

Appendix A: Supplemental country analysis of future top 10 GMCI nations

1. United States

Key statistics	United States	Peer average
Manufacturing GDP CAGR (2010-13)	0.8%	2.3%
Manufacturing GDP percentage of total GDP (2013)	12.3%	16.7%
Labor costs (US dollars per hour) (2015)	\$38.0	\$18.7
Manufacturing exports percentage of total exports (2014)	63.7%	60.2%
Highest corporate tax rate (2015)	39.5%	25.3%
Researchers per million population (UNESCO 2013)	4,019	2,852
Per capita personal disposable income (US dollars, 2015)	\$42,225	\$14,910
Per capita personal disposable income (US dollars) CAGR (2005-2015)	2.9%	3.8%

Supplemental analysis United States – Competitiveness at a glance

Manufacturing highlights

- The United States remains the most heavily invested-into country in the world with FDI stock inflow being US\$5.4 trillion in 2014.
- The United States is the second largest producer of vehicles – cars and commercial vehicles- in 2014 with a share of 13 percent.
- The United States has the 5th largest proven natural gas reserves at the end of 2014. Low cost shale gas availability gives US manufacturers a competitive edge in the global markets. Natural gas prices in the United States averaged US\$4.35 per million British thermal units in 2014 compared to US\$8.22 in the United Kingdom, US\$9.11 in Germany and US\$16.33 in Japan.
- The United States' share of the world's total GDP (at constant prices and constant exchange rates) declined from 28 percent in 2004 to 26 percent in 2014.
- Manufacturing employment in the United States declined from 17.6 million jobs in 1998 to 12.3 million jobs at the end of 2015.
- The United States is still the world's largest manufacturing economy, producing 19 percent of all globally manufactured products in 2013.

Advantages to manufacturers

Technological prowess and size:

- The United States leads many nations, both advanced and emerging, in innovation. The United States is the largest spender on basic research with expenditure of US\$64.4 billion in 2013 while the second highest spender, Japan, is at a distant second with spending of US\$16.0 billion. Consequently, the United States stood at the top in terms of patents filed with 61,492 patents or 29 percent of patents filed by all countries in 2014.
- The United States has superb innovation ecosystem where industry, start-ups, labs, and universities collaborate on R&D work to enhance manufacturing competitiveness. e.g., automotive cluster in Detroit.

High productivity: The United States has one of the highest labor productivity in the world, at \$110,050 (constant 2011 PPP international dollars) per person engaged in 2014.

Supplemental analysis United States – Competitiveness at a glance

<p>Advantages to manufacturers (continued)</p>	<p>Research support for national laboratories and universities: The United States has a robust system of research funding for national laboratories and universities.</p> <ul style="list-style-type: none"> • Department of Energy’s national labs, representing 17 facilities, are known to be pioneers in carrying out basic research, have created an annual impact to the tune of US\$21 billion from their path breaking technologies. e.g., development of Web, advanced cathode technology helping battery manufacturing industry. 	<p>Policy actions:</p> <ul style="list-style-type: none"> • The United States is celebrating the first Friday of October every year as National Manufacturing Day on which manufacturers will allow the public to tour their factories. This will likely help dispel the misconception that manufacturing plants are dark and dangerous places and employ low-skilled workers. • In September 2013, President Obama launched the Advanced Manufacturing Partnership Steering Committee 2.0 as a continuation of Advanced Manufacturing Partnership that was started in 2011. The new committee will continue to suggest policies/programs that will make America attractive for manufacturing. As part of the partnership, new manufacturing innovation institutes will be established and there is also a proposal to set up an US\$8 billion fund to help community colleges work with industry on imparting required industrial training.
<p>Challenges</p>	<p>High-cost labor: Labor costs in the United States in 2015 were significantly higher than in emerging countries such as China and India; in addition, availability of talent pool and rising consumption in these markets have been a threat to US manufacturing.</p> <p>High corporate tax rates: One of the highest effective corporate tax rates in the world (at 39.5 percent in 2015) poses a serious burden on manufacturers.</p>	<p>Increasing R&D investments outside of the United States, particularly in emerging nations: US-based manufacturing companies are also increasing their R&D efforts in Asia to take advantage of favorable R&D incentives and also to be closer to their markets so that they can bring out products to suit their localized needs. From 2000 to 2010, R&D performed by subsidiaries of US MNCs in locations outside of the United States grew at an annual rate of 4.4 percent (in constant dollars) compared to growth of 2.3 percent in R&D spent by US MNCs in the United States.</p>
<p>Things to watch out</p>	<p>R&D tax credit: Manufacturers support the R&D tax credit being made permanent rather than being extended it each year, to boost competitiveness.</p> <p>Shale gas availability:</p> <ul style="list-style-type: none"> • Abundant availability of shale gas could make the United States an attractive destination for energy-intensive manufacturing such as chemicals. • Some of the manufacturers producing petrochemicals, steel, fertilizers, and other products are already returning to the United States after relocating overseas to take advantage of the low feedstock costs. 	<p>Reshoring: Large US manufacturing companies are building high-tech factories in the United States owing to rising labor costs in China and the resulting narrowing of the gap between American and Chinese wages, increasing freight costs, and availability of low-cost shale gas in the United States. Helped by reshoring and FDI inflows, US manufacturing employment increased by more than 60,000 in 2014, an increase of 400 percent since 2003.</p>

Source: Deloitte Touche Tohmatsu Limited analysis ^(XXII)