

Japan: a tale of two countries

By Angelo Katsoras

Introduction

Hovering perpetually between stagnation and sluggish growth yet boasting some of the world's most competitive companies, Japan defies easy categorization. Despite having the world's oldest population and the highest public debt-to-GDP ratio, many of its companies continue to excel in key sectors such as automobiles and robotics and have a significant global manufacturing footprint.

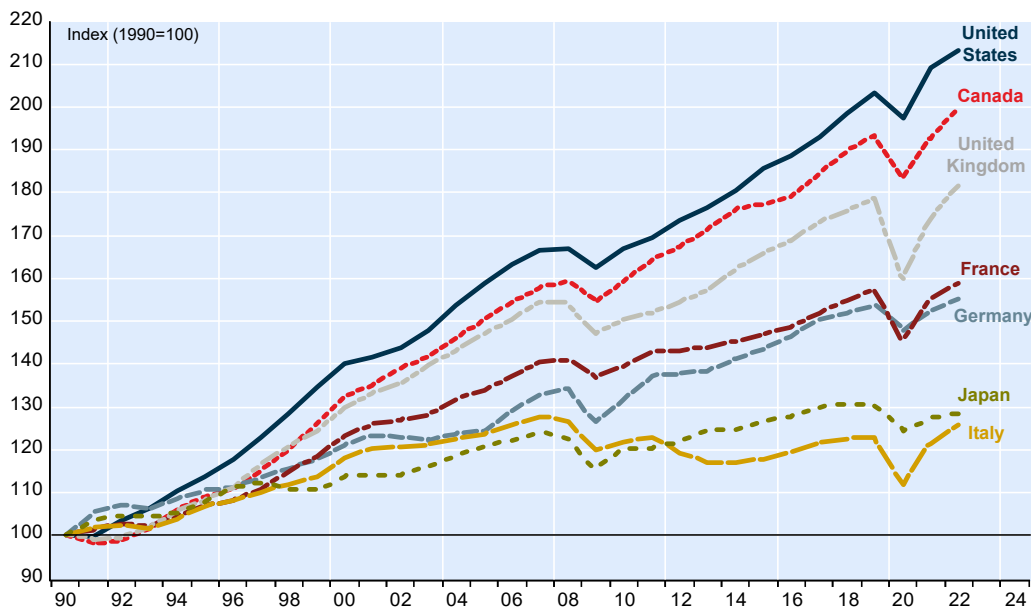
This report argues that because of Japan's enduring mix of strengths and weaknesses, the wide gap between its stagnant economy and its globally competitive companies will remain for the foreseeable future.

Japan's long stagnant economy

Japan's sluggish growth began in the early 1990s when its real estate and stock market bubbles burst.

Japan's economy has been in the doldrums for a very long time

GDP in PPP (constant 2017 international \$), index (1990=100)



NBF Economics and Strategy (data via World Bank)

Recently, Japan's economy has been experiencing modest growth. In December, the OECD estimated that real GDP would grow by 1.9% in 2023, and then slow down to 1% in 2024.¹ It is important to note, however, that Japan has had many false economic dawns over the past three decades. The latest possible source of disappointment is the slowing global economy, which is exerting pressure on Japan's trade-dependent economy and may force a downward revision of future growth estimates.

Japan's currency, meanwhile, has long been under downward pressure due to factors such as a stagnant economy, declining population, deflation and lower government bond yields than in other countries.

In the long run, and regardless of the economic cycle, Japan may find it difficult to move away from a low interest rate environment because both the government and the financial system have become heavily dependent on these low rates. We saw what the risks are of transitioning to higher interest rates last March when the U.S. Federal Reserve's monetary tightening triggered a reaction that led to the collapse of Silicon Valley Bank and several other financial institutions.

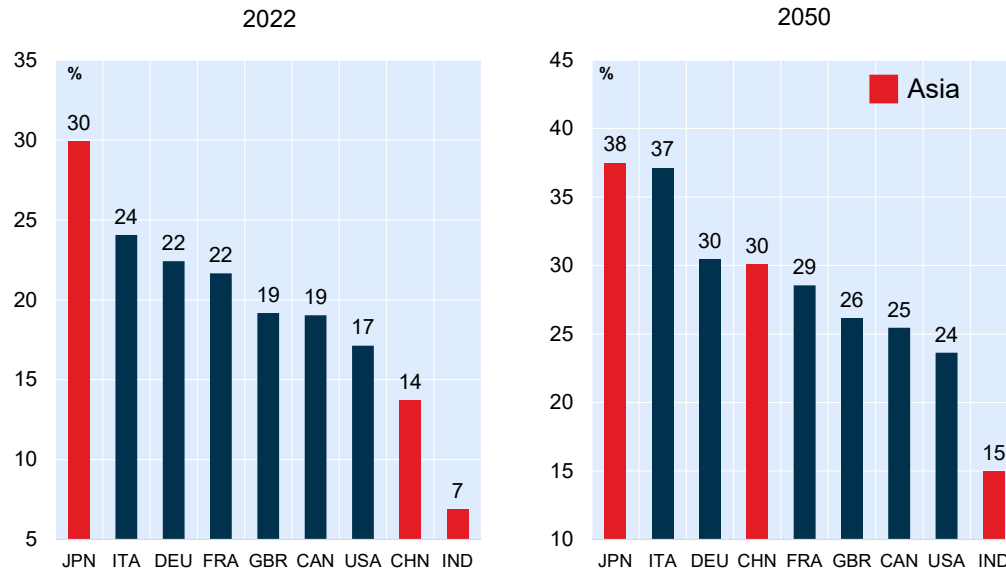
¹ "Japan 2024," OECD Economic Summary, January 2024

Japan's growing demographic storm

Dealing with the immense costs of having the world's oldest population is, by far, Japan's biggest challenge.

Japan's rapidly aging population

Countries with the highest share of people aged 65 and over, 2022 and 2050 projections



NBF Economics and Strategy (data via [United Nations](#))

The proportion of seniors in the Japanese population is growing largely because of the country's low birth rate. In 2022, it stood at 1.26 children per woman² (whereas a rate of 2.1 is needed to keep the population stable over the long-term). Overcoming this low birthrate is complicated by the fact that Japan is one of the most expensive places in the world to raise children.³ Large-scale immigration could be at least a partial solution, but the country has traditionally resisted this option.

The government has recently pledged to spend about 20 trillion yen (about \$140 billion or 4% of GDP) on measures to support couples who want to have more children. It is important to note, however, that similar policies enacted in other countries have almost always failed to boost the birth rate significantly.

The United Nations has predicted that if current trends continue, Japan's population will shrink from 126 million in 2020 to between 98 and 106 million in 2050.⁴

This will hurt the economy in two ways. First, it means there will be fewer workers to drive economic growth and to pay taxes to fund public services. Second, proportionally more seniors equal more spending on pensions and healthcare. Further, the electoral clout of senior citizens is amplified by their tendency to vote in much higher numbers than younger people. All of this makes politicians extremely wary of cutting age-related benefits.

But there are two factors working in Japan's favour that are worth noting:

- While Japan is aging faster than the United States, its healthcare costs are much lower. In 2022, per capita healthcare costs stood at \$5,250 for Japan versus \$12,555 for the United States.⁵
- Japan's aging population makes layoffs politically easier because displaced workers can quickly find new jobs. Unemployment peaked at 5.5% in 2002. Today, the unemployment rate is only 2.7%.⁶

² Japan Ministry of Health, Labor, and Welfare, 2022

³ "It's 'now or never' to stop Japan's shrinking population, PM says," Reuters, January 23, 2023

⁴ "Japan's Eighth National Communication and Fifth Biennial Report," The Government of Japan, December 2022

⁵ OECD, 2022

⁶ "Japan's GDP Bump Is Real but Fragile," Foreign Policy, August 30, 2023

Debt as far as the eye can see

Since the bursting of Japan's real estate and stock market bubbles in the early 1990s, a combination of very slow growth and a rapidly aging population has left Japan with the world's highest public debt-to-GDP ratio. As of December 2022, Japan's gross government debt amounted to 263% of GDP, according to the International Monetary Fund. In fact, the government spent 22% of its annual budget on debt and interest payments last year, more than the 15% spent on public works, education and defence combined.⁷

Why is there no debt crisis in Japan?

Unlike many other debt-burdened countries, Japan finances almost all of its debt domestically. The debt is largely owned by Japanese banks, pension funds and the central bank, which alone holds about half of all government bonds.⁸ Japan also has a large current account surplus, which has been bolstered by exports and payments from overseas subsidiaries (more on this later). All of this has allowed Japan to simultaneously have the world's highest national debt and the world's lowest interest rates.

However, these low interest rates carry significant risks. For starters, any indication that the central bank is tapering its purchases of government bonds could cause a spike in yields and hurt economic growth. Longer term, the growing number of retirees could eventually draw down their savings to the point where Japan will have to start borrowing more from abroad at higher rates.

Finally, the OECD has warned that Japan's debt will grow to even higher levels unless policymakers enact major reforms.

Japan's energy and food vulnerability

Japanese households are particularly vulnerable to food and energy costs. This is because Japan imports about 60% of its food and 90% of its energy. The weaker the yen, the more expensive these imports become.⁹

Japan's sluggish economy stands in stark contrast to the strength of many of its global companies

Japanese companies generate more than 50% of sales abroad. For companies such as Sony and Toyota, the level of foreign sales reaches 70% to 80%.¹⁰ These revenues come not only from exports, but also from production shifted overseas to overcome trade barriers and diversify away from a long-stagnant domestic economy.

In 2022, about 35% of industrial production by Japanese firms occurred overseas, up from just over 10% in the 1980s.¹¹ Japanese automakers have been at the forefront of offshoring. In 2022, they produced more than twice as many vehicles at their production facilities outside Japan (16.96 million) as they did inside.¹² Their profits have been bolstered by the yen's significant long-term decline, which makes every dollar earned abroad by Japanese companies more valuable when it is repatriated to Japan and converted to its home currency. This, along with other investments abroad, allows Japan to run a current account surplus and not rely on foreign capital to finance its public debt.

Japan's companies a very competitive in certain key sectors

Japan's robotics advantage

Japan is a world leader in robotics. The country has a 46% share of the global industrial robot manufacturing market, according to the International Federation of Robotics. From 2017 to 2022, production grew at a compound annual growth rate of 6% and, in 2022, exports reached a new high of 207,737 units.¹³ This figure does not include industrial robots manufactured by Japanese companies in other countries.

⁷ "Japan's debt time bomb to complicate BOJ exit path," Reuters, February 10, 2023

⁸ "Japan's growing debt mountain: Crisis, what crisis?," Nikkei Asian Review, August 1, 2023

⁹ "Yen tumbles and shares soar as Japan inflation begins to bite," Financial Times, October 1, 2023

¹⁰ "Japan: Reclaiming Lost Decades," Charles Schwab, June 2023

¹¹ "Survey Report on Overseas Business Operations by Japanese Manufacturing Companies," Japan Bank for International Co-operation, May 26, 2023

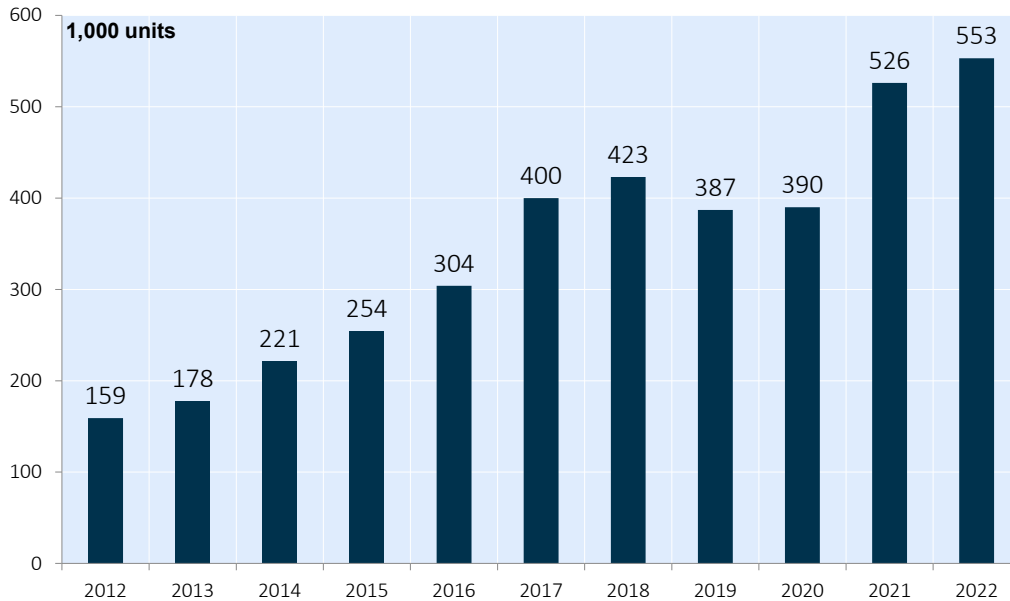
¹² "Japan Automobile Manufacturers Association (Via Statista), February 2023

¹³ "Robot Installations in Japan up by 9%," International Federation of Robotics, September 25, 2023

The following chart reveals that over 553,000 industrial robots were installed globally in 2022, an increase from only 159,000 in 2012. The International Federation of Robotics predicts that annual installations will reach 718,000 by 2026.¹⁴

World: Automation has accelerated

World annual installations of industrial robots



NBF Economics and Strategy (data via World Robotics 2023 and International Federation of Robotics)

In addition to the demand for industrial robots, there is a growing global demand for service robots used in sectors such as healthcare, logistics and agriculture. In 2022, 158,000 of these robots were sold, a 48% increase from 2021.¹⁵

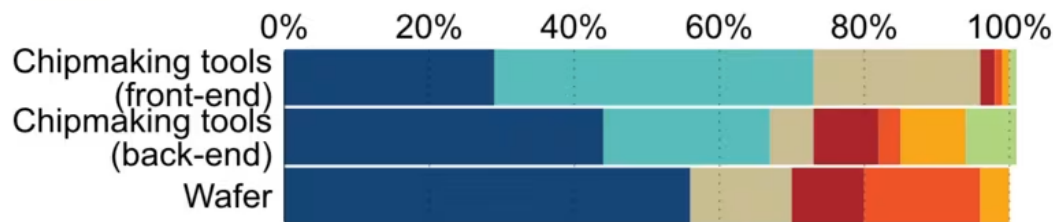
Japan's semiconductor strengths

While its share of the semiconductor market has slid from 50% in the late 80s to about 10% today, Japan remains a major supplier of chip-making machines and semiconductor materials.

Market leaders in chipmaking equipment and materials

(In percent)

Japan U.S. Europe South Korea Taiwan China Other



Source: "Japan's world-leading chip materials makers risk being acquired," Nikkei Asian Review, Sept. 16, 2023

¹⁴ "World Robotics 2023," International Federation of Robotics, September 2023

¹⁵ "World Robotics Service Robots 2023 (summary)," International Federation of Robotics, September 2023

How Japan stands to benefit from China-U.S. tensions

Japan is well positioned to benefit from efforts being made by many Western companies to partially diversify their supply chains away from China and prioritize resilience. Here's why:

- Even if manufacturers do not build factories in Japan, they may enter into joint ventures with Japanese companies overseas and/or rely on their expertise to help build more automated factories
- Japanese firms hold a significant geopolitical edge over their Chinese competitors: access to U.S. tax credits provided by the Inflation Reduction Act. This legislation offers preferential treatment to companies in key sectors that set up manufacturing plants in the U.S.
- Japanese manufacturers have steadily lost market share to their Chinese and South Korean counterparts, particularly in the EV battery market. By 2022, only one Japanese company—Panasonic, with a global market share of less than 6%—ranked among the top 10 battery manufacturers in the world.¹⁶ U.S. legislation aimed at reducing reliance on EV supply chains from China provides an opportunity for Japan to regain market share in this sector.
- As noted in the previous section, Japan is well positioned to benefit from the global reconfiguration of semiconductor supply chains

India attempting to gradually reduce reliance on Chinese companies

Tensions between India and China following the 2020 border standoff (which resulted in deaths on both sides) have made it more difficult for Chinese companies to operate in India. For example, India recently announced that it would not consider allowing Chinese suppliers to Apple to set up operations unless they first found local joint venture partners. This disadvantage is highlighted by the fact that China's Luxshare (the second-largest iPhone assembler after Foxconn) is struggling to get approval for an iPhone plant in India, while Japan's TDK has already begun building a wholly owned 180-acre facility to manufacture battery cells for iPhones.¹⁷

Conclusion

Investors face a tale of two Japans. On the one hand, there is the domestic Japan, which is struggling with high debt levels and a rapidly aging population, factors that have contributed to its long period of sluggish economic growth.

On the other hand, there is a Japan characterized by highly competitive globally oriented companies with substantial overseas industrial production capacity. This side of Japan is the driving force behind its current account surplus, which allows it to finance its substantial debt at very low interest rates.

As long as this balance is maintained, Japan will be able to maintain its ability to struggle and prosper at the same time.

¹⁶ "Japan a likely winner in the United States" China strategy," Japan Times, July 4, 2023

¹⁷ "Apple moves toward India-made iPhone in push away from China," Financial Times, December 6, 2023



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