2 Monetary and fiscal policies during the lost decades

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Japan's two-decade-long slump was avoidable. While some slowdown in growth following the "bubble years" in Japan was inevitable, the depth and duration of the downturn from 1995 onward was largely due to the monetary and fiscal policies pursued. Demographics and banking problems contributed to Japan's poor growth, but their role should not be exaggerated. Two facts strongly indicate that the primary cause of Japan's lost decades was depressed demand, not structural decline: the first is that deflation accompanied economic stagnation; and the second is that productivity growth returned to a relatively high rate after 2002. Demand remained depressed because monetary and fiscal policies were consistently inadequate and at times counterproductive. Recently, a third fact has driven home this reality: the coordinated fiscal and monetary policies of Prime Minister Abe, dubbed "Abenomics," since December 2012 have increased growth and inflation.

The macroeconomic policy failures of 1995–2012 resulted from fundamental governance problems in Japan, not unlike those associated with the management of the Fukushima disaster and the other policy mistakes discussed in this book. Several factors account for the errors that were committed by the Ministry of Finance (MoF) and the Bank of Japan (BoJ). One is that they viewed each other as rivals and threats, rather than as partners constructively coordinating policies. Another is that they clung to existing policies in spite of bad results and external advice. In addition, they insisted that Japan's problems were due to forces beyond their control, rather than accepting responsibility and taking action. Further, the MoF and BoJ were able to persist in making bad decisions because they were not held accountable to the public by politicians.

This chapter will make three arguments. First, we will establish the failure to exercise standard macroeconomic stabilization polices in Japan over the last twenty years and look at why this happened. To some extent, the failure can be blamed on poor implementation by the Japanese monetary and fiscal authorities – the policies were insufficiently aggressive and poorly coordinated. Apologists repeatedly claim that these policies have also been constrained by other impediments, but these constraining factors are exaggerated. It is true that the zero lower bound (ZLB) on the nominal interest rate, for example, removed the primary policy tool from the BoJ's arsenal by 1995 and that the bad loan problem reduced the effectiveness of monetary policy from 1998–2002. Yet, monetary policy can be pursued through quantitative easing effectively to go around damaged banking systems, as subsequently demonstrated by the Bank of England, the European Central Bank, and the Federal Reserve after 2009.

Similarly, a rapidly rising public debt-to-GDP ratio, largely driven by population ageing and an arguably unsustainable level of social security and medical expenditures, has constrained the Japanese government's open-ended use of expansionary fiscal policy. But that long-run constraint on government debt was not a true limit on stabilization policy. Instead, it was used counterproductively as an excuse for cutting public investment, thus squandering the opportunity for stimulus when Japan did have room to borrow. Again, the United States, United Kingdom, and France demonstrated the potential alternative of temporary fiscal stabilization in 2008–2010, as has the Abe government in 2013.

The chapter's second argument charts a future course for fiscal and monetary policy in Japan, based on a reasonable degree of BoJ and MoF coordination and sounder policy approaches in line with international norms. On the fiscal policy side, a significant consolidation is clearly necessary to stabilize the country's debt burden. But the MoF and the Japanese government need to make the budgeting process more transparent in order to build a consensus for the necessary reforms and to rationalize the allocation of scarce fiscal resources. The economic capacity is there to significantly increase taxes such as VAT to above 20 percent. The issue is sequencing the adjustment and committing to it over a multi-year period.

With respect to monetary policy, the BoJ's forceful (and long overdue) commitment since April 2013 to aggressively combat deflation is laudable. The adoption of an explicit inflation target of 2 percent is an important step forward, as is the Bank's embrace of qualitative and quantitative easing (QQE). Finally, the recent Joint Statement by the BoJ and MoF outlining the two institutions' shared macroeconomic objectives marks the beginning of a period of constructive policy coordination, signaling an end, we hope, to the conflicts that characterized fiscal and monetary policy during much of the two "lost decades."

Our third argument is for institutional reform and change in bureaucratic culture to limit the potential for a repeat of macroeconomic policies to go astray for long periods. Japan's lost decades were accompanied by recurring bad ideas and the ducking of responsibility by macroeconomic policymakers. The structural excuses offered by key officials for poor economic performance contributed to the self-reinforcing cycle of defeatism and inaction in Japan, prolonging the malaise. As with the BoJ's new 2 percent inflation target, macroeconomic officials have to be held accountable to international standards of performance more generally. It can be that such standards provide positive hope for Japan's economy, as a legitimate spur to action, and do not simply represent self-interested foreign criticism.

Monetary policy

The BoJ has deservedly been a lightning rod for criticism since the slump began in the early 1990s. Many economists and commentators, both inside and outside the country, have criticized the Bank for being slow to react to the initial downturn in the early 1990s, for being timid in the use of unconventional policy tools, and for accepting if not welcoming deflation. The BoJ is not the only central bank to refrain from activism, despite having the legal mandate and operational capacity to do more. The U.S. Federal Reserve's infamous tightening in 1933, the Bank of England's return to the gold standard in 1923, and the European Central Bank's allowing panic in 2010–12 until the announcement of its outright monetary transactions policy were all deflationary mistakes. Yet, in each of these cases, the mistaken policies were reversed within two to three years when the costly errors became apparent. Even the independent Federal Reserve and European Central Bank were held accountable for results, but the BoJ somehow eluded that responsibility for nearly twenty years. This section examines the BoJ's policies over the past two decades and draws lessons from that experience for the conduct of monetary policy going forward.

Too little, too late

If one were to date the beginning of the period now known as the "lost decades," it would be with the collapse of the stock market in 1990 and the real estate market in 1991. The BoJ had been tightening monetary policy since early 1989 to try to pop the bubble. The actual lasting decline in real estate prices, however, only came with an increase in regulation on collateral in 1991. In the subsequent years, the Nikkei lost approximately half its value and land prices fell by more than 30 percent. The drop in asset prices damaged firms' and households' balance sheets and crippled the banking system. Gross domestic product (GDP) decelerated at about the same time.[1] The BoJ responded with a series of cuts in the call rate (the BoJ's policy instrument) beginning in July 1991. From a level of 8 percent in early 1991, the rate had fallen to half a percent by mid-1995.

On the face of it, the policy rate reductions would appear to have been a forceful response to deteriorating economic conditions, comparable only to the cuts in the interest rate in the mid-1970s. The cuts were spread out over four years, however, and inflation fell by more than a percentage point over the same period. The reduction in the real, inflation-adjusted call rate was therefore gradual and relatively modest. Two years into the recession the real rate had only declined to 2 percent, a level consistent with little or no monetary stimulus. The sluggishness of the BoJ's response did not go unrecognized by Japanese observers. Kuroda Haruhiko, later to become governor of the BoJ, wrote in 2005 that "The [BoJ's] conduct of monetary policy had always been behind the curve in this period and could not stop the aggravation of recession and deflation."[2]

Faced with falling inflation and near-zero real economic growth, most central banks would have eased much more aggressively than the BoJ. The Federal Reserve, for example, reacted quite forcefully to the two most recent recessions in the United States. Its rapid rate cuts in 2001 led to a near-zero real rate by the end of the year, and the rate remained there for the following three years. The Federal Reserve's response is especially striking given the fact while the U.S. economy experienced a slow period of growth from 2002 through 2003, the 2000–01 recession was itself quite mild, not unlike Japan's initial 1991 downturn.[3] The Federal Reserve's rate cuts in 2007–09 were even more drastic, and the real rate reached zero within a year of the business cycle peak.

Despite being described repeatedly by the BoJ as "radical," the BoJ's implementation of unconventional monetary policy during the 1990s also was unduly cautious. The first significant expansion of the Bank's balance sheet did not occur until the failures of Yamaichi Securities and The Hokkaido Takushoku Bank in 1997, and even that was a relatively modest increase in level from ¥60 to ¥80 trillion. And although the BoJ gradually increased its use of short-term liquidity provision throughout the 1990s, nothing resembling the Federal Reserve's quantitative easing (QE) policies began until the stepped-up purchases of Japanese government bonds (JGBs) in 2001. Instead, the BoJ's emphasis throughout the 1990s was on short-term liquidity provision and the expansion of current account balances, rather than on bringing down long-term interest rates.[4]

This is reflected in the fact that the BoJ's purchases were largely at the short end of the yield curve. In fact, the average maturity of the Bank's portfolio of government bonds fell from nearly six years in 2001 to less than four years in 2005.[5] Simply replacing liquid, risk-free short-term government bonds with cash (or equivalently current account balances) is unlikely to affect financial markets and the economy. Quantitative easing would have been more effective had it replaced illiquid, risky assets with cash, inducing investors to invest in higher-yielding assets, such as corporate bonds, thus driving down their returns and reducing borrowing costs.

In the United States, on the other hand, QE policies were implemented within a year and a half of the business cycle peak. After short-term liquidity provision in the wake of the 2008 Lehman failure, Federal Reserve purchases of privately issued mortgage-backed securities commenced in earnest in February 2009 with QE1. QE2, which involved large-scale purchases of U.S. government bonds, followed in 2010. "Operation Twist," which lengthened the average maturity of the Federal Reserve's portfolio, and QE3, which established a program of purchasing $40 billion a month in mortgage-backed securities and $45 billion per month of long-term treasuries, were both launched in 2012.[6] Unlike the BoJ's policies, which emphasized the level of current account balances, the Federal Reserve's measures were explicitly designed either to reduce long-term interest rates or to provide credit directly to the private sector (specifically, the housing market). Given the Federal Reserve's goal of putting downward pressure on bond yields, it is not surprising that long rates fell more quickly in the United States in the six years following the crisis than they did in Japan over a comparable period.

A decisive shift in BoJ policy finally came on January 22, 2013, more than two decades after Japan's economy slid into recession. Under pressure from the newly elected Abe government, the Bank finally announced an explicit inflation target of 2 percent and committed to open-ended monetary easing.[7]

Three months later, the Bank released further details of what it referred to as a policy of Quantitative and Qualitative Monetary Easing. One element of the policy is to set a time horizon of two years for the achievement of the target announced in January. A second element is a much more rapid expansion of the monetary base, at a pace of ¥60 to 70 trillion per year. A third element is that rather than limit JGB purchases to the short end of the yield curve, the Bank extended the maturity of the bonds purchased, its first explicit effort to bring down long-term interest rates.[8] The policy also entails purchases of ETFs (Exchange-traded funds) and J-REITs (Japanese Real Estate Investment Trust), but the quantities involved (¥1 trillion and ¥30 billion, respectively) are comparable to those of the Comprehensive Monetary Easing policy under Shirakawa, and remain quite small relative to the size of the Bank's balance sheet.

The BoJ's balance sheet has grown spectacularly since the adoption of the policy. The Bank's total assets have grown from ¥163 trillion in February 2013 to ¥225 trillion as of early 2014. Most of this growth has come through increases in the purchases of long-dated JGBs, and the average maturity of the Bank's portfolio of government securities has risen from less than three years to more than seven.

Just as importantly, the Bank's communication changed dramatically with the appointment of Kuroda Haruhiko as governor. In his public statements, BoJ Governor Kuroda has reiterated the seriousness of the Bank's commitment by downplaying the risk of inflation getting out of control and by pledging to use any tools necessary to achieve the inflation target. In fact, the April 2013 announcement stated explicitly that one of the BoJ's goals was to "drastically change the expectations of markets and economic entities."

Kuroda's rhetoric makes a stark contrast with that of his three predecessors, which often emphasized the risks associated with expansionary policy and lamented the lack of effective tools for combating deflation. Taken together, these policies are a sharp break from previous BoJ policy. Prime Minister Abe Shinzo was not exaggerating when he hailed the move as a "regime change" in monetary policy.

Explaining the BoJ's conservatism

The fundamental lesson from Japan's experience of the past twenty years and the 2007–09 global financial crisis is that periods of severe economic and financial stress call for extraordinary monetary policy measures. Why, then, did the BoJ act so deliberately even as the economy slid into deflation?

One hypothesis is that members of the policy board simply were not attuned to the risks posed by the extraordinary shocks the economy experienced in the 1990s. One such shock was the sharp decline in asset prices, and the financial stress caused by the resultant balance sheet effects. Subsequent research has shown (or reminded us) that recessions precipitated by financial crises call for policies that are considerably more interventionist than in normal times.

In extreme cases, it may be appropriate for the central bank to temporarily resuscitate significant parts of the financial system through the direct provision of credit. This is essentially what the Federal Reserve did with its support of the commercial paper and mortgage-backed securities markets, where the buy side of the market simply evaporated. Referring to this form of support as "credit easing," Bernanke drew a distinction between this set of tools and conventional monetary policy and traditional liquidity provision as part of the central bank's lender of last resort function.[9]

Another aspect of the first hypothesis is that the BoJ was slow to recognize the possibility of deflation and the constraints on policy imposed by the ZLB on nominal interest rates. These issues were relevant to the 1930s, of course, but by the early 1990s these were viewed as curiosities and relegated to the footnotes in macroeconomics textbooks. It took Paul Krugman's 1998 paper to bring the ZLB issue back into policymakers' consciousness. In the absence of a sharp contraction (year-over-year real GDP growth never fell below 1 percent during the 1990–93 recession), it is perhaps understandable that BoJ policymakers would not have taken the ZLB possibility into account. The BoJ was not alone in that regard, as the consensus among economists (including those at the Federal Reserve) in the 1990s was that in practice the deleterious effects of the ZLB were relatively modest.

The 2007–09 global financial crisis forcefully demonstrated that ZLB was a far more serious problem than either the BoJ or the Federal Reserve realized in the 1990s, and that it was not an idiosyncratic Japan-specific phenomenon. Subsequent research (not to mention actual experience) has shown that the relatively sanguine view of the ZLB may have been unduly influenced by the absence of large adverse shocks during the "great moderation" period in the United States. If nothing else, the post-2007 experience shows that policy needs to be more aggressive when there is a risk of hitting the ZLB. Blanchard suggested that the ZLB threat may justify an inflation target in excess of the 2 percent adopted by most advanced-economy central banks.[10]

A second hypothesis is that the BoJ leadership clung to erroneous beliefs about ideas about the causes and risks of inflation. As discussed in Bernanke,[11] Blanchard,[12] and Posen,[13] there seems to have been a self-induced paralysis at the BoJ and at times a mistaken belief in the real benefits of tighter credit conditions.

A 2000 speech by then-Governor Hayami Masaru epitomized this mindset. Raising the specter of an inflationary spiral, he hypothesized that any increase in the target inflation rate would destabilize inflation expectations. He said:

> Inflation is most likely uncontrollable once triggered. [. . .] Some argue that since the Bank of Japan is an independent central bank, it can raise the inflation rate to 2 to 3% and then contain it around that level even if there exists further upward pressure. However, if we tried to contain inflation after it had gained momentum, we would need very strong monetary tightening, which might result in a substantial deterioration of economic activity and a steep climb in unemployment.

This view flies in the face of the experience of other industrialized countries, most of which had successfully targeted and maintained inflation rates of roughly 2 percent.

In addition to exaggerating the risk of inflation instability, BoJ officials apparently failed to recognize the potential benefits of a positive inflation target. In the same 2000 speech, Hayami asserted that because increasing inflation would have not stimulative effects, it was not a solution to Japan's economic problems. In fact, there seems to have been sympathy for the view that in the case of Japan falling prices were a manifestation of "good deflation."

These concerns receded over time, with BoJ officials recognizing that the rapid increase in current account balances posed no risk of inflation. In a 2011 interview, then-Governor Shirakawa Masaaki conceded that the proposition that "inflation is always and everywhere a monetary phenomenon" had been proven wrong by Japan's experience.[14]

A third hypothesis is that the BoJ's aversion to aggressive action had its roots in political considerations. One aspect of this centered on the fiscal implications of purchases of private-sector securities, such as asset-backed securities, which were purchased in only very small amounts. As then-Deputy Governor Yamaguchi Yutaka put it in 2001,

> The basic rule in a democratic society is that fiscal policy using taxpayers' money needs to be approved as part of a budget by a parliament composed of members elected by the people. [A policy of purchasing private-sector assets] should be discussed publicly in the context of governance in a democratic society.

Ueda Kazuo raised similar concerns, arguing that capital losses – and *in extremis* insolvency – would undermine the Bank's independence.[15] The BoJ would have been especially sensitive to this issue, having been subordinate to the Ministry of Finance until the passage of the New Bank of Japan Law in 1997. Consequently, the BoJ was eager to establish its reputation as a fully independent central bank. Cargill referred to this as an "independence gap" that led the bank to resist external advice, particularly that coming from the finance ministry.[16] This, in turn, inhibited the adoption of more innovative and aggressive policies and precluded any substantive cooperation with the MoF or the government.

Related to the independence issue, a fourth hypothesis is that underlying conflicts between the objectives of the BoJ and the MoF prevented coordination, and that this may have led the BoJ to refrain from implementing expansionary policies. The coordination problem is discussed in greater detail later in the section on policy coordination.

Fiscal policy

At the peak of Japan's prosperity in the late 1980s, the fiscal situation was sound and improving substantially. The ratio of gross government debt to GDP fell from 70 percent in 1988 to 67 percent in 1989, the first decline in ten years, thanks to the strong economy and increased tax revenue. However, the situation began to deteriorate after the real estate and stock market bubbles burst and the economy began to worsen in the early 1990s.

The economy's deceleration was initially thought to be a temporary slowdown, a hangover after the financial euphoria in late 1980s. The Japanese government undertook only half-hearted stop-start fiscal stimulus in mid-1990s, as Posen argued.[17] Later, based on the incorrect presumption that the Japanese economy was soon reversing to its previous trend, the Japanese government raised the consumption tax rate in April 1997 from 3 percent to 5 percent. Then everything went wrong for the Japanese economy for the rest of the 1990s. The Asian currency crisis started during the summer of 1997. In the fall of the same year, the domestic banking crisis hit the Japanese economy, revealing the seriousness of the nonperforming loan problem. In 1998 and 1999, Japan experienced its worst recession since the first oil crisis in the early 1970s. To combat this sharp economic downturn, the government implemented a series of large fiscal stimulus packages. However, all were smaller than advertised, were less than fully implemented, and allowed cuts in public investment.[18]

Even this fiscal expansion came to an end as the economy started to improve and Koizumi Junichiro became the prime minister in 2001. Though Koizumi successfully brought the nonperforming loan problem to an end in the first half of the 2000s, the debt-to-GDP ratio continued to creep up throughout the 2000s. To cope with the 2011 earthquake and its aftermath, the Japanese government increased its spending once again for 2009 to 2012, which caused a further deterioration of Japan's fiscal situation. According to the International Monetary Fund, Japan's gross government debt-to-GDP ratio was only 12 percent in 1970. Twenty years later, in 1990, it had increased to 67 percent. The ratio more than tripled in the subsequent two decades, reaching 215 percent in 2010.[19]

Japan's fiscal erosion is most alarming when set in the context of international comparison. As shown in Figure 2.1, the gross debt-to-GDP ratio has risen much more rapidly than elsewhere –including even the troubled countries on the periphery of the Euro area. If we consider net debt-to-GDP ratios rather than gross ratios, subtracting government assets from debt outstanding, the difference between Japan and other developed economies is significantly smaller. Japan's fiscal situation becomes barely comparable with Portugal and Italy and significantly better than Greece. Even so, population ageing will continue to worsen Japan's fiscal situation, so that its net debt-to-GDP ratio will surpass Greece's by 2020.[20]

Fiscal sustainability

Exceptionally high relative to the peacetime experience of other developed countries, Japan's debt-to-GDP ratio has now reached a point that has often been associated with the onset of fiscal crises. However, unlike that of some European countries, the Japanese economy has yet to feel the threat of a fiscal crisis in the form of high interest rates on government bonds. This reflects some of Japan's fundamental attributes, including high private-sector savings, and high risk-aversion and home bias by Japanese savers, which have so far contributed to strong domestic demand for Japanese government bonds.

It can be argued that Japan should have increased the consumption tax rate much earlier than it did. Given Japan's demographics, even if the government and central bank had avoided all the macroeconomic policy mistakes since 1990,

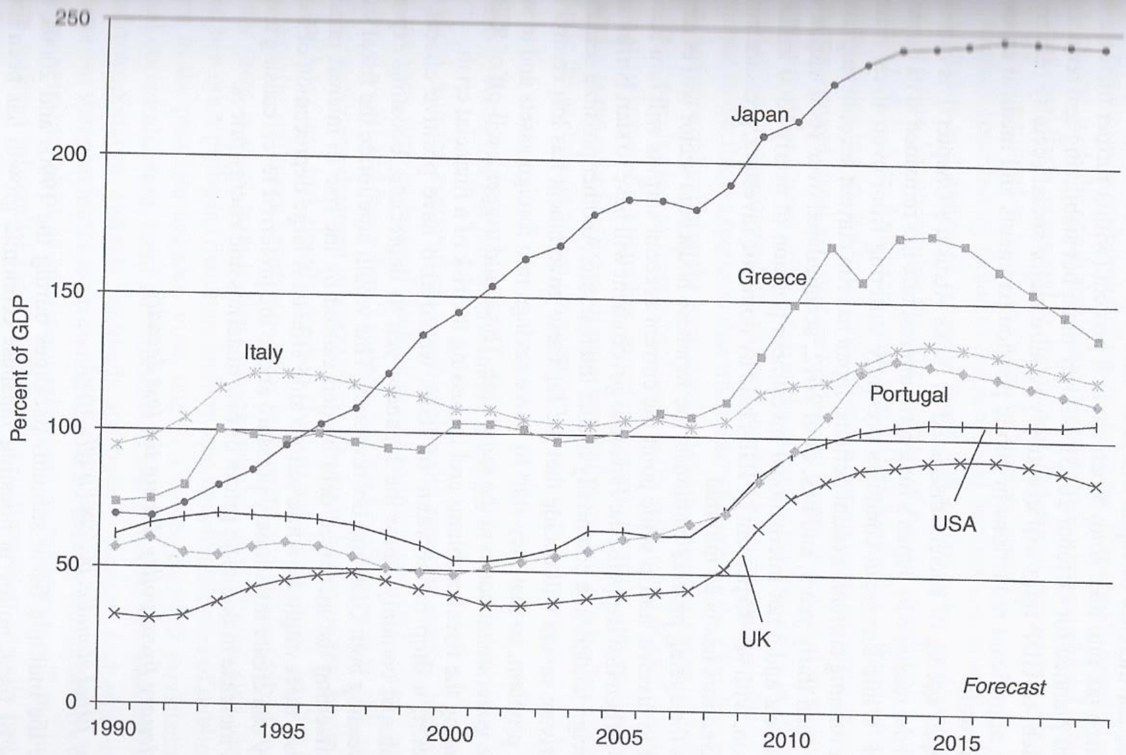

Figure 2.1 Gross debt-to-GDP ratios for selected industrialized countries

Source: IMF World Economic Outlook, October 2013.

the fiscal situation would not be significantly better than it is today. However, tax increases alone will not solve the problem. Simulation results reported by Fukao Mitsuhiro,[21] Anton Braun and Douglas Joines,[22] and by Hoshi Takeo and Ito Takatoshi[23] suggest that an increase in the consumption tax rate to over 20 percent, which would be comparable to that of Scandinavian countries, would not halt the further increase of Japan's debt-to-GDP ratio. The recently implemented consumption tax rate hike from 5 percent to 8 percent (with a further increase to 10 percent planned for October 2015) will buy time, but stabilizing and reducing Japan's debt-to-GDP ratio will eventually require major social security reforms, including significant reductions in public pension payments and medical expenditures, as well.[24]

The rapid ageing of society discussed in Seike Atsushi's Chapter 1 is closely related to the reason why Japan's long-term interest rate has remained at its current low level. While European countries presently suffering from overt fiscal crises had been running current account deficits, Japan has run current account surpluses for more than thirty years, and has, as of 2012, accumulated over ¥600 trillion in foreign assets and a net international investment position of nearly ¥300 trillion. In addition, with 90–95 percent of JGBs held by domestic investors, pressure from foreign creditors has been minimal.

But as the ageing process continues, the Japanese household sector will eventually start to dissave, and at some point the current account surplus will turn into a deficit.[25] When that happens, the Japanese government will have to start borrowing from foreign lenders at a potentially higher interest rate. Another possible scenario is that private savers will decide that the Japanese government has lost control of the debt problem, so that they start to move savings into foreign assets and to sell domestic government bonds at the same time. This could trigger a sell-off of JGBs, exacerbating the fiscal problems and increasing the risk of a financial crisis.

However, a drop in the value of JGBs would also have positive effects. It would almost certainly cause the Japanese yen to depreciate, boosting exports and increasing both GDP and tax revenues. This would ameliorate the fiscal situation, offsetting the increased debt burden caused by the rise in interest rates.[26] Of course, there might be some serious side effects. A large depreciation of local currency can create inflationary pressure above the preferred level, causing a significant increase in domestic prices of raw materials and energy prices.

Discretionary fiscal policy during the lost decades

Why has fiscal stimulus become ineffective?

Despite the multiple fiscal stimulus packages during the 1990s and 2000s, the efficacy of fiscal policy in boosting Japanese economic growth has been hotly debated. While Kuttner and Posen[27] found strong positive effects of (correctly measured) fiscal stimulus, work by Ihori Toshihiro[28] and Ito Arata[29] indicate that Japan's fiscal multiplier has declined in recent years. There are two reasons why it has been hard to discern the effects of Japanese fiscal policy.

First, as pointed out by Posen[30] and to some extent acknowledged by Ihori and others,[31] the total amounts of fiscal expenditures have been exaggerated and true numbers were much lower. The MoF had used various accounting maneuvers and rhetoric to inflate the "headline" numbers. Second, some economists argue that Japanese households became conservative and precautionary, causing them to spend less of the money they received from fiscal stimulus or tax reduction. Also, because of ongoing globalization, Japanese households spend more money on imports, with the result that some of the stimulus leaked abroad. The share of international trade, measured by the sum of export and import as a percentage of GDP, has continued to increase for the last twenty years.[32]

Another contributing factor to the perceived ineffectiveness of fiscal stimulus is the nature and timing of Japanese fiscal policy. The delay in decision making and the policy lag undermine the effectiveness of fiscal expenditure. As argued by Robert Hall,[33] Alan Auerbach[34] and Yuriy Gorodnichenko,[35] fiscal policy in the United States has tended to be more effective during times of crisis. However, the response time of fiscal expenditure tends to be longer than that of monetary policy, especially at the time of crises, such as the domestic banking crisis in 1997–98, the post-Lehman recession in 2008–09, and the Tohoku earthquake in 2011. This was relevant to the fiscal expansion that was undertaken under the Obuchi administration, and especially during the Mori administration at the beginning of 2000s. Such ill-timed policies led to further increases in the debt-to-GDP ratio while having little stimulative effect. Another important aspect about the timing issue of fiscal stimulus is the coordination with monetary policy, an issue to be discussed further later in the section on policy coordination.

Has the productivity of public investment declined?

In addition to the explanations mentioned in the previous section, many empirical analyses, such as those of Asako Kazumi and Sakamoto Kazunori[36] as well as Mitsui Kiyoshi and Inoue Jun,[37] suggest that the beneficial supply-side effects of public investment declined in recent years. These studies argue that Japan's physical infrastructure had already reached close to saturation level, so that positive productivity spillovers to private-sector investment and productivity diminished. While there is some truth to that characterization, such studies also identify at least two other problems that have undermined the effectiveness of public investment in the past two decades. First, due to a combination of privatization and fiscal decentralization, local governments in Japan started to invest and manage local transportation systems (railroads and buses), tourism, and other regional enterprises that previously were owned or at least heavily subsidized by the central government. Most of such semi-privatized or "corporatized" public enterprises suffered substantial losses, and local governments eventually had to pay for those losses.

Second, public investments by the central government increasingly favored road construction over more productive infrastructure. Most of the road construction budget was spent on roads in rural areas, with no serious assessment of the economic benefits. The main purpose of the so-called investment was in fact to redistribute income from urban areas, such as Tokyo, to rural areas that were experiencing rapid population ageing and decline. Such road construction projects helped many local Japanese cities and villages provide enough employment opportunities for their working-age populations. The evidence presented by Mitsui Kiyoshi[38] suggests that the marginal productivity of public investments in rural areas is much lower than in urban areas. Hoshi and Kashyap[39] also argue, based on Doi Takero and Ihori Toshihiro's calculation of category-wise productivity, that the share of public investments to the categories with lowest marginal productivity has significantly increased during the two lost decades.[40]

Lessons from the 1997 consumption tax hike

The arguments presented so far seem to suggest that Japan should have started fiscal restructuring much earlier than it did. However, it is not that simple. The causes of rises in the debt-to-GDP ratio derive both from increased government debt and the slowing of GDP growth. In particular, recent experiences in the Eurozone crisis strongly suggest that ill-timed and aggressive austerity does not work as it hurts growth and tax receipts, as well as growth potential for the long term. Misguided austerity can drive up net public debt as a result, and so the needed rise in consumption taxes discussed above must be spread over several years and take into account the short- and long-term impact on growth.

From this perspective, the 1997 consumption tax hike was a mistake – especially given the coincidence with the Asian financial crisis and the emergence of problems in the banking system. The tax rate hike was in fact part of a policy package, a structural reform of Japanese tax system, that had been initiated in the early 1990s.[41] The income tax rate had been cut over the 1993–95 period in a rather complicated process that included both permanent and temporary reductions. The recession after the collapse of the asset bubble in the early 1990s had necessitated a delay in the consumption tax hike that had been scheduled at that time.

Even so, the Japanese government's decision to increase the tax rate in April 1997 was questionable. According to the BoJ's Short-Term Economic Survey of Enterprises (Tankan) data, overall business conditions of Japanese firms in 1996 had bounced back to their 1992 level. However, the 1996 recovery was mainly due to the improvement of external economic conditions. At its peak in the summer of 1995, the yen had strengthened by 40 percent relative to 1990. It began to reverse in 1996, helping to restore the profitability of Japan's export sector. On the other hand, domestic business conditions had deteriorated more sharply than overall conditions following the 1990 collapse of the asset price bubbles and did not experience a comparable rebound. Business conditions remained depressed due to the serious nonperforming loan problem of the Japanese banking sector. Given the pessimistic outlook for businesses, the government should have postponed the tax hike for at least another year.

Policy coordination

Conventional wisdom is that the central bank should adjust policy in response to the fiscal stance, but should make no effort to articulate and pursue jointly specified objectives. Central bank independence has become the sacred cow of monetary policy. Any kind of coordination is taboo.[42]

Japan's experience has shown the conventional wisdom to be incorrect. No effort was made to coordinate monetary fiscal policies during the lost decades – indeed, at times the MoF and BoJ appeared to be pursuing completely different objectives. The result was that monetary and fiscal policies often worked at cross-purposes, with expansionary monetary policy offset by tight fiscal policy and vice versa. The unfortunate result was intermittent and inadequate macroeconomic stimulus.

A history of non-cooperation

Figure 2.2 illustrates graphically the lack of coordination between monetary and fiscal policies during the lost decades. One line (almost uniformly trending downward) represents the central government's fiscal balance as a share of GDP, a rough indicator of its stance on fiscal policy. The time line at the top of the figure depicts the BoJ's major policy shifts.

The figure shows that the four years spanning 1993 through 1996 were characterized by expansionary fiscal policy (a rapidly expanding deficit) and insufficient monetary stimulus (discussed earlier in the section titled "Too little, too late"). BoJ Governor Kuroda, when he was the governor of the Asian Development Bank, described the situation as one in which "monetary easing did not keep the pace with fiscal expansion, thereby leading to a rise in the value of the yen. The appreciation of the yen in this period is one of the main causes that started the prolonged deflation process, which still continues today."[43]

There was a fleeting period at the end of the 1990s during which monetary and fiscal policies were both expansionary. Responding to the severe recession triggered by the domestic banking crisis that started in late 1997, the Liberal Democratic Party government led first by Prime Minister Obuchi Keizo and later by Prime Minister Mori Yoshiro undertook a significant fiscal expansion beginning in 1998. The BoJ implemented a zero interest rate policy (ZIRP) shortly thereafter, in February 1999. This alignment of policies, however, ended with the BoJ's suspension of ZIRP six months later.

The BoJ reverted to an expansionary policy with its reinstatement of ZIRP and large-scale purchases of JGBs in early 2001. However, the policy coincided with sharp cuts in government expenditures under Prime Minister Koizumi. The result was a period of relatively easy monetary policy and a tight fiscal stance.

The case for coordination

There are a number of compelling reasons for policy coordination. At the very least, the fiscal and monetary authorities should agree on the overall goals of macroeconomic policy. In the context of inflation targeting, Bernanke and others

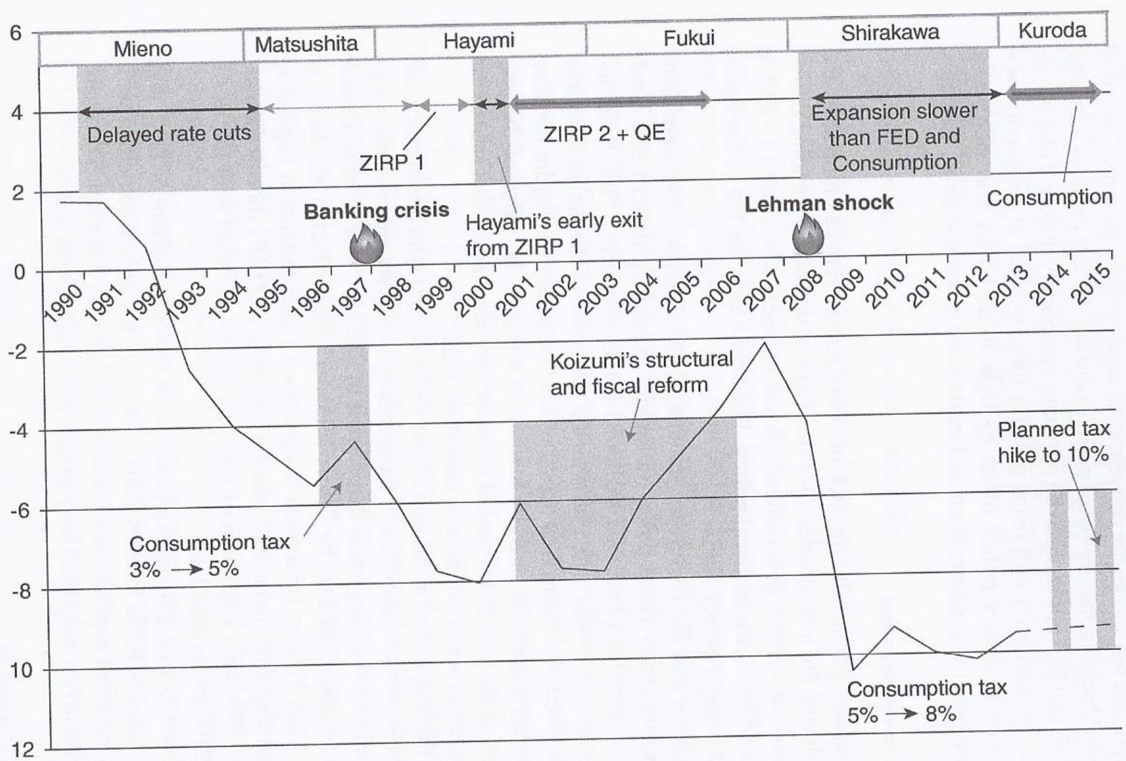

Figure 2.2 Japan's fiscal and monetary policies, 1990–2014

Note: The names at the top of the graph are the names of governors of the Bank of Japan. The horizontal arrows at the top represent monetary policy stance: the black arrows correspond to the periods of relatively tighter monetary policy stance, while the gray arrows correspond to the periods of monetary expansion (the line widths represent the "intensity" of the expansion). The kinked line shows the central government's budget balance as the share of GDP. Shaded areas represent periods in which either monetary or fiscal policy was relatively tightened.

argue that government involvement is beneficial on the grounds that it would maximize central bank accountability while still leaving the ultimate goals of policy to be determined at least in part by democratic processes. . . . This strategy calls for the inflation targets themselves to be set by a political process in which the central bankers consult with the appropriate legislators or ministers."[44]

More fundamentally, situations can arise in which conflicts between monetary and fiscal authorities result in suboptimal policy. The solution to this problem is to coordinate policies, which necessarily involves agreeing on a common set of objectives. Often, the conflicts are such that they lead to excess inflation, as pointed out in Nordhaus[45] and Dixit and Lambertini.[46] Japan's case is different, however, as policy disagreements may have created a *de*flationary bias.

Hoshi Takeo argued that the BoJ's reluctance to continue ZIRP policy in the early 2000s resulted from concerns that doing so would reduce the pressure for financial restructuring.[47] Underlying this view is the assumption that aggressive monetary policy, in the form of very low interest rates or direct credit extensions, would allow insolvent ("zombie") firms to survive. Since the survival of firms would reduce the efficacy of monetary policy, the central bank would like the financial supervisor to close or restructure the zombies – but this is costly for the regulator. Hoshi shows how the central bank and the regulatory agency can fall into a trap with insufficient restructuring and an overly contractionary monetary policy. Posen identified this belief on the part of Japanese macroeconomic policymakers early in the Great Recession and summarized the evidence against monetary tightness causing the right firms to close.[48]

In a similar vein, Eggertsson argued that in a liquidity trap, independent, discretionary monetary policy creates a deflationary bias, preventing or at least delaying an escape from the trap.[49] The problem stems from the central bank's preference for low inflation. The central bank may *say* that it intends to target a higher rate of inflation in the future, thus bringing down the real (inflation-adjusted) interest rate and pushing the economy out of the trap. But once the economy escapes the trap, the central bank will renege on its pledge and keep inflation low. Recognizing this, the public will not believe the central bank and the deflationary mindset will remain. Coordinating with the fiscal authority can help in this situation. In theory, finance ministries like inflation, as it brings in seigniorage revenue and lowers the existing debt burden. By allowing fiscal considerations to affect monetary policy, policy coordination (or simply putting the MoF in charge of monetary policy) would make the promise of higher inflation more credible. Normally a vice, in Japan's case the use of seigniorage would have been a virtue.

Conclusions and recommendations

In retrospect, it is clear that bad luck is partly to blame for the lost decades. Japan was the first major industrialized country in recent history to experience widespread financial distress brought on by the collapse of an asset price bubble. Although the United States and many European countries were also hit hard by the collapse of the housing market in the late 2000s, most responded decisively, partly because policymakers in those countries were determined not to repeat Japan's experience in the 1990s.

Adverse, demographically driven fiscal trends are another source of bad luck. Driven largely by a plummeting fertility rate, Japan's population is shrinking and rapidly ageing. Tax hikes by themselves cannot stop the relentless rise of the debt-to-GDP ratio. The only way to do so is through a major reform of the country's pension system, which faces large (but hopefully not insurmountable) political obstacles.

Bad luck, however, is not entirely to blame for the lost decades. The Japanese government, and monetary and fiscal authorities in particular, made crucial mistakes that contributed to the initial slowdown and the subsequent stagnation. Policymakers repeatedly failed to admit previous mistakes and change course, even after the problems of chronic recession and deflation became obvious.

One reason for the inadequacy of the policy responses is that policymakers were trapped by the legacy of their own success and failed to recognize the seriousness of the economy's deterioration. Consequently, they relied on the prescriptions that had worked in the past and avoided drastic policy changes. The BoJ clung to its old monetary policy regime and was slow to adopt bold, unconventional measures as the economy slid into deflation. Similarly, failing to recognize the deceleration in trend output growth in the mid-1990s, the MoF pushed to increase the consumption tax in 1997, sending the economy into recession while exacerbating an already deteriorating fiscal situation.

At the same time, institutional inertia led policymakers to persist with bad policies, even after they had been recognized as inappropriate. While common to all bureaucracies, the aversion to changing course is particularly strong in Japan, where there is a substantial reluctance to overturning predecessors' decisions. The lack of information sharing and coordination among policymakers has also hindered effective policy making. In particular, the rocky relationship between Japanese monetary and fiscal authorities often led to perverse policy outcomes.

Going forward, four lessons can be learned from Japan's experience during the lost decades. The first is that central banks should expand the set of monetary policy tools used to revive the economy. The projected adverse side effects that inhibited the BoJ from taking strong action during the lost decades have failed to materialize. Debt management – changes in the maturity distribution of central banks' portfolio of government securities – is a potentially useful tool, one that was largely neglected by the BoJ until the recent implementation of QQE.[50] In addition, purchases of securities other than government debt have proven to be effective in reducing private-sector interest rates, and are in fact necessary to stimulate credit in a damaged financial system.

The second lesson is that communication matters. Under QQE, a public commitment by the central bank to "do what it takes" to end deflation, supported by transparent communication and positive rhetoric, has become a central element of monetary policy. While hard to measure with any precision, the impact on expectations should not be discounted.

Third, it would be an error to ignore the contractionary impact of fiscal consolidation. Although additional revenues were needed to counter ominous budgetary trends, it was a mistake to implement a consumption tax in 1997 when the economy was already weak. Any future tax hikes should balance the need to stabilize the debt-to-GDP ratio against the imperative to keep the economy growing. With an expansionary monetary policy in place and a stable world economy, there is currently a window of opportunity to take incremental steps to strengthen Japan's finances. Flexibility must exist, however, to postpone consumption tax increases should economic conditions soften. Regardless, expenditures should be reallocated away from rural construction and towards more productive uses.

The fourth point is that coordinated fiscal–monetary stimulus is desirable, especially in response to dire economic situations. Central bank independence is important, but not sacrosanct. As Posen argued in 2010, government oversight of central bank goals over a multiyear period, and voluntary policy cooperation by the central bank in pursuit of those goals, do not harm and indeed can enhance monetary credibility.[51] The April 2013 replacement of Governor Shirakawa Masaaki by Kuroda Haruhiko was therefore not a blow to the BoJ's independence, as some have warned. Instead, it was a long-overdue step towards meaningful policy coordination.

There are no easy solutions to Japan's economic problems. However, the policies that have been recently implemented by Prime Minister Abe and BoJ Governor Kuroda are steps in the right direction. The BoJ's strong commitment to end deflation and the aggressive deployment of its balance sheet to that end are a long-overdue regime shift in monetary policy. At the same time, there appears to be a willingness to coordinate monetary and fiscal policies. The most difficult task ahead is to solve the country's long-term fiscal problem without jeopardizing economic recovery.

Notes

1. The absence of a sharp drop in output makes it hard to assign a precise date to the beginning of the contraction. The OECD dates the peak as having occurred in August 1990.
2. Kuroda Haruhiko, *Zaisei-kinyu seisaku no seiko to shippai* [Successes and Failures of Monetary and Fiscal Policy] (Tokyo: Nihon hyōronsha, 2005), p. 100.
3. For a more detailed description of the BoJ's policy during this period and a comparison with the Federal Reserve, see James Harrigan and Kenneth N. Kuttner, "Lost Decade in Translation: Did the United States Learn from Japan's Post-bubble Mistakes?" in *Reviving Japan's Economy: Problems and Prescriptions*, Takatoshi Ito et al., eds. (Cambridge, MA: MIT Press, 2005), pp. 79–106.
4. For a more complete chronology and comparison to the Federal Reserve, see Kenneth N. Kuttner, "The Fed's Response to the Financial Crisis: Pages from the BoJ Playbook, or a Whole New Ball Game?" *Public Policy Review* 6 (2010), pp. 407–30. (Also published in Japanese.)
5. Robert McCauley and Kazuo Ueda, "Government Debt Management at Low Interest Rates," *BIS Quarterly Review* (2009), pp. 35–51, documented the maturity distribution of the BoJ's portfolio over this period.
6. http://www.federalreserve.gov/newsevents/press/monetary/20120913a.htm.