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The Economics of Japan's Lost Decades

White Paper

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INVESTMENT MANAGEMENT

Table of Contents

Introduction

Though Japan was hit especially hard during the global recession in 2008, its current malaise can be traced back to the early 1990s and the collapse of its housing and equity markets. Many prominent economists have studied Japan's "lost decades", arguing about its causes and the appropriate policy responses[1]; nevertheless, this debate remains unsettled, and Japan's issues linger.

In spite of more than 20 years of slow growth, Japan remains (as of 2011) the world's third-largest economy, just after the U.S. and the People's Republic of China. Although the quality of life in Japan is high, the country's slow growth, declining and aging population, lack of job growth and low female labor-force participation pose economic challenges going forward. Of course, a sluggish Japan impacts not only its own citizens but also the rest of the world, particularly emerging Asia (including China) given the multifaceted economic and financial ties that bind countries in this region. Moreover, a better understanding of Japan's plight may provide some insight into the countries currently facing problems eerily similar to those that have been bedeviling Japan for all these years — namely, prolonged stagnation and the possibility of debt deflation in the foreseeable future.

In this article, we examine the economic causes and consequences of Japan's lost decades (Section 1) and offer a number of policy recommendations to lift the country from its funk (Section 2). Given its history of comebacks, we've no reason to believe Japan cannot overcome its current economic stagnation and regain its rightful place in the global economy, spurred by appropriate economic, fiscal and monetary policy.

[1] These include Bernanke (2000 and 2002), Eggertsson and Krugman (2010), Hayashi and Prescott (2002), Koo (2008), Krugman (1998a and 1998b), Posen (2010) and Uedo (2012).

Section I: The Stylized Facts of the Lost Decades

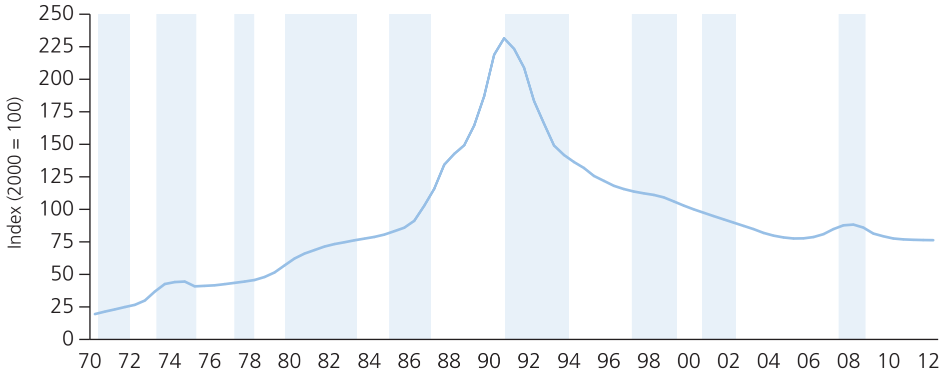
The Slowdown in Growth, and Japan's Diminishing Global Role

Japan's economy has stagnated for more than two decades following the collapse of its real estate (see Figure 1) and equity bubbles in the early 1990s. The value of land and equity markets had risen sharply in the period prior to the crash, particularly during the 1980s, as Japan's banks lent without much regard for the quality of the collateral or the ability of the borrowers to generate sufficient income to service the debt. While these lending dynamics raised equity and real estate prices, the boom in asset prices and increased leverage fueled consumption, mal- and over-investment, and growth. As the Bank of Japan started raising interest rates in the early 1990s, the elevated equity and real estate prices proved to be unsustainable and eventually the bubbles burst.

Japan's economy has stagnated for more than two decades

Figure 1. Japanese Residential Land Prices Crashed in the Early 1990s

Urban Residential Land Prices, Six Biggest Cties



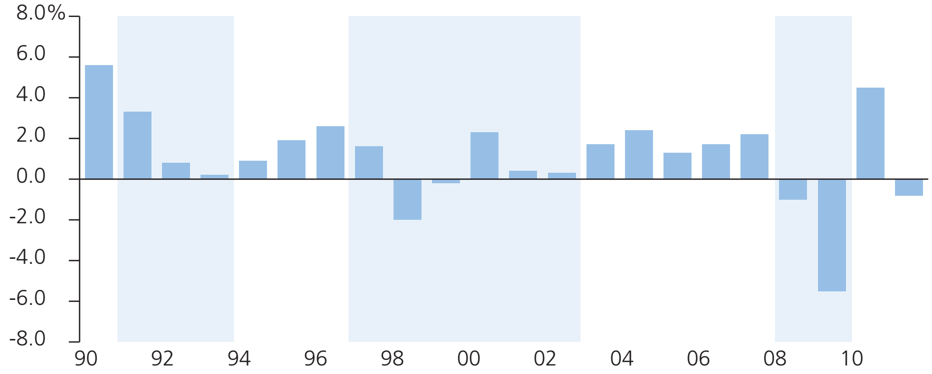
Source: Reuters EcoWin

The 1985 signing of the Plaza Accord — an agreement among the U.S., the U.K., France, West Germany and Japan to intervene in the currency markets in order to depreciate the U.S. dollar versus the Japanese yen and West German deutschemark — was a key development in Japan's saga. It led to a sharp appreciation of the Japanese yen, from around ¥200/$ in 1985 to around ¥135/$ in 1990, which proved harmful for the country's competitiveness and its export-driven growth model. Ever since, the currency has generally tended to appreciate in nominal terms and is trading at around ¥80/$ as of late October 2012.

Japan's real GDP growth rate from 1990–2011 was only 0.9% per year (see Figure 2), noticeably less than the trend growth rates the country had experienced in the 1960s (9.6%), 1970s (4.2%) and 1980s (4.3%). While real GDP has risen very tepidly since the early 1990s, nominal GDP has been flat for nearly two decades in Japan due to the combination of slow real economic growth and deflation.

Figure 2. Trend Economic Growth Has Slowed Markedly Since 1990

Year-Over-Year Change in Real GDP



Source: Reuters EcoWin

In terms of growth in real GDP per capital, Japan has gone from the highest among G-7 countries by a large margin in the 1980s, to the lowest from 1990–2011, as shown in Figure 3. Since 1990, growth in real GDP per capita, measured in purchasing power parity (PPP)-adjusted 2005 international dollars,[2] has fallen well short of the pace set by the U.S., as one example (see Figure 4). Whereas real GDP per capita in the U.S. has expanded from $32,500 in 1990 to $42,500 as of the end of 2011, that metric has grown from $26,500 to $30,700 over the same period in Japan. Not only did the gap in per capita real GDP between the U.S. and Japan increase in absolute terms, Japanese real GDP per capita deteriorated in relative terms compared to the U.S., from nearly 82% to a bit more than 72%.

This sluggish expansion has inhibited the growth of average real income among Japanese, allowing them to fall behind their Asian brethren; Singapore, Taiwan and Hong Kong have already passed Japan, while the Republic of Korea is expected to catch up fairly soon.

Figure 3. Japan's Growth in Real GDP per Capita Is the Lowest Among G-7 Countries

G-7 per Capita Real GDP Trend Growth Rates (in PPP-adjusted constant 2005 international dollars)

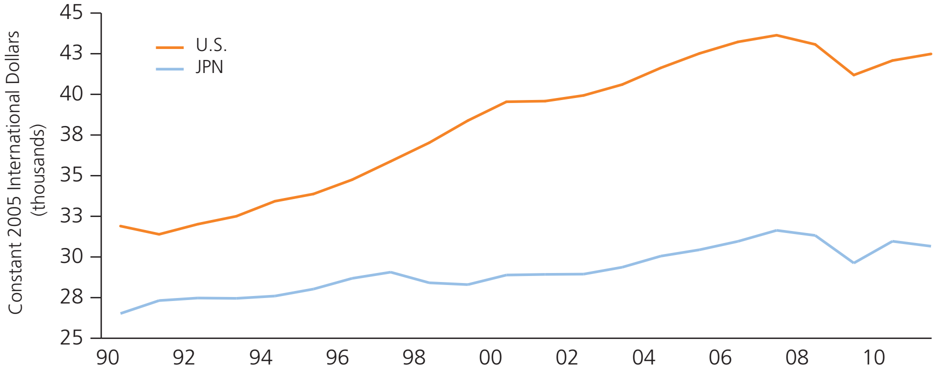
	1980-1989	1990-1999	2000-2009	1990-2011
CAN	2.1	1.8	1.1	1.8
DEU	1.6	1.2	0.7	1.2
FRA	3.1	2.8	1.5	2.3
GBR	3.1	2.8	1.5	2.3
ITA	2.5	1.4	0.3	0.8
JPN	3.7	0.7	0.8	0.7
U.S.	2.7	2.2	0.9	1.7

Source: World Bank, Reuters EcoWin, ING Investment Management

[2] "International dollar" is a term that the World Bank uses to describe a hypothetical unit of currency that has the same purchasing power parity that the U.S. dollar had in the U.S. at a given point in time. For a critical discussion of purchasing power parity see Reddy (2006).

Figure 4. Japanese Real GDP per Capita Growth Has Lagged that of the U.S.

GDP per Capita (PPP-Adjusted)



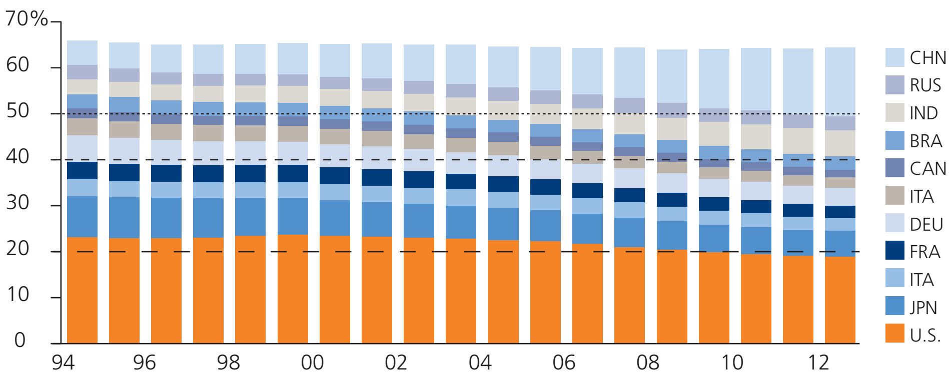
Source: Reuters EcoWin

Japan's global role has diminished considerably since the mid-1990s

Meanwhile, Japan's global role has diminished considerably since the mid-1990s. Its share of global output, measured in purchasing power parity terms, has diminished from 9.0% in 1994 to almost 5.5% in 2012 (see Figure 5). In contrast, China's share of global output has tripled during that period, rising from about 5.0% to nearly 15.0%. Japan's share of global exports and imports has also declined, even though the country has become more open to the rest of the world in terms of international trade, direct investment and financial flows over the past 20 years. The decline in Japan's role in international trade is due both to its receding output growth as well as the emergence of China and other Asian countries as important players in international trade and manufacturing activity.

Figure 5. Japan's Share of Global GDP Has Diminished Sharply

Share of Global GDP (PPP-Adjusted)



Source: IMF World Economic Outlook, Reuters EcoWin

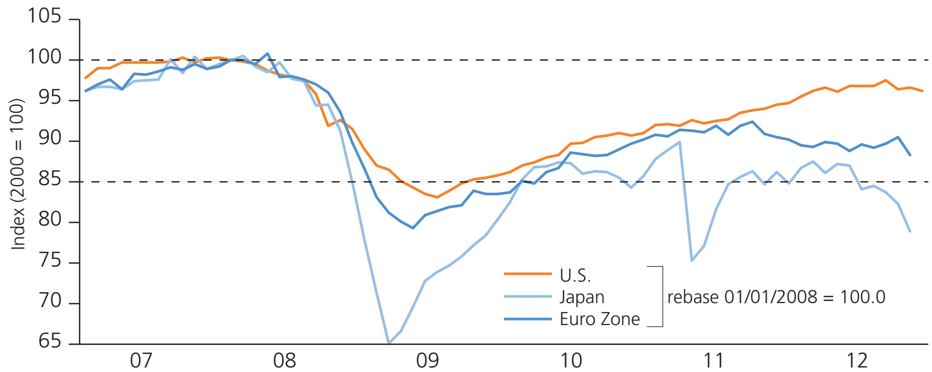
Recession and Natural Disaster Hit Japan Hard

Real GDP in Japan has yet to recover from the global recession of 2008. While the country's economy initially began to rebound fairly quickly after its post-financial-crisis cratering, the 2011 Tohoku earthquake and tsunami hit before a full recovery could take hold, resulting in a serious disruption to production, the supply chain and energy supply. The pace of recovery has slowed since then, and prospects remain dim due to both international and domestic factors.

Japanese industrial production (see Figure 6) has also failed to make up the ground it lost; it fell more than 35% peak to trough, a much steeper decline than those seen in the U.S. and the euro zone, both of which are now close to their pre-recession peaks. The country's exports fell sharply during the global recession, and the economy was particularly harmed by the decline in global demand for advanced manufactured durable goods like motor vehicles, machinery and electronics (Sommer 2009). Advanced manufacturing accounts for a larger share of economic activity and production in Japan compared to other major advanced capitalist countries, and exports of these goods remain considerably below their peaks. The decline in net exports was the main driver of the sharp slowdown in economic activity in Japan (see Figures 7 and 8).

Figure 6. Industrial Production Remains Substantially Below Its Peak

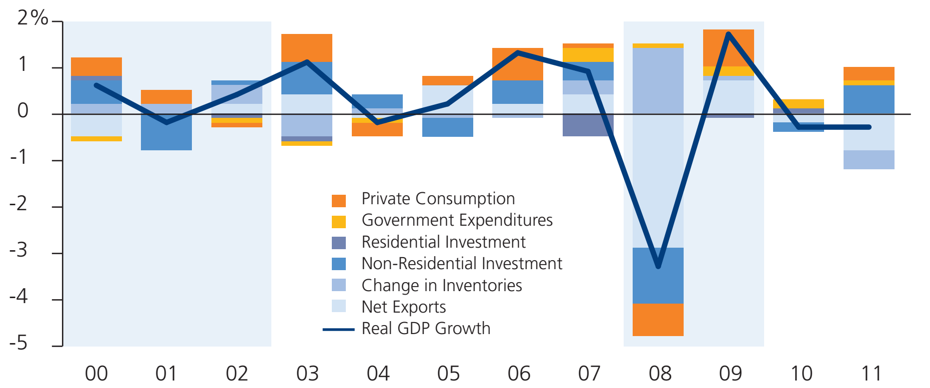
Industrial Production (Seasonally Adjusted)



Source: Reuters EcoWin

Figure 7. Japan Was Hit by a Sharp Decline in Net Exports…

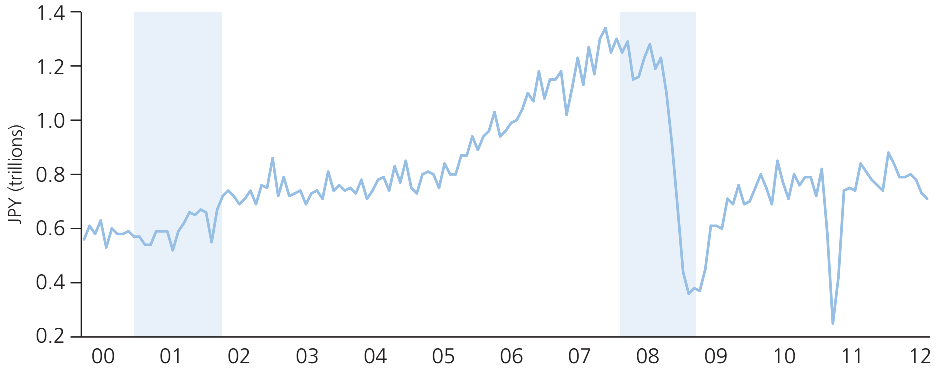
Sources of Real GDP Growth (Seasonally Adjusted)



Source: Reuters EcoWin

Figure 8. …Notably of Motor Vehicles

Motor Vehicles Exports (Seasonally Adjusted)



Source: Reuters EcoWin

The troubled Japanese economy presents challenges to its people's quality of life

The Quality of Life in Japan Remains High

Even though the Japanese economy has been mired in subdued growth and deflation for decades, the quality of life in the country remains high. As you can see in Figure 9, Japan is ranked 12th in human development according to the United Nations Development Program's Human Development Index (2011), a composite metric of life expectancy, education and income indices used to rank countries. Life expectancy in Japan is the highest among G-7 countries, while its infant mortality rate per 1,000 live births — a revealing indicator of health outcomes — is quite low. Both crime rates — as indicated by homicides, victimization risk and incidences of violent crime — and incarceration rates are also low (Barclay et al 2003). While public and civic life in Japan has many enviable qualities that contribute to a high standard of living and social cohesion, the troubled economy presents substantial challenges in maintaining this quality of life; this is particularly true as Japan transitions into a more aged society and faces a declining overall and working-age population.

Figure 9. Japan Ranks High in UNDP's Human Development Index

United Nations Development Program's Human Development Index (2011)		
HDI Rank	**Country**	**HDI Value**
1	Norway	0.943
2	Australia	0.929
3	Netherlands	0.910
4	United States	0.910
5	New Zealand	0.908
6	Canada	0.908
7	Ireland	0.908
8	Liechtenstein	0.905
9	Germany	0.905
10	Sweden	0.904
11	Switzerland	0.903
12	Japan	0.901
13	Hong Kong	0.898
14	Iceland	0.898
15	South Korea	0.897

Source: United Nations Development Program

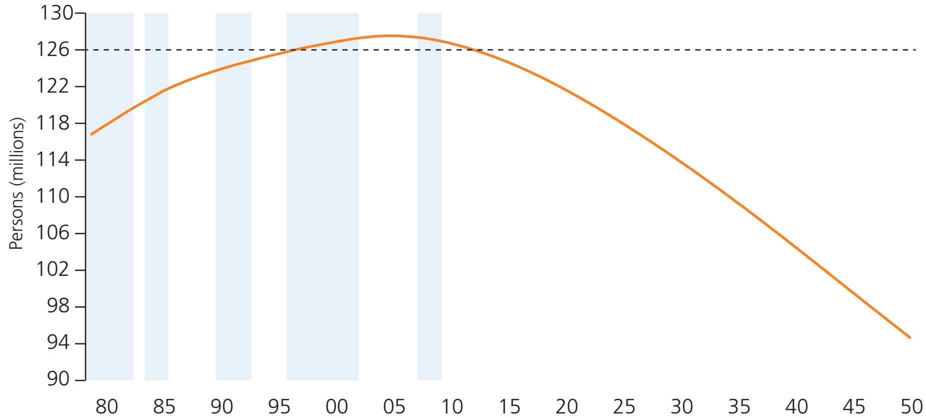
Japan's demographics are likely to remain unfavorable for economic growth

Demographic Trends and Labor Market Characteristics

Japan's demographics have been and are likely to continue to be unfavorable for growth. Its population has been declining since 2006 (see Figure 10), and its fertility rate is quite low (see Figure 11). At 1.4 births per woman, Japan's fertility rate is so much lower than the replacement rate that the country's population is bound to decline naturally. Meanwhile, the population is aging rapidly; as shown in Figure 12, its old-age dependency ratio is the highest among G-7 countries. Whereas a number of advanced capitalist countries like the U.S., Australia and Canada can rely on immigration as a source of labor force growth and dynamism, Japan has not shown itself open to the mass immigration of foreign workers or the assimilation of outsiders. International migrants as a share of Japan's population are the lowest among major advanced countries.

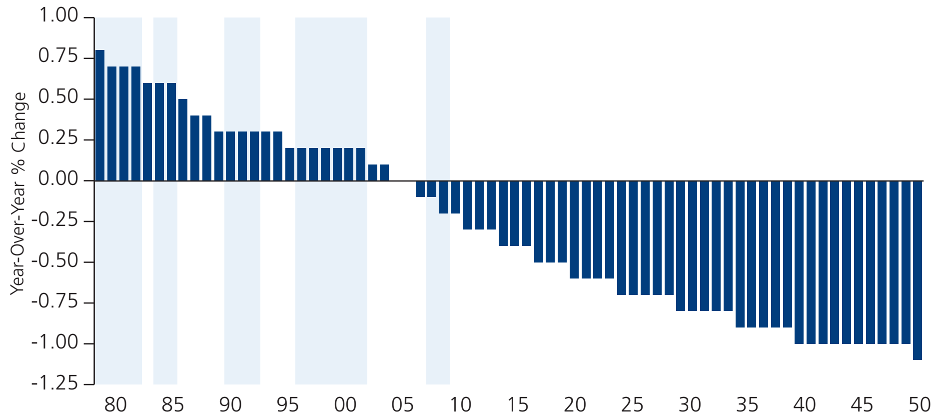
Figure 10. Japan's Population Decline Is Expected to Continue…

Population



Source: Reuters EcoWin

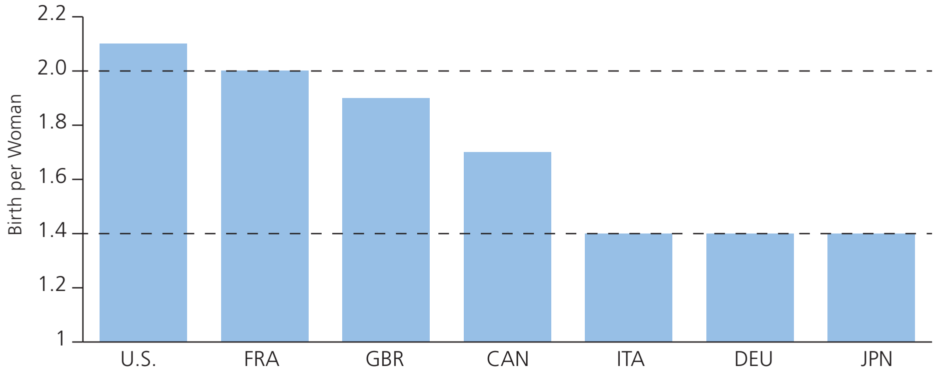
Population Growth



Source: Reuters EcoWin

Figure 11. …As Its Fertility Rate Is Well Below Replacement Rate

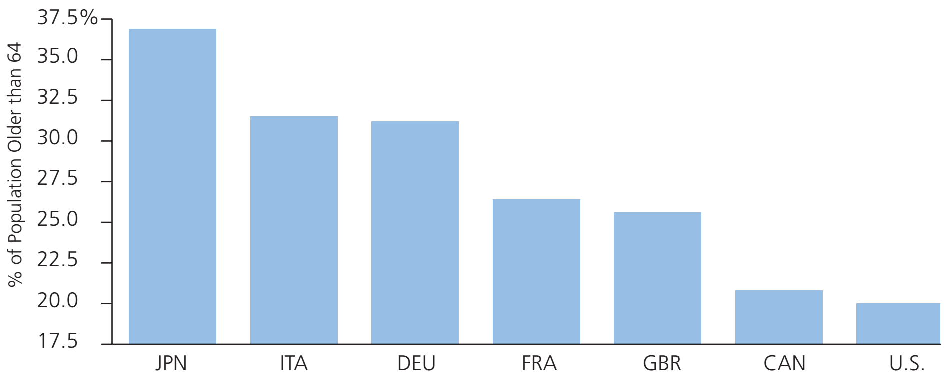
Fertility Rate (2010)



Source: Reuters EcoWin

Figure 12. Japan's Population Is Aging Rapidly

Dependency Ratio (2011)



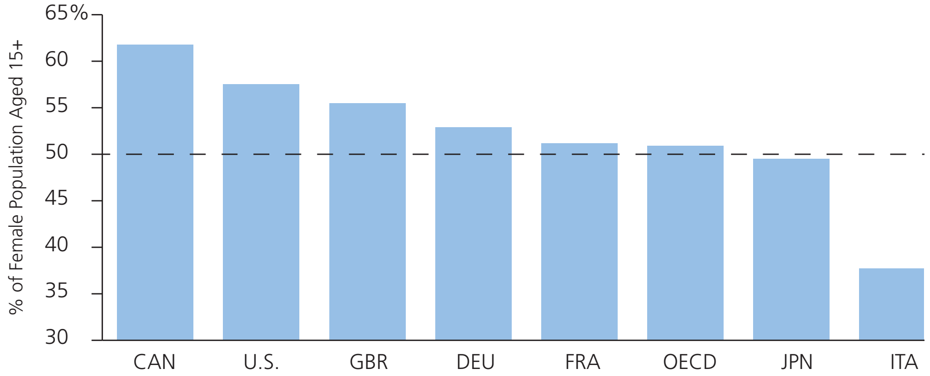
Source: Reuters EcoWin

Employment trends are also discouraging

As you can see in Figure 13, the female labor-force participation rate in Japan is quite low; only Italy has a lower rate among G-7 countries. Studies (Steinberg and Nakane 2012) have suggested that the low participation rate is due to two main reasons: 1) fewer women start in professional-track positions, and 2) many women drop out of the labor force after giving birth. An increase in the participation rate of female workers could raise Japan's potential growth rate.

Figure 13. Female Labor Force Participation Rate in Japan Is Quite Low

Labor Participation Rate, Female (2011)

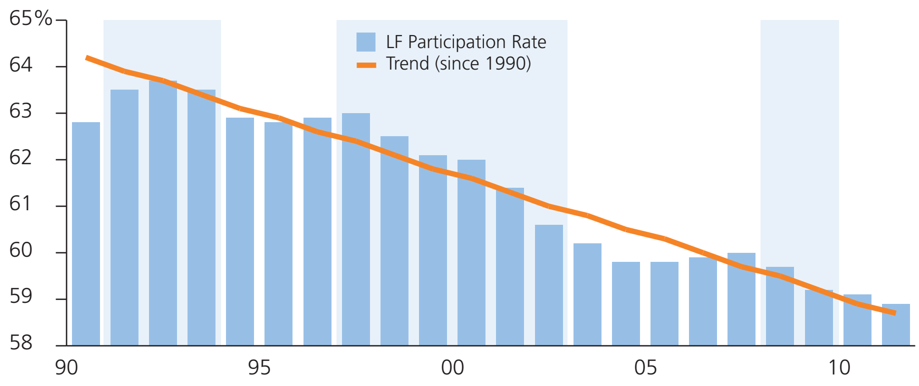


Source: Reuters EcoWin

The combination of unfavorable demographics and poor economic growth has resulted in a secular decline in the employment-to-population ratio, a lower labor-force participation rate (see Figure 14), tepid job growth and a secular increase in the unemployment rate (see Figure 15). Ordinarily, a decline in working-age population — and, thus, a decline in the supply of workers — would tighten the labor market and cause the unemployment rate to fall; in Japan's case, however, the gradual rise in the unemployment rate and tepid job growth is occurring in spite of these demographic shifts, reflecting economic stagnation and weakness in aggregate demand.

Figure 14. The Overall Labor Force Participation Rate Has Declined…

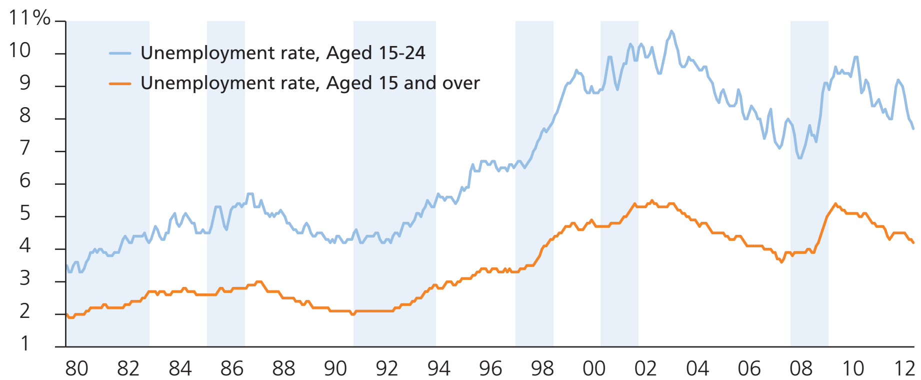
Labor Force Participation Rate, Total (Seasonally Adjusted)



Source: Reuters EcoWin

Figure 15. …While the Unemployment Rate — Particularly Among Youth — Has Drifted Higher Since 1990

Employment Rates (Seasonally Adjusted)



Source: Reuters EcoWin

The Consequences of Changes in the Labor Market

The strict structural and institutional arrangements in the Japanese labor market have gradually become more flexible over the past decades. Labor-market protections have been reduced, and the bargaining position of the Japanese working class has deteriorated due to globalization, restructuring and a fall in trade-union density. (Note that this latter metric — which reflects the number of eligible workers who are unionized — has been declining throughout the developed world, including the U.S. as shown in Figure 16.) Arguably, these employee-weakening structural reforms have been counterproductive and have slowed growth; real average monthly earnings have declined, real aggregate employee compensation and real disposable income have stagnated, and real private consumption has risen at a meager pace. Before taxes and transfers, income inequality has increased since the 1980s.

Figure 16. Trade-Union Density in Japan Has Declined

Trade union density (%)		
Year	United States	Japan
1970	23.5	35.1
1980	19.5	31.1
1990	15.5	25.4
2000	12.8	21.5
2010	11.4	18.4
2011	11.3	19.0

Source: Visser (2006), Organization For Economic Cooperation and Development

The employment-to-population ratio has declined since the early 1990s due to aging and low job growth. While Japan's unemployment rate, at a bit above 4%, is lower than that of most other advanced countries, it has drifted higher in the past two decades. Moreover, the unemployment rate among workers under 34 years old has increased markedly over the past 20 years. Meanwhile, part-time employment has become rampant in Japan; nearly

Japanese workers have been hurt by globalization

one-third of the labor force is currently engaged in part-time employment, compared to less than 13% in 1990. Part-time employees are not entitled to benefits and employment protections that are typically available to full-time employees.

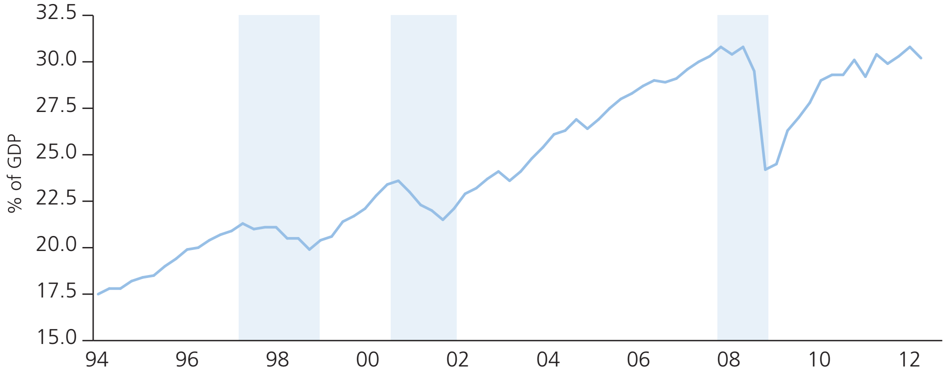
The Effect of the Globalization of Production and Increased Trade

As mentioned in the previous section, the bargaining position of Japanese workers has been weakened by the globalization of production and the increase in international trade, and has thus been elemental in the stagnation of real wages and real income over the past two decades. Like their global counterparts, Japanese multinational corporations have been investing heavily overseas, particularly in emerging Asian countries; the stock of outward foreign direct investment (FDI) by Japanese multinational corporations in overseas markets (Cowling and Tomlinson 2010) has exploded from around $201 billion in 1990 to approximately $963 billion in 2011, a nearly four-fold increase. Meanwhile, the worldwide increase of global outward FDI stock has grown nine-fold, from nearly $2.1 trillion to almost $21.2 trillion over the same period.

Trade linkages have also contributed to the greater openness of the Japanese economy. Trade openness — defined as the ratio of the sum of real exports and real imports to real GDP — has increased markedly since the mid-1990s, as have both imports and exports as shares of real GDP.

Figure 17. The Japanese Economy Has Become More Open Through Trade Linkages

Real Trade [(Real Imports + Real Exports)/Real GDP]



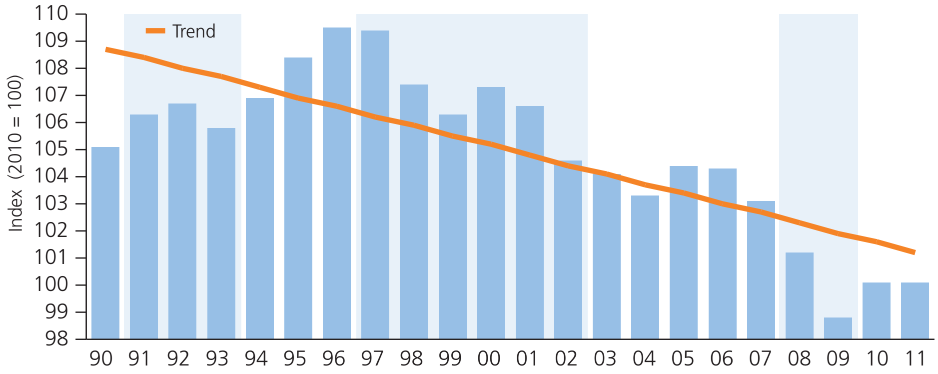
Source: Reuters EcoWin

Stagnant Labor Compensation and Private Consumption

Despite persistent deflation, average monthly real earnings for employees have been declining at a rate of a bit more than 0.2% year over year (see Figure 18) since 1990. Since peaking in the mid-1990s, real earnings have declined 10% while aggregate real compensation has been stagnant.

Figure 18. The Waning Trend in Japanese Real Wages

Average Monthly Real Earnings



Source: Reuters EcoWin

The weakness of real earnings and real disposable income has led to the rather feeble increase in real private consumption, which has averaged year-over-year growth of around 1% from 1995–2011. Households have accomplished this slow growth by increasing consumption's share of disposable income, lowering their savings rates, borrowing and tapping into retirement savings.

Shifts in the Composition of GDP

As you can see in Figure 19, the composition of real GDP in Japan has changed during the lost decades, with the share of consumption increasing while investment has declined. A number of factors may have contributed to the increased share of consumption in domestic expenditures (Figure 20), including the aging of the population and a slower growth in other drivers except government consumption. Meanwhile the share of investment in real GDP has decreased mainly due to the decline of public investment, which as shown in Figure 21 has fallen from nearly 9% of GDP in the mid-1990s to around 5% by 2011.

Figure 19. The Changing Composition of Real GDP in Japan

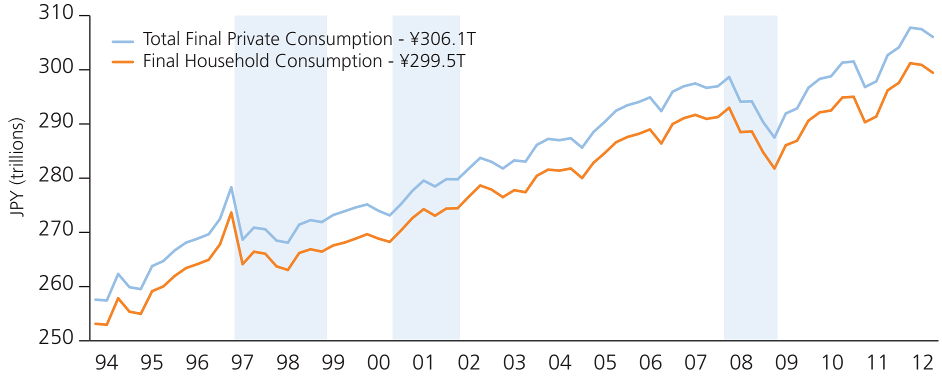
Composition as a % Share of Real GDP							
	Real Private Consumption	Real Private Investment (non-Residential)	Real Private Investment (Residential)	Real Public Consumption	Real Public Investment	Real Net Exports	Real Inventories
1Q1995	56.8	13.1	5.4	15.9	8.3	-0.3	0.5
1Q2000	56.9	13.6	4.2	17.1	7.5	0.1	-0.3
1Q2005	57.0	13.8	3.7	18.5	5.0	1.0	0.0
1Q2010	57.9	12.3	2.4	19.0	4.5	3.2	-0.8
1Q2012	58.1	12.8	2.5	19.4	4.2	2.3	-0.6

Source: EcoWin Reuters

Sluggish consumption growth has been accompanied by a decline in investment

Figure 20. Consumption Has Increased, Though Growth Has Been Soft…

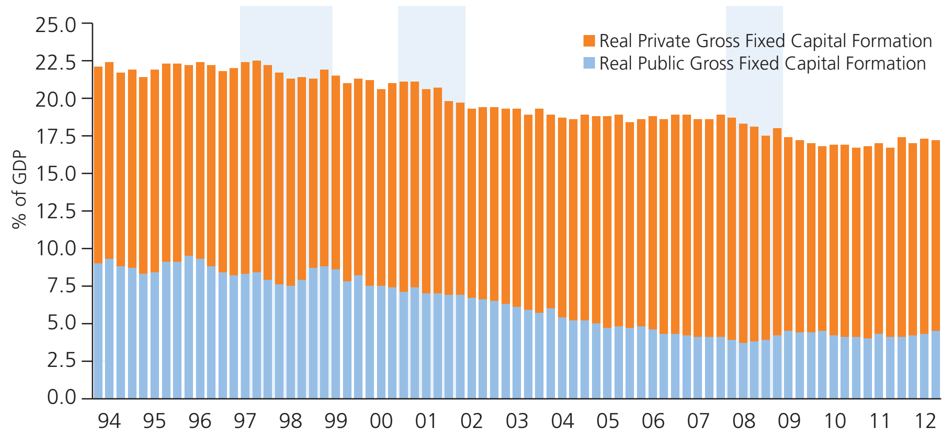
Consumption Expenditures (2005 Chained Prices)



Source: Reuters EcoWin

Figure 21. …While Overall Investment Has Decreased Mainly Due to Dwindling Public Investment

Fixed Capital Formation



Source: Reuters EcoWin

Rising Inequality

Income inequality after taxes and transfers in Japan — as measured by the gini coefficient[3] — has risen only slightly between the mid-1980s and the late 2000s; however, income inequality before taxes and transfers has risen notably, for both the working-age and retirement populations (see Figure 22). This rise in income inequality before taxes and transfers is due to stagnant real disposable income, the weakness of the labor market and the deterioration of the bargaining power of Japanese employees. Japan's progressive tax and transfer regime accounts for the relative stability of income inequality after taxes and transfers. However, if the bargaining position of workers continues to decline, income inequality may rise in the coming years.

Figure 22. Income Inequality in Japan Has Increased

Evolution of Gini Coefficient

		Mid-1980s	Mid-1990	2000	Early 2000s	Late 2000s
Gini Coefficient (After Taxes and Transfers)	Total Population	0.30	0.32	0.34	0.32	0.33
	Working-Age Population: 18 – 65	0.30	0.32	0.33	0.31	0.32
	Retirement-Age Population: Above 65	0.37	0.37	0.36	0.34	0.35
Gini Coefficient (Before Taxes and Transfers)	Total Population	0.35	0.40	0.43	0.44	0.46
	Working-Age Population: 18 – 65	0.34	0.37	0.39	0.38	0.39
	Retirement-Age Population: Above 65	0.50	0.61	0.65	0.68	0.68

Source: Organization for Economic Cooperation and Development

[3] A gini coefficient of 0 means that everyone in the economy has the same income, whereas a gini coefficient of 1 means that only one person has all the economy. Therefore, the higher the gini coefficient, the greater the income inequality.

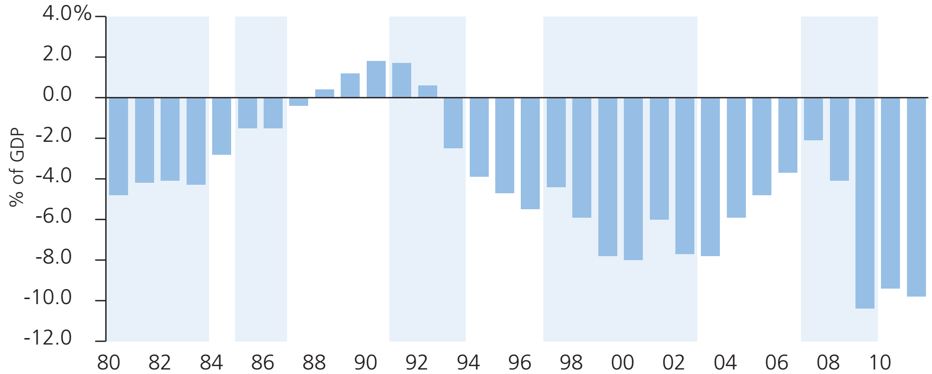
Policy success has been elusive

The Mixed Success of Fiscal Policy and the Paralysis of Policy

As shown in Figure 23, Japan has been running government deficits since the mid-1990s. After rising from the early 1990s through the early 2000s, the country's deficit began to decline until the global recession sent it climbing again. As a result of sustained period of high government deficits, Japan has extremely elevated ratios of general government debt — both net and gross — to nominal GDP. Its ratio of general government net debt to nominal GDP is the highest among G-7 countries, as shown in Figure 24, and is noticeably higher than other advanced countries.

Figure 23. Japan Has Been Running Chronic Fiscal Deficits Since the Mid-1990s…

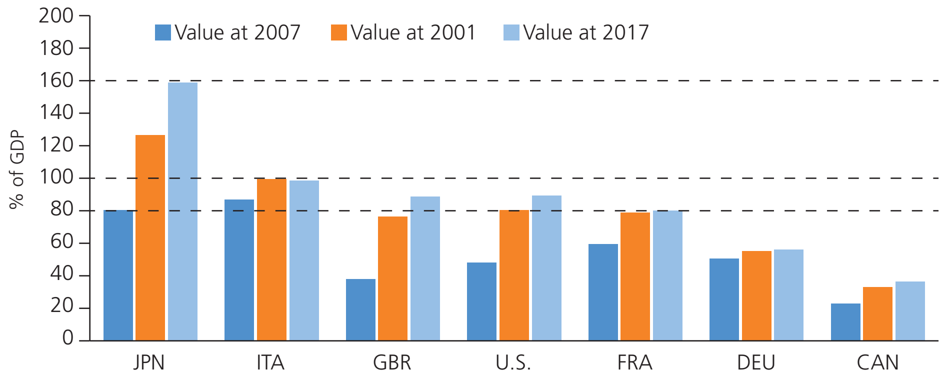
Government Fiscal Balance



Source: International Monetary Fund, Reuters EcoWin

Figure 24. …Resulting in a High Ratio of Government Debt to GDP

Government Net Debt



Source: International Monetary Fund, Reuters EcoWin

Japan's large deficits are the result of automatic stabilizers and fiscal stimulus. The country's record of fiscal policy has been mixed. While large deficits have prevented a depression and a collapse in economic activity (Koo 2008), expansionary fiscal policy has not able been to overcome the country's stagnation or revive growth and employment. The effectiveness of public spending — which is often politically directed — has been disappointing. Moreover, while government consumption spending as a share of real GDP has increased, public investment as a share of real GDP has declined.

The ruling elite in Japan have been quite divided on policy matters and have been unable to reach any policy consensus or dynamic political vision to overcome Japan's economic stagnation and move the country forward. The Liberal Democratic Party (LDP) — which had ruled Japan virtually uninterrupted since World War II until it splintered in 2009 — has been unable to inspire public confidence; meanwhile, the new rulers in the Democratic Party of Japan (DPJ) have been unable to meet public expectations and act decisively on policy issues. Moreover, the authorities' attempts to increase tax rates and undertake fiscal reforms (such as Hashimoto fiscal reform in 1997 and Koizumi fiscal reform in 2001) have proved to be counterproductive, increasing the government deficit.

The Evolution of Government Bond Yields

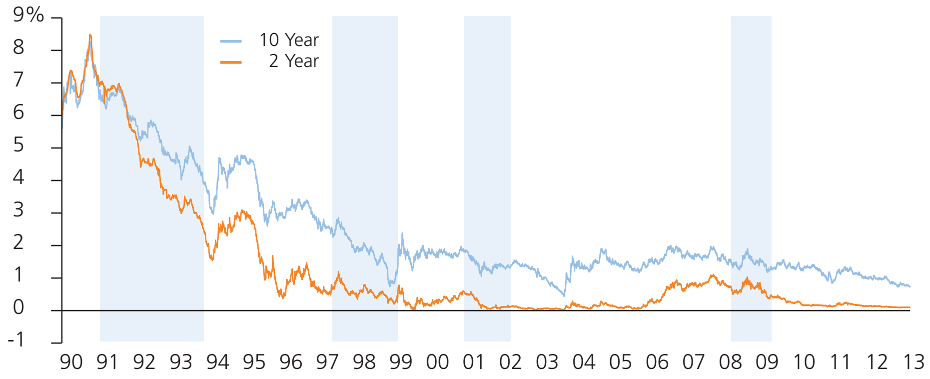
Japanese government bond (JGB) yields have stayed exceptionally low since the mid-1990s, as can be seen in Figure 25. Contrary to the conventional wisdom — for example, the International Monetary Fund, credit rating agencies and so forth[4] — Japanese government bond yields have stayed low even as the country's fiscal deficits remained elevated and the government's net debt ratio rose. The reasons are simple: 1) Japan's debt is issued in its own currency, 2) the Bank of Japan can control government bond yields though its balance sheet and communication tools, and 3) the demand for government debt remains strong, as the country's domestic private financial institutions hold the bulk of it.

The fear that bond market vigilantes or increased levels of government debt would cause Japanese government bonds to sell off suddenly and yields to spike sharply have proven to be spurious. In countries with sovereign currencies such as Japan, changes in long-term interest rates are fairly tightly correlated with changes in short-term interest rates; thus, long-term interest rates generally stay low when short-term interest rates are low.

Moreover, when observed core inflation and inflationary expectations are low, both short-term and long-term interest rates tend to stay low. Long-term interest rates are also driven by persistence, implying that long-term interest rates tend to stay low once they become low and stay high once they turn high. In sum, it would take a major shift in economic prospects to inspire a turnaround in long-term interest rates.

Figure 25. Japanese Government Bond Yields Have Stayed Exceptionally Low

Japanese Government Bonds Yields



Source: Reuters EcoWin

[4] See Lam and Tokuoka (2011) and Tokuoka (2012)

International credit rating agencies such as Moody's have downgraded Japan's government debt many times since the late 1990s (see Figure 26) based on the view that increased ratios of government deficits and debt to GDP entail increased credit risk. However, the evolution of Japanese government bond yields reveals that the downgrades of Japan's sovereign ratings by Moody's and other credit rating agencies have had no effect on yields.

Figure 26. Moody's Downgrades Have Had No Effect on JGB Yields

Moody's Investors Service Rating for Japan
(Local Currency Long-Term Debt)

Effective Date	Rating	Watch	Rating Change
03-May-93	Aaa		
23-Jul-98	Aaa	–	Down
17-Nov-98	Aa1		Down
17-Feb-00	Aa1	–	Down
09-Sep-00	Aa2		Down
06-Sep-01	Aa2	–	Down
04-Dec-01	Aa3		Down
13-Feb-02	Aa3		Down
31-May-02	A2		Down
04-Jul-07	A2	+	Up
11-Oct-07	A1		Up
30-Jun-08	Aa3		Up
18-May-09	Aa2		Up
31-May-11	Aa2	–	Down
24-Aug-11	Aa3		Down

Source: Bloomberg

The rating agencies seem unwilling to acknowledge that the credit risk profile of a government that issues debt in its own currency — such as Japan and the U.S. federal government — is very different from the credit risk profile of a government that issues debt in a currency that it does not control — such as the peripheral countries of the euro zone and U.S. state and local governments. Importantly, a central bank issuing bonds in its own currency can keep yields low for as long as it deems appropriate.

The Bank of Japan can and does control — and, indeed, may even target —Japanese government bond yields as appropriate through its overnight policy rates and other balance sheet tools, including large-scale asset purchases. Moreover, given its ability to issue its own currency, the government of Japan retains the ability to always service its yen-denominated debts barring some extremely low-probability but high-impact catastrophe.

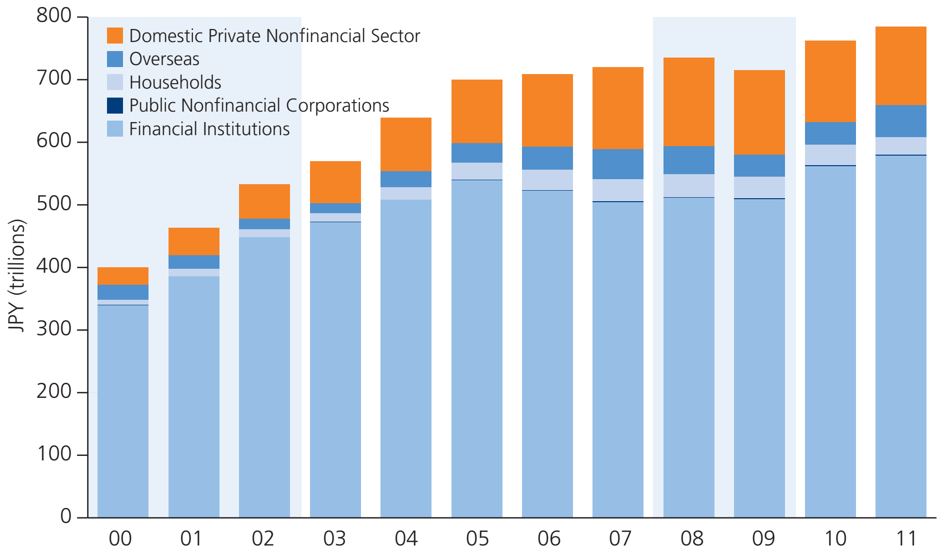
Following Woodford (2001), as cited in Tcherneva (2010), it can be stated that for any sovereign government that issues debts in its own currency, such as Japan, its debt is merely a promise to deliver more of its own liabilities in the future. That is to say, a Japanese government bond is simply a promise to pay yen — which are merely additional government liabilities that happen to be non-interest bearing — at various future dates. It could perhaps be argued that a higher ratio of public debt to nominal GDP might under certain circumstances lead to inflation and a depreciation of the Japanese yen, but there are no operational barriers to prevent the government of Japan from servicing its debt. As such, Japanese authorities are theoretically free from obsessing about fiscal consolidation, and the country's fiscal policy should focus on promoting public well-being and economic prosperity.

Due to low interest rates the government of Japan's net interest payments as a share of nominal GDP is low; however, these low interest payments also imply that interest income for the domestic private sector — specifically the financial institutions that are the primarily holders of JGBs (see Figure 27) — is also low.

There are no operational barriers to prevent Japan from servicing its debt

Figure 27. Domestic Private Financial Institutions Hold the Bulk of JGBs

Flow of Funds, Central Government Securities and FILP Bonds



Source: Reuters EcoWin

Given Japan's current economic plight and likely course of slow growth, long-term interest rates are likely to stay low for a very long time. In spite of its nominal independence, the Bank of Japan is likely to contrive with the government of Japan to keep long-term rates low in the coming years, as low rates are required to keep government debt-service costs low. We expect this will be the case even as the central bank undershoots its year-over-year inflation targets of 1% for the near term and 2% for the medium to long term.

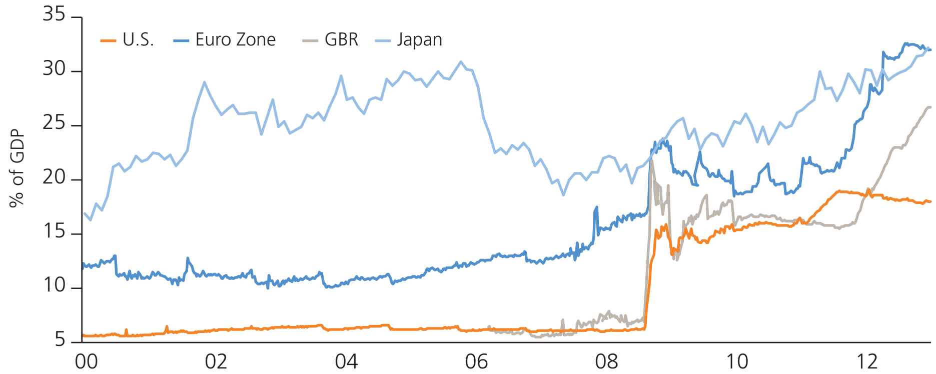
A bloated balance sheet is nothing new for the Bank of Japan

Monetary Policy and Deflation

As shown in Figure 28, the Bank of Japan's balance sheet had been bloated even before the 2008 global recession forced central banks the world over to expand theirs. However, despite years of an expanding monetary base — and contrary to monetarist mantras — Japan remains mired in deflation (see Figures 29 and 30). Japan's experience since the turn of the century validates the contemporary understanding of monetary policy and central banking, which holds that the expansion of central bank's balance sheet does not necessarily lead to higher inflation. Increases in reserves are merely outcomes of the expansion of the central bank's balance sheet; they do not directly affect bank lending or credit growth, and inflationary pressures may not arise unless credit growth fuels economic activity. This is particularly true when an economy is characterized by excess slack and spare capacity, as Japan's is.

Figure 28. The Bank of Japan's Balance Sheet Is Bloated

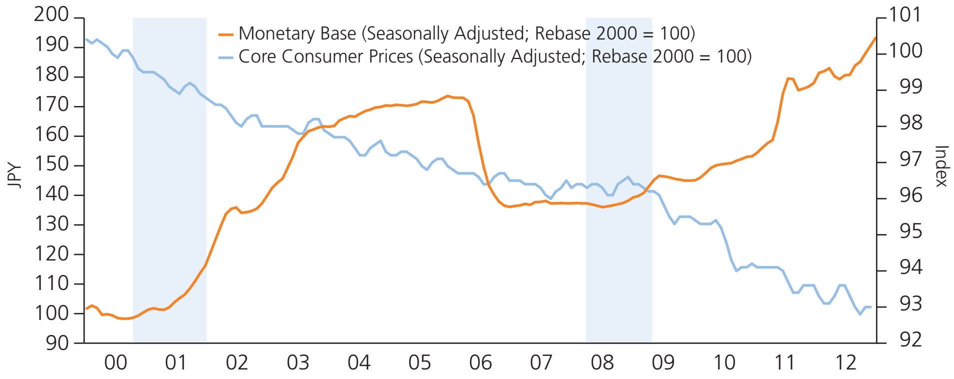
Central Bank Balance Sheets



Source: Thomson Reuters Datastream

Figure 29. Increases in Japan's Monetary Base Have Not Translated Into Consumer Price Inflation

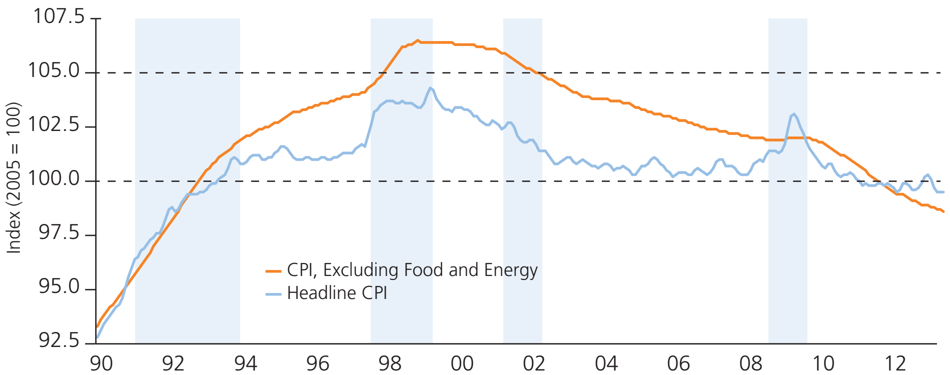
Monetary Base and Inflation



Source: Reuters EcoWin

Figure 30. Japanese Inflation Has Declined Since the Turn of the Century

Consumer Price Index



Source: Reuters EcoWin

Japan's deflationary environment is another reason both short- and long-term interest rates are likely to stay low, as low inflation tends to beget low rates.

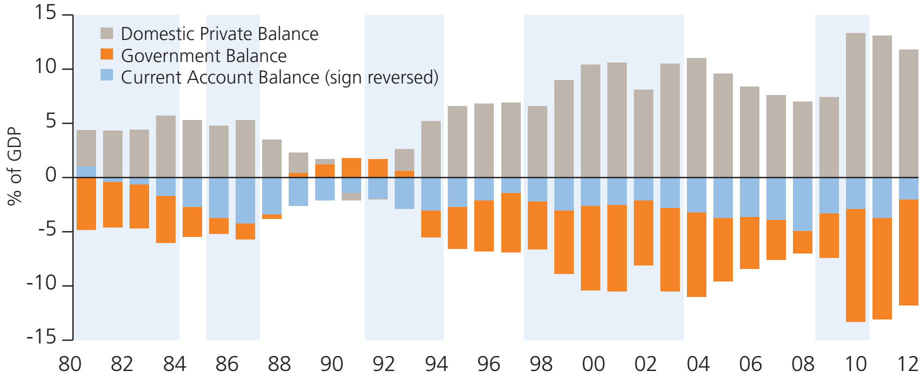
The Evolution of Sector Balances

Understanding sector balances in Japan (as shown in Figure 31 and the accompanying text box) can provide useful insights about the evolution of the Japanese economy. Japan's domestic sector balance had been weakening in the late 1980s, preceding the bursting of its real estate and equity asset bubbles. Japan has been fairly consistently running current account surpluses over the past three decades, contributing to the surplus of its domestic private balance. However, its general government deficits declined from 1988 to 1991, going from nearly 5% of nominal GDP to a surplus. The decline in the government deficit resulted in the weakening of the surplus in the country's domestic private balance. In response to slower growth and fiscal stimulus, the surplus in domestic private balances rose in the mid-1990s as the government deficit rose, helping to partly — but slowly — repair the balance sheets of the private sector. Since the mid-1990s, current account balances stayed in the range of around 1.5% to 5.0% of nominal GDP while general government deficits have varied from 2.0% to 10.0% of nominal GDP. Clearly the change in general government deficits has been the main driver in the variation of domestic private balances. As the domestic private sector deleveraged and spurned debt to repair their balance sheets after the bursting of asset bubbles, the government had to run deficits in order to prevent the economy from failing into a tailspin.

Japan's current account surplus could decline in the coming years, particularly as the country's export growth slows due to stiff competition from various Asian countries and the strength of the Japanese yen, and as Japan's energy import bill rises going forward. Remarkably, the Japanese yen had appreciated through the lost decades, thereby limiting the international competitiveness of Japanese exports, while creating deflationary pressures domestically. If in the coming years Japan's current account surplus diminishes, its government deficits must get larger to retain the domestic private sector's surplus at its current ratio.

Figure 31. Japanese Sector Balances Have Evolved Over Time

Sector Balances



Source: International Monetary Fund, Reuters EcoWin

Continued contraction of Japan's current account surplus will result in still-larger government deficits

Understanding Sector Balances

C = Consumption

I = Gross fixed capital formation

G = Government purchases of goods and services

X = Exports

M = Imports

RI = Net international income from the rest of the world

S = Domestic private saving

T = Government revenue

Domestic private sector balance (DPB) is the gap between domestic private savings and gross fixed capital formation; that is, DPB = S-I.

Government balance (GB) is the difference between government revenue and government purchases of goods and services; that is, GB = T-G.

Current account balance (CAB) is the sum is the difference between the value of exports and the value of imports and the net international income from the rest of the world; that is, CAB = X-M+RI.

Gross national income (GNI) is the sum of consumption, investment, net exports and net income from the rest of the world. Hence, GNI = C+I+G+X-M+RI. GNI can be allocated into three things: consumption, savings and taxes. Hence, C+S+T = C+I+G+X-M+RI. And S+T = I+G+X –M+RI. And S-I = -(T-G)+(X-M+RI).

So, domestic private sector balance is equal to the difference between the current account balance and the government balance; that is, DPB = -GB+CAB = CAB-GB.

If the current account is in balance, the domestic private sector balance is simply the reverse of the government balance. That is, if CAB = 0 then DPB = -GB. Likewise, if the government sector is balanced, then the domestic private balance is equal to the current account balance. That is, if GB = 0, then DPB = CAB.

Section II: Policy Alternatives in Light of the Stylized Facts

Japan should prioritize policies that strengthen demand instead of obsessing about fiscal consolidation

The Japanese authorities have pursued policies of low overnight rates, large-scale asset purchases, fiscal stimulus and both fiscal and structural reforms. While these policy measures have prevented a collapse of the Japanese economy (Koo 2008), they have not been successful in reviving growth, and the country remains mired in deflation despite the Bank of Japan's bloated balance sheet.

Going forward, the Japanese authorities should prioritize policies that strengthen aggregate demand, while recognizing that efforts to strengthen aggregate supply are secondary in importance. Indeed, increased aggregate supply of inputs and productivity without an ancillary increase in aggregate demand could lower real wages and real income. Meanwhile, Japan should also consider shunning various conventional reform policies and the fiscal consolidation advocated by the Organization for Economic Cooperation and Development and the International Monetary Fund.

Aggregate demand. There are a number of steps the Japanese government can take to support aggregate demand; for example, it can increase the public investment share of real GDP in order to provide a boost to growth and advance the capacity of its citizens. Further, authorities should focus on policies that promote labor-intensive aggregate demand, fostering real income growth and real wage growth. In the medium and long term, the authorities may undertake public investment and public works program to address the needs of its citizenry, aging population and provide public services.

The Japanese authorities may consider supporting large-scale employment programs — in health care, services for the elderly, environmental protection, disaster relief and reconstruction, education, child care and so on — or job guarantees to provide near-full employment and to help generate real income growth, stabilize real wages and combat deflation. In the near term, the authorities may provide stimulus and jobs directed at rebuilding infrastructure in areas affected by the recent tsunami and earthquake.

The authorities should promote structural policies to create demand, enhance skill formation, human capital and capabilities, protect workers' rights, protect the environment and improve energy efficiency while supporting enhancement of productivity and the advancement of industries deemed suitable for the needs of its citizens in the coming years.

The Japanese authorities should focus on policies that promote public investment, employment and consumption. Conventional policies aimed at weakening labor protections, reducing workers' real wages and income are harmful for economic growth, and probably foster an environment that is prone to deflation.

Government deficits have prevented collapse in economic activity, and higher taxes and reforms aimed at fiscal consolidation have been counterproductive. Further, the Bank of Japan can keep Japanese government bond yields low as long as it deems necessary; worrying about Japanese government bond yields spiking sharply due to elevated government debt levels is not warranted given that Japan has a sovereign currency and thus no restraints on its ability to service its government debt.

Aggregate supply. The Japanese authorities may try to increase labor-force participation, particularly among females. Policies that support child-care and elderly-care provisions and lower the cost of such services may encourage higher female labor-force participation. Closing the gap between the wages of men and women may also inspire more women to enter to work force, as would the introduction of policies that promote career-track positions for women in corporate Japan.

Increased openness to foreign labor and migration — particularly in areas where there are skill shortages and in industries where many Japanese workers are unwilling to toil, such as domestic services, child care and certain types of construction — would be beneficial to the Japanese economy. Foreign workers in the health-care, child-care and elderly-care industries would help keep costs in check and would enable Japanese women to participate more actively in the labor market. Increased immigration would also raise demand for goods and services and housing in Japan.

Tax policies should promote consumption, labor and environmental concerns, respectively, through low consumption taxes, public employment and various incentives for firms to hire, inducements for energy conservations and recycling, and so forth. The Japanese government would also be well advised to embrace policies that spur venture capital and entrepreneurship, lower the cost of doing business and reduce various bureaucratic obstacles that limit entry and competition.

Exchange-rate policies. Exchange-rate flexibility, particularly the depreciation of the Japanese yen, may be beneficial for Japanese corporations and the international competitiveness of Japanese goods and services. A cheaper yen could keep Japanese industry competitive in the coming years, while it would also spur inflation and inflation expectations; as such, Japanese authorities may seek to gradually allow the yen to depreciate.

Conclusion

Japan has a history of quickly catching up with the Western world. Its rapid expansion following the Meiji restoration allowed Japan to emerge as a modernized nation in the early 20th century, while it overcame considerable odds after the devastation of World War II to become one of the leading advanced capitalist countries. Here in the 2010s, the right monetary and fiscal policies would not only help restore Japan's once-robust economy, it could also contribute meaningfully to overcoming the global economic malaise.

Japan's lost decades have taken their toll, but it is a country with formidable economic, intellectual, social and cultural strengths. If Japanese policy makers adopt appropriate strategies, the country can overcome its current economic stagnation and regain its rightful place in the global economy.

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