MEKETA



Introduction: Japan 2.0

After decades of disappointing economic growth and lagging corporate regulatory reforms, Japan may be on the verge of an economic and financial revitalization. This renaissance features a combination of improving economic fundamentals and new securities regulation governing listed companies. In this first note in our two-part series, we review Japan's macroeconomic boom and bust legacy, and we discuss how the return of wage growth, inflation, and investment could be changing Japan's outlook. Then in our second note we plan to take a closer look at how Japanese companies are adapting to new regulations and responding to shareholders.

In this paper we trace the evolution of Japan's economic miracle from the 1950s through the bubble of the late 1980s, which formed the basis of decades of weak economic growth and stubbornly low inflation. The recent return of inflation and higher than expected economic growth have stoked investor optimism that Japan may be well placed to benefit from multiple positive trends, including the de-risking of supply chains, advanced technology, and rising wages and investment.

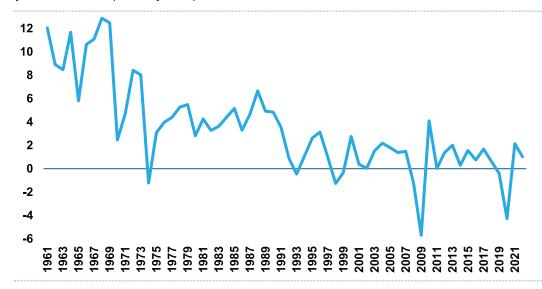
GLOBAL MACROECONOMIC INVESTMENT COMMITTEE

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Economic miracle to bubble and bust 1961-2022

Post World War II, Japan's economy saw rapid expansion, with annual GDP growth often exceeding 10% in the 1950s and 1960s. Industrial policies promoted "sunrise" sectors and provided access to cheap credit and land, while tax policies helped Japanese companies develop productive capacity and focus on exports. By the 1980s, Japan had become the second leading industrial power in the world. However, over time, Japan's exceptionally high rate of economic growth slowed (see Figure 1).

- Source: World Bank. Data as of September 26, 2023.
- ² Source: Asian Studies. https://www. asianstudies.org/publications/eaa/ archives/the-japanese-economy-in-useyes-from-model-to-lesson/



Japan Annual GDP Growth 1961 - 2022 (%) Source: World Bank. Data as of September 26, 2023.

In 1985, the US and Japan entered the Plaza Accord, which led to the US cutting short-term interest rates. The agreement also required Japan to rebalance its economy, stimulate domestic demand, and reduce dependence on exports.³ Japan's government subsequently launched a broad macroeconomic stimulus policy to support economic growth during the transition. The interest rate cuts by the US led to the US dollar weakening against the yen⁴ (see Figure 2). Between 1985 and 1986, the yen appreciated forty-six percent against the US dollar, which weighed on export demand. To offset the stronger yen, the Bank of Japan slashed interest rates to a record low of 2.5%.⁵

- ³ Source: International Monetary Fund, World Economic Outlook 2011, "Did the Plaza Accord Cause Japan's Lost Decade?"
- ⁴ Source: International Monetary Fund, World Economic Outlook 2011, "Did the Plaza Accord Cause Japan's Lost Decade?"
- Source: OECD, Journal of Budgeting, Masato Miyazaki "Japan's Lost Decade: Policies for Economic Revival," Vol. 6-No. 4, 2006.



FIGURE 2 Yen: US Dollar Exchange Rate (1960 – 2023)

Source: FRED. Data as of December 8, 2023.

In the 1980s, bank deregulation in Japan allowed banks to expand their real estate lending activities. Between 1985 and 1990, bank credit in the real estate sector grew by 150% as property developers and home buyers sought to purchase property. This, combined with the financial liberalization of regulations enacted in the 1980s, fueled a dual real estate and stock bubble. Despite soaring land and stock prices (see Figure 3), inflation pressures remained contained. By 1988, property prices in Tokyo had risen by 65%, and the Nikkei 225 nearly doubled in market value between 1986 and 1989, while consumer price inflation was less than 1%.

- Source: Cutts, "Power from the Ground Up: Japan's Land Bubble" 1990. Harvard Business Review.
- Source: Bank for International Settlements, S. Shiratsuka, "The Asset Price Bubble in Japan in the 1980s: Lessons for Financial and Macroeconomic Stability," 2003.
- Source: FRED, as of December 8, 2023. In 1988, the Nikkei 225 rose over 30% in market value on monthly averages.
- 9 Source: FRED, as of November 8, 2023.



FIGURE 3
Nikkei 225 (1949-2023)
Source: FRED. Data as of October 31, 2023.

In a classic bubble phenomenon, ever-increasing asset prices were financed by growing levels of debt. Banks increased lending to the real estate sector as developers, corporations, and households rushed to buy property. Between 1985 and 1989, the real estate value held by Japanese corporations grew by \$2 trillion dollars, equal to about half the value of the Tokyo Stock Exchange at the end of 1989. Banks saw the value of their collateral soar, incentivizing them to further extend credit to real estate and stock investors. The feedback loop of higher prices attracted more capital to both stocks and real estate as a "fear of missing out" pushed prices even higher. Eventually, bubble-like dynamics set in.

Source: Cutts, "Power from the Ground Up: Japan's Land Bubble" 1990. Harvard Business Review and Bank for International Settlements, S. Shiratsuka, "The Asset Price Bubble in Japan in the 1980s: Lessons for Financial and Macroeconomic Stability," 2003.

The Bank of Japan intervened, hiking interest rates to 6% from the low of 2.5% from 1986. But the rate hikes burst the asset bubble and economic growth stalled. Japan's economy went into a recession following the collapse of the real estate and stock bubbles, and it became stagnant partly due to the slow government response to the banking sector's problems. The Bank of Japan quickly reversed its rate increases, cutting interest rates nine times from 6% to 0.5%, but to no avail. In the decade following 1990, banks continued to support unprofitable companies and distressed borrowers, often with the government's encouragement. This had the effect of prolonging the period of stagnation that might normally have lasted only a few years in a traditional business cycle.¹¹

Source: Bank for International Settlements, S. Shiratsuka, "The Asset Price Bubble in Japan in the 1980s: Lessons for Financial and Macroeconomic Stability," 2003.

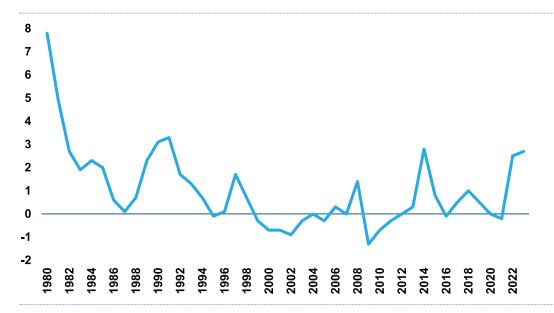


FIGURE 4 Japan Annual Inflation (% YoY) Source: International Monetary Fund. Japan annual inflation percentage change 1980 through 2023.

Japan's economic growth remained below potential between 1990 and 2023. Despite a series of quantitative easing programs and very low policy rates, Japan still experienced a series of recessions. The election of Prime Minister Abe in 2012 ushered in an ambitious fiscal program of investment and stimulus nicknamed "Abenomics." The program focused on deregulation, a reduction in the tax burden, investment in new technologies, flexible labor laws, and expansion of trade agreements with major trade partners.¹² Corporate taxes were cut to below 30%, leading to corporate profits rising between 2012 and 2020. Unemployment fell from 4.3% to 2.4% as women and people over the age of 65 returned to the workforce.¹³ Foreign direct investment hit an all-time high in 2018 as regulatory barriers for foreign business were relaxed.¹⁴ But economic growth and inflation remained low, with disinflationary pressures persisting for decades. Except for 2014, when inflation briefly hit 2.8%, Japan spent approximately three decades with inflation below the 2% target (see Figure 4).

- Source: The Government of Japan, "Abenomics" June 2020.
- 13 Source: Ibid.
- 14 Source: Ibid.

Why is Japan getting investor attention now?

Japan's inflation has exceeded the 2% price stability target since April 2022. However, much of the rise in inflation can largely be attributed to global supply chain bottlenecks from the pandemic and a surge in food and energy prices in response to the war in Ukraine. Today there are concerns that once these pandemic-related inflation shocks diminish, disinflationary pressures could resume. Since 2013, the Bank of Japan ("BOJ") has used a combination of Japanese government bond ("JGB") purchases, negative policy rates, and yield curve control policies to try to bring inflation levels above 2%.

Recently there has been a change in BOJ leadership, with Governor Kazuo Ueda taking over. This has coincided with an incremental but notable change in monetary policy stance. The BOJ decided in December 2022 to, "modify the conduct of yield curve control in order to improve market functioning and

Source: T.S. Lombard, "Japan Swimming Against the Tide," September 2023. encourage a smoother formation of the entire yield curve, while maintaining accommodative financial conditions."¹⁶ A few months later, the BOJ expanded the band for the 10-year JGB yield target of 0% from +/- 0.5% to +/- 1.0%.¹⁷ Markets quickly responded, with interest rates rising to 0.8% in late October, close to the 1.0% ceiling set for the 10-year bond (see Figure 5).¹⁸

¹⁶ Source: Ibid.

2023.

- ¹⁷ Source: Bank of Japan, July 2023.
- Source: Bank of Japan, October 31, 2023



FIGURE 5
Japan Ten Year Bond Yield
(1989-October 2023)
Source: FRED. Data as of October 31,

While the Bank of Japan remains committed to policy accommodation, the pull back on the yield curve control has sparked investor speculation that further normalization may be forthcoming.¹⁹ It is important to note, however, that short-term policy rates continue to remain negative and asset purchases are ongoing. Markets have welcomed the relaxation of the ten-year bond yield as a step toward policy normalization. Underlying growth and inflation in Japan could eventually shift monetary policy and allow higher interest rates to take hold in Japan.²⁰

Higher wages and exports

With higher inflation levels, factory workers were granted significant wage increases, helping to support consumer demand. Unions in Japan won wage increases in 2022 and 2023. The umbrella union group Rengo conducted a survey of its 5,272 unions and found that wages had risen the most since 1993.²¹ However, real wages are lagging inflation. In September 2023, base pay for regular workers rose 2.2% while inflation rose 2.8%.²²

At the same time, the US Fed hiked rates to a multidecade high, strengthening the US dollar versus the yen. The weaker currency could combine with advances in robotics and automation to help boost global competitiveness.²³ Japan has 390 robots per 10,000 workers and produces approximately forty-five percent of the robots used in global manufacturing.²⁴ Japan's economy has largely benefited, with growing net exports and improved demand and production of automobiles in 2022 and 2023.²⁵

With growing risks to doing business in China due to geopolitical tensions, Japan has been a beneficiary of more foreign investment, with global chipmakers at the forefront. Japan has brought in more than 2 trillion yen (USD \$14 billion)

- Source: Bank of Japan monetary policy description and timeline. Yield-Curve control was introduced in 2013 as part of the QQE stimulus, negative interest rates were introduced in 2016 and in 2018 was reinforced in 2018 with forward guidance in order to achieve the 2% inflation target. In 2021, the BoJ undertook policies to encourage lending and support credit growth.
- Source: Oxford Economics, August 2023. In July 2023, the bank is now allowing yields to fluctuate beyond its tolerance band for the 10-year JGB yield at +/-0.5ppt. To set a ceiling, the bank will offer to purchase 10-year JGBs at 1% every business day.
- Source: Reuters, T. Kajimoto, "Japan's Firms Offer Biggest Pay Hike in 30 Years; Wage Growth Broadens," July 4, 2023.
- ²² Source: Bloomberg, E. Yokoyama "Japanese Wage Growth Strengthens for First Time in Four Months," November 6, 2023.
- ²³ Source: IMF. J. Stiglitz et al., "Technological Progress, Artificial Intelligence and Inclusive Growth," June 2021.
- ²⁴ Source: International Federation of Robotics, "World Robot Report 2021." China has 246 robots per worker.
- Source: Oxford Economics August 2023.

in announced investment plans since 2021 from companies in the US, Europe, South Korea, and Taiwan.²⁶ This has been part of an effort from these companies to build supply chains with partners that have shared values (i.e., friendshoring), minimizing the potential damage from any trade, political, or military issues, and reducing the potential impact from other emergencies, like another pandemic.²⁷ Taiwan-based Taiwan Semiconductor Manufacturing Company ("TSMC") already has one Japanese plant under construction and a second in the works.²⁸ Demand for skilled workers to build and work in the new TSMC facilities is pushing up prices for workers and housing as TSMC pulls new workers to the region, creating a so-called 'TSMC-Shock'.²⁹

While other Asian countries like Vietnam and Cambodia have benefited from flows as well, Japan is uniquely positioned to absorb investments related to technologically sophisticated product lines given its labor expertise and infrastructure. If the foreign investment trend continues, it has the potential to boost the Japanese economy.

To help support domestic demand and offset the impact of inflation, Prime Minister Fumio Kishida has announced a new stimulus package of seventeen trillion yen (\$113 billion) of temporary tax cuts for income and property taxes, an increase in benefits to low-income households, and an extension of energy subsidies for electricity and petroleum. "By combining wage increases [by companies] and a cut in income tax, I want to create a situation where the growth in public income will exceed the rise in prices by next summer,"³⁰ promised Kishida at the press conference announcing the new spending plan.

Improving external and internal economic conditions has prompted investors to return to Japan. The substantially weaker yen has improved profits for Japanese corporations whose expenses are in yen but are selling goods and services in dollars. Changes in corporate governance, which we intend to cover in our next paper, have also contributed to stock market gains. The Nikkei 225 Index is up over 28% year-to-date³¹ (see Figure 3).

Looking ahead at potential challenges

Among advanced economies, Japan has the oldest population, along with the highest ratio of those no longer working compared to working (i.e., dependency ratio) at just over 50%.³² By the year 2050, the dependency ratio could rise as high as 70%.³³ Japan's elderly are among the most long-lived in the world, with an average life expectancy of 80 years, a number that is expected to rise over the coming decades.³⁴ Looking ahead, there may be more jobs than workers to fill them.³⁵ Historically, a young population has been associated with a consumption-driven economy and relatedly rising economic growth. Older, retired populations may consume fewer goods and services and are constrained by limited savings and income. However, the disinflationary dynamics of an aging population are

- 26 Source: https://asia.nikkei.com/ Business/Tech/Semiconductors/ Chip-companies-pour-14bn-into-Japanseeking-stable-supply-chain
- 27 Source: https://asia.nikkei.com/ Business/Tech/Semiconductors/ Chip-companies-pour-14bn-into-Japanseeking-stable-supply-chain
- ²⁸ Source: Financial Times, "How TSMC Is Shaking Up Japan" September 23, 2023. Taiwan Semiconductor Company, or TSMC, is the leading global foundry (i.e., maker) of semiconductors.
- 29 Source: Ibid.

30 Source: Ibid.

31 Source: Bloomberg, as of November 30, 2023.

- Source: United Nations Population data for old age dependency ratio of people over the age of 65 and under the age of 15 divided by those of working age between 16 and 64 as of September 2023.
- 33 Source: Ibid.
- 34 Source: Ibid.
- ³⁵ Source: Le Monde, P. Mesmer, "Inflation and Staffing Shortages Threaten Japan's Care for the Elderly," July 13, 2023. Rising costs for labor and services could bankrupt elder care facilities.

uncertain. Too few workers to provide goods and services may increase wages and push up costs. In 2023, migrants made up only 2.4% of the population.³⁶ But with around 220,000 thousand workers leaving the workforce each year,³⁷ immigration policies are becoming more welcoming.³⁸

In the case of Japan, the decline in the total population has been deflationary while population aging has been inflationary.³⁹ Since the world has not yet experienced the economic dynamics of populations with a high ratio of elderly people, we cannot confidently predict the full extent of aging on prices.⁴⁰ For now, in Japan the costs of caring for long-lived elderly are rising rapidly.⁴¹

High levels of public debt may present further headwinds for Japan. While some economists theorize that there is a level of public debt that is fundamentally destabilizing, Japan has thus far defied this logic.⁴² In 2000, Japan's public debt to GDP ratio was around 100%, but today it has reached 217% of GDP, a ratio nearly double that for the United States.⁴³ On the other hand, Japan is also one of the world's largest creditors, with over \$3.2 trillion dollars in financial assets.⁴⁴ Japan is the largest holder of US Treasuries, owning approximately one-third of US debt held by foreigners.⁴⁵ Japan's domestic economy and balance of payments is seemingly dwarfed by its export power and giant international banks.⁴⁶

Summary

Japan's economy has gone through a remarkable transformation since the end of World War II, from rapid growth and export-led industrialization to a prolonged stagnation and deflation. Recent signs of recovery, driven by wage growth, inflation, investment, and external factors, have raised hopes that Japan may be entering a new era of economic and financial dynamism.

Many of the macroeconomic fundamentals for Japan remain largely unchanged: an aging population, a high level of public debt, and a central bank engaged in extraordinary monetary policy initiatives. That being said, a push toward friendshoring, rising demand for semiconductors, and a weakening currency appear sufficient to provide new stimulus and momentum in the economy.

In our next note on Japan, we intend to take a closer look at the meaningful regulatory changes for listed public companies and what they might mean for investors.

- 36 Source: Japan Ministry of Justice as of August 2023.
- ³⁷ Source: Mitsubishi UFJ Morgan Stanley quoted in Bloomberg, G. Reidy "Japan is Bringing in More Foreigners Than You Think," August 3, 2023.
- 38 Source: Bloomberg, G. Reidy "Japan is Bringing in More Foreigners Than You Think," August 3, 2023.
- ³⁹ Source: Ministry of Finance of Japan, Tomiki Isa, "Demographic Effects on Prices: Is Aging Deflationary?" 2021.
- 40 Source: Ministry of Finance of Japan, Tomiki Isa, "Demographic Effects on Prices: Is Aging Deflationary?" 2021.
- Source: Le Monde, P. Mesmer, "Inflation and Staffing Shortages Threaten Japan's Care for the Elderly," July 13, 2023.
- ⁴² Source: Reinhart and Rogoff, "This Time It's Different: Eight Centuries of Financial Folly," Princeton University Press, 2009.
- ⁴³ Source: FRED as of September 2023. US debt to GDP is approximately 119% of GDP.
- ⁴⁴ Source: New York Times, B. Dooley, "Why Japan's Sudden Shift on Bond Purchases Dealt A Global Jolt," January 3, 2023.
- ⁴⁵ Source: United States Treasury Department as of September 2023. Japan holds \$11 trillion dollars of US government debt of \$3.4 trillion dollars of total US debt owned by foreigners.
- 46 Source: Ibid.

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