Japanese asset price bubble

MVE220 - Financial Risk

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This project is our own work and all members of the group have equally contributed to the assignment

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1. Introduction

From stratospheric real-estate and land prices, unregulated loan policies, and inadequate monetary strategies to a lost decade and economic turbulence. This paper will cover the highs and lows of the Japanese asset price bubble, its primary causes and what we can learn from it.

2. The beginning of the Japanese asset price bubble

To understand how the financial crisis in Japan began, the reader must gain some historical knowledge. After World War II, the reconstruction of Japan was funded by credit resources given to the big Japanese corporations. These corporations were owned by groups called *keiretsu*. Keiretsu are alliances, sort of a horizontal integrated corporate conglomerate, where the members own stocks in each other's companies. This was supposed to protect the companies from stock market fluctuations and takeover attempts. These networks were centered around a Japanese bank, which led to high-risk investments in corporate strategies due to the advantageous accessibility of capital.

In the late 1970s, the strong dollar helped to boost Japanese exports. For the big corporations the profits soared. As mentioned before, the reconstruction of Japan post World War II was funded by credit resources. This was still the case during the 1970s, when large Japanese corporations borrowed money from banks or insurance companies instead of raising capital from equities. Through these loans, the Ministry of Finance had the ability to control these Keiretsu-groups, to a certain extent. But because of the rising profits, the corporations saw that the heavy borrowings to finance their continued growth were unnecessary. This was a threat towards the Japanese banks as their biggest clients were the Keiretsu group. The Ministry of Finance felt as if they were losing the control they previously had over these alliances. To support the banks and once again gain credit control, the ministry switched to a policy that encouraged continued corporate borrowing. The policy was founded on the purpose to support the banks in Japan, rather than lend money to people or businesses for capital needs. This policy, established by the Ministry of Finance, also went by the name "cheap money". The policy encouraged Japanese banks to grant loans without any security or guarantor. This led to a spread in purchase activity by the borrower, as they did not have the need for an investment in their own operation. During this period of rising profits for the Japanese corporations, there came to be a U.S-Japan trade deficit where Japan had a large export surplus compared to the U.S. *(Power from the Ground Up: Japan's Land Bubble* (1990), Robert L.Cutts)

During the 1980s the Prime Minister of Japan Yasuhiro Nakasone formulated a new reconstruction plan. The plan aimed to boost domestic demand in Japan and gave the Japanese corporations and their leader indications that the government was planning for the future through intensive commercial and infrastructure development. (ibid)

2.1 Financial liberalization

In the early 1980s, there was an imbalance between the exchange rate of the U.S dollar and the Japanese Yen, due to the American 1980 recession. By the internationalization of the yen and the liberalization of financial and capital markets committee, founded by the U.S and Japanese government 1983, the restrictions in currency exchange decreased. This made it possible for the currency to be invested in and purchased freely outside Japan, which increased the demand on the Yen. During the same time period, the U.S demanded Japan to deregulate restrictions on financial and capital transactions, which later was implemented. (Wood 2005, *The Bubble Economy: Japan's Extraordinary Speculative Boom of the '80s and the Dramatic Bust of the '90s*)

In 1984, banks and general businesses had the ability to be involved in Japanese currency trading. Later the same year the restrictions on foreign funds were eliminated, which meant that a foreign fund could be converted to the same fund but in Japanese Yen without a fee. When most of the restrictions were eliminated or deregulated, the Japanese financial market started to trade internationally. This marked the start of the ensuing rapid appreciation of the Yen. (ibid)

2.2 The Plaza Accord

According to some, the asset pricing bubble that grew and eventually burst in Japan, was partly caused by the Plaza Accord. The accord was a joint-agreement between France, West Germany, Japan, the United Kingdom, and the United States signed in 1985 at the Plaza Hotel in New York City. The purpose of this accord was to depreciate the US dollar in relation to the currencies of all involved parties and to reduce the US trade deficit in relation to the countries with a large export surplus, such as Japan. (IMF, 2011)

In 1986, following the agreement, the Yen rose 46 percent against the US dollar. This put immense pressure on Japanese export prices which halted. Instead of giving up market shares, the Japanese corporations and their suppliers didn’t raise their prices and accepted the consequent losses. At the same time the companies couldn’t lower their production costs. As a consequence, both Japan’s export and GDP growth came to a halt, causing an economic recession, whilst the Yen continued to appreciate. This development called for a response from the authorities which prompted them to introduce sizable macroeconomic stimulus.

The Japanese Ministry of Finance responded with two actions. Firstly, after foreign pressure, they lowered the national interest rate to the lowest in the developed world, 1.375 %. Secondly, through deregulation and domestic stimulation, the Japanese economy was flooded with extra cash. (*Power from the Ground Up: Japan's Land Bubble* (1990), Robert L.Cutts)

2.3 Land, real estate and stock speculation

With the introduction of the "cheap money" policy, which encouraged the common man to loan capital for little to no interest rate from local banks, the speculations in real estates began to increase rapidly. The businesses who borrowed capital, did for the most part not need the capital for their own operations, as previously mentioned, which led to investments in real estates instead. Due to the financial liberalization this also led the way to a higher interest in investing in the stock market. During the 1980s the stock trading volume rose from 19% to 39% (*The Growth in the Japanese Stock Market, 1949-90 and Prospects for the Future,* Ziemba and Schwartz).

The low interest rates, generous loan policies and favorable taxing regulation on property and land that existed in Japan led to an increase in land speculation. Due to the optimistic and favorable climate, it made more sense for investors to speculate in land rather than investing their assets for a productive purpose, which further boosted the demand and caused property and land prices to increase sharply. At its peak in 1990, the total value of all Japanese property was estimated at $20 trillion, which at the time equaled 20 percent of the entire world's wealth, and about double the total value of the world's stock markets. (Malkiel, Burton G, 2020). The valuation of Japanese real estate and land was so outrageous that the estimated cash value of a single ward in Tokyo, namely the Chiyoda-ku ward, could suffice in purchasing the entirety of Canada. *(Power from the Ground Up: Japan's Land Bubble* (1990), Robert L.Cutts)

As an example taken from L.Cutts:

> "The office building you purchased for $400,000 a decade ago was now appraised at $1.5 million—and banks were calling you, offering to lend you 80% of that new value, $1.2 million, at 6% or less, for you to use in any business or investment you wish, including real estate and stock market speculation."

3. Peak, euphoria and subsequent burst

> "America is 25 times bigger than Japan in terms of physical acre-age, and yet Japan's property in 1990 was appraised to be worth five times as much as all American property. Theoretically, the Japanese could have bought all the property in America by selling off metropolitan Tokyo." -Malkiel

In the period between 1955-1990, the Japanese real estate experienced a 75-fold increase in value and the stock prices a 100-fold increase. Japanese stocks sold for more than 60 times price earnings whilst U.S and London equities sold for approximately 15 and 12 times earnings respectively, which left investors adhering to the firm-foundation theory flabbergasted. However, people who denied that this valuation was irrational could find a logical answer to any question posed to them, albeit by a probable confirmation bias or sheer euphoria (Malkiel, 2020).

> "Japanese earnings are understated relative to U.S. earnings because depreciation charges are overstated and earnings do not include the earnings of partially owned affiliated firms" - salespeople at Kabuto-cho

The quote above would be the explanation following the answer "No", when salespeople at Kabuto-cho were asked whether or not the Japanese stocks were overvalued. There was also the argument that the increasingly valuable land owned by Japanese companies (as a result of the speculative bubble) was not accurately reflected in the book value, hence, the valuations seemed more extreme than "what they really were" (Malkiel, 2020).

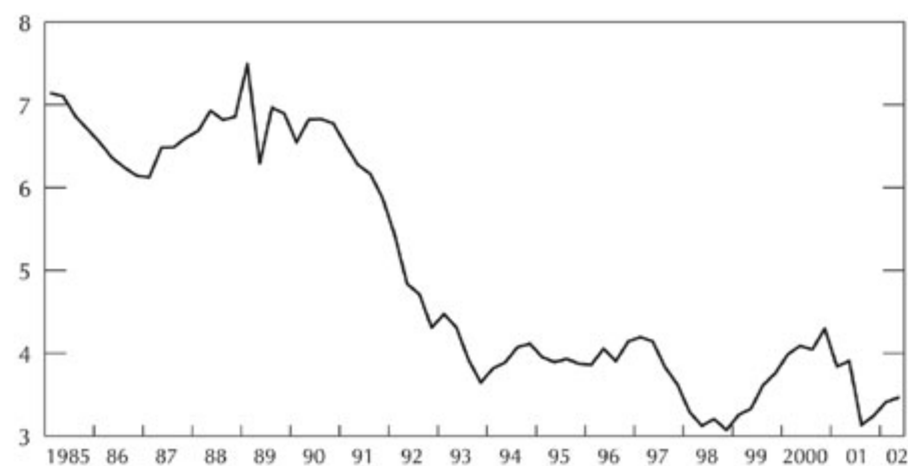
The declining profitability among Japanese businesses, an escalating difficulty in exports following the strong yen, and a general inflation brewing with a large borrowing frenzy led the Bank of Japan to finally restrict credits and raise interest rates with hopes to halt and "downward ease" the soaring real estate and stock market. Instead of a stagnation and slow decrease, the market collapsed. The Nikkei stock index which had reached a peak of almost 40 000 at the last trading days of 1980s suffered a 63% decline when it reached 14 309 mid august 1992 (Malkiel, 2020). For comparison, the Nikkei index is currently, as of April 2022, trading at levels around ~27 000.

4. The Lost Decade

During the bubble in Japan, the security for the loans and credits was in forms of real estates, which caused large consequences for banks when real estate prices collapsed. The keiretsu conglomerate had their bank assets consisting of shares in other firms from the same conglomerate, which led to a huge loss for the banks due to the structure of the banking system when share prices dropped. Credit institutions and banks had difficulties obtaining profitable objects to invest their assets in and some banks made enormous cash deposits into other banks, which caused a negative spiral. Authorities, like the Ministry of Finance, kept the policy of "cheap money" and allowed banks to continue lending companies' money, even when they were insolvent. This behaviour from the authorities proceeded into the early 2000s, which later became called "zombie-lending". (IMF, 2011)

After the bubble burst the average annual growth rate per capita was 0.5% between 1991-2000. Compared to the United States at 2.6%. The Total Factor of Productivity decreased from 2.4% 1983-1991 to an average of 0.2% between 1991-2000 (Hayashi & Prescott). The Lost Decade refers to the decrease of Japanese GDP over the period 1990-2000. The Japanese GDP in 2017 was only 2.6% higher than 20 years before, which eventually came to be known as *the lost 20 years* (Quinn, 2020). And according to MLIT (2004);

> "Commercial, residential and industrial land prices dropped 15.2%, 17.9%, and 13.1%, respectively."



Return on assets. Source: Ministry of Finance

5. In hindsight; lessons for the future

Could Japan and the Ministry of Finance have foreseen and prevented this economic crisis?

From financial crises that have occured before and after the Japanese asset price bubble, one common denominator is the involvement of banks and the lack of security on loans. The cheap money policy, introduced by the Ministry of Finance, led to generous loan policies from Japanese banks with little to no security. As with the Financial Crisis 2008 with housing loans, the Dot-com bubble 2001 where banks transformed technology companies mortgages to shares in the same company, and even in the 18th-century with the South Sea Bubble where individuals were given loans backed by the South Sea Company's shares to buy more shares in the company are all examples of lending activities without proper credit check.

When the economy is driven by favorable stimulus with little regulation, risk management tends to be forgotten in the upward economic spiral. Even if the increased money in circulation can stimulate the economy in a positive way, the consequences can be detrimental when mishandled. Considering this, it will always be important for banking institutions to regulate and reevaluate their lending activities and approach these with caution.

5.1 Taylor's rule

Taylor's rule is a simple monetary policy rule named after the American economist John Taylor. The rule is used as guidance for how to conduct the monetary policy and tends to provide good results under normal economic circumstances. However, since it is a simple tool and somewhat dependent on the state of the economy, it can't always be expected to provide good results. According to the International Monetary Fund, when applying an implicit Taylor rule based on the output and inflation outlook, it can be suggested that the policy rate in Japan was up to 4% too low in the period of 1986-1988 (IMF, 2011).

The proper calculations are of course easier to compute in hindsight, but it goes to show that when assessing the current economic situation, outlooks and forecasts can contain hidden biases stemming from the current economic circumstances; which can skew results.

Therefore, a prudent and objective approach is required in every assessment so that the results reflect reality as closely as possible.

5.2 Macroeconomic & Ministry of Finance

As the financial liberalization began, the Yen was spent both by Japanese citizens and other peoples over the border. This, in a combination with decreasing regulations in the financial market, led to a currency appreciation. According to Robert L. Cutts, Reviewer at Harvard Business, the complex macroeconomic politics, and in Japan's case with decreasing regulations and Plaza Accord, implies an uncertainty and imbalance in the economic structure. This macroeconomic situation in Japan, before and during the crisis, could have been hindered, had the right precautions been taken. For example, in hindsight, the Plaza Accord, in coherence with the other financial liberalization actions that were taken, might have pushed the appreciation of the Yen too far. Therefore, when signing joint agreements with a large number of parties, one should prioritize and analyze one's own benefit or risks in the agreement.

Furthermore, the actions taken by the Ministry of Finance in their desire to maintain their credit control over the Keiretsu groups were enforced with little consideration to other aspects regarding the stability of the financial system. Later, this led to an even further currency appreciation due to the higher trading volume of the Yen. Even when the Ministry of Finance started to comprehend that the high price of the Yen damaged the Japanese industry, they kept the "cheap money" policy. The actions taken at a later stage were delayed and did not stop the so-called Lost Decade.

Appendix

Further Reading

For those that are interested to learn more about the subject, the reader is referred to;

- *Japan's Lost Decade: Policies for Economic Revival* written by Tim Callen.

Although not a credible source in the sense of referencing in a report, Wikipedia-pages often provide the reader with basic knowledge about the subject. Following links might be of interest;

Japanese asset price bubble - https://en.wikipedia.org/wiki/Japanese_asset_price_bubble
Plaza Accord - https://en.wikipedia.org/wiki/Plaza_Accord
Lost Decades - https://en.wikipedia.org/wiki/Lost_Decades

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