

The Reindustrialization of the U.S.; an Update

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Reindustrialization Trend Still Intact

In December of 2012, Euler Hermes Economic Research published an analysis entitled “The Reindustrialization of the United States” which predicted a resurgence in U.S. manufacturing. In this update, we go back to find that the fundamentals underlying the analysis to be not only intact but in some cases even stronger. The central theme of reindustrialization is that the U.S. now has among the lowest labor costs in the industrialized world, and is awash in cheap energy, making it attractive for businesses to bring manufacturing back “onshore” to the U.S.

Labor still cheap, productive

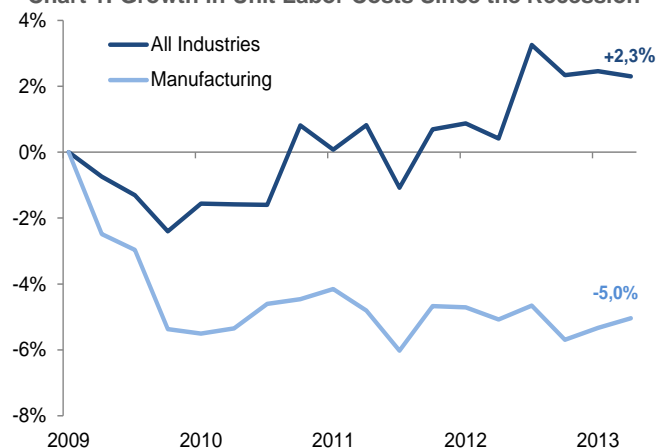
The labor outlook is as positive as before and from some aspects it has actually improved. Chart 1 shows that while unit labor costs for all industries have risen 2.3% since the recession, unit labor costs for manufacturing have actually fallen 5.0%.

As we noted in our prior analysis, in 2006 China held a \$17.1 unit labor cost (calculated as a proxy, Effective Wage) advantage over the U.S., and we predicted that advantage would shrink to \$9.9 in 2014 and \$7.5 in 2015. But since U.S. wages have grown even more slowly than expected, we now predict that the Chinese advantage will shrink to \$9.2 in 2014 and \$6.9 in 2015, as shown in Chart 2.

In summary:

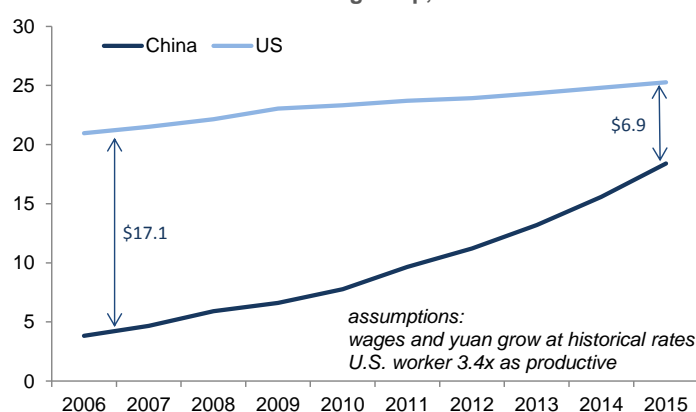
- Reindustrialization factors from previous analysis on track or improved.
- Manufacturing unit labor costs down 5% since 2009.
- Cheap natural gas making inroads in electricity generation and trucks.
- 2014 auto sales to grow 4%, chemicals up 3%.
- New orders for durable goods up 7.8% in Q4.
- Manufacturing unemployment fell from 7.9% to 5.6% in the past year.
- Significant evidence that reshoring is likely to continue.

Chart 1: Growth in Unit Labor Costs Since the Recession



Sources: BLS, Euler Hermes

Chart 2: Effective Wage Gap, U.S. vs. China



assumptions:
wages and yuan grow at historical rates
U.S. worker 3.4x as productive

Sources: Chin. Min. of Labor & Soc. Sec., BLS, Federal Reserve BCG, Euler Hermes

Taking Advantage of Cheap Energy

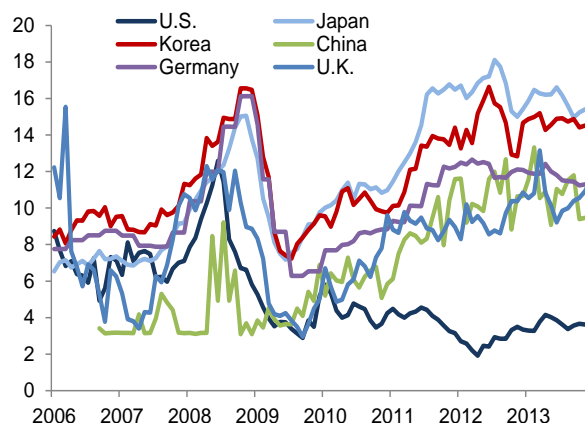
The second leg of reindustrialization is cheap U.S. energy, and that trend continues as well. As shown in Chart 3, natural gas prices have continued their divergence from prices in other industrialized nations (although there have been temporary spikes due to the unusually cold U.S. winter.) Looking forward, natural gas prices are likely to experience downward pressure due to continued increases in production as shown in Chart 4.

Cheap natural gas is already on the way to displacing coal as the major source of electricity generation in the U.S. According to The Wall Street Journal for example, PJM, which operates electrical grids from the mid-Atlantic to the Midwest has recently observed “a new phenomenon” of electricity flowing from eastern gas-fired plants into areas “that have been traditionally served by coal-fired plants.” In the 13 states served by PJM, “27% of coal fired capacity is expected to be retired over the next few years,” much of which will be replaced by natural gas-fired plants.¹

Natural gas is also making unexpectedly rapid inroads as a vehicle fuel, particularly for large commercial trucks. The Wall Street Journal reported that 1% of all heavy duty trucks sold in 2013 ran on natural gas, but 5% are expected to in 2014; Lowe’s plans to have 100% of its fleet on natural gas by 2017; Proctor & Gamble expects to increase its natural gas fleet from 7% to 20% in two years; UPS plans to buy 1,000 natural gas trucks by the end of 2014; FedEx expects its fleet to be 30% natural gas in 10 years, and; 60% of all new garbage trucks purchased in 2013 ran on natural gas². In addition, experiments are underway using natural gas for trains and aircraft.

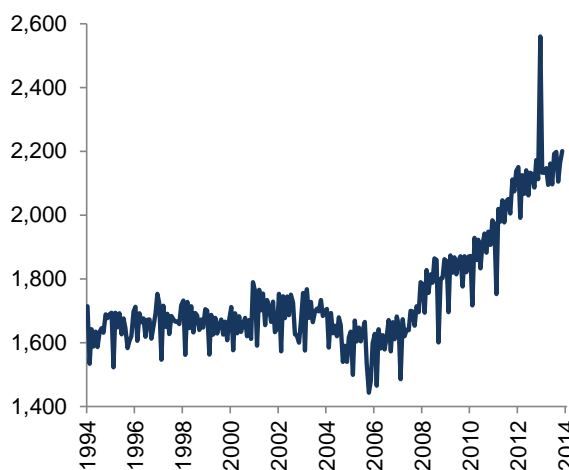
Oil prices also continue to show a significant U.S. advantage. Chart 5 shows the percentage spread of the price of U.S.-based West Texas Intermediate (WTI) crude below the global Brent crude price. While the spread has normally been close to 0%, it spiked down on increased U.S. discovery and production of new oil fields in 2011-13. Although the spread has narrowed to 7% in March, it still provides a significant cost advantage to oil consumers in the U.S., paralleling the U.S. cost advantage in natural gas. The red portion of the line is the forecast spread which is based on futures contracts from April 2014 to January 2015, indicating that participants in the global oil market expect a U.S. cost advantage to increase to 12% by January 2015. Falling oil prices have also contributed to falling gasoline prices, which despite recent increases are still averaging \$0.15 less than 2013, offering a further boost to the U.S. economy.

Chart 3: Price of Natural Gas, \$/MMBtu



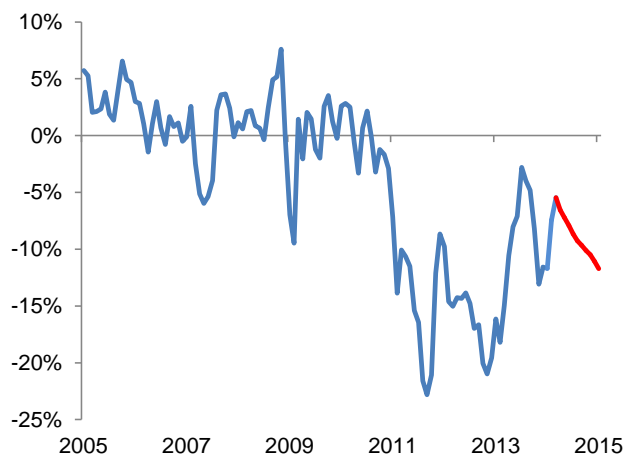
Sources: Energy Intelligence, Euler Hermes

Chart 4: Natural Gas Production



Sources: Energy Intelligence, Oil and Gas Journal, Euler Hermes

Chart 5: Percentage Price Difference of WTI Below Brent



Sources: World Bank, CME Group, Euler Hermes

Strong Manufacturing Output

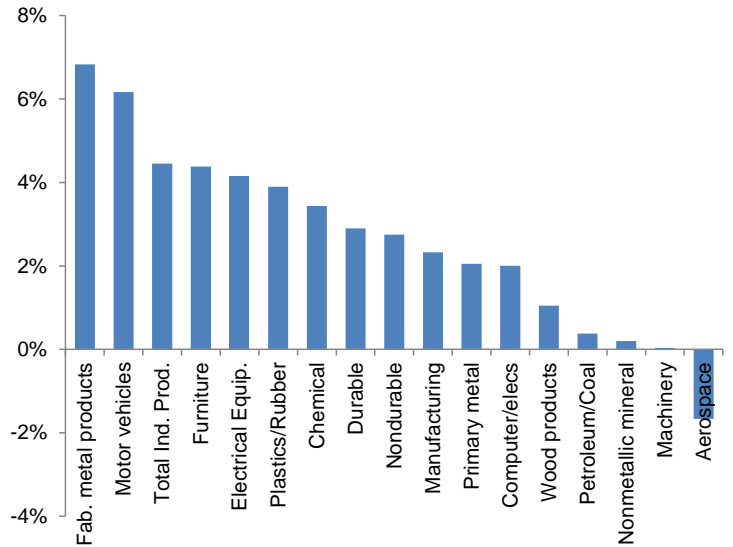
As a result of continued favorable labor and energy trends, measures of manufacturing output are showing rebounding strength from a soft patch earlier in the year. Manufacturing industrial production had risen for five consecutive months until being temporarily derailed by weather in January, but is still growing at an annualized rate of 2.3%. Chart 6 shows the growth rate of industrial production in different manufacturing industries (three months ending Jan '14, compared to prior three months.) For 2014, expectations are that the auto sector, driven by the age of the auto fleet which is a record high 11.4 years, will continue its strong performance with sales growing 4%. Chemical production is expected to rebound from weakness early in 2013 to grow 3% in 2014, again driven by the low cost of natural gas which is used as a feedstock.

Overall goods production, which helped lead the economy out of the great recession, continues to be a major contributor to growth in real Gross Domestic Product (GDP). As shown in Chart 7, since the end of the recession, goods production has outperformed GDP in 15 of the past 18 quarters, averaging a 5.7% annualized rate vs. 2.2% for total GDP; they finished 4Q13 at 8.1% and 2.4% respectively.

Measures which are more forward-looking are showing strength as well. Chart 8 shows manufacturers' new orders for durable goods, which after stripping out inflation, rose at a very strong 7.8% annualized rate in Q4 vs. Q3, well above the long-term average of 2.7%, boding well for durables going forward. Total manufacturing was dragged down a bit by non-durables but still remained at a strong 3.5%

The Institute of Supply Management (ISM) surveys, which can lead actual performance, indicate expansion when they are over 50. While total manufacturing and the new orders subcomponent both fell with the severe winter weather in January, as shown in Chart 9 they both rebounded in February to 53.2 and 54.5, respectively. The employment component (not shown) also demonstrated resilience at 52.3.

Chart 6: Growth in Industrial Production



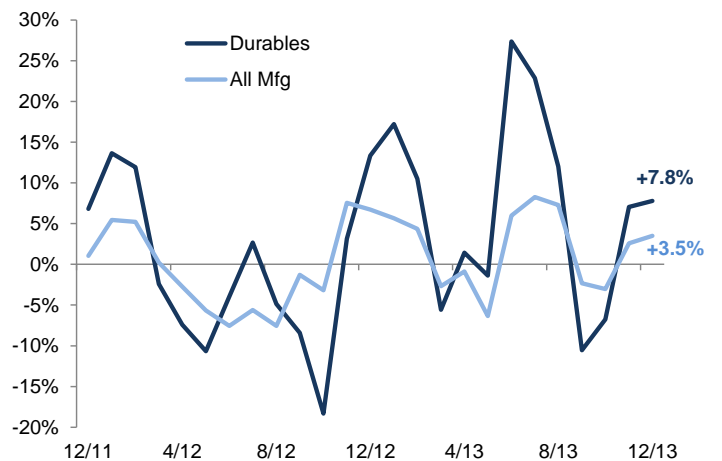
Sources: Federal Reserve, Euler Hermes

Chart 7: Production of Goods vs. all of GDP, year/year



Sources: Census, Euler Hermes

Chart 8: Real Manufacturers' New Orders (Q4/Q3, annualized)



Sources: Census, Euler Hermes

Manufacturing Employment Finally Improving

The resilience in the ISM survey confirms that the last piece of the manufacturing landscape which has been absent until now is starting to fall into place; employment. The number of employees hired in manufacturing has grown for six consecutive months ending in January, more than erasing job losses suffered in April through July 2013. In addition, as shown in Chart 10, the unemployment rate for all industries and for manufacturing were both 7.9% at the beginning of 2013. Since then, the unemployment rate for all industries has fallen to 6.6%, but for manufacturing it has plunged to 5.6%, well below the average since 2000 of 6.6% represented as the dotted line in the chart. An even stronger indication of improvement in the manufacturing labor market is shown in Chart 11. Overtime hours have grown at a steep 9.6% rate over the past three months vs. the long term average of 3.1%. In particular, durables have set a blistering 16.2% annualized rate vs. the long term average of 4.2%.

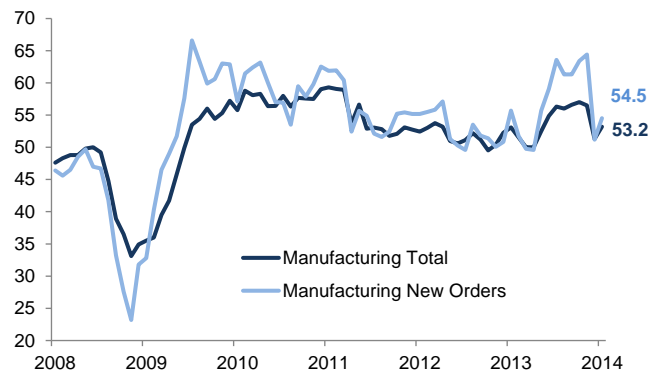
Fed tapering likely to have limited impact

A firming economy has caused the Fed to start tapering its QE program, with expectations that it will be terminated completely by the end of 2014. But the Fed will be still be buying securities and adding to already massive excess reserves, so tapering is not tightening. In addition the Fed will likely keep short term rates at 0% into 2015. Therefore monetary policy remains very loose and is expected to contribute to growth in manufacturing (and most other sectors.) In addition, as QE tapering drives up long term rates, it will also drive up the spread between long term and short term rates, a condition which will increase bank lending profits. As shown in Chart 12, bigger spreads and bigger bank profits also mean bigger incentives to ease credit conditions. Easier credit conditions are likely to provide a further boost to manufacturing and the entire economy. Possible downsides to QE tapering include rising interest rates which have temporarily slowed the housing recovery, and a strengthening dollar which would make exports more expensive and imports cheaper.

Corporate Tax Reform Would Help

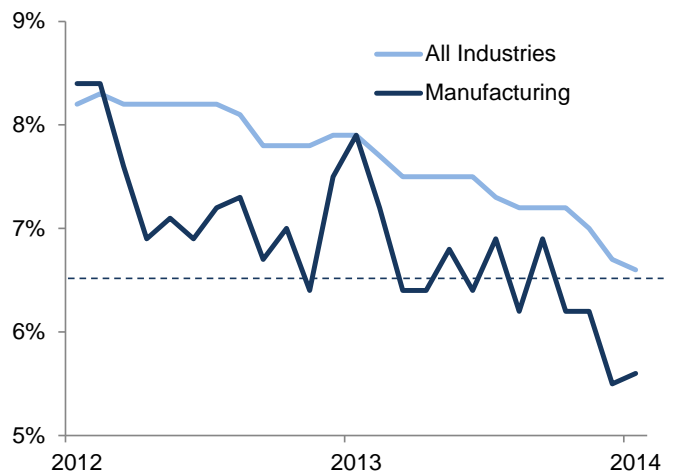
Manufacturing could receive a substantial boost from tax reform. The U.S. now has the world's highest corporate tax rate at 39% vs. the OECD (ex-U.S.) average of 29%. The U.S. also uses a worldwide tax system which taxes profits both where they are made and back in the U.S. By contrast, all of the G8 countries and 28 of the 33 OECD countries use a territorial system, taxing profits only where they are made.

Chart 9: ISM Manufacturing Survey



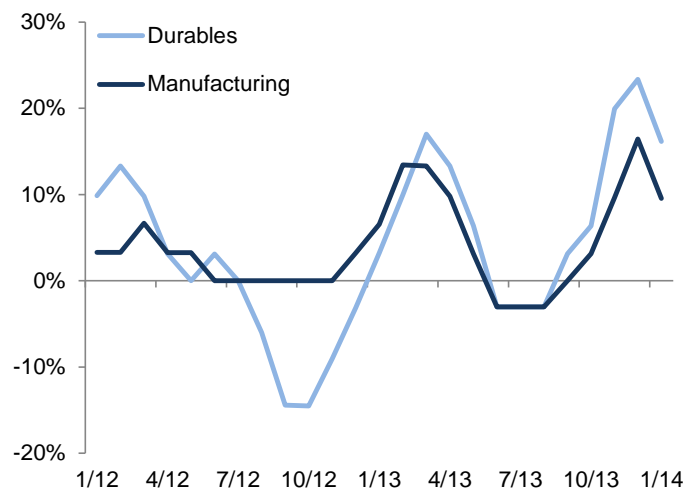
Sources: ISM, Euler Hermes

Chart 10: Unemployment Rate



Sources: BLS, Euler Hermes

Chart 11: Growth in Overtime Hours Worked



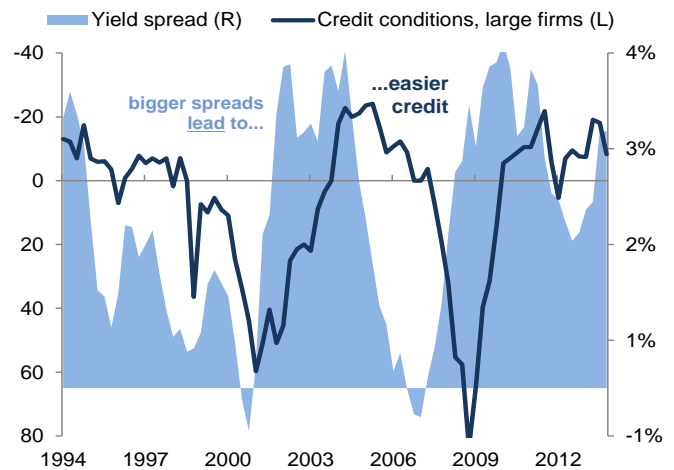
Sources: BLS, Euler Hermes

The U.S.' high corporate rates and worldwide tax system have caused companies to keep \$2T (a full year's worth of total U.S. investment) locked up overseas (Bloomberg, J.P. Morgan). Lowering and flattening rates while reducing deductions, combined with switching to a territorial system could unleash that cash for productive investment. Manufacturing in particular would benefit since eight of the top ten companies hoarding cash overseas are in manufacturing: General Electric, Pfizer, Merck, Johnson & Johnson, IBM, Exxon, Cisco, and Apple. Investment, particularly R&D spending helps drive economy-wide growth as shown in Chart 13.

Reindustrialization Continues

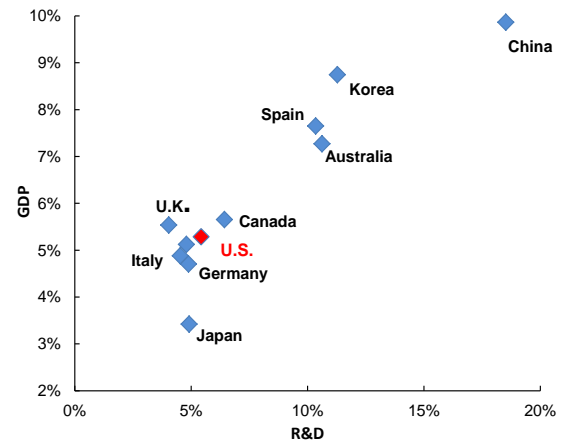
Low unit labor costs and cheap energy have boosted manufacturing output and employment, and are expected to continue doing so for years, reshoring jobs back to the United States. Businesses are expected to invest \$500B in U.S. manufacturing in 2014³. One of the most visible examples recently was Apple's choice to locate a new plant in Arizona instead of China where Apple has traditionally placed much of its manufacturing. While other anecdotes abound, the Boston Consulting Group (BCG) has made a more comprehensive survey of the situation. BCG recently polled 200 U.S.-based executives and reported that 54% are planning to reshore or are seriously considering it, while only 37% gave the same response in a February 2012 survey. Twenty-one percent said they were already doing it or will in the next two years, more than twice as much as in the previous survey. The main reasons given for the shift are labor costs and skill, proximity to customers, lower transportation costs and supply chain efficiencies.⁴ Clearly, the reindustrialization of the U.S. is moving ahead even faster than expected in our previous report.

Chart 12: Interest Rate Spreads vs. Credit Conditions



Sources: Federal Reserve, Euler Hermes

Chart 13: GDP GROWTH VS. R&D GROWTH
ave. annualized rates 1987-2009



Sources: BLS, Euler Hermes

1. Smith, Rebecca. In Blow to Coal, TVA to Shut 8 Units. The Wall Street Journal, 11/15/13.

2. Ramsey, Mike. Truckers Tap Into Gas Boom. The Wall Street Journal, 10/30/13

3. IHS Global Insight

4. Sirkin, Harold L. More Companies See Advantage to Manufacturing in the U.S. Bloomberg Business Week, 10/28/13

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