What lessons can be learnt from Japan's lost decade?

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The worldwide recession that followed the subprime crisis was unprecedented in many ways, but not so unique that no lessons can be learnt from previous experiences. Japanese's lost decade comes probably closest. Both episodes were preceded by the bursting of speculative bubbles, with led to a prolonged banking crisis. In the case of Japan, it took the economy more than 10 years to recover. At the end of the period, GDP was around 20% below the level it would have achieved if capital spending growth had followed more normal patterns. Moreover, the slump in world's second largest economy was not without repercussions for the country's trading partners.

Even though this episode was followed by the longest boom in Japan's post-war history, some scars have remained, making the economy still very vulnerable to external shocks. Indeed, the country was among the most affected by the subprime crisis, even though its banking sector was not particular exposed to this market. The most obvious sign of weakness is that more than 20 years after its dramatic collapse, the Nikkei is still 75% below its peak reached by the end of 1989. In addition, the government accounts have seriously deteriorated. Gross public sector debt amounts to almost 200% of GDP, and the government does not have a plan to reduce the debt to more manageable proportions. Finally, the economy is still confronted with substantial overcapacity, which has been weighing on prices. In November, the government declared that the economy went again into deflation. In the coming two years, GDP is expected to grow by around 2%, well above Japan's potential growth rate, estimated at 0.8%. As a result, excess capacity will gradually dissipate. The Bank of Japan (BoJ) expects the economy to exit deflation in FY2011.

The lost decade

Japan's lost decade was sparked by the bursting of bubbles in the stock and real estate markets in the early 1990 (cf. chart 1). Between December 1989 and December 1991, stock prices fell by 40%, returning them to their pre 1987 level. The property market started to falter in 1991. Between 1991 and 1993, land prices in the six major cities fell by 30%. These two asset categories might have destroyed JPY 1 500 000 billion in wealth, about three times the country'sGDP[1].

The bursting of the asset price bubbles (1985=100)

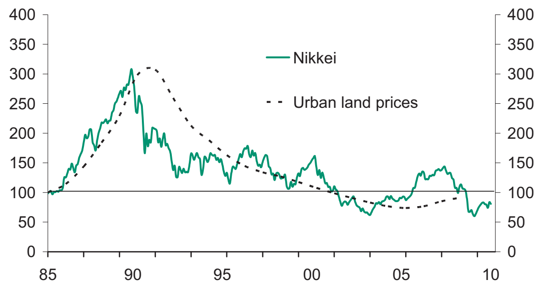

Chart 1 — Sources: Nikkei, Japan Real Estate Institute

In the following decade, the economy was characterised by slow growth, falling prices and dysfunctional financial markets. Between 1992 and 2002, GDP growth averaged only 0.8%, compared with 4.5% in the preceding ten years. The OECD estimates that over this period, the potential output growth declined to 1.4% on average, down from around 4% before the bursting of the bubble. The sharp fall in potential output growth is related to the low investment rates during the 1990s. If capital spending growth had followed more normal patterns, potential output growth would have been much higher. Assuming potential output growth at 2.5% on average, GDP would have been 20% larger than actually achieved.

The extent of economic decline can also be assessed by comparing the Japanese performance with that of the other major economic areas (cf. chart 2). In 1992, in terms of purchasing power, Japanese GDP per capita had been 12% above that of the EU15 countries and almost 20% below that in the US. Ten years later, it had fallen just below that of the EU15 countries, while the income gap with the US had widened to almost 40%. From 2002 onwards, these relative income differences have remained more or less constant.

GDP per capita (PPP, Japan=100)

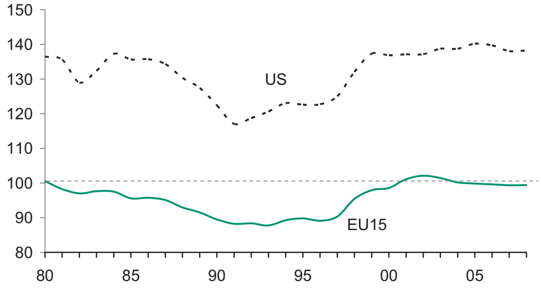

Chart 2 Source: OECD

These numbers put the relative decline of the Japanese economy a bit in perspective. Japan's lost decade is not even remotely comparable with the experiences of the industrialised world during the Great Depression. Japan still has very high living standards while poverty and unemployment remain low. These facts might have contributed to the complacency of the authorities in addressing the economic problems.

Japan's lost decade was not a period of uninterrupted economic decline. Syed *et al.* (2009) distinguish three phases (cf. chart 3). In the first phase, which lasted from 1990 to 1997, growth slowed following the bursting of the bubbles in the stock market and real estate market, but the economy avoided recession. This muted response can be attributed to two factors. First, households started to run down their savings in order to maintain their consumption. Second, the authorities loosened their fiscal and monetary policies. The BoJ cut interest rates to near zero by 1995, while the government implemented successive fiscal stimulus packages. As a result, the government deficit widened to around 5% of GDP by 1996, whereas the accounts were in surplus in 1990 (2% of GDP). Moreover, the debt to GDP ratio rose to close to 100% from just over 60% before the crisis.

GDP and Output Gap

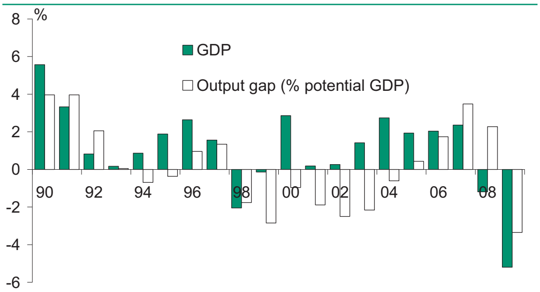

Chart 3 Sources: Cabinet Office, OECD

As growth started to pick up from 1994, the authorities started to withdraw the stimulus. In April 1997, the government raised taxes and social security contributions. The consumption tax was hiked to 5% from 3%. These actions were unfortunately timed, as only a month later the Asian Financial Crisis broke out. Starting with the collapse of the Thai baht, the crisis spread to most of Southeast Asia.

This triggered the second phase, characterised by a severe banking crisis (see below). Growing distrust between financial institutions led to a seizing up of the interbank market, followed by a credit crunch. In mid 1997, the economy went in recession, for the first time since the oil shock in the 70s. The government recapitalised the banking sector, albeit with few conditions to tackle the non-performing loan problems. Moreover, policy rates were cut to zero. These measures had some effect and growth started to pick up. The BoJ, eager to get interest rates back to normal levels, raised its policy rate by a modest 25 bp in August 2000.

However, only a couple of months earlier, the dotcom bubble had burst, leading to the third phase. The economy fell again in recession, and unemployment rose to 5.5%, a post-war record. The banking sector weakened further by the sharp decline in stock prices. Between March 2000 and September

2001, the Nikkei lost 50% of its value. Moreover, as the economic climate deteriorated, non-performing loans peaked at 9.4% of gross loans in 2002.

The government took more drastic action to address the problems in the banking sector, in particularly dealing with the non-performing loans. These measures in combination with the upturn of the world economy led the longest expansion in Japan's post-war history, lasting from early 2002 to 2008. Nevertheless, the economy remained very vulnerable to exogenous shocks. Japan was among the countries most affected by the global financial and economic crisis following the bursting of the US housing bubble.

The lost decade compared to other major financial crises

Episodes of financial turmoil are associated with severe and protracted slowdowns[2]. The IMF calculates that these slowdowns lasted on average 8.4 quarters, compared with 5.1 quarters when the slowdown was not preceded by financial stress[3]. The cumulative output losses amounted to 9.3% of GDP on average.

The six banking related episodes of financial stress during the 1990s[4] indicate that financial stress periods are followed by severe economic downturns, in particular in cases when they are preceded by a rapid build up in credit and house prices and a heavy reliance on credit by firms, which was in particular the case of Japan, and households (cf. table 1). In the case of Japan, the output loss, measured as the loss from peak to trough (in % of the peak level of output) was 5.1%, close to the unweighed average (-5.4%). It took Japanese production 19 quarters to get back to its peak, which was almost a year longer than the average (16 quarters).

Carmen Reinhart and Kenneth Rogoff (2009) have studied the aftermath of financial crises according to three characteristics. First, they noted that asset market collapses are deep and prolonged.

For example, house price declines from peak to trough averaged 35.5, which corresponds with the decline experienced in Japan. However, Japanese house prices declined over a period of 17 consecutive years, well above the average duration of 6 years. The fall in equity prices was even steeper, although shorter lived. The average decline was almost 56%, lasting from peak to trough 3.4 years. This corresponds which the Japanese experience. The Japanese experience was remarkably different in the labour market. The unemployment rate increased by only 3.5 points, compared with an average of 7 points during the other episodes. However, the period was by far the longest: 10.5 years compared with 4.8 years on average for all the episodes. This points to substantial rigidities and labour hoarding.

Finally, financial crisis are often associated with the deterioration of government finances. Reinhart and Rogoff compared the deterioration of real public debt in the three years following the crisis. The average increase in public debt is 86%, compared with less than 50% in Japan. The researchers note that this increase is mainly driven by falling tax receipts and rising expenditure to fight recession, rather than to the bailout costs for the banking sector.

Six Major Periods of Financial Stress and Economic Contraction

	Asset price buildup before the crisis (1)		Asset price decline		Deleveraging(2)		Output Loss (3)	Quarters to recovery
	Equity prices	House prices	Equity prices	House prices	Households	Firms		
Finland early 1990s	80.0	36.1	-85.9	-39.8	16.2	17.0	-13.6	27
Sweden early 1990s	68.5	17.5	-69.5	-20.1			-5.8	19
Norway early 1990s	73.9	26.5	-76.9	-24.6	16.5	8.5	-3.9	12
Japan 1990s	54.4	12.2	-58.5	-11.1	0.5	15.4	-5.1	19
UK early 1990s	19.9	22.9	-21.4	-23.3	9.6	4.4	-2.6	13
US early 1990s	14.5	4.9	-21.0	-4.8	0.8	0.6	-1.3	5
Average	51.9	20	-55.5	-20.6	8.7	9.2	-5.4	15.8

Table 1

Source: IMF (2008)

(1) Trough-to-peak changes before the start of the crisis

(2) Trough-to-peak changes in net lending ratios

(3) Loss from peak to trough in % of peak level of output

Why did the Japanese underperformance last so long?

It took the Japanese economy about 10 years to recover from the bursting of the bubble economy in the early 1990s. This is a remarkably long period, only partly justified by the fact that recovery was twice halted by external shocks – the Asian financial crisis and the bursting of the Internet bubble.

Several reasons have been put forward. Some observers have argued that the economy was experiencing a so-called balance-sheet recession (see f.e. Koo, 2008). Following the collapse in prices for financial and real assets, business and household started to cut back their spending to strengthen their balance sheets (cf. chart 4). In these circumstances, monetary policy was powerless, as the private sector preferred reducing their indebtedness, rather than spending even though interest rates were close to zero. The flow of funds statistics show that the growing surplus in the non-financial business sector was mirrored in the widening deficit for the public sector. In such a situation, the economy can only recover once the debt overhang is worked through.

Financial balances per sector (% of GDP)

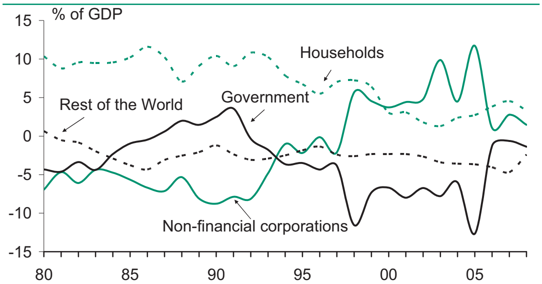

Chart 4 Source: Bank of Japan

Balance sheet recessions often occur in the aftermath of a financial crisis. It is the main reason why economic slowdowns and recessions following periods of financial stress last on average longer than other downturns. Nevertheless, other countries recovered much quicker after similar episodes, suggesting that appropriate macroeconomic policies could have significantly shortened the recovery period. According to Adam Posen, "Japan would have recovered in 1995 had there not been bad fiscal and monetary policies and neglect of the banking sector".[5] Even though, such a statement is difficult to prove, it is interesting to investigate.

1) Fiscal policy: not so expansive as presented

Many observers have argued that Japan conducted a very loose fiscal policy in the immediate aftermath of the bubble. They point to the announced stimulus packages (cf. table 2) and the widening deficit. Between 1990 and 2002 the government deficit widened by 10% of GDP. However, this deterioration is partly related to disappointing tax receipts following the economic downturn, rather than to the various announced stimulus plans. Once corrected for cyclical variations, the OECD estimates that the fiscal stimulus during the lost decade amounted to around 7% of GDP[6].

Adam Posen (1998) notes that all announced fiscal programmes hugely overstated their stimulus content, often by a factor 2. A way to pump up the programmes was by including private investment incentives. These are loan programmes offered by government-affiliated institutions to the private sector. Its main effect is on the allocation of the funding of capital spending, but its impact on the overall level of capital spending is limited. Moreover, some of the spending was for purchases of tangible assets (lands, buildings) or the bringing forward of already planned investment projects.

The largest stimulus programmes were launched in September 1995 and November 1999, amounting to 1.5% and 1.4% of GDP respectively, which indeed boosted GDP growth in 1996 and 2000 to 2.6% and 2.9% respectively.

Any fiscal stimulus programme will boost the economy, but only so far. Posen and Kuttner (2002) compared the Japanese public investment programmes to the building of pyramids in the hinterland. The choice of the projects was highly politicised, favouring strongholds of the ruling Liberal Democratic Party. Stories of wasteful spending abound such as bridges build to islands with tiny populations, highways that end in dirty tracks, and empty government buildings. Following the exposure of several scandals, the government reversed its policy in 1997. Public investment fell steadily from 8.3% in 1996 to 3.3% in 2008. The recently elected Hatoyama government has announced to curb wasteful investment spending[7]. One of its first deeds was the scrapping of two dam projects.

Japan's fiscal stimulus packages in the 1990s

	in trillions of yen					% of GDP	
Date of announcement	Infrastructure	Tax cuts	Other	Total	New Spending Share (%)	Total	New Spending Share
28 August 1992	6.3		4.5	10.7	39.6	2.1	0.8
13 April 1993	7.6	0.2	5.4	13.2	33.4	2.7	0.9
16 September 1993	2		4.2	6.2	23.4	1.3	0.3
8 February 1994	4.5	5.8	4.9	15.3		3	
14 April 1995	1,1		3.5	4.6	56.3	1	0.6
20 September 1995	6.5		6.3	12.8	62.5	2.4	1.5
24 April 1998	7.7	4.6	4.4	16.7		3.3	
16 November 1998	8.1	6	9.8	23.9		5.1	
11 November 1999	6.8	6	5.2	18	36.1	3.9	1.4
20 October 2000	4.7		6.3	11			

Table 2 Source: Nanto (2009)

2) Monetary policy: not as proactive as warranted

Another reason for the prolonged slump was the poor conduct of monetary policy. By failing to tighten its policy during the period 1987-1989, the BoJ contributed to the build up of the speculative bubble in the stock market. Once it started to hike the policy rates, it induced an asset price crash. Finally the bank acted too late in cutting interest rates following the stock market crash. Only by 1995, the discount rate was lowered to 0.5% (cf. Chart 5).

Money market interest rates

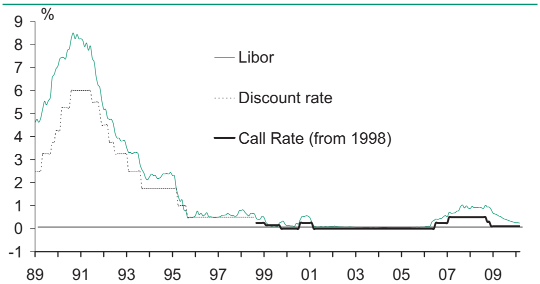

Chart 5 Source: Reuters

In April 1998, the BoJ became independent with governor Hayami at its helm. Markets expected that monetary policy would improve. However, during the Hayami regime 1998-2003, the Bank lost credibility and suffered a serious confidence problem (see f.e. Ito and Mishkin, 2004). The Policy Board members misjudged the economic conditions, and were keen on normalising interest rates. Moreover, the Board insisted on its independence and refused cooperation with the Government.

In February 1999, the BoJ lowered the overnight call rate to 0.15. This was the start of the so-called zero-interest rate policy (ZIRP). However, the BoJ undermined the effectiveness of ZIRP by not disguising its desire to raise interest rates. Even though the pursuit of economic recovery was very much in doubt following the bursting of the dotcom bubble, the BoJ's Policy Board decided to raise the overnight call rate to 0.25% in August 2000 against the will of the government. The decision turned out to be a serious mistake.

As the policy rate approached the zero lower bound, calls for unconventional policies, such as quantitative easing, in combination with more expansionary fiscal policies increased. The BoJ firmly resisted these pressures, arguing that such policies had only a small chance of success and if they would succeed, may generate much higher inflation than 1 or 2%. It also feared that its independence could be compromised. If quantitative easing were successful, the Bank could suffer substantial losses on its bond holdings, and might be forced to ask the Ministry of Finance for supplemental funds. Bernanke (2003) demonstrated that the Bank could easily remove the risk on its bond holdings by a fixed-floating interest swap with the Ministry of Finance.

In 1998, the yen started to appreciate even though the economy went into a deep recession amidst falling prices. Because yen interest rates were very low, this suggested that the market anticipated even greater rates of deflation and yen appreciation in the future (Bernanke, 2000). However, the BoJ resisted calls for non-sterilised interventions in the foreign exchange market, arguing that the yen exchange rate in itself is not an objective for monetary policy.

In March 2001, the BoJ announced a change in instruments, from the short-term interest rate to the balance of current accounts at the BoJ. It effectively meant that the call rate would go to zero. Moreover, the Bank started stepping up its outright purchases of long-term government bonds from JPY 400 billion in September 2001 to JPY 1.200 billion in October 2002. The results were mixed. The economy remained firmly in deflationary territory with core prices falling by 0.8% y/y. On the other hand, one could argue that these measures helped the economy getting out of recession.

3) the banking crisis: a serious underestimation of the problems[8]

The length of the crisis cannot only be blamed on misguided macroeconomic policies. The mishandling of the banking crisis, which lasted almost 14 years, was a serious impediment for the recovery. In the first phase (1990-1994), the capital base of the banks sharply deteriorated following the stock market crash. The value of the unrealised capital gains, which are in Japan part of the capital base, dropped from USD 355 billion in 1989 to about USD 40 billion in 2002. In addition, the fall in land and real estate prices caused the value of collateral underlying many bank loans to fall below the value of their loan principal. In 1992, the government authorised the creation of the Cooperative Credit Purchasing Company to help banks to dispose of non-performing loans. At this stage, the authorities did not realise the seriousness of the crisis and the extent of the non-performing loan problems. They expected the fall in asset prices to be only temporary, and that operational profits combined with the capital gains related to the eventual rebound of asset prices would resolve these problems. In addition, banks continued lending to insolvent borrowers (zombies), thereby aggravating the non-performance loan problems (cf. table 3). Cabellero *et al*. (2006) show that this behaviour had negative implications for the economy by delaying the needed restructuring of industry, reducing profits for healthy firms, and discouraging investment and the entry of new firms.

Non-performing loans (JPY bn)

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Losses on bad debt	1 640	3 872	5232	13 369	7 763	13258	13 631	6 944	6 108	9 722	6 658	5 374	2 848	363	1 046	1 124	3 094
Cumulative losses	1 640	5 512	10 744	24 113	31 877	45 135	58 766	65 710	71 818	81 540	88 198	93 572	96 420	96 783	97 829	98 953	102 046
Loans at risk	424	2 514	5 322	11 302	15 618	19 611	24 320	28 185	31 256	35 231	38 751	42 484	45 238	45 940	46 477	47 298	48 831
Total provisions	3 698	4 547	5 536	13 293	12 334	17 815	14 797	12 230	11 555	13 353	12 585	11 430	8 535	6 438	5 896	11 169	11 610

Table 3 Source: Financial Services

The second phase (1995-1996) started with the bankruptcy of several specialised mortgage lenders (jusen). In 1996, the government made its first bank injections of capital to purchase assets from them. This action proved to be so unpopular, that it may have withheld later the government from taking stronger actions.

In the third phase (1997-1999), the crisis intensified and started to affect very large banks such as Hokkaido Takushoku Bank, which went bankrupt in 1997, and the Long-Term Credit Bank of Japan and the Nippon Credit Bank, which were nationalised. As a result, banks became reluctant to lend to each other, which led to the seizing up of the interbank market. Following the crisis at the Long-Term Credit Bank, new legislation was introduced to protect the banking sector. By October 1998, the Diet doubled the amount earmarked for strengthening the financial sector to JPY 60 trillion or 12% of GDP. These cash injections prevented a further deterioration, but they did not give banks incentives to dispose of their bad debt.

In the fourth phase (2000-04), the problems in the banking sector intensified again following the bursting of the dotcom bubble in 2000. Non-performing loans increased as a result of corporate bankruptcies and the prolonged economic slump. The government decided to take more drastic actions. Accounting standards were brought in line with international best practices. The NPL problems were addressed by the special inspections by the Financial Services Agency resulting in more realistic loan provisioning. The BoJ reduced the exposure of the banking sector to the stock market by purchasing bank equity holdings at market values.

By March 2009, the government had spent JPY 47 200 billion (9.8% of GDP) to support the financial sector[9] (cf. table 4). About 50% of the outlays have been recovered. The amount of bad debt written off reached 21% of GDP.

Government support to the financial sector
From 1992 through to end of March 2009

	Spent (billion yen)	% GDP	Recovered	Recovery rate (%)
Grants for loss coverage	18867	3.9		
Capital injection	12548	2 .6	10814	86.2
Purchase of assets	9777	2	9720	99.4
Others	6011	1.2	4865	80.9
Total	47203	9.9	25399	53.8
Total excluding grants	28336	5.9	25399	89.6

Table 4 Source: Deposit Insurance Corporation

The Japanese economy following the subprime crisis

The subprime crisis had little direct impact on Japan's banking sector, as Japanese banks had only a very limited exposure to subprime-related products[10]. By the end of 2007, they held JPY1 519 billion (or USD 14.5 billion) in these products on their balance sheet. By December 2009, their exposure had been reduced to JPY 320 billion. By that time, cumulative losses on these holdings (from April 2007) had reached JPY 1,035 billion (or around to 2% of Tier 1 Capital).

The major reason for their limited exposure was that the Japanese banks were more focussed on traditional banking services and were less involved in the originate-to-distribute type activities compared to their European and US counterparts. The market for securitised product was relatively undeveloped, and consisted for about 50% of residential mortgage-backed securities, mainly issued by the Japanese Housing Finance Agency and the City and trust banks. Moreover, housing lending was prudent in line with the FSA guidelines, notably on the loan-to-value ratio. This also helped Japan to avoid a housing bubble. Furthermore, unlike in most other countries, the implementation of Basel II reduced bank's appetite for risk by raising the minimum required capital of the larger banks due to their substantial equity holdings. In addition, the Japanese remuneration system is less performance driven than in other countries, thereby limiting risk taking behaviour. However, this pay and incentive structure is also blamed for low profitability, less innovation and long delays in addressing the non-performing loan problems in the 1990s.

Nevertheless, the turmoil in the international markets spilled over to the financial sector and to the real economy. Even though banks had reduced substantially their exposure to the stock market in recent years, the sharp fall in equity prices led to a substantial erosion of bank capital. Moreover, the disposal of non-performing loans rose from JPY 1 124 billion in FY 2007 to JPY 3 094 billion (or 0.7% of loans outstanding) in FY 2008 due to a rise in bankruptcies and worsening business conditions. In the money market, the spread between JPY Libor and OIS – a measure liquidity funding risk – widened, although much less than in the European and US market (cf. chart 6).

Libor-OIS spread 3 months (bp)

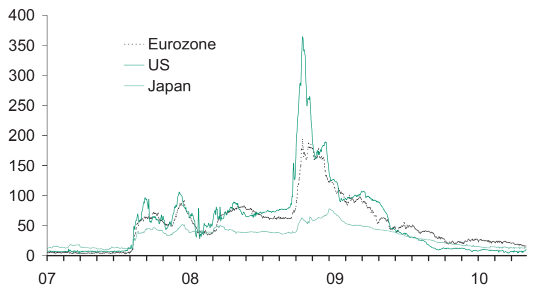

Chart 6 Source : Reuters

Activity was especially affected by the sharp fall in international trade in the aftermath of the Lehman Brothers' bankruptcy in September 2008. Industrial production dived by 11.3% q/q in 2008 Q4 and by 20.1% q/q in 2009 Q1. GDP contracted in 2008 and 2009 by 1.2% and 5.2%, respectively, the worst performance among the G7 countries.

Moreover, unemployment reached 5.7% in July 2009, a record high.

Amount outstanding of operations utilising corporate debt (100 billion yen)

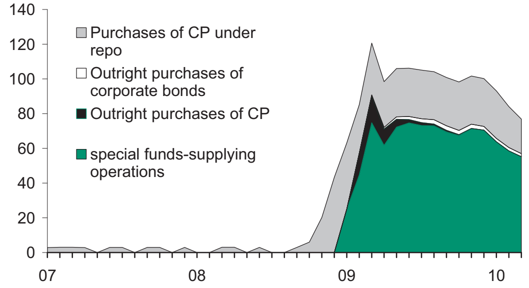

Chart 7 Source: Bank of Japan

The government and the BoJ acted swiftly to redress the situation. The BoJ stepped up the pace of outright purchases of JGBs from an annual rate of JPY14 000 billion prior to December 2008 to JPY 21 600 billion (4% of GDP) in March 2009. In addition, the BoJ started to purchase CP and corporate bonds. Due to lack of supply, this measure was withdrawn by the end of the year. A more effective way to support corporate financing was through the "special funds-supplying operations", which provided funds to banks at the policy interest rate against a wide range of corporate financing instruments. As the measure expired last March, the amount outstanding is now gradually declining. This has been compensated by the doubling of the amount of funds to be provided through the three-month loan facility introduced in December 2009 to JPY 20 000 billion. In addition, the BoJ resumed purchases of equities held by financial institutions in February 2009. At its latest meeting (30 April) meeting, the Bank announced to maintain the extremely accommodative environment and is studying on new measures that might be introduced in the coming months. These could be similar to those taken in 1998, whereby low interest funds would be supplied to banks in proportion of their credit expansion.

On the fiscal front, the government launched a series of stimulus packages in 2008 and 2009, worth around 4% of GDP (excluding transfers to recapitalised public financial institutions). Half of the measures consisted of transfers to households and businesses. For the household sector, the key element was the fixed-rate payment of JPY 12 000. In addition, the government introduced incentives for the purchase of environmentally friendly goods such as household appliances (eco-point system) and low-emission cars. The budget for FY 2010 remains very accommodative. The government deficit is expected to be close to 8% of GDP.

These very loose policies in combination with strong external demand from the Asian emerging countries succeeded in getting the economy out of recession in Q2 2009. The recovery has been largely driven by the rebound in manufacturing production. In Q1 2010, industrial production rose by almost 7% q/q. The recovery is slowly spreading to other sectors. In the three months to February, activity in the tertiary strengthened to 0.8% q/q, compared with 0.2% in the previous month. Moreover, labour market conditions have clearly improved since the beginning of the year. The unemployment rate in the three months to March inched down to 4.9%, while employment growth during this period accelerated to 0.6% q/q. Total cash earnings rose by 0.8% y/y in March, the first rise in 22 months, while contractual earnings rose by 0.5%.

Business cycle indicators point to improving economic conditions, driven by the manufacturing sector. The increase in profits will enable enterprises to step up capital spending to remain competitive in world markets, even though capacity utilisation rates are set to remain relative low. We expect the financial surplus of the non-financial sector to increase further in the coming quarters.

Consumer spending is projected to remain sluggish, even though labour market conditions are to improve gradually and disposable income will be underpinned by some government measures. Households will remain very prudent in stepping up their consumption. In the first place, they want to rebuild their financial assets, which have been battered by the financial crisis. Moreover, they might fear that taxes will have to be raised in the coming years to shrink the public debt to more manageable proportions.

The economy is expected to grow by around 2% both in 2010 and 2011, well above Japan's potential growth rate, estimated at 0.8%. As a result the excess capacity will gradually dissipate. Nevertheless, prices are likely to remain on a declining trend at least until 2012. In particular, it will be very hard for policy makers to erase deflationary expectations after such a long period of price falls. According to the BoJ's latest projections, the economy could get out of deflation in FY2011.

The lessons to learn from the Japanese experience

The world economy is recovering from the worst financial and economic crisis since the Great Depression faster than expected. Over the past few quarters, international organisations and professional forecasters have been upgrading their forecasts. BNP Paribas expects the world economy to grow by about 4% in 2010, whereas only three month earlier, it forecast 3.6%. This positive result can be for an important part attributed to the quick reaction of governments and monetary authorities after the outbreak of the crisis.

The main lesson learned from Japan's lost decade is that insufficiently addressing the fragilities of the financial sector impairs the functioning of monetary and fiscal policies, while leaving the economy vulnerable to further adverse shocks. In this area, priority should be given to the recognition of losses associated with distressed assets in an early stage. According to the latest Global Stabilisation Report (IMF, 2010) considerable progress has already been made in this area. Thanks to improving economic and financial conditions, the total write-downs and loan provisions between 2007 and 2010 as estimated by the IMF have fallen from USD 2 809 billion to USD 2 276 billion. Of this amount, around two-thirds had been realised by the end of 2009. However, the IMF warns that some segments of country banking systems remain poorly capitalised and face significant downward risks.

Secondly, public funds can help to recapitalise the banking sector, if banks are not able to raise sufficient capital in the market. In Japan, these public funds were made conditional on ensuring realistic valuation of bad assets, achieving satisfactory progress in the disposal of non-performing loans, and strengthening supervision. It is true that this would put taxpayer money at risk. However, the experience in Japan and also other countries show that most of this capital will be repaid when the sector recovers. To date, nearly 90% of the JPY 28 300 billion of public capital (excluding grants) has been repaid.

In Japan, the government also took steps to facilitate the restructuring of distressed borrowers. The Industrial Revitalization Corporation of Japan (IRCJ) was set up to buy distressed loans from banks and work with creditors in restructuring. As asset prices eventually recovered, these interventions were less costly than the initial price tag. The IRCJ even managed to generate a small profit before it shut down in 2007. Moreover, the Japanese insolvency system was reformed. To deal with the current crisis in the housing market, the US government has set up the Home Affordable Modification Program, which enables homeowners to modify their mortgages and helping them avoid foreclosure.

Central bankers have learned from the Japanese experience the importance of monetary activism. In this respect, it was fortunate that Fed Chairman Ben Bernanke had extensively studied the monetary policy of the BoJ during the Lost Decade (see e.g. Bernanke (1998) and Bernanke (2003)[11]. To face the crisis, Policy rates were lowered to close to zero, and central bankers did not hesitate to implement unconventional policies, such as introducing long-term liquidity operations, broadening the range of eligible collateral, and the purchase of government bonds and other securities.

In addition, governments have launched stimulus plans to support activity, including car purchase incentive schemes, tax reductions, and investment programmes. One of the main lessons from Japan's lost decade is that these supportive policies should remain in place for a considerable time to have a durable effect. The premature adoption of a tighter fiscal policy (in 1997) and the lifting of interest rates (in 2000) have contributed to ending a nascent economic rebound in that country.

Nevertheless, important risks remain. First, a major problem is the sharp deterioration of the public sector accounts in the aftermath of the crisis. In the OECD, public debt has gone up to around 100% of GDP compared with 70% at the start of the decade. Japan has been confronted with the same problem, as public debt has reached almost 200% of GDP. The IMF warns that the strains in sovereign funding markets could have cross-border spillovers. It warns that the possible transmission of these risks to local banking systems and feedback through the real economy threatens to undermine global financial stability[12].

According to Reinhart and Rogoff (2010) the developed world might have entered a period of subpar growth. Currently, the private sector (households and firms) in many other countries (notably both developed and emerging Europe) are unwinding the debt built up during the boom years, which will dampen growth in the medium term. Moreover, the authors have identified a marked negative effect on the growth rate of real GDP in developed countries once government debt increases above 90% of GDP. Median growth rates in these countries could be roughly one percent lower than otherwise; average growth rates could be around 1.5% lower. The Reinhart and Rogoff calculations are based on the official debt data and do not include unfunded pension liabilities, which can be very high in particular in the continental European countries. The authors also note that many developed countries are presently saddled with extraordinarily high levels of total external debt, debt issued abroad by both the government and private entities. In the case Europe, the average exceeds 200 percent external debt to GDP. This could add to the vulnerability of these economies.

Their conclusions might be too pessimistic. Krugman and Wells (2010) offer a different interpretation of the evidence. They remark that the GDP contraction in the US after the Second World War was not linked to the level of debt but to the postwar demobilisation, with many women leaving the workforce. In the case of Japan, they point out that the high-debt years followed the financial crisis of the early 1990s. Debt was not the consequence of slow growth rather than the other way around. Partly based on IMF research, these authors plead for strong stimulus policies.

Second, more the financial system must be safer. In its latest stability report, the IMF warns that some segments of the country banking systems remain poorly capitalised [13]. Addressing these problems complicate policy exits from the extraordinary support measures.

Finally, during the lost decade, Japan was supported for most of the time by strong demand from the rest of the world. Between 1992 and 2000, the US economy grew by almost 4% per annum. Currently, the whole developed world is confronted with similar problems. Even though recovery is well underway, it remains fragile as it is largely underpinned by very accommodative policies. Against this backdrop, actions aimed at regaining competitiveness by devaluing the currency may be interpreted as beggar-thy-neighbour policies, which could easily lead to retaliation and trade wars. This calls for more coordinated policies in order to get the world economy back on a sustainable growth path.

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NOTES

[1] *Koo, Richard C., 2008, "The Holy Grail of Macro Economics", Lessons from Japan's Great Recession", John Wiley & Sons.*
[2] *A downturn is defined as the number of quarters during which GDP is below trend.*
[3] *IMF (2008), Chapter 4.*
[4] *Finland, early 1990s, Sweden early 1990s, Norway early 1990s, Japan 1990s, United Kingdom early 1990s, and United States, early 1990s.*
[5] *Posen (2009).*
[6] *This is probably an upper limit. The OECD tends to underestimate the potential output of the Japanese economy. As a result, the cyclical part of the deficit is also likely to be underestimated.*
[7] *On the programme of the Hatoyama government see Van der Putten (2009).*
[8] *On the Japanese banking sector in previous issues of BNP Paribas Conjoncture see Hermez, A.V. and L. Quignon, 2002, Japanese banks: a spring-cleaning, April 2001 and June 2002, and Quignon, L., 2005, "Are Japanese banks safe from a relapse", May 2005.*
[9] *OECD (2009).*
[10] *OECD (2009).*
[11] *Moreover, last September, the Bank of England's Monetary Policy Committee was joined by Adam Posen whose research also has focussed on Japanese political economy.*
[12] *IMF (2010).*
[13] *IMF (2010).*

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