

# UMAC

Macquarie University, Sydney Australia

「過ちて改めざるこれを過ちと言う」

*"The biggest error of all is to not learn from past mistakes"*

# Japan's Bubble Economy: Lessons Learnt.

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## Synopsis:

This paper attempts to understand the environment in which the Japanese economy was affected by rapid asset price inflation at the end of the 1980s. The underlying questions being addressed are:

### Questions being addressed:

1. Why did the Japanese economy encounter rapid asset price inflation ("bubble") and why didn't the managers of the economy attend to this condition?
2. What were the consequences of the creation and subsequent bursting of the bubble?
3. Recognising the circumstances and conditions that led to the creation of the bubble then what implications does this have for developing economies that have similar characteristics to that of the Japanese economy?

The structure of the paper delineates between macroeconomic and microeconomic issues. The general format of the paper is:

### Macroeconomic Issues:

- General Overview
- Fiscal Policy
- Monetary Policy

### Microeconomic Issues:

- General Overview
- Japan's "Iron Triangle" and Administrative Guidance
- Corporate Governance

After reviewing the reasons why a bubble was created the paper then proceeds to discuss the consequences of the bubble for Japan and also the implications that the Japanese bubble has for developing economies.

### Consequences of the bubble bursting

- General Overview
- Bad Loans Problem
- Confidence

### Implications of Japanese bubble for other economies

- General Overview
- Remedies

### Conclusions

The conclusion of the paper is that both the bubble and the resulting economic condition of Japan were not caused solely by macroeconomic factors. Specific structural factors evident in Japan's economy at the time such as the lack of credible corporate governance structures played a major role in allowing the bubble to continue growing unchecked.

## Introduction:

The history of the development of the Japanese economy is punctuated by many periods of internal and external instability. In observing the contemporary conditions of Japan's economy especially the bubble period it is important to understand how the modern Japanese economy has developed.

Dividing the history of Japan in to three parts: pre WWII, the WWII period and post WWII provides a good breakdown of the economy's development. However since this paper focuses on the post WWII period then it is not within the scope of this paper to review the developments prior to WWII even though there were many indirect 'carryover' factors between the three distinct eras.

At the end of WWII Japan was in ruins. The allies had extensively bombed the mainland island of *Honshu* destroying most of Japan's capital infrastructure that was previously being used for the war effort. According to Argy and Stien (1997) an estimated forty percent of Japan's total urban structures had been destroyed by the time that Japan had surrendered. This period of severe difficulty continued for sometime but gradually as General MacArthur and the occupational forces under his control attended to the welfare of the Japanese people the situation stabilized. Before the end of the US occupation in 1952 many structural reforms that positioned the Japanese economy for re-growth were undertaken. However it was the change in the world's political economy immediately following WWII that provided the economic inertia and infrastructure that enabled Japan to become the world's second largest economy in less than fifty years.

As the world recovered from the devastation of WWII the cold war had begun in earnest. The victory of the Reds over the Whites on Mainland China and the start of the Korean War in 1950 only served to fan the fears of the USA. In order to counter growing support for communism the USA used Japan along with South Korea and Taiwan to form a strategic barrier within the East Asia theatre. The US feared Japan was vulnerable to communism and took steps to counter this. The non-prosecution of the Emperor for war crimes and release of all right wing figures from jail enabled many elite persons affiliated with the WWII war effort to retake their positions in society post WWII without punishment. The release and return of right wing figures to senior positions within business, bureaucracy and government created the close relationship between those three bodies that provided the governance structures that Japan used to achieve rapid economic growth in the fifty years since WWII.

Without doubt the Korean War had significant immediate and future benefits for the development of the Japanese economy. Special procurements (SP) by the USA military such as orders for trucks, radios and other equipment needed for the US war effort on the Korean peninsular gave a significant injection of funds into the Japanese economy. As well as monetary gain the use of Japan as a "Workshop" for the Korean War effort imparted technical knowledge and created the required infrastructure that Japan would use to rapidly grow its economy thereafter.

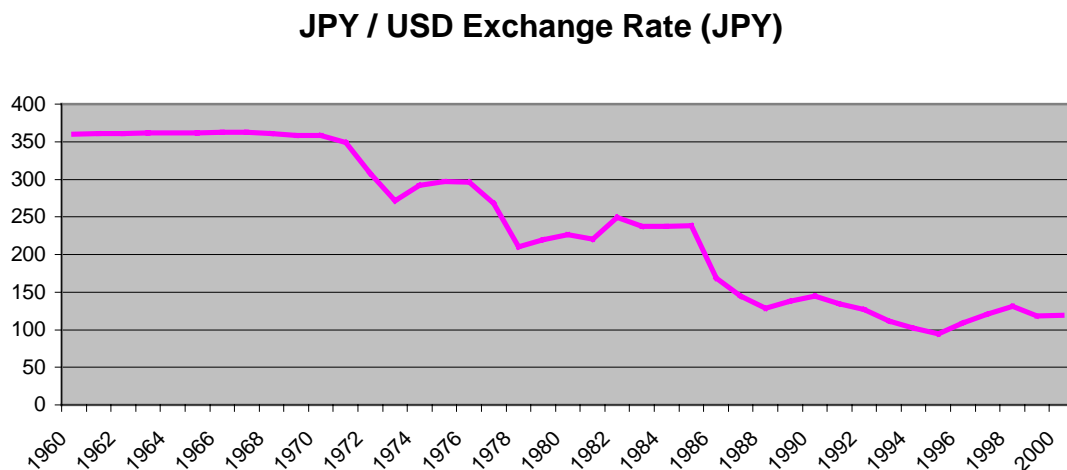
## The Macroeconomy of Japan

### *General Overview:*

Since the end of WWII Japan has experienced spectacular economic growth resulting in Japan becoming the second largest economy after the USA. The country has gone through many phases of development and is currently undergoing its most significant phase of transformation since the end of WWII.

In 1952 the departing occupational forces left behind a significant legacy of having redeveloped strategic industries within Japan. These industries were mainly heavy in nature such as steel and textiles. From this base of heavy industry Japan was able to export manufactured products that were very competitive with other nations products. This was mainly due to the exchange rate being maintained at the ¥360 level against the US dollar as determined by the Bretton Woods Agreement in 1948 until the Nixon Yen Shock<sup>1</sup> of the early 1970s. This is clearly evident in the graphic below, where the Yen (JPY) appreciated almost 20% in less than two years.

*Figure 1: Exchange Rate 1960-1999 (JPY)*

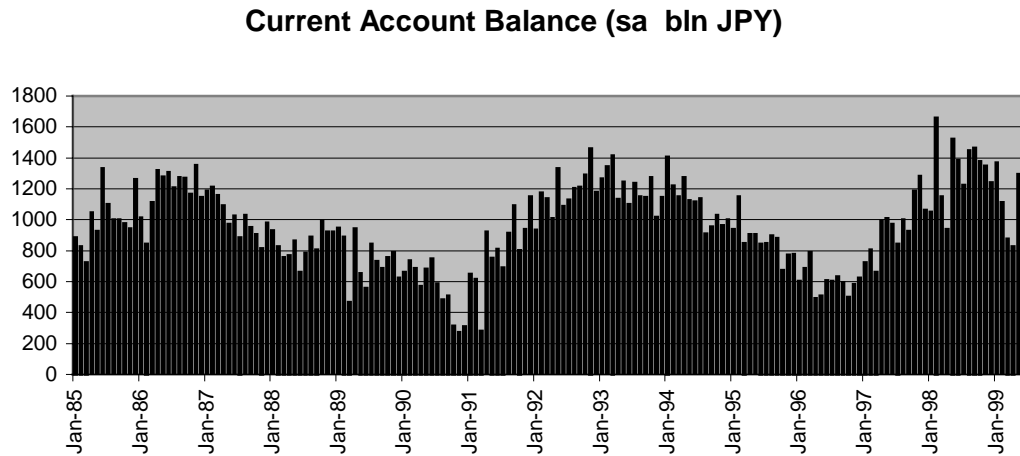


Source: OECD

Japan is relatively poor in terms of natural resources and therefore has relied on international trade in order to import primary inputs then transfer these into secondary goods that are then exported. Due to its reliance on external demand the exchange rate has traditionally been important to the growth of the Japanese economy and this is reflected in the current account balance which has since the mid 1960s been in surplus.

<sup>1</sup> In the early 70s the Bretton Woods system was under attack and speculative buying of the JPY and selling of the USD forced President Nixon to impose protectionist policies that eventually led to an agreed re-alignment of the exchange rate.

Figure 2: Current Account Balance 1985-1999



Source: OECD

Since the end of the ¥360 level there has been a consistent appreciation of the JPY that has forced Japanese industry to continue adapting in order to remain internationally competitive. Another shock to which Japanese industry has had to adapt to apart from the appreciating JPY was the oil shocks of the 70s and 80s. As was mentioned previously Japan is resource poor and when the crude oil price spiked, this had a significant appreciative<sup>2</sup> impact on the price of inputs to production. Since then Japanese industry has focused less on heavy manufacturing and turned towards more high-tech industries such as semi-conductors.

It should be noted that this adaptation to both the appreciation of the JPY and the restructuring in face of the oil shocks did not occur on their own. The Ministry of Finance, Ministry of International Trade and Industry (and other bureaucracies to a lesser extent) played a central role in coordinating<sup>3</sup> the transformation of Japan's economy from heavy 'sunset' industries into lighter 'sunrise' industries. The relationships between the bureaucracy, business and government will be discussed again at a later stage because although it was crucial in helping the economy adapt to changing circumstances in the past it will also be found to be one of the causes of the bursting of the bubble.

### ***Fiscal Policy:***

Traditionally the budget balance of government in Japan has made up a small proportion<sup>4</sup> of total GDP when compared to other countries like the USA. As Argy and Stien (1997) recognize Japan has been able to avoid spending in areas that aren't directly

<sup>2</sup> It should be noted that the price of oil in real terms has depreciated over the course of the last three decades and this has assisted Japan's economy.

<sup>3</sup> Some Authors downplay this coordinating role and say that officials only react to economic rent seeking opportunities.

<sup>4</sup> During the period 1988-90 Government Budget Balances operated in the range of 2 to 3% of GDP.

economically productive such as defence and welfare. When the government has spent it has often focused on construction spending as a means of fiscally stimulating the economy as well as being an effective method<sup>5</sup> of appeasing core constituents of the Liberal Democratic Party (LDP).

During the late 70s early 80s the Japanese economy was still recovering and restructuring as a result of the oil shocks of that era. In order to stimulate demand the government increased expenditure and ran consecutive budget deficits by issuing deficit Japanese Government Bonds (JGB). Once the economy had begun to show signs of adaptation and recovery the direction of fiscal policy took on a much more disciplined appearance. As the OECD (1987-88) noted, *"Major emphasis was placed on limiting the growth of government expenditure, which expanded in real terms by less than one percent per annum over the period 1980-1985."*

On the other hand the government was also able to improve its fiscal position through the 1980s by increasing taxation revenue. This was related to both the cyclical recovery from the oil shock recession and the creation of the bubble towards the end of the 1980s. Noguchi (1994) sort to clarify the use that the government put this increased supply of revenue to, *"The increased revenues were used mainly to cut back on the issue of deficit-financing bonds."* With relation to the implications of Japanese fiscal policy on the creation of the bubble Noguchi (1994) went on to say, *"This meant there were fewer such bonds available for financial institutions to invest in, forcing them to place more of their funds in loans (even as major corporations were borrowing less<sup>6</sup>), and thereby indirectly fueling speculative activity."*

Real estate was the biggest beneficiary of the changes in government fiscal policy and corporate finance techniques. According to the OECD the average price of residential land in Tokyo doubled in 1987. In the competitive lending market banks were keen to lend money for the speculative purchase of property. In their alacrity to find replacement markets for finance the banks lowered the quality of their creditors and in many cases property related loans were channeled through non-bank intermediaries to disguise this fact from the banks' shareholders and the public.

### ***Monetary Policy:***

As was mentioned in the previous section a central factor to the successful economic growth of Japan since the end of WWII has been the management of the exchange rate and the current account surplus. Monetary policy has focused on providing

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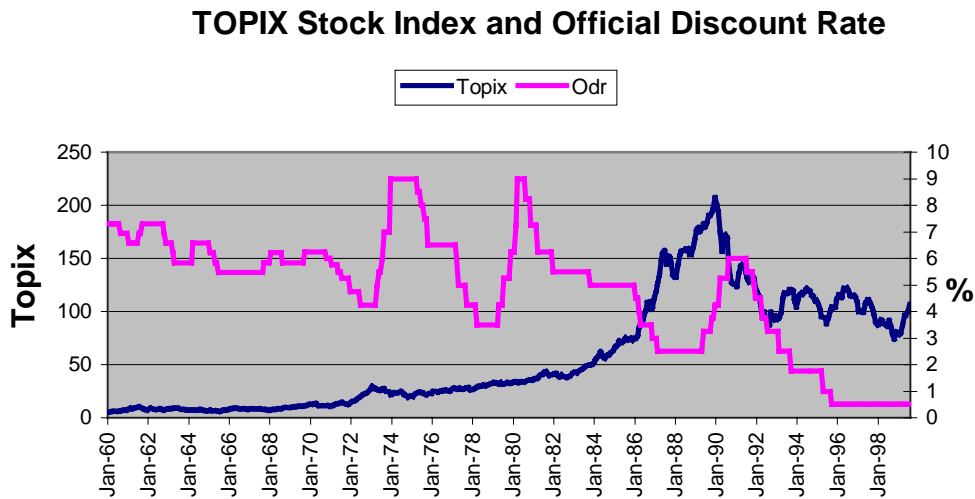
<sup>5</sup> Until 1973 the secondary budget of Japan (FLIP) did not need approval of the diet, therefore it was often used for politically motivated discretionary spending administered by MOF bureaucrats.

<sup>6</sup> As the stock market strengthened major corporations turned to equity linked fixed income debt as a cheap form of raising capital.

a stable investment environment by maintaining price stability<sup>7</sup> whilst encouraging economic growth by providing low interest rates. The 'easy money' policy of the Bank of Japan has been the key factor behind the management of the JPY and Japan's international competitiveness. Due to the incomplete pass through effect characteristics of the JPY the currency has in general been undervalued in recent times and although there has been a significant trend of appreciation over the last decades, increases in Japanese productivity has ensured the competitiveness of Japanese exports.

Monetary policy in the late 70s early 80s was severely influenced by the oil shock which led to periods of significant tightening in order to keep cost push inflation in check. After the contractionary stances had ended the official discount rate was lowered and remained at the 5% level until September 1985. The weak US dollar and the appreciating JPY led to the Plaza Accord in which Japan agreed to loosen its monetary policy. The Bank of Japan gradually reduced the official discount rate from 5% to 2.5% within the space of about 18 months. This move was partially successful in that it did slow the rate of appreciation of the JPY but undoubtedly such a pronounced cut in interest rates (50% reduction) over a relatively short period of time had huge implications for financial markets. This can be seen below in the marked inverse relationship between the TOPIX Tokyo Stock Price Index and the Bank of Japan's Official Discount Rate during the period 1987-90.

Figure 3: Relationship between ODR and TOPIX



Source: OECD

The unfortunate events of September 1987 caused havoc in the world's financial markets with the Dow Jones Industrial Average losing 11% of its value in a single session, becoming infamously dubbed as 'Black Monday'. At the time the BOJ was said

<sup>7</sup> The BOJ is recognized as being extremely sensitive to possible general price inflationary pressures hence its current policy neutral stance despite pressure from MOF to lower rates further in order to defend the JPY

by many commentators including Noguchi (1994), to have been considering a tightening move but because of the ensuing instability caused by 'Black Monday' this was put on hold. Whether or not the BOJ truly intended to tighten monetary policy if 'Black Monday' had not occurred in retrospect will never be known. But it is fair to place a question mark around the degree of influence that the MOF<sup>8</sup> representative on the BOJ policy board had at the time.

This extended period of almost two years where the ODR remained at the 2.5% level provided an ideal environment in which credit and speculative investment grew radically. This combined with the competitive environment in which Japanese banks were operating further added to the ambivalence with which banks assessed loan applications.

The effect of the extended easy money policy in an environment where asset prices (especially real estate prices) were already diverging from 'fair value' only served to inflate the bubble further and worsen the shock to the economy upon the bursting of the bubble. A question is: If Japan had such low interest rates for so long then why didn't general price inflation (to which the BOJ is sensitive) appear? If CPI inflation had increased during this period the BOJ would have had a definite mandate to enforce a tightening stance before it was too late. In retrospect it was unfortunate that general CPI inflation didn't appear and this was because:

**Reasons for CPI Stability:**

- Low cost of imported goods and inputs due to the appreciation of JPY
- Wage claim restraint by labour unions
- Decline in real oil prices

## The Microeconomy of Japan

### *General Overview:*

The key to Japan's economic success has been its ability to use information flows to the advantage of business. Although in other economies there exists a defined independence between bureaucracy, business and government, in Japan the relationships between these arms of the economy are much closer. This has served to lower the information costs<sup>9</sup> to business in Japan which when combined with the coordinating efforts of various bureaucratic bodies such as MOF and MITI has led to very effective microeconomic management.

Such a close relationship between business and the bureaucracy has in turn led to the bureaucracy being 'captured' by Japanese business. Entrenched practices such as *Amakudari* and other ethically questionable arrangements between business and

<sup>8</sup> The MOF has traditionally (and is currently) pressured the BOJ to maintain a loose stance in order to protect the JPY and in turn to protect Japanese exporters.

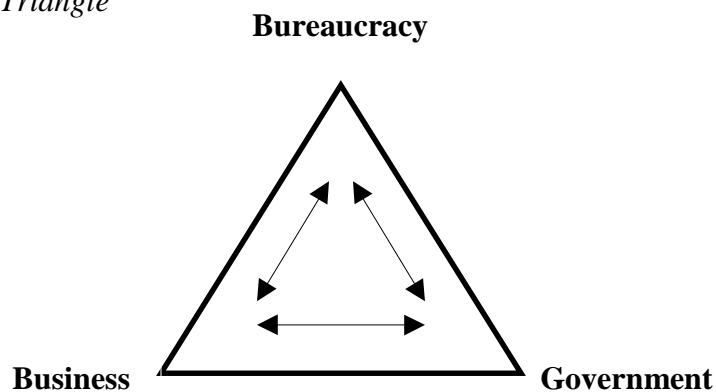
<sup>9</sup> Also lowering business risk and ensuring some level of equality of success between competitors

bureaucrats provide significant incentives for officials to 'understand' the interests of business as is commented by Miyamoto (1995).

The conflict of interest that is created by having incentives for a 'monitor' not to monitor effectively leads to a moral hazard that can cause significant structural damage to the business and social environment. Without a doubt the uniquely close relationship held between the bureaucracy, government and business has been a central factor in giving direction to the economy that has not been as evident in many other developed nations. Episodes such as the Plan for Doubling GDP, Nixon Yen Shock and the Oil Shock are all examples where the Japanese economy used this centralized information coordination in order to reorganize the economy as efficiently as possible. However the true relationship between the three bodies: bureaucracy, government and business reveals a triangular chain of 'capture'.

### *Japan's 'Iron Triangle':*

*Figure 4: Japan's 'Iron Triangle'*



This diagram illustrates the chain relationship between the three bodies in question. It is interesting to note that in this illustration there is no representation of the Japanese public. This is because the public has not effectively structured their lobbying powers in order to secure their own interests. Without a doubt these three bodies above have their best interests served by serving each other. Bureaucrats can obtain power and benefits by serving business such that it redistributes economic rent to them. Government can maintain the support of the bureaucrats, which is necessary to for reelection by assisting the bureaucracy achieve its goals of helping business. By government helping the bureaucrats help business it is then in businesses best interest to support the current government and provide other incentives to the bureaucrats. In this way the government of Japan and the bureaucracy serves business first because the public have not effectively been able to provide government a large enough incentive to look after their interests directly. The public is only now realizing the cost of not participating and taking interest in the democratic process.

This relationship is crucial to understanding from a microeconomic perspective why the growth of the bubble was not stopped. Asset price inflation per se is not

uncommon in the economies of the world but when the institutions and underlying governance structures designed to arrest such divergences from 'fundamentals' are compromised then this will affect the authorities resolve to recognize and deal with the problem effectively.

It is ironic that the structure that enabled Japan to develop so rapidly is now the same structure that has become irrelevant within the context of the global economy and a handicap (quasi-tax) on the further development and maturation of the Japanese economy.

### ***Corporate Governance:***

The inadequacies of the underlying governance structures in Japan that explicitly prolonged the bubble are summarized as:

#### **Inadequate Governance Structures:**

- Structure of *Keiretsu* cross-ownership
- Lack of complete corporate code and reporting requirements
- Lack of adequate accounting standards
- Lack of independence of monitoring bodies
- Lack of credible punishment for violators

Recent examples of the failure of the Japanese corporate governance system to effectively 'police' and direct the actions of business are abundant. One poignant example that relates to the creation of the Bad Loans problem is that of the *MOF Tan* scandal. In the banking supervisory bureau of the MOF there were teams that was responsible for monitoring and liaising with individual banks. Within the banks there were individuals whose sole job was to deal with the MOF these people were known as *MOF Tan*.

During the bubble the banks had large amounts of under performing loans that had been concealed by accounting practices such as *Tobashi*<sup>10</sup>. To effectively conceal the bad loans the banks required the complicity of the monitoring officials. In return for lavish entertainment and direct bribes, MOF officials would let the *MOF Tan* know when they would be next visiting to inspect the accounts.

This is only one example of the overly close relationship that existed between business and the bureaucracy that gave rise to an ineffective corporate governance structure. This particular example is illustrative of how the bubble was tacitly allowed to grow by the authorities responsible for supervising irresponsible activity.

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<sup>10</sup> A practice of passing on bad loans to a subsidiary company that is not inspected by MOF

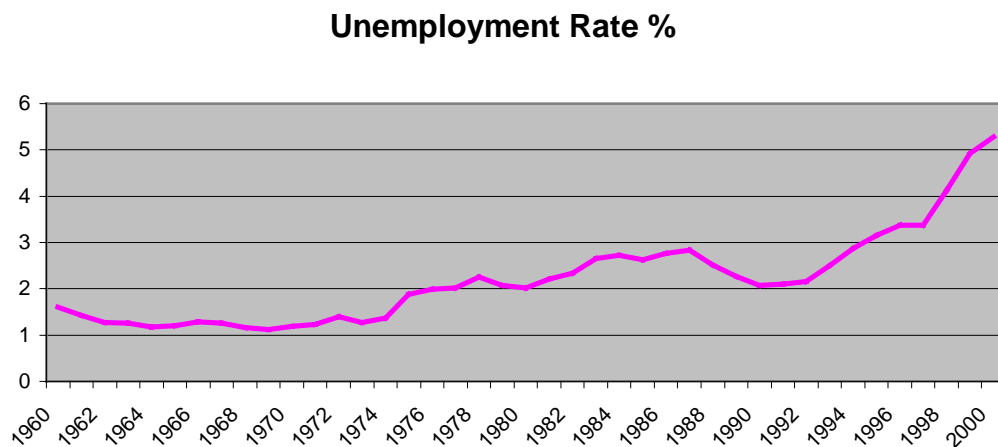
## Consequences of the Bubble

### *General Overview:*

As the BOJ realized that asset price growth, tight labour markets and a rise in the price of oil was overheating the economy the Official Discount Rate (ODR) was belatedly lifted from 2.5% to 6% in a series of interventions.

The resulting realignment of asset prices back towards 'fair value' caused many institutions and individuals to incur large losses from which they were unable to recover. Although the BOJ attempted to lower the volatility (i.e. soft landing) of the capital asset price readjustment on the economy by easing policy their attempts were in vain as the bubble had caused deep structural damage. As businesses went bankrupt and the economy stalled the labour market weakened significantly.

*Figure 5: Unemployment Rate of Japan 1960-99*



Source: OECD

Another effect on the economy was the repatriation of foreign investment in Japan that had taken place during the bubble. Imai (1997) referred to the 'hollowing out' of Tokyo as a global financial centre, in which foreign financial institutions found it too difficult and uneconomic to operate in the Japanese market. This affect of the bubble on the direction of foreign investment is evident in figure one.

The worst macro consequence for the Japanese economy was the inefficient allocation of resources created by artificially high prices of assets, as noted by Noguchi (1994). Firms that had property assets were able to leverage this significantly at the expense of firms and individuals who did not hold land. Most of this high leveraged borrowing was then invested in the equities market in anticipation of capital gains not revenue/dividend stream growth. This is why many investors in the stock market who had borrowed on the value of their property to do so faced repeated margin calls that only

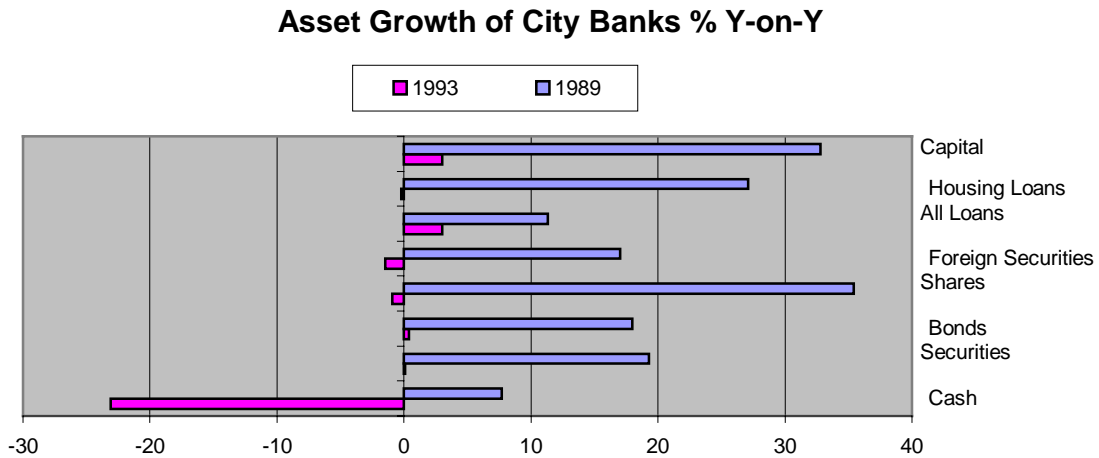
grew as the value of both the underlying leveraged property and the stock prices plummeted.

Speculative investment as described above came at the cost of non-investment in the further restructuring of Japanese 'sunset' industries into 'sunrise' industries<sup>11</sup> and therefore delayed the maturation and transformation of the entire economy that is only now starting to occur.

**Bad Loans Problem:**

Unfortunately by the time the BOJ realized that the economy was overheating the inflationary damage was already done and financial markets began to fall rapidly in conjunction with property prices. The lax lending practices of the banks that were under strong competitive pressure on many fronts whilst enjoying an environment of inadequate fiduciary supervision had finally come home to roost. The following figures show the amount of speculative lending the banks were undertaking at the height of the bubble compared to the resulting period of a recessive credit crunch.

Figure 6: Comparison of Asset Growth Rates for City Banks between 1989-93



Source: Ministry of Finance

There is a marked difference in the asset growth rates across all types. Overall the attitude of the financial institutions had changed from risk inclined to a much more conservative risk adverse stance. The OECD (1993) noted, "The surge in bad loans is undoubtedly the most important factor making the banks more prudent in their lending behavior." Previously Japanese authorities were criticized for ignoring the growth of

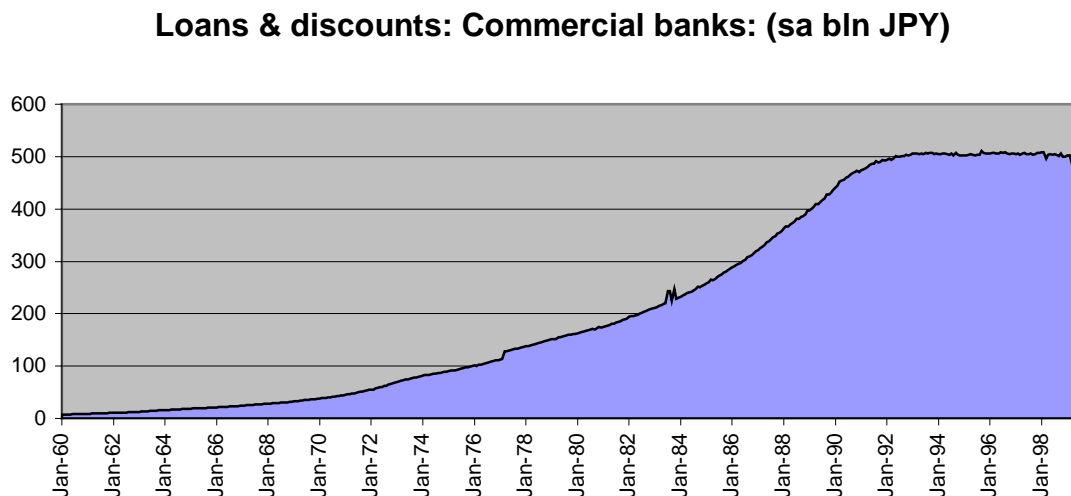
<sup>11</sup> This may go part of the way to explaining why Japanese companies missed the first stage of the personal computing and information technology revolution. The internal nature of Japanese corporations with regards to creativity and risk probably played a more significant role in this outcome however.

speculative loans that then turned bad. But it was not only the Japanese bureaucrats who benefited from bribes by allowing these practices (e.g. *MOF Tan*). Many foreign investment bankers specializing in financial engineering with derivatives profited greatly from Japanese institutions wanting to hide bad loans. Partnoy (1997) stated that while working for Morgan Stanley in Tokyo in 1992 he personally assisted a number of Japanese banks in hiding their bad loans with complex financial engineering. In support of Partnoy (1997), earlier this year Credit Suisse First Boston (Japan) temporarily lost their trading license for allegedly making bad loans "disappear" for Japanese banks in the early 90s.

As was described previously the bad loans were created when the banks lent funds for speculation in real estate and stock markets. As the price paid for the assets were severely overvalued when the bubble burst this left all bank debtors exposed to huge losses, the true total amount of which will probably be never known. As the debtors were unable to pay the rising financing costs of the loan they mostly declared bankrupt leaving the bank with the asset valued at significantly less than what had been lent to pay for it, thus giving rise to the creation of the bad loan problem.

The existence of bad loans on the balance sheets of Japanese financial institutions meant the banks had to reduce their amount of assets in order to alleviate pressure on their capital adequacy ratio (CAR). As well as reducing assets Japanese banks stopped lending funds because of the 'Japan Risk Premium' attributed to Japanese financial institutions by the world's financial markets. Other reasons included; strengthening their own balance sheets and to avoid more bad debts. Better known as a credit crunch it penalizes businesses that didn't speculate during the bubble for the wrongs of those who did speculate and lose.

Figure 7: Credit Growth 1960-99



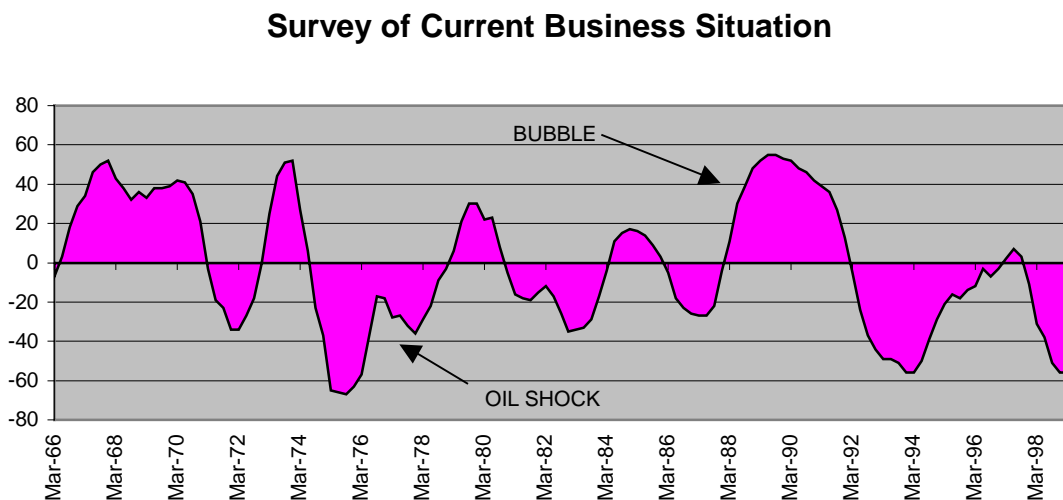
Source: OECD

The above figure is a particularly graphic example of what happened to bank lending after the bubble burst.

### ***Confidence:***

A more significant consequence of the bursting of the bubble, collapse of financial institutions<sup>12</sup> and credit crunch was the impact on the public's confidence in the market and authorities to provide a credible environment for economic contracting. The general public began to fear lower wages, retrenchment and bank failures. For this reason consumers stopped spending and stopped saving money with their banks. Confidence in the integrity of the economic system to provide consistent and credible outcomes is crucial. Once the Japanese public began losing confidence in the structures that were underlying their economy a vicious cycle began, in which non-confidence about future negative economic outcomes becomes self-fulfilling. As consumers spend less the economy contracts, businesses go bankrupt and the consumer's fears are confirmed.

Figure 8: Business Sentiment Survey 1966-97



Source: OECD

Reviewing the contemporary history of business sentiment in Japan then it is quite clear that the recession following the bubble was as significant as the oil shock recession of the 70s in terms of business confidence.

To counter this negative sentiment towards the underlying structure of the economy by the public, the government has continually attempted to stimulate consumption spending. Lately the expansionary fiscal policies seem to be taking effect but this only because it appears as though sections of the three points of the 'Iron Triangle' are genuinely trying to reform their modus operandi.

<sup>12</sup> Such as Hokkaido Takushoku Bank

In the long run the creation and bursting of the bubble may be healthy if it makes the Japanese public question the actions of the authorities and more fully participate in the democratic process.

## Implications of the bubble for other economies

### *General Overview:*

The Japanese experience of unchecked asset price inflation can serve as a useful lesson to countries on different levels that have a similar governance structures underlying their economic environment. Countries that have similar 'immature' governance structures are those that are still regarded as developing economies especially those from Asia such as; Indonesia, Thailand, Malaysia, Philippines, Taiwan, China and South Korea.

It is no coincidence that it was these countries currencies that were under attack during the Asian economic crisis in 1997. Although the crisis was directly related to the ineffective macroeconomic management of exchange rate systems in those countries there were also secondary factors found to be contributing such as over lending for speculative investment. Little consideration of debtor's credit risks was given when assessing applications for loans. Many of the nations in question had underdeveloped governance structures with similar flaws to that of Japan and that is why there was a similar inefficient allocation of resources arising from the Asian financial crisis of 1997. Only now are the economies of Asia restructuring and redefining the roles of authorities within the economy.

As a general observation it is interesting to see that economies like Hong Kong, Singapore and to a greater extent Australia - who were initially caught up in the negative sentiment against the region - rode the instability during and after the 1997 crisis better than the before mentioned nations mainly due to superior macroeconomic infrastructure but also due to the more credible governance structures in place in those countries.

### *Remedies:*

A bubble cannot be stopped from occurring as long as financial markets are not efficient (i.e. non-EMH). But a bubble can be stopped from bursting and causing significant long-term structural economic damage. For countries like Japan the main problem in rectifying their ability to effectively deal with bubbles and crises in general is the mentality of public servants. As was illustrated by the 'Iron Triangle' at no stage did the interests of the public get taken into account and this is the problem. Japanese public servants (despite their English name) tend to serve the interests of the industries and special interest groups by whom they are 'captured' instead of maintaining an 'arms length' independence and serving the interests of the public by whom they are employed.

Imai (1997) wrote specifically about reform of the Japanese financial system but many of his findings can be extended and applied to the broader economy. The policies of the Big Bang reforms are a good example of the kind of culture and philosophy that needs to be engendered into the Japanese bureaucracy if it is to better serve the interest of the public in the future. The objectives of such values include clear communication, credibility and international consistency. While the core values of the reforms include:

**Remedies:**

- Transparency
- Accountability
- Globalization

With relation to the implementation of monetary policy by the BOJ, although the bank has recently shown signs of becoming more independent there is concern over whether the independence of the BOJ is real (*honno*) or fake (*tatemae*)? Time will only tell. If Japan is to avoid further financial crisis in the future the BOJ needs to be given more official goal and instrument independence. By keeping within the spirit of the above stated values and becoming more independent the BOJ would gain significant credibility.

The change required of Japan and other similar economies to improve their internal governance structures is substantial. Partly cultural and partly philosophical the paradigm shift in thinking and work practices being asked of those who have benefited for so long from 'Iron Triangle' type relationships will only be achieved by providing incentives that induce change.

Underlying this is the will and interest of the public to hold politicians directly responsible for inadequate reform of governance structures. Without a participatory role played by the public in the democracy of the nation the relationships such as the 'Iron Triangle' will continue to exist. Alas change in Japan is something that takes a long time to arrange but once consensus is reached implementation is quick. Hopefully these changes are implemented before the next significant crisis.

## Conclusions

This paper outlines the background of the contemporary development of the Japanese economy. Looking at the events before the period of the bubble in Japan we gain an understanding of the context in which policy makers were operating. The most important findings of this paper are that asset price inflation occurs from time to time in economies due to the erroneous application of economic policy among other things. In order for a bubble to develop and then burst it requires a significant miscalculation by authorities. However it also requires a failure in the governance structures that are supposed to protect the economy from such harmful outcomes.

In conclusion the macroeconomic and microeconomic factors that contributed to the creation and bursting of the Japanese bubble are in broad terms:

**Macroeconomic factors:**

- Tight fiscal policy
- Easy Monetary policy
- Subdued general inflation

**Microeconomic factors:**

- Weak corporate governance structures
- Corrupt and unethical authorities

The consequences of the bubble and its bursting for the Japanese economy were:

**Consequences of the bubble:**

- Inefficient allocation of resources
- Delay of economic restructuring due to speculative investment
- Economic recession
- Bad loans & credit crunch
- Low consumer confidence

The implications and lessons that can be learnt from the creation and bursting of the Japanese bubble for developing economies are summarized as:

**Implications of the bubble for developing economies:**

- Need to improve macroeconomic infrastructure and management
- Need to focus on the 3 principles of Transparency, Accountability and Globalization in order to improve quality of governance structures

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