term economic declines (or some other coordinated revolt to Trump's presidency) has risen substantially.

What Does It Mean

As those in my office can attest, I was one of the few that thought Trump was going to win. Brexit provided a powerful example of both the gross inadequacy of polls in predicting outcomes as well as the strength of the populist movement that is sweeping parts of the developed world. Some of the smartest political minds in the US totally missed it – when I told the head of external affairs for a large Washington-based private equity firm recently that I thought Trump would win, he responded (albeit half-jokingly) that his firm needed some smarter LPs. Despite calling the election correctly, the market reaction is something we did not foresee – as of this writing, the S&P 500 is up almost 3% since Election Day, and rates (on the 10-year US Treasury) are *up* around 27%.

As outgoing President Obama likes to say when commenting on the US economy, it's a big ship and not a speedboat. Changes implemented in Washington take time to filter through the broader economy in order to nudge the course of events in one direction or another. While markets may try to digest things quickly, any meaningful corporate tax cuts, repatriation scheme, or other perceived stimuli will take months and years to significantly change the course of events.[7] In the near-term, we are largely staying the course with asset class and risk positioning while trying to seek out differentiated, uncorrelated sources of alpha. Over the medium and longer-term, we'll continue to assess what opportunities any change in legislation might present while acknowledging that the economy is a big ship.

Please let us know if you have questions, and thanks as always for your continued support.



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[7] See the "Perspecta Commentary" section of our website for our views on potential tax reform: http://perspectatrust.com/category/perspecta-commentary/