

Notes of a Hypothesis

What Caused the Bubble?

(Mainly in the Real Estate Market)

“Memories of a Bubble in Japan”

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We should not repeat a bubble.

(Price-hike > Burst > Bad debts > Financial crisis > Economic slump > Increase of national debt)

We need a circumstance in which we can notice a bubble before the danger line.

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Japan's real estate appraisal was born out of the self-examination of severe land price-hikes which occurred after the mid 1950s. US appraisal, which Japan used as a reference, was born in 1930s from the self-examination of the Great Depression. Both were born from the recognition that something unfavorable exists in the opposite side of the rational thinking, since the opposite side had caused a lot of social maladies.

(Ex.: In Japan) There were difficulties in forming market values. For example, value factors were complex, the market was not transparent, prices were including individual conditions in many cases, the sellers/buyers were not well-informed, etc. etc. Japan's law, at now, prohibits speculative land transactions, but the original state was that speculative transactions frequently troubled us. They often put supply and demand out of balance, spread, gave birth to unused lands, and disturbed public projects.

So, the Japanese real estate appraisal standards require us, real estate appraisers, to submit an opinion of the adequate price which indicates the market value.

On the other hand, the original state (the opposite of the rational thinking) had not been fully examined scientifically. This lack is diluting our memories which must be communicated to our posterities.

Akerlof and Shiller say, “It is necessary to incorporate ‘animal spirit’ into macroeconomic theory in order to know how the economy really works.”

I looked back at the Japan's bubble from the viewpoint of ‘animal spirit’. I realized an important fact which lies in the things which we do not notice in our everyday life. It is too natural for us to be aware of.

(Notes)

1. The word 'lives' in this document means 'organisms or all living things/systems including us'.
2. The word 'herd/swarm' in this document includes 'herd, flock, pack, school, swarm, cluster, etc.'
3. Arrows '→' in Japanese are substituted by '>' in this document.

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[Features of the demands motivated by inflationary expectations]

(Japan in the latter half of 1980s)

(Note: The demands motivated by inflationary expectations include not only the 'purchase for resale', but all demands motivated by future price rise.)

(Hereinafter referred to as 'this demand')

The marriage value of the land sharking frequently had been explained that it is not a normal market value. But, without notice, people had started to say, "The land price is rising!" A feeling of 'first come, first served' spread. An atmosphere in which 'one can not sit still' also diffused.

Amplifications occurred, that is, 'rent > price > land price', land sharkings, and rushes.

(Amplifiers)

In central Tokyo,

where rumors had spread that 'coming globalization would bring an office shortage',

'foreign companies would lease offices at high rents',

where office vacancy rate fell below 1%,

animal spirits started to rush up a mountain that was called a bubble afterward.

(Note: Marriage-value/Plottage-value)

It is an increment created by assembling small adjacent parcels into a larger, more useful one.

Example: There are 5 small houses. Their market values amount to Y100,000,000.

But, the assembled land can be sold at Y500,000,000 for a site of an office building.

(Note: Land sharking)

It is 'Jiage' in Japanese. Japan's post war history started from burnt fields.

Many small houses/buildings crowdedly existed in central commercial areas.

It was an act to ask a realtor/builder to buy/assemble small lands to construct a large building.

On one hand, as the inflationary expectations spread, 'this demand' also spread. It increases whole demand for real estate in a particular area.

On the other hand, whole supply decreases for a while, because sellers' inflationary expectations appear, that is, 'waiting brings more gain'.

This mechanism stirs up the buyers' mind. Land price rises excessively since it could not be supplied soon.

Investors often recall in hindsight that 'this demand' do not like to take a risk for an accrued gain, whereas they tend to take a risk for an accrued loss. They incline to sell earlier to fix the gain, while they tend to be unwilling to sell it when it has an unrealized loss. At last, they are liable to sell it in the bottom.

... Fear is stronger than greed. ...

Mortgages amplified speculations (leverage).

"Since Ginza soared by three times, XX will, at least, double!" (Note: Ginza is a major commercial area in Tokyo.)

Such expectations generated a view that 3 equity + 7 mortgage = 20 resale price, so 3 equity will swell up to 13. (An amplifier)

Some companies used it to offset their deficit which had accumulated after the second oil crisis. Land price-hikes which occurred in some limited areas started to spread.

... Note: Above events occurred under high mortgage interest rates within 7-8%, in 1984-85. ...

Example: Kanda (1983), Nihombashi (1983), Kachidoki (1985), Moto-azabu (1985)

Compare: Ayase (1986)

When banks furiously expand lending, the money tends to flow into speculations. (Mortgage's interest rate was higher than the yield from the excess money, that is, excess saving amount.) (An amplifier)

Interest rate started to decline in 1986, responding to the sudden yen-hike after the Plaza Accord. Low interest rate made it easy for banks to expand lending. At the same time, a moralless/fierce refinancing war occurred. (Note: Targets were other banks' fixed-rate loans. Debtors were also enthusiastic about it.)

In those days, 'domestic demand expansion' had become a governmental policy. But, to improve sales performance, it could not increase lending so rapidly/largely. Whereas, 'this demand' could increase loans rapidly/largely thanks to a synergy of a boom of 'money management technique'.

The overseers move without watching the field. Persons in the field move without watching the whole pictures. Additional interest rate reduction was noticed. Report was required as to loan promotion. Needless mortgages increased. High target figures exhausted the persons in the field. A strong emotion of unfairness swelled up. They started 'Loan Creations' in many ways. Overseers

also started it. (Note: When occasion demands, banks can create loans by themselves. They had tried every way. But, needless to say, it does not continue forever.)

No one noticed that 'while a few people do it, it will result in a good deed, whereas, while many people do it, it will result in a bad deed'. Morals, professional ethics, even conscience had disappeared without their noticing it, I heard.

"Borrow! Borrow money! Borrow money from our bank!"

"We were thirsty for loans!"

"We were starved of borrowers!"

... In this way, the upward spiral was fueled. ...

A strong emotion of haste appeared. "It will become impossible to buy a land." (An amplifier) An emotion of shortage was amplified. Feelings of scarcity/status for glamour lands were intensified. Their prices started to skyrocket as if they were flying to the moon. Besides, people started to buy steep slopes, remnant lands, leased lands, and lands which front to no street. (Note: Under Japanese laws, these lands are usually not popular.)

Everyone had forgotten that someone would pay for it from his/her earnings. No one had feared that high economic growth could not continue eternally.

... Kaguya-hime phenomenon (literally meaning 'Glowing Princess' that is Japanese old tale). ...

... Love is blind. She who loves an ugly man thinks him handsome. ...

Serious impacts of the price-hikes against the 'actual present demand' became a political issue. They were the first home buyers who could not buy homes even if they would work hard for the rest of their lives. Their affordability depended basically on the down payment, income, repayment-to-income ratio, interest rate, loan systems, and far/near, high/cheap, small/large. (As to US bubble, they were the subprime borrowers. They became victims of predatory loans.)

The bubble, at last, bursts. It contains, in itself, factors which crash it. For example, an end of the boom, end users' ability to pay, additional supply, adjustment of long term supply-demand, etc. etc.

In Japan, in its last phase, sales slumps appeared in some areas. But, the decisive factor was the fact that it became a political issue. The most important event was the government regulation on the total loans for real estate.

... The danger zone was difficult for us to notice in advance. ...

... Many factors were rapping it. ...

... Ex.: Purchases for resale. Second home buyers. Mitigations of laws and taxes. etc. etc. ...

Then, the days of enthusiasm finished and the era of post bubble settlement started. Still, there were persons who persisted that 'Land price is falling now, but it will rise again' or 'XX area is special, so it will not fall further'. These stories added more losses to the people who believed them.
... Thoughts tend to last, even if the events finish....

Banks' above reactions had spread like the 'diffusion of innovations theory'. Finally, banks' major bankruptcies occurred in the late majorities. Banks which did not get on the boom survived as a AAA rating. The spotlights played on such news, later.

... Actions which arise as expecting a tragedy sometimes result a larger tragedy. ...
... Lives provide themselves a diversity to preserve their lives. ...

'This demand' decreased when prices began to fall. At last, when hard conditions arrived, their properties were given up. They increased the supply. As a wave had been large, exhaustions also became large.

Mountains of bad debts and BIS required capital/asset ratio began to put pressure on banks. The banks which had been extremely active to lend, suddenly changed to be unwilling to lend. This change amplified the economic turndown further.

(Foreclosure sales): Banks' confidentiality/secret decreases the number of prospective buyers of the mortgaged properties. It also increases risks of the properties, that is, the risks come from the unknown-content itself. Even so, banks keep confidential, because the damages which may be caused by rumors would be more harmful for them. Even more, there occurred piles of quick sales and public auctions. Furthermore, there appeared deteriorations of properties, market slowdown, and too many properties for the actual present demand to buy them. To make matters worse, they got in the way of transactions of other usual properties, etc. etc.

... Price falls excessively. ...

'This demand' reacts to the factors different from those of the actual present demand, that is, the expectations of future gain.

(An inflationary expectation has a mechanism which stimulates price-hikes): That expectation generates a view that 3 equity + 7 mortgage = 20 resale price. It tends to lead to purchase prices at 12, 13, 15, since there still remains a future gain. Look! It produced a 50% price-hike. The price had risen since the buyer bought it to hoard it. Moreover, other buyers who heard of it also repeat 'It will rise, so I want it.' Demands come from the future one after another.

... We need to incorporate the humans into the investment theory. ...

... The premise, that the conclusion will not deviate from a prospect terribly, has burst! ...

‘This demand’, fueled by the excess money, sometimes recklessly rushes while breaking the floor and ceiling of the real estate market of actual economy.

In the bubble era, ‘this demand’ had been working as an amplifier, not as a stabilizer, within the floor and ceiling of the actual economy.

Banks’ fierce lending also worked as an amplifier. “They lent umbrellas on fine days, and took them back on rainy days.” (This phrase was quoted from a Japanese TV drama ‘Hagetaka’ which literally means ‘Vulture’).

Since ‘this demand’ pushed up the price and the banks sustained it with lending, the real estate price moved like the stock price. It moved from optimism, to enthusiasm, to mania, to collapse, and to pessimism.

.....

[Not to repeat it again]

< Key factors of the bubble occurrence (my observations) >

(Japan)

Key factors: Speculations, Excess money, Fierce (sometimes predatory) lending, Catalyst of low interest rate, Land myth, etc.

Notes: The low interest rate should be divided into two functions. One is a function that increases property values generally. Another is a function that low interest rate, together with its background, catalyzes human actions.

A Bubble is a phenomenon in which the latter accelerate the price-hike that exceeds the value increased by the former.

It is insufficient to explain the bubble only by the decline of the long-term prime rate from 8% to 5%. It is important to explain why such massive investments with excessive expectations occurred, and why banks sustained them.

There had been some important preceding factors: 1. Japan's trade surplus increased. 2. Large companies turned to be reluctant to borrow from banks. 3. Foreign pressures started to deregulate the financial systems. 4. Then, sudden yen-hike occurred after the Plaza Accord in 1985.

Banks began to fear that the loan-to-deposit ratio might decline. Coming financial deregulations would increase cost. Excess-money turned into banks' top issues. Excess-money had been invested into foreign bonds in which banks could get proper returns. But it became a poisoned apple under the ultra yen-hike. Banks did not have suitable domestic investment choices for them.

Fears escalated that banks without enough loan balance could not survive the coming financial deregulations. A sense of impending crisis led banks to start fierce lending. Lend more! Lend more!

Lending amount considerably returned to the savings balance. In addition, trade surplus, income growth, and other factors that increased yen also came into the savings balance. Lend more! Lend more! (Repeat this paragraph 8 times.)

Note: If every bank begins this repeating, this cycle becomes a vicious spiral. But, if some bank does not do it, its loan-to-deposit ratio will decline. So, it starts the same action.

On the other hand, another spiral was circulating. Land prices rose. Sooner investors got higher gains. Collateral values upped. They became able to borrow more. They started to seek properties in other areas where land prices had not risen yet. Inflationary expectations spread further. (Repeat)

In those days, most Japanese people had a strong sense of 'land myth'. It was created in a long continued high economic growth. The trend of land price was like below:

Initial salary was Y10,000, 30 years ago. Land price was Y10,000 per tsubo, then.

Initial salary is Y130,000, 30 years later. Land price is Y1,300,000 per tsubo, now.

(Note: 1 tsubo is around 3.3 square meters.)

A sense of being in a high economic growth lingered on in the times of stable economic growth.

Note: Overconfidence which arose from continued successes might have sublimed to a myth.

Even in a mini-bubble period (2006-2007), some realtors said that there was a land myth.

The money supply increased, but, the price index was stable. The excess money would have been gathered around the land/stock market, swelled by rotary pumps of fierce lending and speculations.

Note: Under the sudden yen-hike, investments for foreign bonds decreased, and even selling/withdrawal occurred. On the other hand, in order to encourage businesses which suffered a recession caused by the yen-hike, Government started fiscal stimulus and BOJ lowered interest rate. These policies swelled the excess money further.

Note: 'Credit creation' x 'Few transactions create price levels' = Excess money which would be smaller than our imaginations led to a huge aggregate amount of land prices far beyond our imaginations.

(USA)

After the Asian financial crisis (1997-98), world excess money accelerated to flow into the USA. Rapid developments of emerging countries produced a huge trade surplus. Baby boomers in advanced nations came close to the pension age. Rapid progress of IT industry quickened settlements. It also increased the population of investors.

Stock-hikes occurred and burst. Then, investors, who got tired of the bearish stock market, shifted their investments into the housing market. Easy lending, low interest rate, and excessive home ownership promotion scheme encouraged it.

Note: Japan and China were large money suppliers. Where should the trade surplus flow into in order to stabilize the global economy? In Japan's bubble, yen-hike discouraged the trade surplus from returning to the importing countries. It played an important role in the bubble.

Note: Two factors are facing each other. That is, the 'Globalization, Pension, IT, and Financial engineering' vs. the 'Absence of the international government'. This situation looks as if bullet trains are running on an old railroad line, or, new medicines are sold without any pharmaceutical legislation.

< Difficulty in prior control >

We again become aware of the difficulty of controlling bubbles in advance. Rushes can not be stopped by a person's good behavior, since we are in a competitive market.

People said in hindsight, "If the effective regulations had been carried out earlier, later damages would not be so heavy like this." On the other hand, if a common understanding is not matured, the regulations will meet with a strong antipathy, since they are not carried out by the hand of God.

As for the interest rate policy, if it is only for a particular area or only for real estates, it would be quite difficult to be introduced, since other subjects will be coexisting (ex.: yen-hike or local recession). A real estate bubble tends to spread from area to area for some years.

In this global financial crisis, it is quite natural to tighten the financial regulations, since it is a measure for preventing the recurrence of the tragedy. However, from the long-term viewpoint, regulations tend to cling to conventional styles. Things are changing ceaselessly. In the course of time, a movement may occur to reform it, and may break everything, again.

Before the collapse starts, an enthusiasm/prosperity prevails in people's minds. Belatedly, a storm of blaming occurs. A political decision needs a long time to be made. Is it possible to decide a prior control in the times of enthusiasm?

Above all, this time, in the USA, the bubble burst came before people realized that they had been in a bubble. It was same also in Japan's bubble.

... Basic questions which lie in the bottom of the bubble phenomenon are:

... 1. Why we can not notice the bubble in it.

... 2. Why we repeat it when the generation/circumstances changed.

< We need one more stabilizer >

Besides all above controls/regulations, we need one more stabilizer not to rush recklessly. One reason why we can not be aware of a bubble in it is that it is caused by our instinctive activity which is too usual and too natural for us to be aware of.

From my viewpoint of animal spirit, speculative prices are moving like swarm intelligence. It contains structures below.

1. A herd behavior without any commands/controls.
2. A chain reaction which spread from the few to the many.
3. The emergence of a global behavior which is unknown to the individuals.

Few transactions precede. A few transactions form price levels. Assessments of all assets change. Pulled by a value (derives from market, cost, income, etc.), it does not diverge, does not converge, so fluctuates.

Real estates have a market in which a few transactions form price levels but far more properties are mortgaged. Its price fluctuations have a large impact on our economy.

We need an environment in which we can become aware of the coming bubble before we enter the danger zone. We need to follow up the inflationary expectations.

Also, there is another critical factor. We have a market in which excess money moves around the world. A pursuing of a short term gain tends to push up the price and to sell it before a price fall.

Excess money tends to become a pressure for a profitable investment. An expectation of future profit-decline may appear. Also, there may be expenses which can not be reduced soon, for example, personnel expenses, cost of supplies, and defined-benefit some thing. In addition, money illusion may appear, too.

From our savings or a shortage of proper borrowers, the pressure for high yield, and the high risk speculations arise. Ex.: Pension savers pressure a pension fund to earn more profit. The pension fund invests money to a financial institution that takes higher risks. The financial institution uses money in high risk speculations.

For the animal spirit, first of all, we need to present accurate information. If parents know that their high yield brings their children unaffordable house prices, they will not do such an investment.

< Example of a scheme of the stabilizer >

One can not register transactions without presenting a questionnaire. + Duty of confidentiality. The data is to be categorized and totalized rapidly with a computerized system corresponding to a spread speed of price-hikes. Then, we make a long term statistics by examining following items.

1. To know the place of outbreak and route of infection of the speculative price-hike. (by districts)
2. To obtain the number of supply and demand which came from the present, the number of demand which came from the future, and the number of supply which came from the past. (by districts)
3. To make a long-term statistics of agreed price and corresponding mortgage balance. (by districts)
4. To obtain cap-rates of the properties for rent and operational assets.
5. To obtain a force of infection, an average latent period of the inflationary expectation, and a rate of the persons who go into actions.
6. To simulate it like a typhoon or a new type of influenza. < Transparency of the market! >

< Comparison with a new type of influenza >

(In the old days)

1. The mechanism of a new type emergence was unknown.
2. The place of outbreak and the route of infection were unknown.
3. The force of infection and the average latent period was unknown.
4. Doctors diagnosed patients through an analysis of symptoms.
5. Doctors could nothing but to place patients into enforced isolations.

(Nowadays)

1. The mechanism of a new type emergence is proved.
2. The place of outbreak and the route of infection are detectable.
3. The force of infection and the average latent period can be compiled and analyzed.

A transition of the number of carriers can be simulated.

4. Doctors diagnose patients with test kits and MRI.
5. Doctors can treat patients with medicines.

We need a transparent market!