

OVERCOMING THE GLOBAL FINANCIAL CRISIS: SOME LESSONS FROM JAPAN'S "LOST DECADE"

KENNETH KANG AND
MURTAZA SYED*

Introduction

Two decades ago, Japan's seemingly inexorable rise was stalled by a crisis whose contours bear an uncanny resemblance to the present global financial turmoil. During the early 1990s, abundant liquidity – fueled by easy monetary policies and financial deregulation – had inflated unprecedented bubbles in Japan's real estate and stock markets and funded a huge build up in bank lending to corporates (see Figures 1 and 2). When these twin bubbles burst, the effects slowly rippled through the rest of the economy. While growth faltered, the full impact was not felt for some time, and hopes were raised by signs of a recovery in the middle of the decade. However, it was not long before the grim realities of a post-bubble recession became forcefully apparent – by 1997, much like the panic that gripped the globe following Lehman's collapse last fall, Japan was on the verge of a financial meltdown. Escalating losses on real estate loans and a renewed stockmarket crash led to a breakdown in the interbank market and a wave of high-profile failures in the financial sector. In turn, these shocks had a devastating impact on real activity. For the first time in decades, Japan had been pushed into a recession and inflation locked in negative territory.

Despite significant policy efforts, the crisis ultimately took a major toll on the Japanese economy, re-

flected in a "lost" decade of economic stagnation and a sharp rise in public debt (Figure 3). In 2002, unemployment had risen to a post-war high of 5½ percent, and non-performing loan (NPL) ratios peaked at almost 9 percent. Meanwhile, gross public debt more than doubled to over 160 percent of GDP, by far the highest among advanced economies.

However, the corner was finally turned shortly thereafter. A more pro-active approach to dealing with capital shortages and distressed assets in the form of problem loans helped to reduce systemic stress in the financial system. A virtuous cycle gained a foothold as the banking system was resuscitated while corporates redressed the underlying imbalances of the bubble period by shedding the triple excesses of debt, capacity and labor. Resolution of the crisis heralded a prolonged period of prosperity between 2003 and 2007, on the back of rising corporate profits, expanding employment and surging exports supported by robust global growth. This article looks back on this episode and draws lessons from the exceptional monetary and financial sector policies that Japan employed to stabilize its economy and rebuild its banking system, in the hope that they may shed some light on the way out of the present crisis (for more details, see Kang et al. 2009a and b).

Liquidity support and credit easing: damage control through unconventional monetary policies

As its crisis unfolded, Japan confronted an evolving and increasingly unprecedented set of challenges. Initially, the authorities needed to accommodate the asset bubble collapse and ensure that corporate deleveraging was orderly. Over time, as the problems worsened, attention shifted to preventing an implosion of the financial system and providing extraordinary macroeconomic support to stave off a deepening recession and stubborn deflationary pressures. In the final stage, the challenge was to move beyond simple stabilization and place the economy back on the path of robust growth by undertaking a thorough clean-up of bank and corporate balance sheets. The nature of Japan's policy responses transformed in line



* International Monetary Fund.
Email: kkang@imf.org, msyed@imf.org. The views expressed herein are those of the authors and should not be attributed to the IMF, its executive board, or its management.

Figure 1

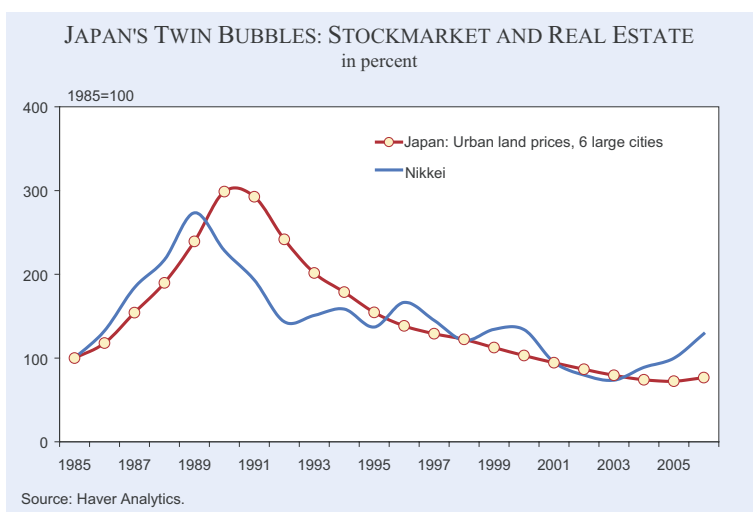


Figure 2

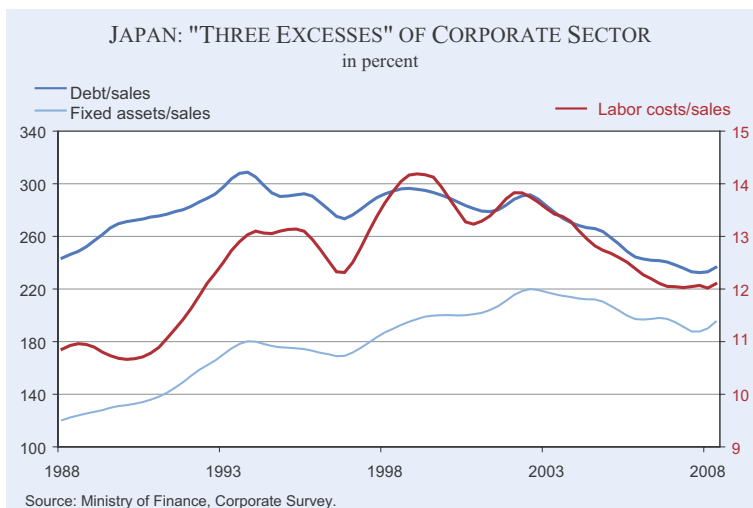
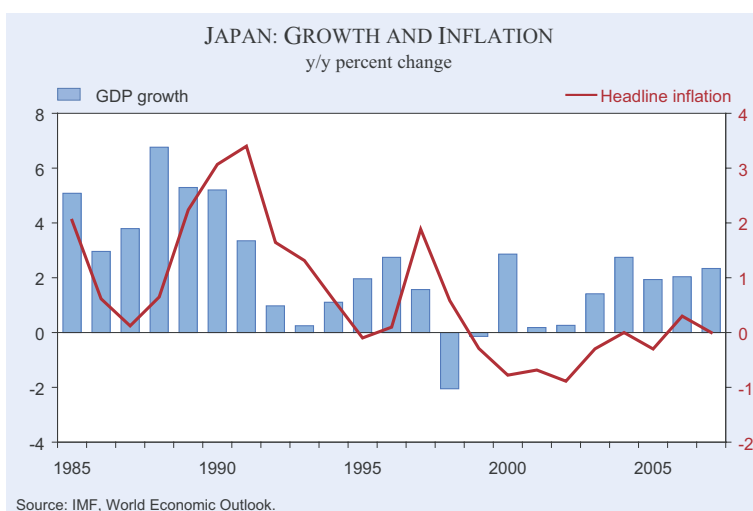


Figure 3



with these changing imperatives (Nakaso 2001 and Ito 2006).

After some delay, monetary policy was gradually loosened through the 1990s, with interest rates falling all the way to zero by the end of the decade – the first time this had happened in an advanced country in the post-war era (Figure 4). However, the economy remained unresponsive as deleveraging pressures subdued the demand for credit and the monetary transmission mechanism was disrupted by the crippling of the financial and corporate sectors (Figure 5). Unable to lower policy rates further, the Bank of Japan (BoJ) had to go beyond the textbooks and venture into uncharted territory to stimulate the economy and fight deflation. It resorted to a series of innovative and untested steps to ease credit conditions, centered on exceptional measures to provide liquidity, including expanding the range of collateral, direct asset purchases, and quantitative easing under a zero interest rate policy (ZIRP) between 2001 and 2006 (Fijuki et al. 2001; Shirakawa 2003). This period provides a rare glimpse into the mysterious world of unconventional monetary policy that a number of advanced economies (including the United States, the United Kingdom, and Canada) have embarked upon in response to the present crisis. What then are some of the lessons that can be gleaned from the Japanese experience?

First and foremost, generous liquidity support by the central bank can help in the face of a pronounced slowdown and deflationary pressures. To substitute for the impaired interbank market, the BoJ expanded the range and flexibility of its monetary instruments. These measures evolved in re-

Figure 4

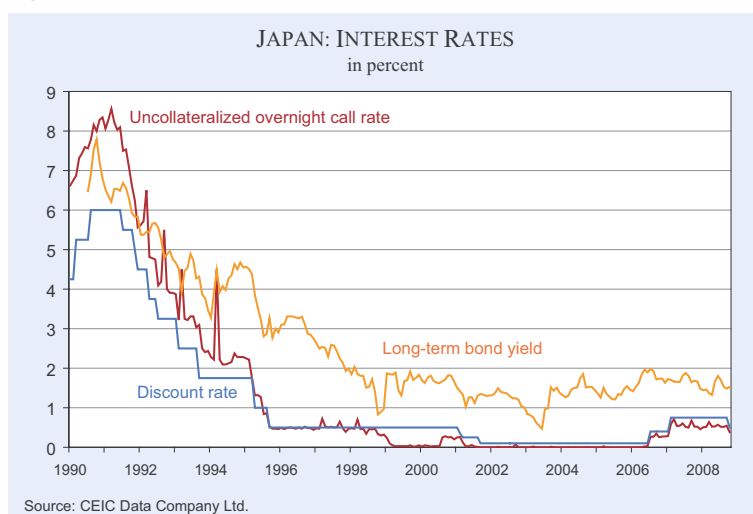


Figure 5

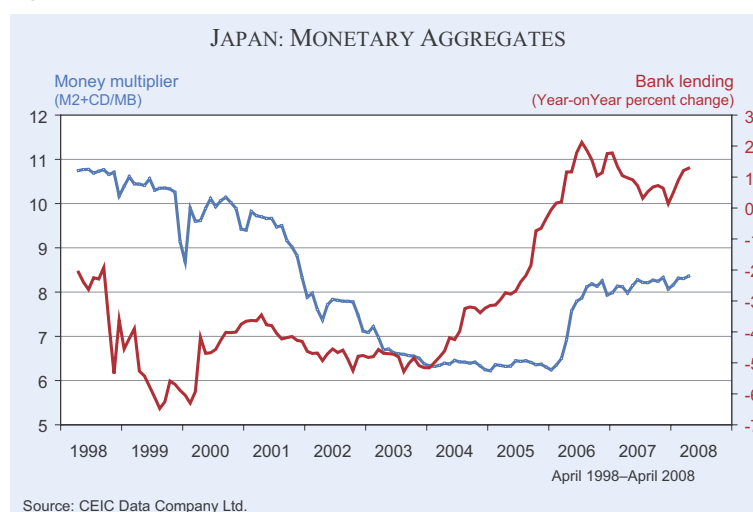
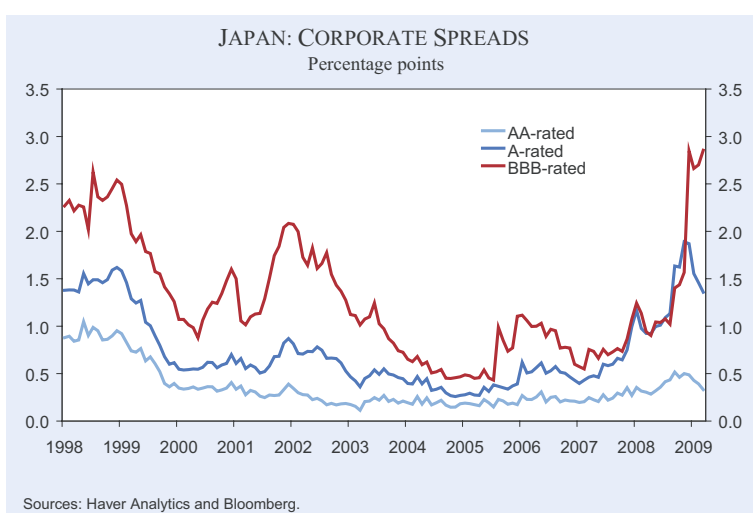


Figure 6

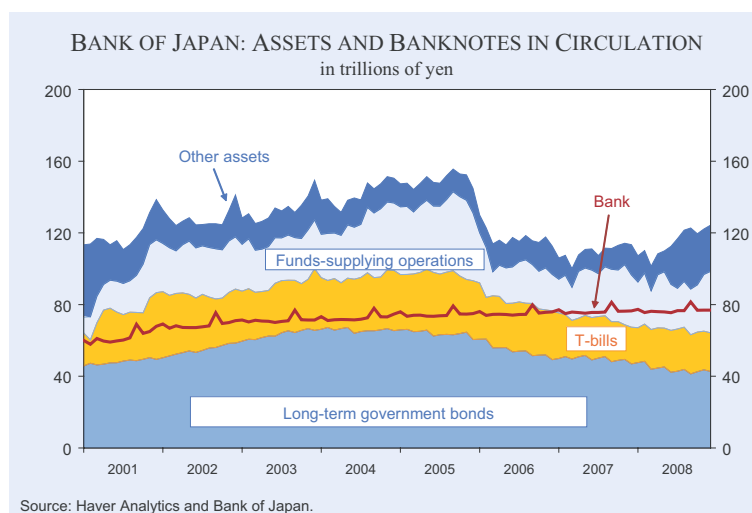


response to changing market conditions and focused primarily on broadening the range of eligible collateral to include corporate bonds, loans on deeds, asset-backed commercial paper (ABCP) and other forms of asset-backed securities (ABS); providing liquidity at longer terms by extending the maturity of bill purchases and Japanese Government Bond (JGB) repos from six months to a year; and increasing the number of counterparties for JGB purchases and commercial paper repo operations.

Second, direct measures to jumpstart credit can be useful while private markets remain dysfunctional and volatile. The BoJ resorted to a variety of unconventional measures to support corporate lending (Figure 6). In 1998, to help firms with their end-of-year funding, the BoJ established a temporary lending facility to refinance part of the increase in loans by financial institutions. In 2003, the BoJ initiated a program to assist small and medium-sized enterprises (SMEs) by purchasing ABS and ABCP backed by SME loans. This complemented generous credit guarantees on SME lending by the Ministry of Finance that provided 100 percent coverage to banks against losses and reached nearly JPY 30 trillion (6 percent of GDP) by 2001. At the same time, the BoJ took unprecedented steps to address the capital shortage in banks. In the face of declining share prices, banks' large equity holdings constrained their ability to extend credit and take on new risk. In response, the BoJ introduced a program in 2002 to purchase equity directly from banks at market prices.

Third, effective communication is vital for explaining unconventional monetary policy actions to the

Figure 7



markets and the public. The BoJ strengthened both its explanation of, and its commitment to, prolonged easing through its communication strategy during the quantitative easing period. In October 2003, the BoJ formalized its commitment by announcing two necessary conditions for ending quantitative easing – that core inflation be non-negative for a few months and that a majority of BoJ Policy Board members forecast positive core inflation. As a result, it became increasingly clear that a more expansionary stance would be maintained until deflation ended. This commitment, which was lacking during the early stages of the bank's response, helped to better manage market expectations about the future path of interest rates.

Fourth, temporary and limited coordination between fiscal and monetary policy can help support economic activity, with due attention to risks to the balance sheet and independence of the central bank. During the initial phase of Japan's crisis, the BoJ had indicated that it regarded the downturn as stemming mainly from problems in the financial and corporate sectors, so that the onus rested with fiscal and structural policy (Cargill et al. 2000). However, greater coordination with fiscal policy was visible after the adoption of quantitative easing, with the BoJ gradually increasing its purchases of long-term government bonds from JPY 400 billion to JPY 1.2 trillion per month. Such purchases were generally regarded by market participants as helping to place a cap on long-term yields. Over time, assets that could be purchased by the BoJ were expanded to include commercial paper, corporate bonds, equities and ABS, although actual amounts were relatively limited (Figure 7). Purchases were balanced against possible drawbacks, including jeopardizing the BoJ's independence and

credibility in financial markets; exposing the central bank balance sheet to potentially large capital losses once the economy recovered; facilitating fiscal profligacy; and the risk of a spike in yields when these operations were wound down. The quantitative easing policy saw the BoJ's balance sheet expand from 18 percent of GDP in 1998 to a high of about 31 percent of GDP in 2006.

Fifth, an exit strategy from unconventional monetary operations must be conceived at an early stage, although support should

only be withdrawn after clear signals of recovery emerge. In marked contrast to the mistimed reversal of ZIRP in August 2000 – when the lifting of policy rates amid fledgling signs of a pickup contributed to a renewed downturn – the BoJ was able to exit from quantitative easing relatively smoothly, aided by transparent and open communication. After the economy started to recover in 2003, it took some time before deflation was ended and the preannounced conditions for ending quantitative easing were met. In March 2006, the BoJ began shifting to a more normal monetary framework, indicating that it would gradually drain liquidity through open market operations while keeping overnight interest rates effectively at zero. The Japanese money market, which had withered during the late 1990s, was revived, as institutions relied less on the BoJ for funding which had been made available at penal rates relative to normal times and the opportunity cost of idle bank balances rose, stimulating credit growth. With the recovery drawn out and inflationary pressures subdued, the BoJ was also able to avoid losses and yield spikes by holding JGBs to maturity. However, the BoJ has not been able to fully unwind its stock purchases: as of March 2008, it held about JPY 1.4 trillion, down from a peak of JPY 2 trillion. At the time, capital gains on these shareholdings were estimated at around JPY 800 billion, but a large part has likely been wiped out by the collapse in global stock markets during the current crisis.

Ultimately, however, unconventional policies are not a panacea and carry a cost. Japan found that while generous liquidity support helped limit the damage, it also had negative side-effects, notably in the form of compounding the breakdown in money markets,

Figure 8

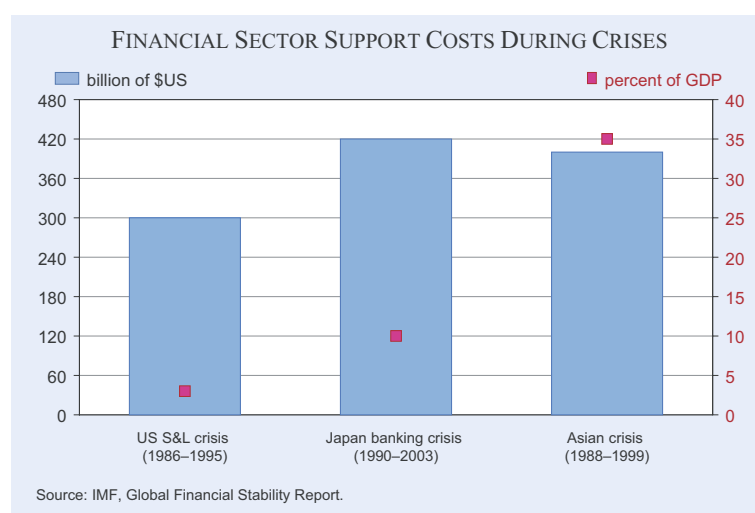
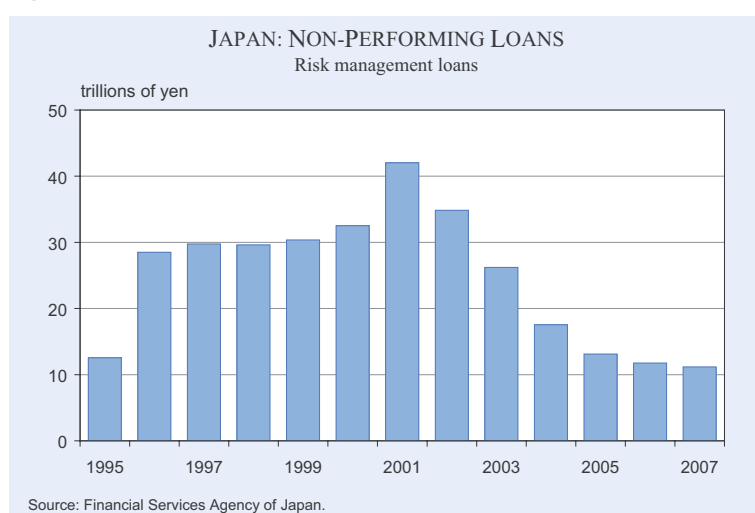


Figure 9



compressed credit spreads, and pressure on bank profits. Ample liquidity and low interest rates could also have reduced incentives for restructuring – for instance, by easing financing constraints for both sound and insolvent borrowers, they may have delayed the recognition of bad loans and undermined market discipline. This may have been a necessary price to pay for maintaining financial stability and preventing deflation from worsening. However, the costs increased the longer unconventional policies were in place, putting a premium on rapid progress to fix the financial system and restructure all affected balance sheets.

In the end, generous liquidity provision helped forestall an immediate systemic crisis and arrest the decline in output, but it could not adequately address the fundamental problem of an undercapitalized banking system. As discussed in the next section, Japan found that a lasting recovery could only be

achieved by tackling the financial and corporate sector problems that lay at the heart of the crisis.

Restructuring banks and rehabilitating borrowers: financial sector imperatives for a sustained recovery

As Japan's crisis intensified and its roots became clearer, financial sector policies assumed center stage. The eventual strategy revolved around restructuring banks, encouraging them to recognize problem loans and raise new capital, and in some cases seek out public funds or exit the sector. After a subdued start, the government ended up injecting public funds of nearly 10 percent of GDP to recapitalize the banking system and dispose of problem loans (Figure 8). At the same time, the banking system underwent significant consolidation, with several large banks and many smaller institutions either closed or merged. By 2003, bank share prices started to recover, as NPLs began to trend down and capital ratios stabilized. Over 70 percent of the public capital has since been repaid, reflect-

ing the success of Japan's restructuring policies. In the final analysis, tighter supervision, judicious use of public funds and a sound framework for restructuring distressed assets proved decisive. Japan's experiences suggest a number of important ingredients for reviving the financial sector.

First, losses associated with distressed assets have to be fully recognized at an early stage. Delays in recognizing problem loans exacerbated Japan's crisis and postponed a sustained recovery. For many years, weak accounting practices and regulatory forbearance masked the NPL problem and limited incentives for remedial action (Figure 9). To some extent, this reflected a lack of understanding of the size of the NPL problem and the initial belief that a recovery would soon take hold. The delay in recognizing the losses proved costly, not just in terms of taxpayer funds but also in holding back a recovery, as uncer-

tainty about the health of bank balance sheets weighed on market sentiment and insolvent “zombie” firms were allowed to linger (Caballero et al. 2008). At a minimum, earlier action to recognize problem loans and raise adequate provisioning would have helped identify the capital shortage and jump-start the process of restructuring.

Second, resistance to the use of public funds must be overcome by underscoring the importance of financial stability to taxpayers. In the mid-1990s, public backlash over the ineffective injection of public funds into the failed *jusen* mortgage financing companies made it very difficult for the authorities to consider additional public funds for some time, limiting policy flexibility. Overcoming public resistance to bank bailouts and the stigma attached to public capital was crucial in forging a final solution.

Third, public funds available for cleaning up balance sheets need to be adequate and conditional on strict performance criteria. The BoJ and others pushed strongly for the government to inject public funds as a means of freeing banks’ capital constraints and reviving the credit channel (Table). Early attempts at public recapitalization came with few conditions and without a comprehensive examination or clean-up of bank balance sheets. As a result, they failed to restore health to the banking system or generate a sustained macroeconomic impact. To resolve the NPL problem, the government ultimately adopted a more forceful approach to using public funds, concentrating on four key elements:

- *Ensuring realistic valuation of bad assets.* The strategy began with so-called “special inspections” focusing on large borrowers, which confirmed that

bank self-assessments of asset quality were overly optimistic and that NPLs had been significantly understated. Starting in 2002, prudential norms were strengthened by introducing mark-to-market accounting, stricter loan classification and more realistic loan-loss provisioning (Figure 10).

- *Accelerating NPL disposals.* Under the so-called “Program for Financial Revival,” banks were required to accelerate the disposal of NPLs from their balance sheet within two to three years by selling them directly to the market, pursuing bankruptcy procedures or by rehabilitating borrowers through out-of-court workouts. Remaining loans would be sold to the Resolution and Collection Corporation (RCC), which was charged with disposing of bad assets of failed banks.
- *Improving bank capital.* Around JPY 12^{1/2} trillion (about 2^{1/2} percent of GDP) of public funds was used to recapitalize banks, mainly through preferred stock or subordinated debt. In the later stages, in exchange for public funds, banks were required to write down the capital of existing shareholders, replace senior management and submit a reorganization plan to be reviewed regularly by the authorities. Banks were also required to undertake governance reforms consistent with Basel Committee guidelines, such as appointing outside directors and establishing a board audit committee.
- *Strengthening supervision.* In 1998, the Financial Supervisory Authority (FSA) was created, consolidating supervision from the Ministry of Finance (MoF) and other government agencies into a single entity. A new law was also passed, authorizing the FSA to prescribe prudential rules and apply prompt corrective action when rules were breached or where authorized institutions were viewed as unsafe or unsound.

Table

Japan: Public funds allocated to the financial sector 1999–2008

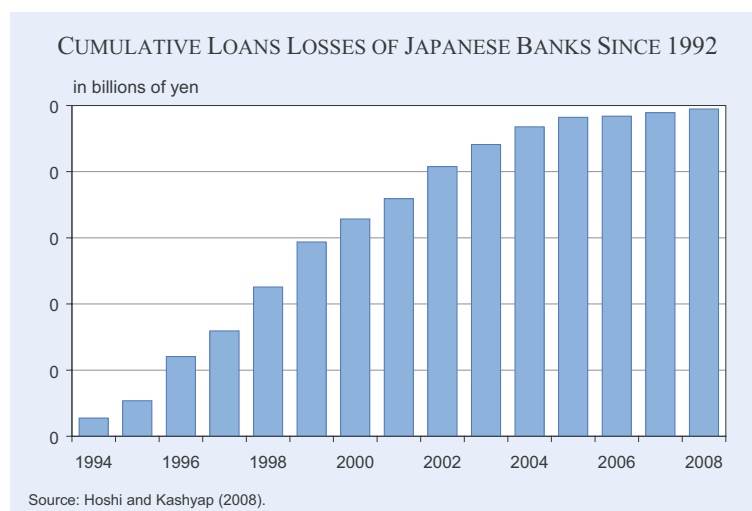
	Trillions of yen	Percent of GDP	Recovery as of March 2008	Recovery rate %
Grants of loss coverage	18.6	3.6	8.2 ^{a)}	·
Asset purchases	9.8	1.9	9.6	98.0
Capital injection	12.4	2.4	10.2	82.3
Others	6.0	1.1	4.9	81.7
Total	46.8	9.0	32.9	70.3
excluding grants	28.2	5.4	24.7	87.6

^{a)} 10.4 trillion yen is covered by the taxpayers, with the remaining amount scheduled to be covered by deposit insurance fees paid by financial institutions.

Source: Bank of Japan; Financial Services Agency of Japan; Deposit Insurance Corporation of Japan.

Fourth, rehabilitating distressed borrowers is the other side of the coin in a financial crisis and can support bank restructuring. In Japan, the large write-offs and debt restructuring by banks were instrumental in promoting the needed deleveraging of the corporate sector. To facilitate the restructuring process, the government established the Industrial Revitalization Corporation of Japan (IRCJ) in 2003 to purchase distressed loans from banks and work with creditors. To support

Figure 10



private sector-led restructuring, the government also reformed the insolvency system, introduced guidelines for out-of-court corporate workouts and upgraded the accounting and auditing framework. In the end, these measures helped to create a market for restructuring distressed assets, drawing in private capital and expertise, including from overseas.

Fifth, a centralized asset management approach can accelerate the cleaning-up of bank balance sheets (Hoshi and Kashyap 1999; Kang 2003). Government purchases and sales of NPLs through the RCC and the IRCJ helped jumpstart the restructuring process by enhancing price discovery, resolving credit disputes and providing legal clarity and accountability. They also allowed bank management to concentrate on extending new loans and reforming their business operations. With asset prices recovering, these interventions cost taxpayers far less than their original price tag – the IRCJ even managed to generate a small profit before shutting down in 2007.

Finally, to restore market discipline and minimize moral hazard, an exit strategy needs to be developed for divesting public shares in the banking system and unwinding other financial sector interventions. In Japan, the shift from a blanket guarantee to partial deposit insurance and the gradual repayment of public funds were fairly orderly and smooth. However, some banks are still struggling to repay their public funds and the relatively gradual withdrawal of public support for SMEs may also have held back the restructuring of smaller firms, which continue to suffer from excess leverage and low profitability.

Conclusions

Japan's experiences underscore the difficulty of combating a post-bubble recession rooted in private-sector profligacy and an over-extended financial sector. Compared to more typical cyclical downturns, such episodes can be longer-lasting and call for responses that fall outside of the usual policy toolkit. In the short-term, policymakers must be flexible and willing to employ a broad range of measures to stabilize the financial system and stem the decline in output and prices, including aggressive fiscal and monetary

stimulus. To lay the ground for a robust recovery, damaged balance sheets, of both creditors and debtors, must then be painstakingly rebuilt. The challenges do not end there. Exit from the exceptional macroeconomic and financial sector policies necessitated by the crisis must be conceived early and communicated convincingly in order to guide expectations and prevent longer-term damage to growth and price stability. In addition, the actual exit must be carefully timed and only implemented when clear signs of a recovery emerge. Given the inescapable parallels with the current crisis, it would serve global policymakers well to cast a careful eye on Japan's experiences.

References

- Caballero, R. J., T. Hoshi and A. K. Kashyap (2008), "Zombie Lending and Depressed Restructuring in Japan", *American Economic Review* 98, 1943–77.
- Cargill, T. F., M. M. Hutchison and T. Ito (2000), *Financial Policy and Central Banking in Japan*, MIT Press, Cambridge, Mass.
- Fujiki, H., K. Okina and S. Shiratsuka (2001), "Monetary Policy under Zero Interest Rate: Viewpoints of Central Bank Economists", *Monetary and Economic Studies* 19, 89–130, Institute for Monetary and Economic Studies, Bank of Japan.
- Hoshi, T. and A. Kashyap (1999) "The Japanese Banking Crisis: Where Did It Come From and How Will It End?" *NBER Working Paper* no. 7250.
- (2008), "Will the U.S. Bank Recapitalization Succeed? Lessons from Japan", *NBER Working Paper* no. 14401.
- Ito, T. (2006), "Japanese Monetary Policy: 1998–2005 and Beyond", in *Monetary Policy in Asia: Approaches and Implementation*, BIS Paper No. 31, 105–32.
- Kang, K., M. Syed and K. Tokuda (2009a), "Revisiting Japan's Lost Decade", in *Asia and Pacific Regional Economic Outlook*, International Monetary Fund, Washington DC.
- (2009b), "Lost Decade in Translation: What Japan's Banking Crisis could Portend about the U.S. Recovery", *IMF Working Paper*, forthcoming.

Kang, K. (2003), "The Resolution and Collection Corporation and the Market for Distressed Debt in Japan", in T. Callen and J. Ostry, eds., *Japan's Lost Decade*, International Monetary Fund, Washington DC.

Nakaso, H. (2001), "The Financial Crisis in Japan during the 1990s: How the Bank of Japan Responded and the Lessons Learnt", *BIS Papers* no. 6.

Shirakawa, M. (2003), "One Year Under 'Quantitative Easing'", *IMES Discussion Paper* no.2002-E-3, Institute for Monetary and Economic Studies, Bank of Japan.