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Bank of Japan

Dislocations in the Financial Sector: Challenges for Monetary Policy

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It is a tremendous pleasure to speak on the occasion of the 10th anniversary of the Banque centrale du Luxembourg by participating in this panel on "Growth and Productivity of the Financial Sector: Challenges for Monetary Policy." Coming here from Tokyo is not always easy, for it requires 14 to 15 hours' air travel and 8 hours' time difference. This time it was even harder for me because I had to make a detour via Sao Paulo, Brazil for G20 and BIS meetings before I arrived at Luxemburg Airport only a few hours ago. However, I am very happy to be here with you because I am surrounded by the best intellectual ambiance at this historic moment. Before I begin my remarks, allow me to express the usual disclaimer of a central banker, namely that I speak for myself this evening, and my comments do not necessarily reflect those of the Bank of Japan.

At present, every central banker around the world is busy with crisis management in his or her country's financial system. The financial turmoil that began on both sides of the Atlantic over a year ago now encompasses practically the entire globe. Several months ago Japan and emerging economies were believed to be relatively free from the impact of the turmoil, but not any longer. In these circumstances, we are still too busy to sit down and consider what went wrong in the financial system. An examination has of course been done with respect to regulatory policies, e.g., capital requirements of complex financial assets, use of credit ratings, and liquidity risk management, under the auspices of the Financial Stability Forum, of which I am a member together with the next speaker, Don Kohn. However, we have yet to begin a serious study of the role of monetary policy in both the creation and bursting of asset price bubbles. Today's topic of discussion, productivity of the financial sector, should be an integral part of the study of monetary policy amidst financial dislocations, both upwards and downwards.

Japan experienced an accumulation of the speculative bubble in the second half of the 1980s. Prices of a variety of assets went up at a ridiculous rate during this period: corporate stock, real estate, and art items, particularly paintings. Investments in these

assets were financed by borrowing, entailing a rapid rise in leverage in both the personal and corporate sectors. There are a number of similarities between this episode in Japan and the more recent episode of housing booms in the US and some European countries. In both episodes, optimism with respect to asset valuation overwhelmed the market.

Asset prices are of course determined in the market as a function of the net present value and variability of future cash-flows that the asset in question generates over time. The net present value is equivalent to the expected future incomes discounted by the asset holder's rate of time preference, which interacts with market interest rates. In broad terms, therefore, asset prices are determined by the expected earnings, expected interest rates, and their volatility. In the period of a booming bubble, the market becomes bullish over expected earnings and gullible about a number of explanations based on optimism, which in hindsight may prove to be wrong. In Japan during the 1980s, many hypotheses were believed to account for the rise in asset prices. For example, it was believed that Japanese manufacturers were so efficient and innovative as to be able to support rapid productivity gains, which would result in both stable prices at home and competitiveness of the Japanese corporate sector internationally. As a result, the Japanese yen would continue to appreciate, increasing its purchasing power. Investors naively believed that these benign conditions would last for a long time, i.e. high returns on investment, low interest rates, and low volatility. Twenty years later, the same set of conditions was believed to prevail, this time not in Japan, but in the United States, Europe, and many other parts of the world as well.

Important parts of this belief were in fact supported by experts' estimates for trend growth in productivity. I suspect that some of the participants in the seminar yesterday and today may have been involved in such exercises before and after the current financial turmoil began. No one in the economics profession would blame any one of you who might have concluded that trend growth shifted upwards in the past several years. A

standard application of econometric technique to productivity growth estimates for a number of industries, particularly the US financial services sector, would bear out such a conclusion.

Believe it or not, I was an economist in its strict sense when I was younger, and with more hair. In the early 1980s, I was assigned to a job at the Bank of Japan's Research and Statistics Department, to estimate the potential growth rate of Japan's economy. I worked so hard that I soon became a real expert in this field. Being carried away with the technical prowess I had acquired, I dared to ask my boss what figure he would like to get as an estimated potential growth rate for Japan's economy, and continued by saying that whatever figure he liked, I would be able to support his choice using my econometric techniques. Well, soon after I said this, I was sent to the BIS in Basel, Switzerland on secondment. Obviously I was too good to stay in Japan, or perhaps too bad to stay with my boss.

I don't mean to throw cold water on any serious econometric exercise, but I hope every honest economist agrees with me upon the sad reality that a point estimate for any economic variable in the most recent period is inherently elusive, even if that estimate is best unbiased. It is because these estimates are based on the assumption that nothing extraordinary is happening at this very moment. Even if you were an outlier like myself, what else could you set for a working assumption but no change in sample mean and variance? It is an unbiased assumption to think that tomorrow will be another today under normal circumstances.

It was not only econometricians but also policy makers who failed to address the excesses that have accumulated in our financial systems over a decade. Of course, there was a minority view a few years ago that bubbles were simmering here and there, and that these would eventually burst, inviting a debt deflation like the one witnessed in Japan in the

1990s and the early 2000s. With the benefit of hindsight, this view was only heard as a caveat, and not as an injunction to stop the bubbles. The traditional maxim of the central bank taking away the punch bowl just when the party gets going, did not play its proper role in preventing the situation from getting out of hand.

What went wrong? One popular view is that there are characteristics in the financial system which allow the human tendency to pro-cyclicality to grow, or that there are several features of the system that fuel pro-cyclical behavior, e.g., the incentives structure of the financial services industry, and regulations on bank capital and leverage. These are indeed correct arguments, and it would be nice if we could improve the financial system by introducing a mechanism to check that systemic pro-cyclicality.

However, this would not exonerate us central bankers. In this regard, the Bank of Japan has also had bitter experience. Monetary policy continued to be easy in the late 1980s, in spite of the bubbles in both stock and real estate markets. It did so because there was virtually no inflation threat in the economy. Although the Bank warned commercial banks about excessive lending in 1988, such verbal guidance was far from effective without monetary policy tightening. Something similar happened in the United States in the mid-2000s, when monetary policy was actually tightened, but only at a measured pace because there was no immediate inflation risk. I understand that there were also regulatory warnings given in this period, but their ineffectiveness was demonstrated unequivocally by the remark of one American commercial banker, who said that he would keep on dancing as long as the music was on.

Should we have stopped the music? A popular view then was that central banks should focus their attention on inflation, rather than getting confused about their objectives. It went on to say that you have only one tool of interest rate policy and therefore you can achieve only one goal. Chasing too many rabbits would leave you with no rabbits, so

don't set your sights on anything other than inflation risk. In recent years, an additional constraint has been applied to central banks in their endeavor to take asset bubbles and financial excesses into monetary policy consideration. I am speaking of inflation targeting, which has acquired the status of orthodoxy in monetary policy thinking in a number of countries.

Of course, none of the ECB, the Fed, and the Bank of Japan adopts formal inflation targeting. However, all our central banks are to some extent under the influence of the inflation targeting mentality. In fact, all these central banks publish inflation rate forecasts, as well as some kind of comfort zone for inflation rates, if not an actual inflation target per se. As long as inflation numbers carry a hefty weight in policy discussion, inflation tends to loom much larger than other risks.

At the same time, I know the ECB has two pillars on which it decides upon monetary policy actions, the first pillar being economic analysis of inflation, and the second monetary analysis. Likewise, the Bank of Japan has two perspectives on which it calibrates its monetary policy, the first perspective being analysis of the most likely course of the economy and its risks, while the second is unknowns with potentially large pay-offs but uncertain probabilities. At both central banks, however, the modus operandi of the second pillar or perspective is still a work in progress, in my view. For example, it is not so clear what the BOJ should do in the case where the first perspective indicates no change in monetary policy, while the second indicates a tightening bias. You could say that a leaning-against-the-wind posture would be advisable vis-à-vis action on the basis of the first perspective alone. But how hard should we lean against the wind? Is it advisable for such a policy decision to be based on some linear combination of the two perspectives, or on a lexicographic order of the two?

Before we obtain any meaningful answer to these questions, the world has undergone a seismic change since bubbles began bursting here and there. It was the US housing market that triggered the bursting of the bubbles, but by now it has become painfully obvious that bubbles had been formed in many other areas as well, e.g., housing markets in some European countries, investment booms in many emerging economies, and high-risk securities markets across the board. Painful as it is, a rapid unwinding has taken place in all these markets during the past year.

The good old days are gone. We no longer believe that tomorrow is another today, and therefore there is no confidence in counterparties, no assurance of our own survival, no trust in the system. Once again, there was a similar episode in Japan. Commercial banks and other depository institutions became so sensitive about counterparty risk exposure, that financial intermediation virtually stopped in interbank markets in the late 1990s. Because banks were so concerned about possible capital shortage, deleveraging continued despite regulatory forbearance as well as monetary easing. Against this background, commercial bank lending stopped growing. As a consequence, the traditional channels of monetary policy transmission mechanism broke down, and successive reductions in interest rates failed to stimulate credit expansion, to say nothing of economic recovery.

On the economic research front, econometrics offered very little for policy deliberations because traditional relationships had become untenable. For example, in the 1990s, when liquidity preference overshadowed yield consideration amongst average depositors, the aggregate amount of demand deposits increased while economic growth tumbled. There was in fact an inverse relationship between money growth and nominal GDP growth; a spurious relationship but it was statistically significant. This can be accounted for by an increase in precautionary demand for money amidst the financial system crisis coupled with heightened job insecurity in the labor market. The traditional relationship

based upon transaction demand for money was more than offset by that based on precautionary demand. In this situation, the operating cost effectiveness of commercial banks in Japan seems to have improved because of a larger proportion of deposits carrying naught or low interest rates. Of course, on the other side of the ledger, losses from write-offs and write-downs damaged the banks' earnings, thereby lowering the total productivity of commercial banking. Once again, econometric estimates for productivity gains in the financial services sector became tenuous in Japan during this period.

In the early 2000s, when the traditional channels of monetary policy transmission mechanism were clogged, the Bank of Japan employed some unconventional policy tools, without much support from empirical analysis. In March 2001, the Bank began its so-called quantitative easing, under which it provided the market with more than sufficient liquidity so as to leave excess reserves in the system. Actually, the Bank aimed the operating target of monetary policy at the amount of total reserves in the system. In addition, the Bank announced that it would maintain quantitative easing until the core CPI rose above zero, year on year, and was expected to remain positive for some time. In a way, this meant that the Bank committed itself to running the risk of staying behind the curve. At its peak of reserve creation in 2004, the reserves amounted to over 30 trillion yen, or seven times the required reserves.

The efficacy of quantitative easing in arresting deflation is still a moot question. There seems to be a consensus that it eased concerns over the funding difficulties of financial institutions at times of strain in the financial market. It also ensured a flat LM curve, if I may borrow terminology from an economic text book. At a time when the yen was under upward pressure on the foreign exchange market, this flat LM curve appeared to help limit the extent of the yen's appreciation. On either account of this question, however, the jury is still out.

I am afraid I may be exhausting your patience, having spoken over twenty minutes, much of which was spent on discussion only tangential to the topic I was assigned. So let me conclude. In 1984, when I was working in Basel, I happened to read the text of the Fred Hirsch Memorial Lecture given by James Tobin, entitled "On the Efficiency of the Financial System." After appraising the efficiency of the financial system, he confessed to an uneasy Physiocratic suspicion that "we are throwing more and more of our resources … into financial activities … into activities that generate high private rewards disproportionate to their social productivity." He went to say, "I fear that, as Keynes saw even in his day, the advantages of liquidity and negotiability of financial instruments come at the cost of facilitating nth-degree speculation which is short-sighted and inefficient."

Now that this has proved all too real, we may as well review the entire framework of monetary policy thinking. A starting point for reconstruction of the framework is, in my opinion, to focus on the very basis of central banking. The central bank is responsible for guarding the integrity of money because it is the provider of money. The integrity of money is maintained only when it functions properly as means of exchange, unit of account, and store of value. The maintenance of low inflation is only part of the essence of this integrity, which also consists of soundness and efficiency of the financial system. In the middle of the financial turmoil, every central banker is required to meet the challenge of reviewing monetary policy from a wide perspective rather than grafting ideas on inflation targeting. I hope we will have finished the review by the time the Banque centrale du Luxembourg celebrates its 20th anniversary.

Thank you.