

The Japanese Economy: Stagnation, Recovery and Challenges

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December 13, 2018

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Acknowledgements: The author thanks Ms. Mary Rafferty for her editorial support.

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Funding: This research did not receive any specific grant from funding agencies in the public, commercial or not-for-profit sectors.

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Abstract: The Japanese economy is showing signs of a moderate recovery after more than two decades of stagnation. This stagnation was characterized by low inflation or outright deflation, subdued long-term interest rates, elevated government debt and chronic fiscal deficits, and the decline in its share of global exports. Monetary policy has been highly accommodative, marked by low and negative policy rates and the expansion of the central bank's balance sheet. The country has been mired in a liquidity trap. Despite the recent recovery, observed inflation is still below the Bank of Japan's target of 2.0%. Wage growth is muted even though the unemployment rate is low. Meanwhile, the working-age population continues to shrink, and the general population is rapidly aging. Japan's export sector faces stiff competition. Openness to immigration is quite limited. This paper analyzes Japan's economic challenges in light of the moderate recovery after the protracted stagnation, ongoing demographic changes, the reforms of Abenomics and globalization.

JEL codes: E02, E60, O11, O20, P1

Keywords: Japan, stagnation, liquidity trap, economic policy

Japan's economy is gradually recovering from an era of economic stagnation. It appears to be back on a path of expansion, albeit one of moderate growth. Trend growth in real GDP and real GDP per capita has slowed markedly over the past decades. Japan has suffered from decades of low inflation and actual deflation (Akram 2014, Bernanke 2003, and Garside 2012).

This paper analyzes Japan's economic challenges in light of the current recovery after the protracted stagnation and liquidity trap (Akram 2016), ongoing demographic changes, the reforms of Abenomics and globalization. Section II analyzes Japan's long stagnation and the recent recovery. Section III discusses the recent policy challenges.

Section II: An Analysis of Japan's Stagnation and Recovery

Japan's economy is undergoing a modest recovery, as evidenced by a nominal GDP (nGDP) that has been rising since 2013 (see Figure 1). The country's nGDP had been essentially flat from the late 1990s to 2007. During the global financial crisis, Japan's nGDP actually declined, and it remained at this reduced level until the gradual recovery that started in 2013. This protracted weakness of nGDP in Japan owes to both weak growth in real GDP and low inflation, or even deflation.

<INSERT FIGURE 1 HERE>

Japan's trend growth rates of real GDP and real GDP per capita have slowed. Table 1 below shows the reduced growth of real GDP and real GDP per capita by decades and by selected era. The Japanese economy grew rapidly following World

War II until the mid-1990s. Growth rates fell sharply following the bursting of the country's asset bubbles in equity and real estate in the mid-1990s, which had been fueled by increased leverage.

<INSERT TABLE 1 HERE>

The growth slowdown occurred due to slower growth in employment and labor productivity. Table 2 gives the decomposition of the trend growth rate in real GDP by decade and by selected era. It shows how the decline in employment growth and labor productivity growth have contributed to slower real GDP growth in recent decades. Growth in labor productivity has declined, whether measured as output growth per person employed or as output growth per hours worked. Growth in total factor productivity has also declined. This is the growth in output that is not explained by increases in labor and in capital. It is generally considered a useful indicator of economic efficiency.

<INSERT TABLE 2 HERE>

Since 2013, businesses have turned somewhat more optimistic about the future. Machinery orders and real private nonresidential investment have been gradually improving. Despite this recovery, Japan's industrial production is still below the peak it attained just before the global financial crisis. The country's industrial production dropped considerably at the time of the global financial crisis as global demand for advanced manufacturing, particularly electronics and motor vehicles, fell sharply. Industrial production also fell in the aftermath of the Tohoku

tsunami. The industrial production recovery in Japan has been weak for many reasons, including the shifting of production and increased competition from other Asian countries, including China. Manufacturing capacity and capabilities in other Asian countries has risen significantly. The growth of these markets—and the higher cost of production—makes Japan less competitive for production and investment. For these reasons, many Japanese corporations prefer to expand capacity overseas.

Since the mid-1990s, the Japanese economy has been trapped in low inflation and deflation. The price level, as measured by implicit price deflators for GDP and domestic demand, has declined from the late 1990s until 2013. Since then, price levels have increased slightly, but core inflation is still low—markedly below the Bank of Japan’s (BoJ) target of 2.0% annual inflation on a sustained basis. Core inflation is just barely positive as of late 2018. Occasionally, core inflation rose during the past decades, but only due to a sales tax rise in late 1998 and again in 2009. As the base effect of such tax increase wore off, core inflation fell sharply.

Another factor in the lackluster core inflation in Japan has been the weakness of effective demand. Muted wage growth has also been responsible for the country’s low inflation and deflation (see Figure 2). Prices are a function of wages, markup and labor productivity. Restraints in wage growth and improvement in productivity have led to low core inflation and deflationary trends in the Japanese economy. Low inflation and deflationary trends tend to increase the burden of debt. These trends

discourage businesses from borrowing and financial institutions from lending, which in turn adversely affects investment, business formation, entrepreneurial risk-taking and innovation.

<INSERT FIGURE 2 HERE>

Japan's population is declining. Its peak population was 127 million in 2009; it is expected to be less than 108 million by 2050. The country's population is also aging rapidly. This, combined with low fertility rates and a fairly limited openness to immigration, is causing Japan's population to decline. With an aging and declining population, the country's working-age population is likely to decrease as well in the coming years. The fertility rate (i.e., births per woman) in Japan is one of the lowest among advanced countries. Japan's fertility rate is less than 1.4 per woman as of 2015, whereas in the U.S. the rate is around 1.8, and in France it is nearly 2.0. The number of foreign-born population, as a share of the country's population, is also very low, reflecting the lack of openness to immigration. Less than 2.0% of the population in Japan is foreign-born, whereas in the U.S. it is about 14.5%, and in Australia it is a bit more than 28.0% of the population.

In the past five years, employment growth has exceeded labor force growth. As a result, the unemployment rate has declined precipitously—to well below 2.5% as of September 2018. The total labor force participation rate has been falling since the late 1990s. The decline is likely to continue due to the rapid aging of the population. However, in the past couple years, the labor force participation rate has

risen modestly thanks to a higher female labor force participation rate. Despite the tight labor market, wage growth has been tepid for several reasons, namely: the increased flexibility of the labor market; the weaker bargaining position of the trade unions; the rise of the service sector; the offshoring of production; the globalization of manufacturing; and a rise in female labor force participation rate, albeit with a persistent male-female wage gap.

Real private consumption has been weak in Japan. Since the mid-1990s, private consumption has risen an average of merely 0.8% on a year-over-year basis. This is mainly due to feeble growth in household real disposable income and labor compensation weakness. The increase in sales taxes from 5% to 8% in April 2014 led to a fall in real private consumption, particularly real retail sales, following the initial rise right before the hike. The earlier experience of a sales tax increase in April 1997 had a similar effect, but the decline in 2014 was more severe.

Starting in the mid-1990s, gross fixed capital formation had been flat. Indeed, in the years after the global financial crisis, gross fixed capital declined. Since 2013, however, fixed capital formation has shown a gradual and moderate recovery. Japanese corporations do have plenty of cash (see Figure 3) but have been reluctant to undertake domestic investment because of the weakness of effective demand, the deflationary environment, low inflation, heightened uncertainty and diminished expectations of market growth (Akram 2016). A plausible explanation for the rise of corporate profits amid stagnant nGDP is that low inflation and deflation has been

accompanied by subdued wage growth, along with a rise in productivity. As a result, labor costs have been held in check and, in fact, sometimes declined.

<INSERT FIGURE 3 HERE>

An additional hike of sales taxes from 8% to 10% has been postponed until October 2019. It is highly likely that a future hike will result in a modest slowdown in real private consumption and real retail sales.

Despite stagnant nominal GDP and lackluster gross fixed capital formation, corporate profits rose from the mid-1990s to 2008. Corporate profits fell during the global financial crisis and immediately afterwards between 2008 and 2012. However, corporate profits have been modestly rising since 2013. Business profits amount to nearly 25% of national incomes as of 2017.

In recent years, exports have fared well due to overseas growth and a weak yen. However, Japan's share of global exports has fallen from nearly 9% in 1990 to less than 4% as of 2017. In contrast, China's share of global exports has risen from around 2% in the early 1990s to 13% in 2017. Japan's export sector was quite adversely affected following the global financial crisis. The country's motor vehicle exports fell sharply during this time. Exports of motor vehicles also fell in the aftermath of the Tohoku tsunami. However, motor vehicle exports have been showing signs of moderate recovery since 2013. The country's electronic exports also took a major hit during the global financial crisis. The recovery in electronic exports since 2008 has been modest. The level of electronic exports remains below

its peak prior to the crisis. Meanwhile, Japan's economy since the beginning of the 21st century has been increasingly globalized as reflected in the rise of both exports and imports as a share of nGDP. Japanese multinational corporations are increasingly engaged in outward direct investment to access overseas markets and take advantage of the lower costs of production elsewhere.

The country's export competitiveness had been hampered by the strong appreciation of the Japanese yen from the late 1990s until early 2012. The yen had appreciated from ¥144/\$ in July 1998 to ¥76/\$ in January 2012. This large increase in value undoubtedly affected the country's export sector. The Japanese authorities' new policy stance, the BoJ's expansionary monetary policy, and low real interest rates have been able to halt and partly reverse the appreciation of the yen.

Japan has been running persistent fiscal deficits since the mid-1990s. Fiscal balance as a share of nGDP has deteriorated markedly in the 1990s because of automatic stabilizers that were switched on by the weak economy, in addition to the government's fiscal stimulus in response to stagnation and mandated transfers incurred due to social security and medical spending. The country ran large fiscal deficits from 1998 to 2005 and again following the global financial crisis from 2008 to 2014. Persistent fiscal deficits have resulted in elevated government debt ratios. Japan's gross debt and net debt, as a share of nGDP, have risen from 19% and 64%, respectively, as of 1991, to 156% and 238%, respectively, as of 2018. Japan's debt ratios are the highest among the major advanced capitalist countries. Fiscal deficits

have stabilized the economy, while periods of fiscal austerity have slowed consumer spending, business investment and economic activity.

Despite persistent fiscal deficits and elevated government debt ratios, long-term interest rates on Japanese government bonds (JGBs) are remarkably low. The BoJ has pursued low policy rates that have resulted in low short-term interest rates, even pioneering a zero interest-rate policy. The country's central bank has also aggressively expanded its balance sheet since 2011, purchasing a substantial volume of JGBs. Low short-term interest rates have been the primary driver of low long-term interest rates (Akram and Das [2014] and Akram and Li [2018]). This phenomenon is consistent with Keynes' (1930 and 2007 [1936]) views on price action in the government bond market and with the perspectives of modern monetary theory (Wray 2012). Low long-term interest rates have resulted in low interest payments on government debt and lowered the government's debt burden, but this has also reduced the aggregate interest income received by the nongovernment sector. Low long-term interest rates have not been able to lift gross domestic fixed investment, which has been soft for decades. In the past few years, however, real private nonresidential investment has moderately improved due to a slight improvement in expectations and a view that the policy paradigm might be gradually changing.

Section III: Policy Challenges

Japan enjoys a very good standard of living, one of the highest life expectancies, social stability, cohesion, low crime rate, democratic institutions and a modern and liberal constitution, and a remarkably low unemployment rate.

However, Japan has suffered in recent decades from low growth, low inflation (and deflation), and feeble wage growth. Its population is declining and aging rapidly.

The country faces serious challenges. Policymakers have attempted to respond, but the results have been mixed. The BoJ has been a pioneer in adopting a low and zero interest-rate policy, an unconventional monetary policy and other innovations. Upon returning to office in December 2012, the government of Shinzo Abe has undertaken a set of policies to reinvigorate growth and overcome deflation. These policies, referred to as Abenomics, have three components: (1) accommodative monetary policy; (2) fiscal actions; and (3) structural reforms. They have had mixed results. Accommodative monetary policy, carried out by the BoJ, has been able to keep interest rates in Japan extremely low. Outright deflation appears to have ended. Fiscal stimulus supported economic activity and fixed investments. The increase in sales taxes led to a temporary increase in consumer spending, but subsequently dampened it. Consumer spending has yet to fully recover as taxes lower real disposable income. Initiatives on structural reforms have been rather limited, although the female labor force participation rate has risen due to both policy actions and moral suasion.

Productivity growth in Japan is important for the country's future. Labor productivity growth has declined in recent decades compared to labor productivity growth in past decades in Japan. However, in recent years, Japan's labor productivity growth has been favorable compared to other major advanced countries in the same period. Since Japan's labor force is shrinking, the country needs to attain high labor productivity growth that is sufficient to more than offset the decline in its labor force to ensure increased prosperity in the coming years. Advances in artificial intelligence, robotic process automation, the Internet of Things and other technologies could lift productivity. Policy measures designed to raise public and private investment to enhance Japan's productive capacity, human capital and the capabilities of its workforce would also be beneficial.

Japan needs to raise productivity and increase the supply of labor and capital inputs. Efforts to further increase the female participation rate and narrow the male-female wage gap would be useful. The country needs to be more accepting of foreign-born workers through immigration and guest worker programs. The presence of foreign workers would address shortages of workers, mitigate skill gaps, and boost effective demand. Increased investment in fixed capital, intellectual property and new processes would be constructive. The authorities need to induce Japanese corporations to invest in Japan. Corporations have plenty of cash but have been reluctant to invest despite low long-term interest rates for a variety of reasons,

including tepid effective demand, declining population, uncertainty and expectation of feeble prospects for economic growth.

Accommodative monetary policy can keep government bond yields low and prevent the undue appreciation of the Japanese yen. Bernanke (2003) and Krugman (1998) have been emphatic about the propitious characteristics of monetary easing, strong monetary policy actions, forward guidance, large-scale asset purchases and overall commitment to raising actual inflation and inflation expectations. However, although the BoJ has demonstrated that it can target the yield curve while undertaking stupendous expansion of its balance sheet and committing to low interest rates and monetary easing, such actions have not had the desired effect. Even after five years, the BoJ has been unable to attain its inflation target because of the firms' price-and-wage-setting behavior and the deeply entrenched inflation expectations. The evidence would suggest that low interest rates alone are insufficient to generate effective demand and a rise in core inflation. Low interest rates can have some harmful effects on the private sector's interest income, business confidence and economic activity, however. Higher interest rates can benefit the banking and financial system and do not necessarily retard effective demand and economic activity (Samuelson 1945 and Kregel 2015). Indeed, low interest rates may be a symptom of weak aggregate demand. Businesses are willing to borrow and invest if the expected marginal efficiency of capital is higher than the

interest rate. Creditors are willing to lend if the expected marginal return from lending is greater than the opportunity cost of the alternative use of their funds.

Authorities need to place greater emphasis on fiscal and structural policies to support effective demand and growth in real disposable income to overcome low inflation and deflationary trends. The planned hike in consumption taxes—though milder than the previous one—is likely to be counterproductive amid a moderate recovery. It would be advisable to postpone the hike until observed inflation overshoots its target for an extended period.

Real wages and real disposable income must rise sustainably for a virtuous cycle of economic growth. The growth of nominal wages must exceed the growth in labor productivity on an ongoing basis to produce a sustained increase of core inflation.

The objective of structural reforms should be to boost living standards, human capital and capabilities. Oftentimes, neoliberal labor market reforms reduce the bargaining power of labor, while other structural reforms benefit oligopolies and provide protection to vested interests. Fiscal austerity is often not just welfare-reducing, but also ineffectual in achieving the inflation target and raising effective demand.

The Japanese authorities should become more receptive to new ideas, engage in policy experiments, and judiciously weigh the balance of evidence to determine the course of action. The country's history demonstrates aptly that the Japanese

people can achieve common goals under able and resolute leadership. The point, however, is to set goals and implement actions that serve the Japanese people and the rest of the world by fostering higher growth and realizing the inflation target.

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TABLES

Table 1: Trend Growth Rate, 1960–2016

Japan, Trend Growth Rate, %		
	Real GDP	Real GDP per capita
<i>By decade</i>		
1960–1969	9.6	8.5
1970–1979	4.2	3.0
1980–1989	4.4	3.9
1990–1999	1.3	1.0
2000–2009	1.0	0.9
2010–2016	0.9	1.1
<i>By era</i>		
1960–2016	3.3	2.8
1960–1994	5.2	4.3
1995–2016	0.8	0.8
Sources: World Bank; author's calculations		

Table 2: Decomposition of Trend Growth Rate, 1960–2016

Japan, Decomposition of Trend Growth Rate, %			
	Real GDP Growth	Employment Growth	Labor Productivity Growth
<i>By decade</i>			
1960–1969	9.6	1.4	8.2
1970–1979	4.2	0.8	3.4
1980–1989	4.4	1.1	3.3
1990–1999	1.3	0.2	0.9
2000–2009	1.0	-0.1	1.1
2010–2016	0.9	0.1	0.8
<i>By era</i>			
1960–2016	3.3	0.7	2.6
1960–1994	5.2	1.1	4.0
1995–2016	0.8	-0.1	0.9
Sources: World Bank; author's calculations			

FIGURES

Figure 1: Nominal GDP Is Rising After Decades of Stagnation

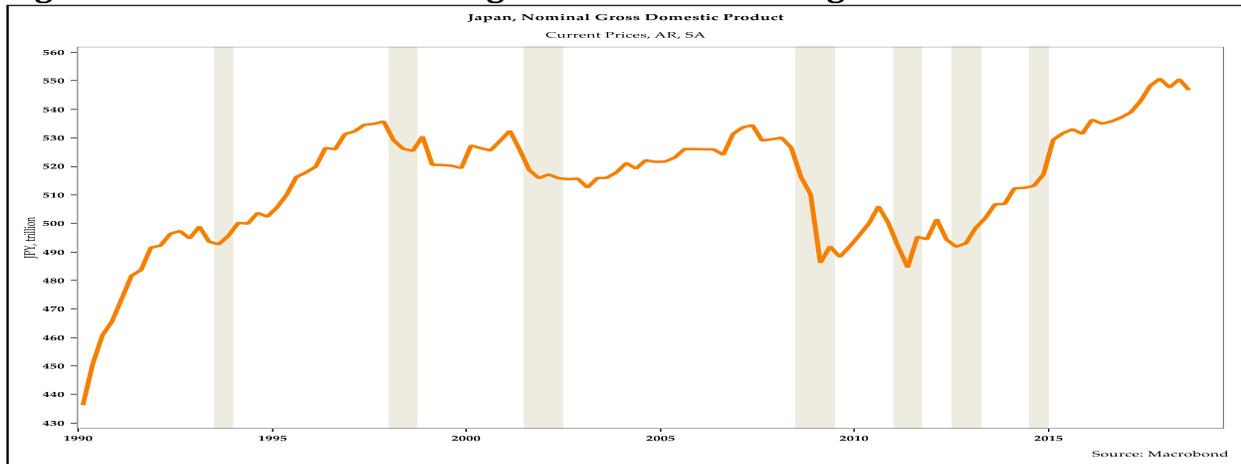


Figure 2: Muted Wage Growth Has Kept Core Inflation Very Low

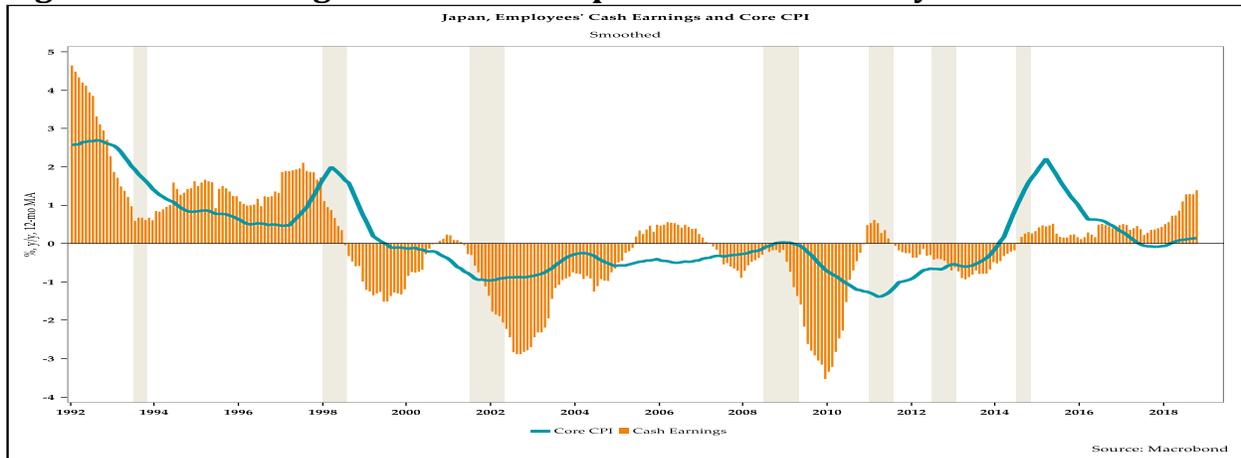


Figure 3: Japanese Corporations Have Lots of Cash

