

International Transmissions of the Subprime Crisis

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Once upon a time, on the East side of the Pacific, there was Country A that was inhabited by grasshoppers; on the West side of the Pacific, there was Country B that was inhabited by ants.

Grasshoppers in Country A lived a high style of life because they had a secret cruse called “the cruse of Wall Street,” which was allegedly able to transform, by magic, risky real estate securities into a set of safe securities. They put into the cruse, papers that were contaminated with dirt, then received gilt-edged securities in return. The transformed, gilt-edged securities were labeled “subprime securities.” In this manner, grasshoppers could afford to enjoy presumptuous consumption beyond their means by borrowing from Country B.

On the other side, ants in Country B worked hard to leave estates to their off spring. They were so pressed to increase their savings that they even bought the securities produced by the magic financial engineering.

Suddenly, it was found out that the magic, of the Wall Street cruse was a fake. The processed securities, once appearing as gilt-edged turned out to be edged with dirt. Moreover, all those securities were labeled as AAA securities, and there was no way to distinguish securities that contained risky elements of default (landmines) and those that were free of

them.

What could grasshoppers do under these circumstances? And furthermore, what could ants do?

This describes, metaphorically, the current situation of the subprime crisis. In the United States, who for these purposes is the country of grasshoppers, the wealth they thought they possessed has disappeared suddenly. The loss in the value of their assets requires adjustment in consumption. The most probable adjustment to this decline in permanent income is to reduce consumption, and improve the current account balance of payments while reconstructing the financial system.

This change means that Country B, the ants, which may represent China or Japan, will also be seriously affected. If U.S. citizens suddenly reduce spending, then exports from China or Japan will substantially decrease. Through this process, China or Japan will share some of the burden that the U. S. economy imposed through the misperception of risks and returns in real estate loans. As in the case of Japan during her lost decade in the 1990s, the myth of ever rising real estate prices reinforced this misperception. Genuinely risky assets were regarded safe because of the ever rising real estate prices.

China and Japan have long accumulated their foreign assets in the form of dollar denominated securities. Because of the predetermined accumulation of the dollar denominated securities (some economists call “the original sin,”) whether appropriate or not, both the Chinese and the Japanese people have ended up in a capital loss situation. For example, China is reluctant to appreciate the Yuan, even if appreciating the Yuan is the right solution for coping with the inflationary pressure in China¹

¹ Two years ago, at this Forum, a deputy governor of the Bank of China was complaining about the inflationary situation. I was puzzled by the complaint because the Bank of China could revalue the Yuan. He has the right to complain, however, if he does not want to incur a capital loss accompanying the revaluation.

(conflicted virtue).

II. Volatile Asset Prices in the U.S. are Triggers for the World Turmoil.

It was difficult to blame other countries when Japan was in its lost decade during the 1990s. Some in Japan attributed the cause of deflation to low commodity prices exported from China and other countries, but that was wrong because Japan could choose more depreciated yen rates. The subprime, on the other hand, began in the United States, while the Japanese and Chinese systems were functioning normally. "Fundamentals in these neighboring countries were practically sound when the crisis started." This crisis is an imported crisis from the United States to Japan, China and other Asian nations. The malfunctioning of the United States markets, and the mishandling of the crisis by the U.S. government worsened the situation, and foreign trade partners now have to deal with the consequences of the U.S. turmoil. In the stock dimension, the center of the earthquake was in the United States, and its waves were immediately transmitted to foreign asset markets as well as to the currency market. The sudden disruptions in the asset markets in foreign countries caused declines in the flow dimension, such as their exports, output, and finally in the labor market.

Figure 1 traces the movements in the stock market index in the U.S., China (Shanghai), and Japan that begin around the time that those markets peaked before the subprime crisis deepened. They are measured in their currencies, but more important figures for international investors are movements in the stock index in terms of yen, as depicted in Figure 2. Because of the appreciation of the yen during this period, investments in the Tokyo market performed slightly better. In any case, the graphs indicate that those asset markets are strongly connected internationally, and investors lost a great deal wherever they invested.

Stock markets are aligned because capital can move freely around the world. This integration usually adds to the capability or dynamic efficiency in allocating consumption and investment around the world. On the other hand, huge capital movements are triggered by arbitrage possibilities with a very small margin of rate differentials, and the possibility of emerging bubbles becomes reality.

Therefore, the present difficulties were not so much caused by structural problems in their domestic markets as by triggers from the U.S. financial market. Price movements in the stock market (assets) are abrupt and extremely volatile, while those in the flow market are slow. Interactions of immediate movements in the market of stock variables and slow movements in the market of flow variables create interesting but serious problems of adjustments.

III. Scenes in the U.S. in the Center under the Subprime Crisis..

Let me compare the scenes in the United States where I regularly live, and the scenes in Japan where I occasionally stay.

First, securitization has advanced in the United States. In Japan, university teachers' pension funds do not invest in equities, but in the United States a part of pensions funds "college teachers' retirement fund (CREF)" invests in equities. Accordingly, as an aspiring retiree in a few years, I was informed that my wife watched the sudden reduction of my retirement capital when the total (fictitious) wealth of Lehman Brothers disappeared. The development of the subprime market had been beneficial to low income house holders. Moreover, it was believed that mixing and manipulating these risky loans by financial engineering could craft the derived assets with safer and much higher returns.

Second, worship on Wall Street remains strong. Many Yale students still favor applying to financial sector jobs. In spite of the fact that firms are to receive the government “help,” that is, Federal tax money, chief executives do not find it awkward to fly to Washington D.C. in private jets, nor do they consider it inappropriate to also pay large bonuses to executives. Those privileges are entitlements as well as rewards to winners of tournament competition. What a vastly different scene it is from the scene in Japan where chief executives bow deeply to tax payers as apology!

Third, President Obama has shown that a smart, serious and benevolent---at least in appearance---leader can change the whole nation. His governance and his posture to create hope among people give a sense of relief to the nation under this rare turbulence in the financial market.

IV: Scenes from Japan Where Fires Were Thrown from Abroad

In Japan, I feel comfortable to find that Japan is full of warm consideration for old, sick, and disabled people. On the other hand, because of this warm nature of the society, the policy discussions on the present crisis were super-imposed on the policy agenda for social objectives. The discussions are focused on how to use (in terms of flow variables) public expenditures on various social and economic objectives for citizens. They spring from good intentions, but would the present crisis, occurring once in 80 years, allow us to divert our attention from the crucial issues that are directly caused by the linkage to the international capital market?

The crux of financial turmoil is that the declines in asset prices incapacitated the real estate market, the credit market and the bank loan market. The proper functioning of the credit market, the bank loan market and the mortgage market all affect the nature of public goods, and disorders in these markets disturb

seriously the performance of total national economies. At this moment, policy makers should give priority to the emergency rescue policies developed against systemic destructions in those crucial markets rather than to the policies to improve economic structures and the welfare of people. One has to sharply distinguish between the emergency policies that should be immediately enacted to rescue the financial fiasco and those policies needed to improve the quality of people's lives in the immediate and long run. Of course, those immediate policies may have some side effects in the long run. Future generations may suffer from these emergency measures.

Monetary policy that directly works at asset markets may also have side effects that lead to inflation. In Japan, as well as in the United States, however, the economy is under deflation rather than under inflation, and, accordingly, the risk of inflation is not serious.

Government expenditures have problems, as economists studied in the wave of contradicting the naïve Keynesian prescription. Future generations may suffer because of the aggressive fiscal expansion. The unfortunate features of the present crisis necessitate the adoption of otherwise undesirable fiscal policies to warrant the survival of the system. We have to blink on the undesirable side effects of fiscal policies in order not to rock the boat we are all on.

In the United States, Japan, and probably in China, politicians are looking for votes and popular support. Therefore, it is the instinct of politicians to mix medium term policy goals in their political agenda with the device for handling the impending crisis. We always need policies that enhance the quality of life. In this current situation, however, it is imperative to save the credit system from immediate threat. After the system survives and revives, then it will be easier to achieve social and political goals and to achieve a more balanced government budget.

In the epicenter of the subprime crisis, the United States policy measures in almost all categories are attempted. Not only policies concerning the flows, that is, spending policies of the government but also various policies that act on the asset markets are put into place. In other words, both income maintenance policies in the flow markets and price maintenance policies in the asset markets are attempted. In Japan, the latter, asset-price oriented policies are relatively neglected, perhaps because of the ignorance of the politicians and the public about the nature of asset-price triggered crisis and about the relationship between asset markets and flows markets. They all limit attention to fiscal policies as a means of emergency measure and neglect the role of monetary and asset management policies.

The open market (buying) operation is the well known instrument for monetary expansion. Under the zero interest situation or the near zero interest situation, which prevailed in Japan for a substantial period, the conventional market operation lost its edge because government short-term securities are almost perfect substitutes for cash. This is the reason for the fact that unconventional policies were adopted to rescue the Japanese economy from the lost decade. For example, the Bank of Japan (BOJ) attempted to buy a certain amount of common stocks, and the Ministry of Finance (MOF) engaged in the huge exchange intervention, called the "Great Intervention" by John Taylor. In short, the Central Bank had to buy securities that have return-risk characteristics farther away from the return-risk characteristics of money.

If the BOJ purchases government bonds, then they should accordingly be medium term or long term government bonds. The BOJ takes a careful attitude concerning the widening of the targets of the open market operation. According to Governor Shirakawa, the BOJ should consult with the MOF because trading in long term and medium term government bonds, and particularly making swap operations, almost trespasses upon the

realm of debt management usually conducted by the MOF.

It is, however, solely the BOJ that can substantially influence the asset markets and support asset prices by private equities and currencies without reducing the supply of money. The MOF cannot engage in such operations without borrowing money from the BOJ or without raising tax revenues. Only the BOJ can engage in meaningful buying operations of equities and debentures.

Since unconventional operations beyond government securities may have side effects in terms of fairness,² and excessive liquidity, it is understandable that the BOJ tends to be conservative. If the central bankers' attitudes move from "careful and conservative" to "cowardly," however, we may not be able to rule out the situation that Japan's financial market is still in flames even though the fire in the epicenter, the United States, has been extinguished. Merely suggesting the buying operations in unconventional bonds and securities by the BOJ will help to bolster expectations such that the securities market may rebound soon..

V. Misunderstanding of the Nature of International Monetary Coordination under Flexible Exchange Rates

Here let me correct a common misunderstanding of the mechanism of "international monetary coordination." It is commonly believed that monetary expansion or interest rate reduction on the part of Japan helps the United State when the United States is suffering from recession and pursuing expansionary monetary policy. This, however, is completely wrong!

² For example, the question arises, for fairness, what company's equities or bonds should the central bank to purchase?

I hope you will agree with the following two propositions:

(1) A lower rate of interest in the home country normally depreciates the home currency, and in turn, appreciates the foreign currency.

(2) If inertia exists in wages and prices, then the appreciation of foreign currency will have an unfavorable effect upon employment and output in the foreign country.

The combination of these two conditions clearly implies that the United States will suffer when Japan adopts the policy of a lower interest rate or a monetary expansion. Leaders and central bankers (including Japanese) seem to be trapped in the fallacy that mutual reduction of interest rates is a beneficial policy coordination process. The truth exists on the contrary side.

For fiscal expansions, the conventional view is correct with regard to flexible rates. Fiscal expansion in the home country will help the foreign country in recession. This direction of channels is consistent with the perception in the Summit or in conventional journalism.

VI. Toward a Self-fulfilling Expectations for Economic Recovery

J. M. Keynes compared the stock market to a "beauty contest" where the prize will be given to the one who votes for the contestant who gathers the majority of votes. It is of no use to vote for a contestant who one considers most beautiful; he has to vote for the contestant that he regards will collect the largest number of votes.

It is easy to understand why this metaphor applies to the stock market. In a similar vein, an investor should, and will, invest in Wall Street when he thinks that others will be optimistic, and not because he himself is optimistic.

The asset market or asset markets, are the center of financial troubles now. In order to ignite recovery from asset markets, rosy pictures about the future should be visualized by investors. Then the win-win process of a self-fulfilling expectation will begin. President Obama, using the phrase originated by Franklin D. Roosevelt, “all we have to fear is fear itself,” as his political motto, is attempting to embed optimism in the psyche of the public rather successfully. Secretary of the Treasury, Geithner, on the other hand, takes a scholarly cautious view, attaching caveats to his policy statements. His more scientific style does not to create optimism.

Indeed, the values of papers coming out of the cruse were overestimated. It is, however, an exaggeration to regard them as totally value-less. Human nature tends to remember only recent memories and to neglect the long run real trend of the economy. Aren't investors now too pessimistic and forgetting about the treasure still hidden in the cruse?

A potentially hopeful, if not absolute, case is made by the low value of the Price Book Value Ratio (PBR or P/B) that is often contrasted by the Price Earnings Ratio (PER). The index of P/B is consistently low, about 0.7, in the Tokyo Part I Nikkei Index (See Figure 3). It has never been less than unity except in the beginning of 2003 when it was about 0.9 and then soon rebounded. *If* one can sell the components of a firm with book values and repay debt with book values, then one can make profits of close to 40%. Of course, this “if” is a big if. I admit that one cannot always sell paper or physical assets for book values during a recession. Still, this is currently an encouraging indicator for investors to purchase equities now. Investors who are too pessimistic will be left behind because the market may realize the potential gain that is behind the historic low PBR.

There are hopeful factors for the future of the stock market. First, since the asset markets plunged very suddenly due to the

near perfect degree of securitization in the U.S. market, we may hope that it recovers in a V-shape fashion, as opposed to Japan's lost decade when the recovery process took extremely long at least partly because of its loan dominated market.

Under the influence of the subprime crisis, many markets in stocks and many markets in flows are suffering. Theoretically, all the markets should be restored. If, for example, the stock market recovers, then the beneficial synergy effects will spill over to the currency market, the commodity market, the export-import market (flows), the output market, the labor market and finally the real estate market, completing the virtuous cycle.

Scholars' market forecasts are often unreliable. Irving Fisher who kept trust in the U.S. stock market during the Great Depression, recommended others to buy stocks, and himself invested a large amount of money. He was not popular among Yale administration because Yale had to support him in order to prevent him from losing his house through foreclosure.

Since I have no reputation value in the forecast of equity price, I would rather echo President Obama's optimism:

"We are apt to be impressed by the most recent events. Before the outset of the subprime crisis, we overestimated the wealth by counting non-existing wealth as existing wealth. Now we tend to underestimate our wealth. Low values of PBR clearly indicate this. We will see the light outside the tunnel ahead. Optimistic expectations of the public will certainly become a self-fulfilling prophesy. One of the most important qualifications of a political leader is that she or he can build up an atmosphere of optimism."

VI. Concluding Remarks: Where Does Macroeconomics Go Ahead?

As we have seen, this crisis emerged because of the discrepancy

between volatile asset prices and sluggish flow prices. A long time ago, Knut Wicksell studied the discrepancy between the market rate of interest and the equilibrium rate of interest. The former is the rate of interest set by monetary policy and the latter is, I may interpret, the interest rate consistent with the flow equilibrium. If the former is lower than the latter, the economy will start a cumulative process of inflation.

Keynes saw the world after the Great Depression as the world with sluggish price movements as opposed to Wicksell. Here, at the same time, the adjustment from asset prices, particularly interest rate to slow flow prices creates unemployment. (We have to superimpose the distinction between the nominal rate of interest and the real rate of interest recognized by Fisher, but we abstract from it here.)

Milton Friedman duly emphasized the nature of money as an asset, and James Tobin built a general equilibrium world of asset markets from where repercussions go over to the markets of flows. He compared the price of a unit of equity with the (unit) reproduction cost of the firm and called it "q." When Tobin's q is above unity, there is an incentive to invest in the firm. Like the case of Wicksell, the crucial attention was centered on the relationship, or the gap, between the asset price and the flow price.

The rational expectations revolution will long be remembered because of its remarkable achievement in rendering the expectation formation in a macro-model endogenous, or at least, model consistent. Macroeconomics, however, has developed in the direction that one pays little attention to the situation where people make systematic mistakes in assumptions--just as in the case of the subprime and its derived securities!

With the dominance of the Real Business Cycle (RBC) theory, macroeconomics is more and more concentrated on the study of

the world where frictions between stock prices and flow prices are minimized. The study is concentrated in macroeconomics where Tobin's q is automatically unity. Such a world is in opposition to what was observed in the subprime crisis and its aftermath. Presumably, the new Keynesian economics should be able to cope with this situation because it contains many Keynesian elements, such as price-wage inertia, limited rationality and others. But most of the New Keynesian models are strongly bound by the spell of the long run neutrality of money, the classical assumption, models often look like entities that try to deviate but return to the palm of the Buddha, a neoclassical god.

Can I expect the emergence of a new macroeconomics that emphasizes the disequilibrium process by itself, exhibits betrayed expectations, and discuss seriously the divergence between the asset prices and the flow prices? Or, after the storm, will the traditional school revive to glorify the flows market with some cosmetic surgery and dominate the academic scene?