

4. Japan

Key statistics	Japan	Peer average
Manufacturing GDP CAGR (2010-13)	0.2%	2.3%
Manufacturing GDP percentage of total GDP (2013)	18.8%	16.7%
Labor costs (US dollars per hour) (2015)	\$24.0	\$18.7
Manufacturing exports percentage of total exports (2014)	87.4%	60.2%
Highest corporate tax rate (2015)	33.1%	25.3%
Researchers per million population (UNESCO 2013)	5,201	2,852
Per capita personal disposable income (US dollars, 2015)	\$19,502	\$14,910
Per capita personal disposable income (US dollars) CAGR (2005-2015)	-0.8%	3.8%

Supplemental analysis Japan – Competitiveness at a glance

Manufacturing highlights	<ul style="list-style-type: none"> • Japan is the third largest economy in the world. Though it lacks any significant natural resources, its manufacturing industry has been the primary driver for its rapid growth. • Japan's primary exports are consumer electronics, automobiles and semiconductors. 	<ul style="list-style-type: none"> • Manufactured goods account for 87 percent of Japan's total exports, though manufacturing exports declined overall 12.1 percent between 2010 and 2014, from US\$680 billion to US\$598 billion. • Japan has traditionally been ahead of the rest of the world in automation and implementation of best practices in manufacturing operations.
Advantages to manufacturers	<p>Favorable policy actions to spur new industrial revolution:</p> <ul style="list-style-type: none"> • The Japan Revitalization Plan, which identified infrastructure and energy (next generation vehicles) among focus industries, was revised in June 2014 to leverage Japanese dominance in the advanced manufacturing of robots with the establishment of the Robot Revolution Realization Council. • Japanese companies currently garner 50 percent of the global market for factory robots. 	<p>Incentives to advance core manufacturing technologies: In 2014, the government introduced subsidies for projects to promote the enhancement of manufacturing technology for SMEs, likely to lead to commercialization.</p> <p>Dominance in auto and electronics industries: Japan is home to companies that are global auto and electronics leaders. Automobiles, auto parts and electronics are among the largest exports of the country.</p>

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Challenges

High corporate taxes a barrier to investment: FY 2015 tax reform will reduce the effective corporate tax rate from 34.6 percent to 31.3 percent in FY 2016, but Japan will still have one of the highest corporate tax rates in the industrialized world. As of 2015, Japan has the highest effective tax rate on new business investment – 37.3 percent – among leading economies.

Regional manufacturing competition intensifies: Japanese manufacturing strength in electronics and automotive industries are being challenged by South Korean rivals. Chinese robotics companies captured 13 percent of the factory robots market in China in 2014, eating at Japanese dominance in robot manufacturing.

Few natural resources: Scarcity of natural resources of its own has required Japan to rely on imports for its industries. This has been the case even through its rapid industrialization in the 20th century.

Rapidly aging population: The rapidly aging population in Japan means that the working population, which is critical for the manufacturing industry, is fast shrinking. Japan currently deploys a quarter million industrial robot workers and aims to increase the number to 1 million by 2025 – a number still insufficient to address projected labor force shortages.

Things to watch out

Restarting of nuclear energy facilities: In August 2015, despite strong public opposition, Japan restarted its first nuclear reactor since the Fukushima incident. Nuclear reactors, which contributed to about 27 percent of Japan’s power generation in 2010, are critical to the Japanese economy until feasible alternatives are available.

Investment in infrastructure: Growth in infrastructure with a major focus on the reconstruction post the tsunami and earthquake in the Fukushima region of Japan. Japan has already spent US\$205.1 billion on reconstruction and clean-up since the disaster, through June 2015. Going forward, the Prime Minister has pledged an additional US\$52.6 billion during the five-year period starting FY 2016.

Source: Deloitte Touche Tohmatsu Limited Analysis ^(xxxv)