Japanese lessons for an Anglo Saxon banking crisis

Is Japan's experience in the 1990s relevant to the global markets today?

This paper highlights why the collapse in equity and asset prices in Japan led to a prolonged period of slow growth, multiple recessions and a repeated inability of the equity market to sustain a meaningful rally. The discussion also highlights the similarities and differences with the current situation in the US and other countries.

It has been argued in some places that, it was not the collapse of the equity market in Japan that led to the "lost decade" but the inappropriateness of the policy responses that followed the collapse. As a result, some argue that the Japanese experience is not relevant to today. This is a highly contentious argument. Japan's experience has many similarities with recent developments in the US and Europe and can be used as a template to assess investment strategy in an environment of failing banks and falling asset prices.

The rise and fall of Japanese equities

It is fairly well known that the Japan's Nikkei 225 index peaked just short of 39,000 at 38,916 at the end of 1989 (actually on the last trading day of the year) and fell rapidly over the ensuing two years. By the end of 1992, the Nikkei had fallen to 16,925 – a fall of 57%. In the eight years that followed to 2000, the Nikkei basically traded between 15,000 and 20,000. The ending of the technology boom and subsequent collapse in global equity markets after 2000 saw the Nikkei fall to a low of 7,607 in April 2003. It subsequently recovered until mid 2007 but has recently fallen back to low of 7162 as global markets collapsed in October before rebounding to around 8000-8500.

Nikkei 225 index

Source: Yahoo!.

It is generally argued that the rapid rise in the Japanese equity market during the late 1980s was fuelled by slack monetary policy being followed by the Bank of Japan particularly in 1988 and into 1989 when the economy grew by 6.8% and 5.3% respectively. It is argued that the eventual tightening of monetary policy in three steps from May to December 1989, which increased the Official Discount Rate (ODR) from 2.50% to 4.25%, finally caught the attention of investors and this precipitated the collapse in the equity market.

It is then argued that the situation was aggravated further as the ODR was subsequently raised throughout 1990 till it peaked at 6.00% in August. It then stayed there till July 1991 despite the

crash that was occurring in the equity market. This tightening of monetary policy was done with the aim of reducing inflation, which was running at 3.5-4.0% during the first half of 1991. From July 1991, the ODR was lowered in various stages until the Bank of Japan finally introduced the Zero Interest Rate Policy (ZIRP) and Quantitative Easing (QE) from 1999 onwards.

This line of argument attributes much of the reason for the rise and fall of the Japanese equity market firmly to the Bank of Japan and inappropriate monetary policy. There are echoes of this occurring today with many arguing that central banks around the world (the Federal Reserve and Bank of England are often cited) have contributed to the recent run up and collapse in global equity markets.

Japan Official Discount Rate during the late 1980s and early 1990s

Date	ODR (%)
22 October 1983	5.00
30 January 1986	4.50
10 March 1986	4.00
21 April 1986	3.50
1 November 1986	3.00
23 February 1987	2.50
31 May 1989	3.25
11 October 1989	3.75
25 December 1989	4.25
20 March 1990	5.25
30 August 1990	6.00
1 July 1991	5.50
14 November 1991	5.00
30 December 1991	4.50
1 April 1992	3.75
27 July 1992	3.25
4 February 1993	2.50
21 September 1993	1.75
2 April 1993	2.50
21 September 1993	1.75
14 April 1995	1.00
8 September 1995	0.50

Source: BoJ

There can be little doubt that the BoJ's response was not as surefooted as it could have been. However, there is a need to place the actions of the BoJ in a wider context.

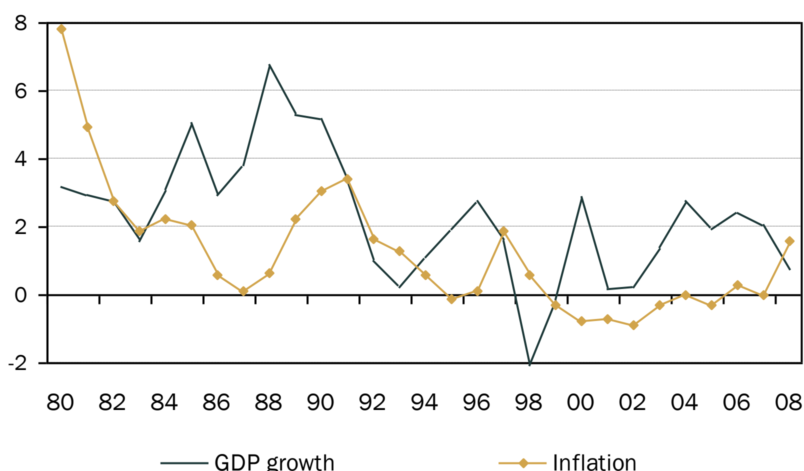
The blanket criticism that the BoJ was too slow to raise rates when the economy was clearly growing above its potential rate fails to recognise that Japan, at the time, was trying to co-ordinate policy with other nations (principally the US and Germany) in an attempt to manage exchange rates. This was the time of the Plaza accord of 22 September 1985, which aimed at weakening the USD and then the Louvre Accord of 22 February 1987 which attempted to halt that weakening.

As a result of the Plaza Accord, central banks intervened in foreign exchange markets and sold USD. This policy proved successful and the USD fell. However, this also meant that the JPY strengthened. This affected Japan's exports and slowed growth. The BoJ attempted to offset this by lowering rates, pushing the ODR to a (then) historic low of 2.5%. Interestingly, the ODR was set at this level on the day immediately after the signing of the Louvre Accord. As a result, it could be argued that Japan was fulfilling its commitment to help strengthen the USD by lowering its own interest rates and weakening the JPY.

Some in Japan still have bitter memories of this period and the attempts at policy co-ordination. There is a school of thought that the US is largely responsible for the subsequent rise in asset prices that occurred in 1988 and 1989[1]. It also helps to explain the apparently tough stance adopted by the BoJ to reign in inflation during 1990/1991 after the failure of international policy co-ordination.

It should also be remembered that the 1990-1992 period, when the Nikkei fell from 39,000 to 17,000 was also influenced by the fall of the Berlin Wall, the first Gulf War, the start of a US recession and the beginnings of the Savings and Loans crisis in the US. Managing policy under these conditions would have been extremely tricky. Claims of BoJ incompetence could be judged as unfairly harsh.

Japan GDP growth and inflation (annual average %)



Source: IMF.

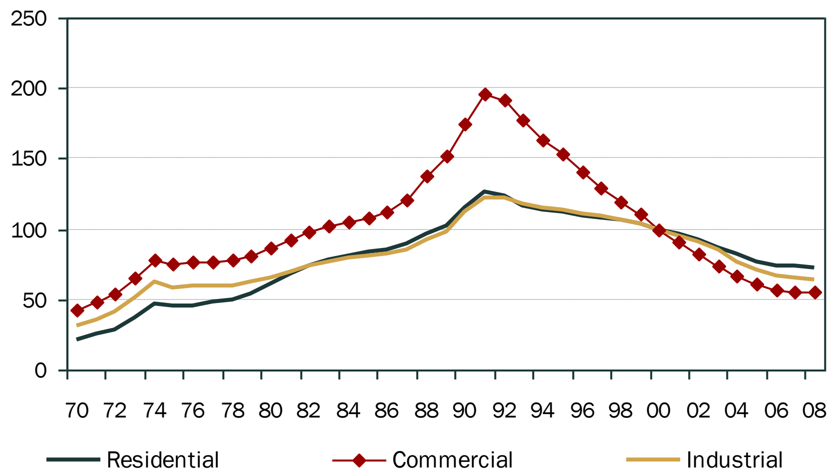
There is a case to make that the BoJ and policy makers in Japan were aware of the increase in asset prices (land included) but felt they could do little about it as monetary policy was being directed towards achieving different goals (e.g. managing exchange rates) rather than containing inflation and restricting fast rates of credit growth. Once again, we see parallels with recent experience as there has been criticism that central banks have targeted inflation without paying sufficient attention to rising asset prices.

The rise and fall of property in Japan

The discussion above focuses on the equity market alone but a critical part of the asset price story in Japan concerns the real estate market. Once again, we can hear echoes in the current financial turmoil.

[1] A useful discussion of some aspects of this argument can be seen in Chapter 9 (especially page 271) of the book “Changing Fortunes” published in 1992 and authored by Paul Volcker and Toyoo Gyohten.

Nationwide and prices in Japan (2000 = 100)

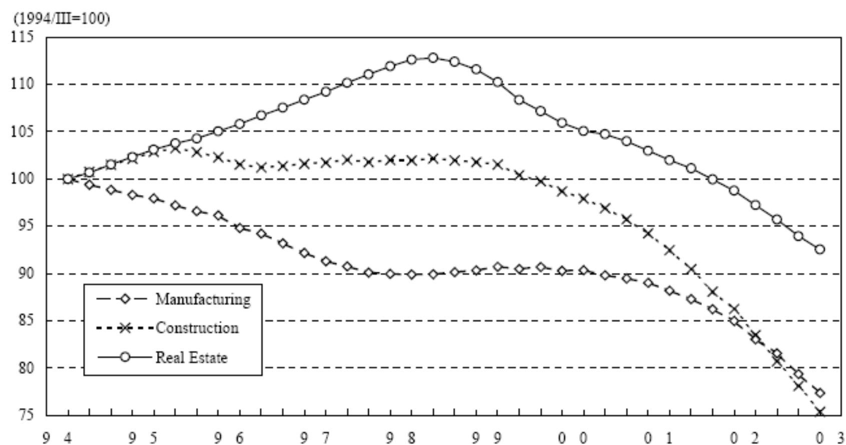


Source: MIAC.

With monetary policy being slack, credit growth in Japan could accelerate. This found its way into property prices and they rose to truly dizzy heights. Slack money and rising credit would be sufficient to explain the rise in property prices but the increase was also fuelled by tax distortions and financial deregulation. The net effect was that, not only did bank lending increase (the bank lending to GDP ratio increased from 70% in the late 1980s to 108% by 1990) but it became more focussed on real estate[2]. The share of the manufacturing sector in loan portfolios declined from 25% in 1977 to less than 15% by the end of the 1980s. Meanwhile, loans to real estate and financing companies rose sharply. This is demonstrated in the chart below.

[2] A further discussion of this with details of the tax and deregulation aspects can be seen in "Financial Supervision in the Lost Decade" by Mitsuhiro Fukao, President, Japan Center for Economic Research, June 11, 2007 (mimeo). Also aspects of this are covered in "Asset Price Bubble in Japan in the 1980s: Lessons for Financial and Macroeconomic Stability" by Shigenori Shiratsuka, Bank of Japan Institute for Monetary and Economic Studies discussion paper 2003-E-15.

Bank loans outstanding by industry – Japan



Source: BoJ IMES discussion paper 2003-E-15.

Higher interest rates clearly played a role in weakening property prices but we should also remember that growth was slowing throughout 1991 to 1993. (the annual rates of growth were 3.4% in 1991, 1.0% in 1992 and 0.2% in 1993). Property prices fell, not only because rates increased but because growth collapsed.

This would be bad enough. But conditions became much worse. Over the late 1980s, banks not only lent heavily to the real estate sector but regularly used property as collateral for other loans. Slow growth and higher interest rates weakened property prices and increased bad loans. Banks tried to hide, understate or defer their losses associated with these bad loans in the hope that property prices would rebound.

It would be easy (and understandable) to say that this poor accounting for bad loans was outright fraud. However, the situation was made more complicated by the web of cross shareholding between corporations in Japan (*keiretsu*) and the close relationship Japanese banks had with the companies they lent money to (the "convoy system" of banking relationships). The ownership structures were confusing and interlinked and the product of a finance system and culture that had developed in Japan as the economy built itself up from the total devastation of the Second World War.[3] It should also be remembered that organised crime syndicates were very active in many real estate transactions. This muddied the water further as reformers, whistleblowers and conscientious accountants and regulators faced more than financial difficulties in raising concerns about the quality of balance sheets.

In the parlance of micro and regulatory economics, there were serious principal agent and information asymmetry issues in Japan which led to a breakdown in incentives to reveal the full extent of the losses involved. In effect, there was collective inaction rather than specific incompetence.

The situation with bad loans was made even worse due to the way in which the Jusens were bailed out. The Jusens (i.e. home loan corporations often financed by money from small agricultural credit unions) were found to have extended their loan portfolios from ordinary mortgage lending into more risky real estate loans. As property prices fell, they were highly

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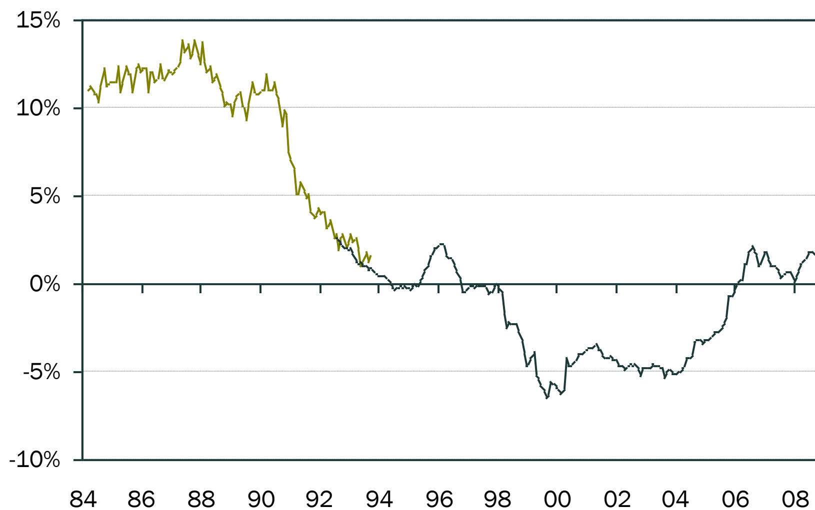
[3] Some interesting colour and perspective on this can be seen in "Saving the Sun" by Gillian Tett, 2003.

exposed and at risk of failure. They were rescued in 1991 with the injection of Y680 billion of public money but no Jusen officials were punished[4]. This was highly unpopular with the general populace and delayed the prospect of public money being used to support banks for some time. Eventually the Jusen were closed in 1995 with total write offs of Y6.4 trillion. The weight of bad debt weighed on the whole economy and credit creation dried up. We can see this in the graph below which shows the declining rate of loan growth by banks between 1990 and 1992. From there, loan growth largely remained negative until 2006 – basically 14 years.

Loan growth in Japan – annual %



Source: BoJ.

Conditions then got even worse as the government introduced a sales tax in 1997. This squeezed consumer spending and fortune dealt another cruel blow with the Asian currency and LTCM crises hitting in 1998. It was around this time that the “Japan premium” came into prominence. This was a situation where there was so much distrust about the solvency of banks in Japan that they had to pay higher rates to access funds than banks located outside Japan. This can be seen in the difference between LIBOR (London Interbank Offer Rate) and TIBOR (Tokyo Interbank Offer Rate). This is shown in the graph below. And once again, there is an eerie echo in today’s data with the reverse happening.

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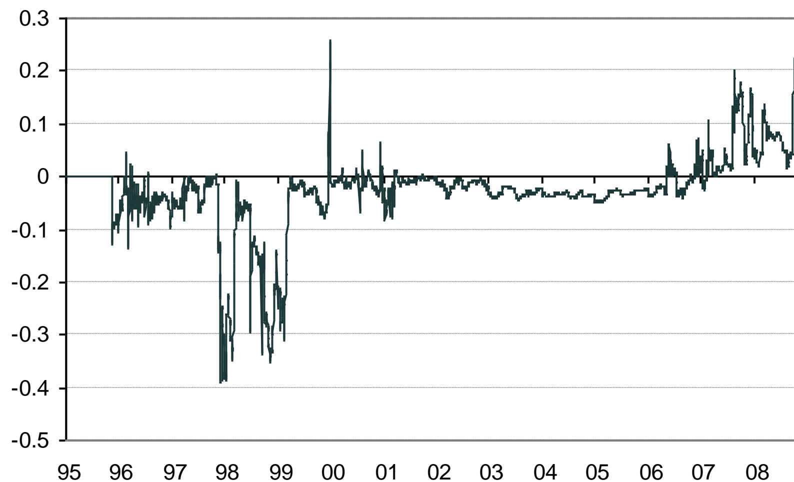
[4] A short and useful description of the Jusen failure and its relevance to the SIV situation in the current financial meltdown can be seen by Takeo Hoshi at the RGE Monitor website on http://www.rgemonitor.com/financemarkets-monitor/252605/jusen

Japan premium and its reversal: 3 month LIBOR minus TIBOR (basis points)



Source: Bloomberg.

The Japanese economy contracted by -2.0% in 1998 and -0.1% in 1999. The recovery in 2000 was short lived as the global technology industries collapsed in 2000/2001 and equity markets around the globe contracted until well in to 2003 and the unemployment rate increased to 5.3%. It is only since then that the economy and equity market have shown some life. According to the business cycle dating committee in Japan, the economy troughed in December 2002 and has been in a recovery phase since then. Recent data, however, shows that the economy has once again fallen into recession.

Similarities with the current turmoil in financial markets and implications for the future

The discussion above has already suggested some similarities between what happened in Japan and what is happening now. In this section, we shall be more explicit in noting the lessons from Japan and its implications for policy and markets.

(a) Delaying appropriate action is costly

One of the most stark lessons from Japan is that the delay in recognising the extent of the problems and attempting to hide them proved to be extremely costly.

It can be argued that this lesson has already been learnt. But not before time. When the credit crisis broke over a year ago, there was a desire avoid large scale public intervention and attempts were made to shore up liquidity in various markets rather than improve the capital base of institutions by providing the necessary funds. This has changed in recent months but the delay will prove costly. The milk has been spilt.

(b) Loan growth collapses

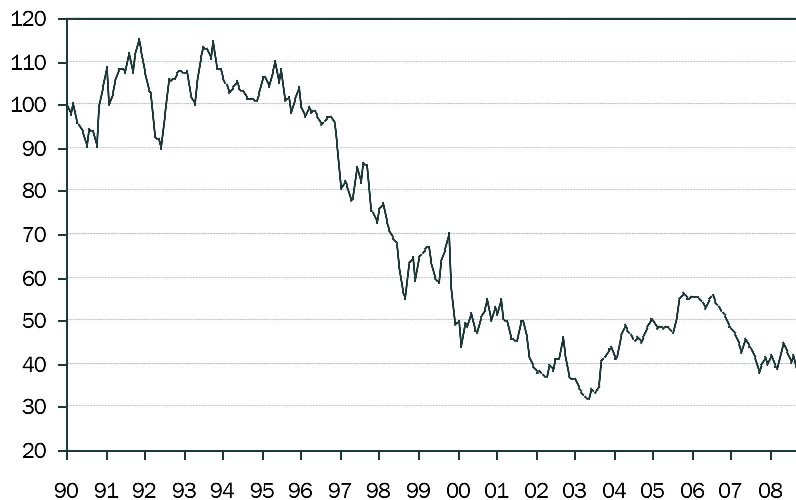
One of the clear lessons from Japan is that the losses incurred by banks and the destruction of their balance sheets will lead to a reduction in their ability to make new loans. This is hardly

surprising but it must be recognised that this appears to be inevitable – even if effective recapitalisation plans are put in place. [5]

This has important implications. Even appropriate policy actions designed to recapitalise banks through increasing their capital base will be associated with a shrinking of the finance sector.

One of the implications of the reduction in loans must be that the size of the banking sector in the economy is reduced. As a result, it is reasonable to assume that the banking sector will continue to underperform the market in general over the medium term. Even after the full extent of the problems started to be addressed from 1998 onwards, the banking sector in Japan under performed massively against the Topix. We should expect a similar development in Anglo Saxon markets going forward.

Bank sector relative to Topix (Jan 1990 = 100)



Source: Bloomberg.

It is also reasonable to argue that attempts by governments to stop this collapse in loan growth by mandating that a specific amount of loans are made by banks are bound to fail. In particular, attempts to stabilise the level or rate of growth in loans to specific sectors (such as to housing or small business) will either fail or lead to substantial withdrawal of loan facilities in non-designated categories (e.g. consumer finance, student loans and credit cards).

(c) Recession is inevitable and prolonged

It is now widely accepted that the US and Europe will suffer severe recessions. However, until recently, there were still some who argued that a recession could be avoided. However, what is widely misunderstood is that the duration of the recession is likely to be much longer than typical.

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[5]See the IMF's World Economic Outlook October 2008, page 152. The IMF notes that "Measures aimed at quickly improving the capital bases of financial institutions do not directly improve debtor capacity, but they make it easier to for banks to recognize losses and thereby facilitate corporate restructuring."

According to the business cycle dates in Japan, the economy was in contraction for 32 months between February 1991 and October 1993. The only period with a longer period of contraction is October 1977 to February 1980, in the aftermath of the second oil shock.

According to the US National Bureau of Economic Research (NBER) business cycle dates, the longest contraction period in the US in the post war era was 16 months (two periods of November 1973 to March 1975 (the first oil shock) and July 1981 to November 1982). If the Japan experience is anything to go by, then the period of slow growth that the US is about to experience will be prolonged.

This is important as there are likely to be optimistic views about the outlook for factors such as corporate earnings and employment built upon the experience of past recessions. However, if the experience of the other countries that have faced financial crises is any guide, the time taken to recover is much longer than usual. Indeed, the discussion above could understate the problem. The IMF's latest World Economic Outlook carries table (Table 4.4 page 149) in which it estimates that the average time taken for an economy to recover the output lost in a recession resulting from financial stress is 15.8 quarters – that is nearly four years

(d) Public sector budgets move deeply into deficit.

Once again this should not be surprising as the slowdown in activity will harm revenues and increase payments. However, even after adjustment for this, the cyclically adjusted budgetary position deteriorates rapidly. This is partly because funds must be diverted to support the banking system.

One of the features of the Japanese support of the banking system during the 1990s was the way in which stimulus packages were needed sequentially. The table below shows the packages enacted between 1993 and 2000 in Japan and their size relative to GDP. We already know that the US and UK governments have committed large sums to bailing out their banking systems. The lesson from Japan must be that, if more public funds are needed, they will be found.

Japan economic stimulus packages: 1992 - 2003

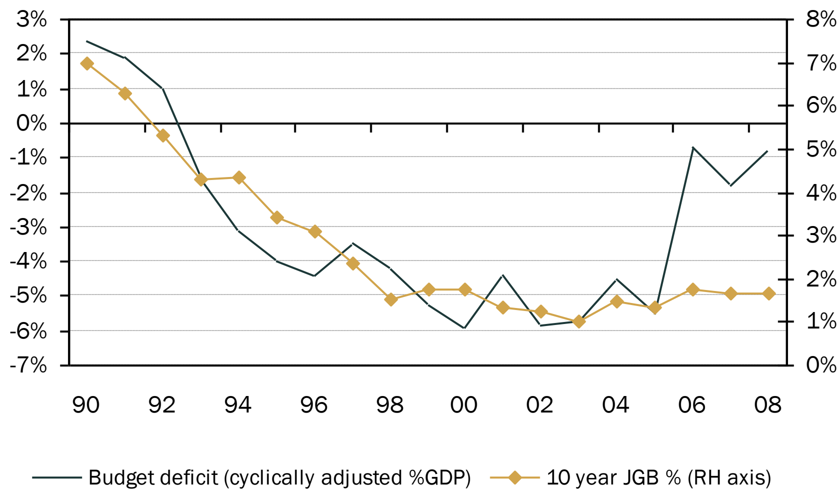
Date	JPY trillion	% GDP
April 1993	13.2	2.7%
September 1993	6.2	1.3%
February 1994	15.3	3.1%
September 1995	14.2	2.9%
April 1998	16.7	3.2%
November 1998	23.9	4.6%
November 1999	18.1	3.5%
November 2000	11.0	2.1%

Source: IMF

(e) Government bond markets rally.

This may seem incongruous with the deterioration in budget deficits but the expansion of Japan's cyclically adjusted budget deficit from a surplus of 2.3% of GDP in 1990 to a deficit of -5.9% in 2000 was associated with a fall in ten year bond yields from 7.0% to 1.7%.

Japan's budget deficit and bond yields



Source: OECD.

Essentially three factors come into play. First, the recessionary factors are more powerful than the budgetary effects. This will reduce inflation and make bonds attractive. Second, monetary policy will tend to be eased. This is partly due to standard macro reasons to offset the recession but there is also an argument that the central bank will want to keep the yield curve upward sloping in order to allow banks to refinance themselves by exploiting the difference between short and long term rates ("riding the yield curve"). Third, as banks withdraw from lending to the private sector, they substitute by lending to the government by purchasing government bonds. This also has the effect of improving their capital ratios as government bonds require less capital under BIS capital adequacy rules than loans to the private sector. In Japan, the share of total banks' assets bank accounted for by government bonds increased from 4% to 14% between 1999 and 2004 as the banks began their recapitalisation process. The increase in issuance by the government was accommodated by the increased demand for low risk assets by the banks. T

JGBs as a share of total bank assets

Source: Bank of Japan.

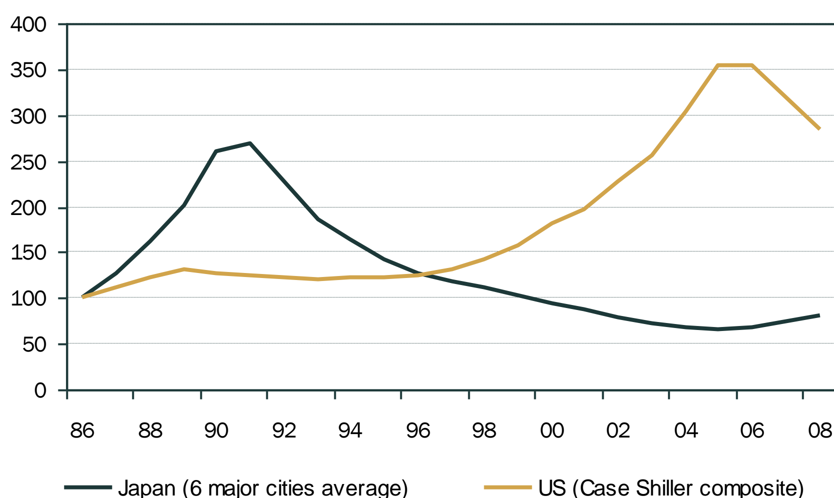
Valuations could still be stretched

There is an argument that the comparison between Japan and the collapse of its equity market and the current situation in the US and Europe is misleading. This is largely because the Japanese equity market entered its collapse in 1990 from a position of extreme overvaluation with a PE ratio of 75. This is clearly different from the situation in the US and Europe when the current crisis began. PE ratios in major Anglo Saxon markets were then well below 20. More detailed calculations using cyclically adjusted PE ratios and Q calculations also suggest that the equity market in the US is undervalued. As a result, there is an argument that we should not expect a repeat of the cataclysmic developments that were seen in Japan during the 1990s. Indeed, even the latest evaluation of conditions in the US (and other countries around the world) made by the IMF shows that conditions in financial markets are not as extended as they were in Japan in 1990.[6]

It could also be argued that equity markets in the US and elsewhere have already fallen to reflect the coming recession but this has little truck with the macro outlook. Growth is still set to disappoint and remain weak for a prolonged time. As a result, there is still the prospect of disappointment in corporate earnings, employment, wages, loan growth and budgetary positions for much longer than many are prepared to admit. Although equity markets in the US and Europe have fallen by around 40% over the past year, it should be remembered that the Nikkei fell by 39% in 1990. This did not stop it falling by another 29% over the next two years.

There is also one area where it could be argued that valuations have not yet adjusted. This is housing. The graph below gives a representation of this. It plots the average land price index for the 6 major cities in Japan (this covers commercial, industrial and residential land) against the US Case-Shiller composite index. The indices have been reset so that 1986 equals 100. Looking simply at the price indices, there is a case to argue that there is still plenty of room for house prices to adjust downward further in the US. This does not mean that house and property prices in the US are going to copy the Japanese experience but the similarities in the rise in real estate prices gives one pause for thought.

Comparison of Japanese and US property prices (1986 = 100)



Source: MIAC and S&P.

[6] See IMF World Economic Outlook, October 2008, table 4.4.

Even if we can make the case that equity markets across the world are not as over valued as they were in Japan in the 1990s, there is still a good case to argue that house prices in the US (and arguably elsewhere) have further to adjust. As much as the problems that afflict financial markets have been caused by instruments closely associated with residential property in the US, this suggests that other financial markets (apart from equities) have not yet fully adjusted.

Some concluding remarks

In the discussion of how Japan fell into the trap of the lost decade, the importance of global developments was outlined. There is no doubt that factors specific to Japan contributed greatly to the problems that Japan faced in the 1990s. However, in some ways, Japan was lucky. Its lost decade was spent at a time when the global economy was recovering from recession. As a result, there was an opportunity for exports to grow.

Today, the situation is different. The problems in financial markets are global rather than local. As a result, the chances of any one country finding solace in exports are slim. Furthermore, the chances of “beggar my neighbour” exchange rate depreciations and protectionist moves must have increased.

Investing in this environment will necessarily be biased towards the safety of government bond markets. However, for those that must take exposure to equities, several recommendations can be made.

First, given that capital will remain in short supply for a long time, companies that have low debt levels and an ability to generate internal capital to fund future investment must be prized. Second, market capitalisation must be large enough to entice investors and guard against potential exposure to needing credit. One of the features of the Japanese economy over the past decade or more has been the way that small and medium sized companies have been consistently more pessimistic than large companies. Not only are they likely to be more reliant on banks for capital (both working and investment) but they are likely to be squeezed by larger companies because they are further down the supply chain. Finally, in a world where interest rates and returns are set to be low for a prolonged time, those that can maintain good dividend flows will be favoured.