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Economic Watch

US

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Economic Analysis

US

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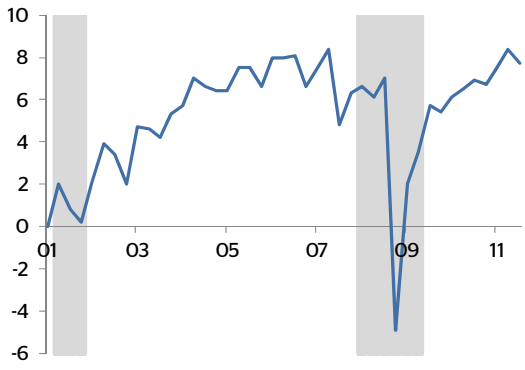
Can Manufacturing Save the Labor Market?

Only if deep structural reforms occur

- **Recent gains in manufacturing mask long-term problems**
- **Reforms to education, infrastructure, research and development, trade agreements key to future evolution of manufacturing**
- **The US is in self-denial about industrial policy**
- **America is not out of the game yet; time remains to change course**

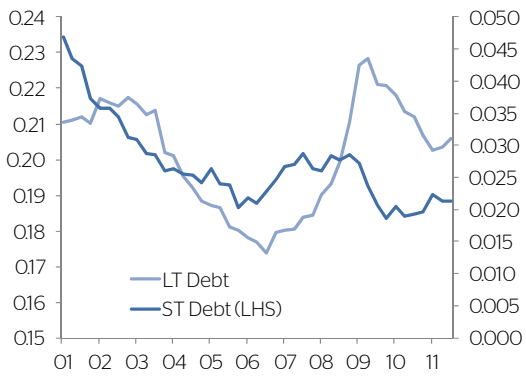
Following manufacturing since early 2010, one would be encouraged to feel positive about the labor market. Since January 2010, employment in durables manufacturing has increased total employment by 418k jobs (nondurable manufacturing, in contrast, is a net drag over this same time period). Orders for durable goods, surveys of manufacturing expansion, and indices of purchasing managers all suggest positive momentum over the past few months for US manufacturing production and employment. Many of the government's efforts to revive the economy are positively impacting the manufacturing sector: ultra-low interest rates are sprucing up manufacturers' balance sheets and accelerated depreciation, viewed in ramped-up depreciation expenses, is fostering cash flow. According to the 2011Q3 Quarterly Financial Report on Manufacturing, net sales and revenues are recovering strongly alongside profits. More interestingly, the financial conditions of manufacturers are impressive. Working capital as a percent of total assets is at 8.4, which is at the upper range of data since 2000. Overall gearing of manufacturers is low compared to the past decade (0.55 in 2011Q3 compared to 0.61 in 2000Q4). Manufacturers are also relying less on short-term debt, which as a ratio to total assets stands at 0.021 in 2011Q3 compared to 0.045 in 2000Q4, and more on long-term debt. Manufacturers also benefit from a lower trade-weighted US dollar index, which makes their products cheaper abroad. In general, the recovery in emerging market demand since the crisis, special tax incentives, and ultra-low interest rates have boosted durables employment over the past two years. This is also coupled with increased domestic business investment in equipment and software. This may also improve if Congress allows for tax-free repatriation of profits held abroad by large companies.

Chart 1
Manufacturers' Return on Assets after Taxes



Source: Census Bureau and Haver Analytics

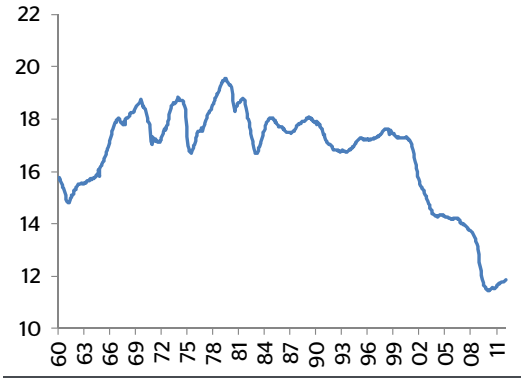
Chart 2
Manufacturers' Long and Short-term Debt Ratios



Source: Census Bureau and BBVA Research

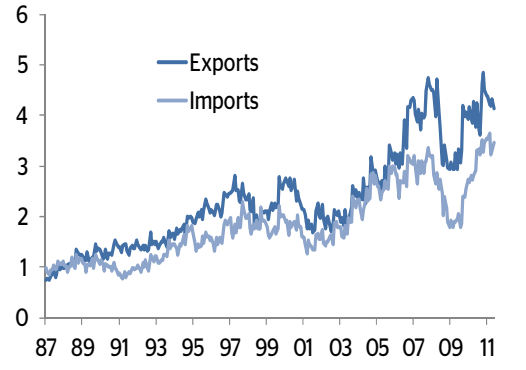
Keeping a time period over the past 24 months, however, shields us from major problems that still exist in US manufacturing. While our accelerated depreciation and low interest rates have created substitution of capital for labor and a productivity boost, persistent productivity increases require more than just a tax break. Since January 1998, the US has lost 5.8mn manufacturing jobs and international firms have stepped-up their hiring abroad. Given the trend of manufacturing employment in Chart 3, it is hard to argue that recent strength will continue. In all likelihood, and given current neglect of structural reforms, these jobs will never return to the US. The main problem is not that productivity enhancements made these jobs redundant or that these jobs shifted to other countries, or that higher wages made these jobs uncompetitive. International wage differentials, while important, yield to a much larger problem. The major problem is that the US did not create new industrial jobs to replace these displaced jobs. This is a uniquely different challenge to America than during the formative days of its economic development. America's pro-business environment, innovative business practices (economy of scale and the modern corporation), and natural resources allowed it to escalate its economic development in the 19th and early 20th centuries. The system was not necessarily perfectly laissez-faire, but it was free enough to let market mechanisms work where appropriate and more laissez-fare than most of its competitors. This particular cocktail of economic development will not allow for outperformance in a world where even communist countries know a pro-business environment is necessary for development.

Chart 3
Manufacturing Employment, in mn



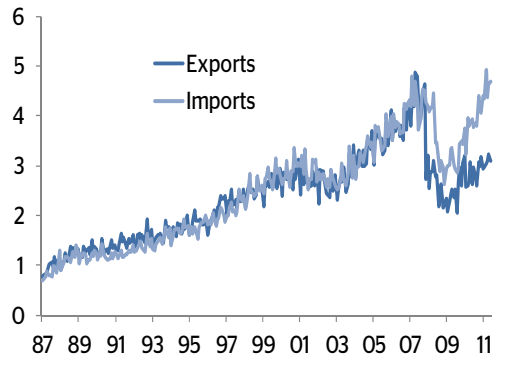
Source:

Chart 4
Imports and Exports, Specialized Machinery, $mn



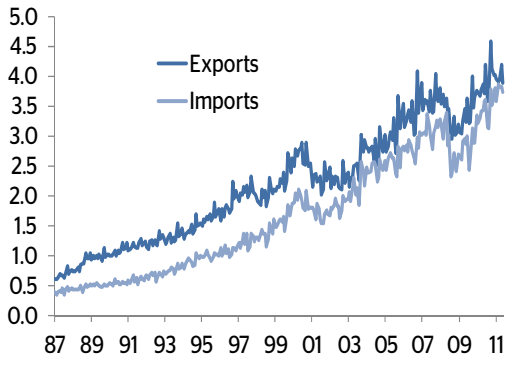
Source: Department of Labor

Chart 5
Imports and Exports, Power Generating Equip, $mn



Source: BBVA Research

Chart 6
Imports and Exports, Scientific Instruments, $mn

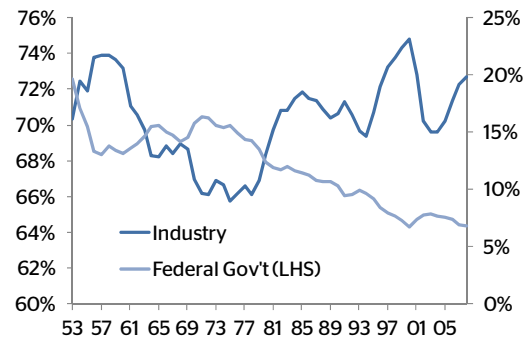


Source: Department of Labor

The impetus to replace these missing manufacturing jobs becomes more dependent on high value-added industries. For example, the export profile of the US remains strong in certain areas like specialized industrial equipment and scientific instruments, but weak in power generation equipment. Certain manufacturing exports like TVs and VCRs have become commoditized over time (the drag of nondurable manufacturing mentioned above is also exemplary of a commoditized industry, i.e. textiles and footwear). The loss of a particular industry such as VCRs is not so much a problem as the inability to fill that gap with a higher value-added industry. High value-added industries, like transportation or power generation equipment, are also key to feeding demand from high growth emerging markets. In theory, specialization and technical proficiency by the US in high value-added industries would complement growth in emerging markets. Some argue that an increasing services role in the economy is part of a natural process of development. Even though a country may move towards more services employment as it matures, it is possible to progress too far towards services. It is also possible that the transition from manufacturing to services can be badly managed or requires more time. It may be the case that an ultra-advanced economy will have 90% employed in services, but perhaps the change in the US towards services progressed faster than what the services sector could deliver for wages for the foreseeable decades.

Manufacturing matters to the US economy in a very strict sense: it allows for productivity increases, cluster formation, and capability development over time. These capabilities are key to generating new industries. A manufacturing industry also fosters demand in other sectors of the economy and tends to require changes in skills and education of the labor force. Manufacturing matters, in its most raw form, because of the productivity and the agglomerations associated with it. For example, Adam Smith would be blown away by some of the manufacturing accomplishments of China (or alternatively, Upton Sinclair would be horrified). China's Datang township makes one-third of the world's socks. Nearly 40 percent of the world's neckties are made in Shengzhou township. Songxia township produces 350mn umbrellas a year. The US should not be worried about losing manufacturing of socks and neckties to China. However, experience with routines and progressively more sophisticated manufacturing led China up the value-added hierarchy. This is how a country like China creates Foxconn, with one facility employing 230k workers on 12/6 schedules. It is important to note, however, that American multinationals are an important part of international manufacturing. The income generated by these corporations benefits the US, but this income is not as broad-based as we would expect if more production was located in the United States. The US is certainly lucky to headquarter international firms like Apple, but the wages and dividends of its managers and shareholders cannot fully recompense for millions of manufacturing jobs and the attendant broad-based real wage growth.

Chart 7
Industry and Federal Share of US R&D Expenditure



Source: BBVA Research

Chart 8
Nominal Broad Trade-Weighted Dollar (Jan-97=100)

Source: Haver Analytics

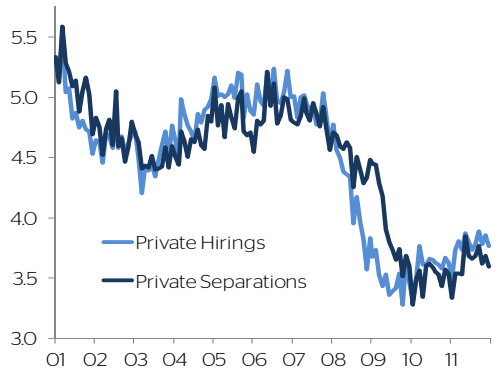
These stellar Chinese manufacturing results were brought about partially through industrial policy, a term used with extreme unease in the United States. In other countries, however, the number one rule of economic development is "be practical." Practicality is fostering manufacturing through good infrastructure, a strengthened education system (both in tertiary and vocational training), and collocation of manufacturing with research centers. Other countries developed capabilities in new industries by allowing government to perform a coordinating role, with attendant risks from rent-seeking and other government failures. Some countries executed this coordination badly, for example, the import-substitution programs of Latin America. Other countries executed this coordination efficiently, for example, the export-promotion of Japan. At some point an economy can become overly-balanced towards exports, requiring the abandonment of a blueprint that served an emerging economy well for years. In the case of the US, the problem is not to speed up the manufacturing learning curve. The problem for the US is to sharpen the saw of industrial achievement further along the cutting edge so that the country is premier in those industries with high sunk costs to market entry.

In the past month, the National Science Board (NSB) reported that although the US is a global leader in research and development, it is quickly becoming overtaken by investments by Asian countries. In particular, China increased research and development by 28 percent in one year, placing it second behind the US. One important initiative recommended by the NSB is investment in advanced manufacturing techniques that have the potential to foster new industrial jobs in the US. One risk to this outlook is the problem of fiscal austerity in the US. While private industry accounts for most research and development, the fiscal drag on the economy could extend to cutbacks in defense and federal research expenditures, which would further damage US potential growth. Regulation policy plays a role, but it is not the determining factor outside of the larger issues of infrastructure, education, and investment. American regulation must be "smart" in the sense that it regulates activity we need regulated: nobody wants to go back to Upton Sinclair's factories, but we should also not constrain industry unduly.

Bottom line: Living in denial about manufacturing

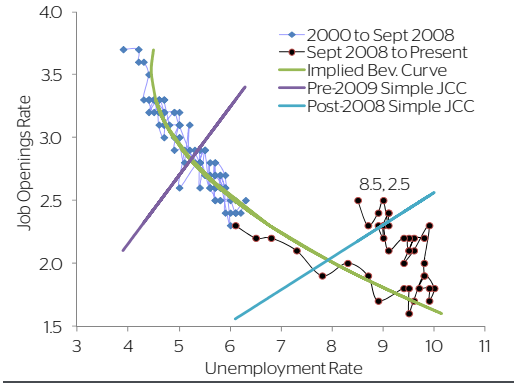
Recent gains in manufacturing belie the reality that a considerable amount of damage has already been done to the US manufacturing base. Indeed, our current measure of labor market tightness in the manufacturing sector (Chart 12) suggest manufacturing labor tightness is only slightly above the 2002 recession low and far from its peak. This damage is directly related to the neglect of long-term structural issues such as immigration, the education system, research and development policy and infrastructure. More fundamentally, the damage is also related to the US Federal government's ideological abhorrence to industrial policy. Our view is that in order to revive US manufacturing in the long run, the Federal government must play a limited coordinating role. Organizing tournaments for advanced manufacturing technology, somewhat along the lines of the Defense Advanced Research Projects Administration (DARPA), may be one means of doing so. More fundamentally, the Federal government can subcontract economic development to regions of the US. Cities and major regions of the US have no problem with industrial policy: many of them are extremely aggressive with tax breaks, developing infrastructure, and targeting exporters for development of business districts in their cities and localities. One benefit of decentralization is that these cities and regions will have better information about what will and will not work, the composition and needs of their labor force, and their natural resources and advantages. However, the Federal government is not completely off the hook in this regard. Many important complementary reforms to economic development, such as education or energy policy, must be reformed at the national level. Without simultaneous and complementary reforms, any initiatives at the regional level to revive manufacturing may fail.

Chart 9
Private Hirings and Separations, In Mn



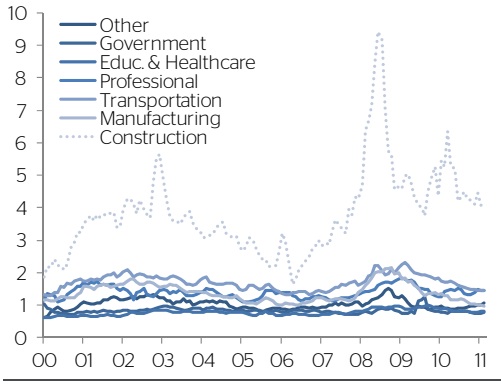
Source: BBVA Research and BLS

Chart 10
National Beveridge Curve



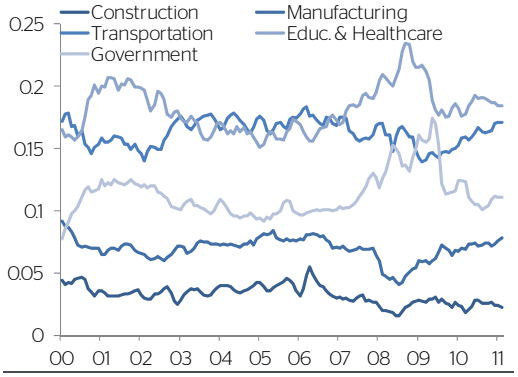
Source: BBVA Research and BLS

Chart 11
Vacancy Yield by Industry. 3MMA



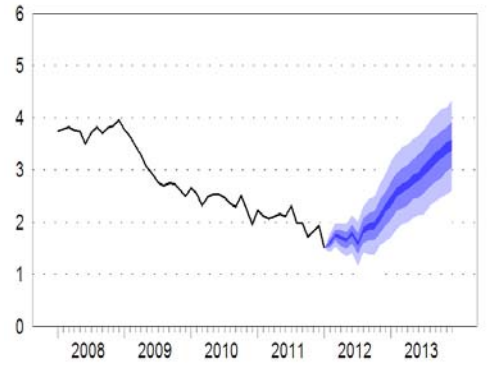
Source: BBVA Research and BLS

Chart 12
Share of Vacancies by Industry, 3MMA



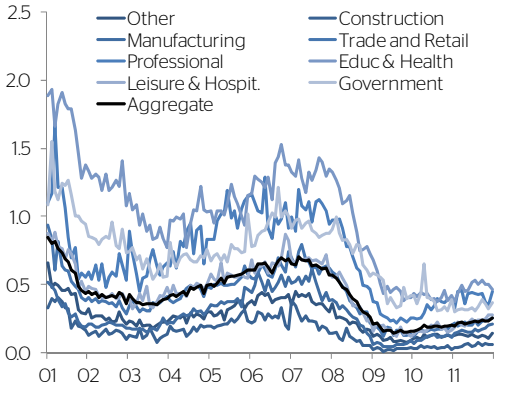
Source: BBVA Research and BLS

Chart 13
Nominal Average Hourly Earnings, YoY %



Source: BBVA Research

Chart 14
Labor Tightness by Industry (higher=tighter)



Source: BBVA Research and BLS