# General Discussion: Housing and Monetary Policy

Chair: Martin Feldstein

*Mr. Frenkel:* I want to come back to the discussion that connects both sessions—in particular, the decision of bubbles that brings us back to the Shakespearian dilemma, "To burst or not to burst!"

It is always the case that we have to balance risks. As Stan Fischer said, we should not kid ourselves that there is any decision that does not involve balancing risks. The question is, Does the central bank have an informational advantage?

In one area it does. If it is not about data and the functioning of a model, it does have the perspective of systemic dangers that typically the market participants do not take into account.

So, I am not dogmatically shying away from the central bank looking at areas of that type. However, Stan mentioned the notion of an open-mouth policy. Of course, I like it because I used it once, but I want to make sure that it is understood that it is not a substitute for, or it is not the easy way out of, using conventional open market policy.

It is effective if, and only if, it has the credibility based on previous actions of conventional policies of conveying the signal that if the open-mouth policy, so to speak, does not generate the intended result, then immediately thereafter there will be the other policies that are conventionally used. It is not a strategy for monetary policy, but if it saves us once from having to make a tough measure, then it is a positive.

I would like to say, however, that if we are about to grant to the central bank the responsibility of communicating to the market, explaining to the market in analyses, and so forth, again we should be very careful about it because the central bank is not just another analyst. The central bank is an analyst with a gun. It is important because it is almost generating the moral hazard. Therefore, when the central bank comes to the market and says something about its beliefs about the rights of change of prices of assets or the levels of prices of assets, and where is it relative to the intended one, it is really conveying to the market a very clear signal of what it is intending to do and willing to do in order to bring it about to the places it wishes to be.

Well, the distance between this and assuming responsibility for the functioning of asset markets and so on is very, very close, and we are very close to the mother of moral hazard. We have seen it in the discussions about exchange rates, where it was very natural to say, "I will peg the nominal exchange rate."

And before long, you also say, "I want to ensure price stability for inflation targeting."

And suddenly you found yourself responsible for the real exchange rate, which we know that is not the case. Once it changes, everyone said, "You lied. You cheated us."

Let me say where I come in the debate. I side really with Frederic Mishkin and with the Swedish experience about what to do about it and what roles that asset prices play in monetary policy. Obviously, I will note part of the objectives. But, by the same token, their development in it as much as it affects the stated objective obviously needs to be taken into account. The timing and the magnitude, therefore, need to be calibrated to the assessment of the central bank of what it does to the attainment of the stated objectives.

So, I would not respond just to asset prices, but I would respond to them if I thought they had a quantitative impact on what I want to achieve in the stated objectives.

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One last remark. Mishkin reminded us of the syndrome of "too large to fail," and we should be careful about it. I agree with it, and I also want to add one additional syndrome, which is the inaction that arises from "too little to be bothered with." No "too large to fail" case arose without the mistake of "too little to be bothered with." Like always, we need to take it into account before it really raises its head.

*Mr. Mussa:* I thought the concluding panel really was excellent. I enjoyed all of their remarks. I am going to touch on their remarks only tangentially.

As he was being convicted of multiple counts of fraud and conspiracy, Jeffrey Skilling consistently maintained that the collapse of Enron was nothing other than "a classic bank run." I think in substantial measure he was right. After all, in bank runs, it was often the case that depositors ran against institutions that were insolvent, as well as those that were solvent but illiquid.

It is even possible in the case of Enron if the Dallas Fed had been prepared to lend them \$20 billion to \$30 billion that they might have survived the crisis and would have been worth more as a going concern than dissolved in bankruptcy. In which case, Mr. Skilling might still be in the corner office rather than where he belongs, in federal prison.

I mention the Enron case because it is essential to recognize that the operation of a market economy does involve business failures. Typically, businesses fail when their creditors and counterparties decide they have a serious worry that they may not be able to collect on their obligations. Sometimes they will run even against a business that is actually solvent. Now, Mr. Skilling was, of course, a Harvard MBA, like our president, and thus did not benefit from what we told Chicago MBAs, which is that you not only need to be solvent, you need to be sufficiently visibly solvent—have sufficient resources and pledgeable collateral—that if your creditors and counterparties panic, even for reasons that are not entirely rational, you can withstand the shock. Most businesses are run on that basis. It is essential to the functioning of our economy that they operate in that way. If there is somebody who is in the business of bailing out businesses in general because they can claim, "Well, we are really not insolvent; we are only illiquid," then the market mechanism is going to be frustrated.

Those failures and the cost that is associated with them are an essential part of the operation of the economic system. What, then, should be the public policy response to some of the difficulties that we are presently seeing?

Well, there are a lot of investors who invested on a leveraged basis in high-risk assets. They are learning now the wisdom of a very experienced Chicago trader with regard to these strategies and their returns. They are going to have to eat substantial losses, and some of their creditors will have to eat substantial losses. As far as I am concerned, the proper public policy response to that is "bon appétit."

There are going to be innocent victims as well. That is a concern. But, in the functioning of the economic system, there are always innocent victims in the necessary correction. And the policy response cannot protect all of them. To some extent, the policy response needs to be the policy response of the park service here in the Grand Tetons. When you have a fire started by lightening, let it burn. You need to clear out the underbrush and some of the dead timber. If you let it all accumulate over years and years and years, you run up the danger of a really big conflagration, which we had here in 1989.

It is important for monetary policy to guard against the risk of that major conflagration. And it is prudent to take action, even before the data necessarily show that is what is happening, if you get early indications that may be in line. But it is important to recognize in that regard that we have had mild recessions in the past in conjunction with monetary tightening.

It would not be an enormous tragedy if we had a mild recession in 2008, although there might be some politicians who wouldn't favor it. The Federal Reserve, certainly at this stage, should not be targeting such an event. I don't think the inflationary threat warrants crushing the economy in order to reduce inflation below what it is likely to be. But it won't necessarily be avoided.

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Finally, I would add one should be at least cautious about reacting too strongly and asymmetrically to these types of financial market difficulties. If the policy is "we never do anything when asset prices are going up, but we respond early and vigorously when asset prices fall," then that is going to produce the higher risk of the big conflagration.

I recall that the largest forecast error I ever made in 25 years of forecasting the U.S. economy was in late 1998, persuading my colleagues on the International Monetary Fund staff to reduce the growth forecast year-over-year for 1999 in the U.S. economy down to 1.8 percent because of the concerns we all had about the effects of the financial market turbulence in the fall of 1998. The actual outcome was 4.2 percent real gross domestic product (GDP) growth. We somewhat overestimated the damage that the financial turbulence was likely to do to the economy. It is important to be cautious, not to do that too much, too often.

*Mr. Weber:* There are some issues I'd like to touch upon. First, it was mentioned before by James Hamilton that we had some banking problems occur in Germany. Let me stress this was a symptom coming from U.S. subprime problems. It was not a sign of genuine banking problems originating in Germany.

What is so special about current events relative to past banking crises? During the Asian crisis, we saw a strong maturity mismatch combined with a currency mismatch in banks' balance sheets. Currently, we are not seeing major currency mismatches, but there is a maturity mismatch and a high degree of leverage. However, this mismatch is off-balance-sheet rather than on the balance sheet of regulated banks. And this is why it is difficult to call it a banking crisis because it concerns off-balance-sheet engagements. The institutions most affected currently are conduits and structured investment vehicles, which raise funds by issuing short-term commercial papers. Their ability to roll these short-term commercial papers is, at the moment, impaired by the events in the subprime segment of the U.S. housing market. The link to banks exists indirectly through backup credit lines. We were finding out there are two types of credit lines. One is solid lines that are irrevocable (or nonwithdrawable). The sponsoring banks themselves provided those lines. That is the link through which exposures come back onto the balance sheet of banks.

There are also other lines, both senior lines and junior lines that were granted, which either had margin calls or trigger points indebted, linked to the quality of assets. This created an endogenous mechanism which could basically lead to forced sales of the underlying assets if the commercial paper could not be rolled and commercial paper holders had to be reimbursed.

A second issue concerns credit enhancement rights. Such contract clauses also undermine the irrevocability of credit lines and could thus also contribute to forced sales.

Where do we stand now? The subprime-related problem has been spreading. It has been spreading from the commercial paper market into the money market because off-balance-sheet credit risks are now rolling back onto the balance sheets of banks. The issue simply is one of deleveraging. Some of the conduits had high degrees of leverage. So, the question now is whether all the banks are able to absorb that exposure on their balance sheet, since the deleveraging process will lead to a prolongation of balance sheets of banks.

I think what is needed now, and this is clearly what banks have done in Germany, is to develop a clear strategy. One solution for banks that own conduits is to tap other forms of financing, such as issuing longerterm bonds. In addition, restructuring the asset-backed commercial papers (ABCPs) to become more transparent (plain vanilla) products by taking the most impaired subprime tranches out of the ABCPs and onto the bank's balance sheet will help both in the deleveraging and relaunching of those commercial papers. Since the actual default rates on subprime mortgages are relatively low, compared to the current market pricing of their default risk, marking and holding them to maturity and simply riding it out could be a viable option. The underlying assets are impaired, that is true, but delinquency rates—as John Taylor was showing—are in the order of magnitude of 8 percent or 10 percent at this stage. For AAA subprime asset, it is hard to imagine a, say, 20 percent delinquency rate. So, what we are seeing at the moment is a total overreaction in terms of expected losses, but we usually observe this at the start of some tumult in the market. Some market players behave as if the underlying intrinsic values of these assets have to be completely written off, whereby the impairment may be up to 80 percent.

So, where are we going? This is the last point I wanted to make. I think that "too large to fail" is not the issue this time. Rather, "too many to fail" may be the issue because of the general feature of all these conduits. If the issue is "too many to fail," I think what we need to do as central banks—and we are clearly doing that—is to help banks in the deleveraging process so that it can occur quickly.

There is no general underlying problem in terms of solvency. It is one of liquidity. The commercial paper market is still liquid for very transparent, understandable, and clearly structured ABCPs. Complex ABCPs, in particular the ones with a high content of mortgagebacked securities from the subprime U.S. housing market, have more problems in rolling their maturing commercial papers. Swift action is needed. We need to help banks in the deleveraging process since only this can actually solve the problem.

*Mr. Nothaft:* I had two observations on the U.S. experience. First, adding to the reduction in the amplitude of the housing cycles since the early 1980s has been the growth of the secondary mortgage market, which has helped reduce the volatility of mortgage credit flows over the business cycle. Joe Peek and Jim Wilcox have written a couple of papers on this and have linked that to the reduction in the housing cycle since the early 1980s.<sup>1</sup> That also links back to Ed Leamer's paper, where he reported a greater relative reduction in volatility for residential fixed investment relative to other contributors to GDP since the early 1980s.

My second comment is about the recent performance of subprime loans. There are at least three factors that have contributed to their recent high default rate. First, the deterioration of underwriting and layering of credit risk over the last few years has been significant. Second, an upward bias in appraisals, perhaps fueled by competitive pressures and the desire for repeat business from loan brokers.

And third, the decline in home values in a number of markets. All three of these have contributed to the high foreclosure rates we are seeing for subprime. Model error and the models' assumption that the reported values of income and of homes are always accurate have contributed to underestimates of subprime loan default.

*Mr. Tannenbaum:* I have a couple of thoughts. First, some of the comments we heard earlier indicated the effectiveness of interest rate policy in influencing housing was diminished because we have primarily fixed-rate mortgages and the capital markets extend the credit.

I was wondering—this is more for Professor Taylor—whether you've taken a look at your results over more recent periods where that feature has been more pronounced, and would that have an impact on whether that blunt instrument would work?

Secondly, for the full panel, would the alternative of adjusting capital requirements to certain sectors that might be affected by bubbles be a more precise and surgical way of trying to take some of the steam out of a particular excess?

The development of risk-based standards did promote the movement of assets out into the securitized market. As a corollary to that, since many financial intermediaries that both originate and hold credit are not subject to the same types of capital regimes, would consideration be given to extending them, and how would that be done?

*Mr. Alexander:* This is a question that was originally posed to Governor Mishkin, but it is relevant here as well. He made the point of saying that central banks should respond when they see housing prices move and not wait until they see the effect on output. The question I would ask is whether or not the panel and Governor Mishkin would see that as a general rule with respect to all risky assets. Mike Mussa raised this question in a somewhat different question. I might argue that we are in the midst of a regime shift with respect to how risk is priced generally over the last two months and, if one takes that as a

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general rule, that does have implications for how quickly policy should respond. But it is relevant to Mike Mussa's comments as well.

*Mr. McCulley:* In fact, my comment has been echoed so much at this final session that I really don't need to do anything except say "amen" to a lot of people who have been commenting. The real issue going on in the marketplace right now is a run on your shadow banking system. The Fed is doing an absolutely fantastic job with the official banking system. It is the shadow banking system, which is about \$1.3 trillion, funded by commercial paper, that is at hand, both here as well as in Euroland.

I agree with John Taylor that the Fed should be very liberal in providing liquidity at the policy rate. They are doing so. That is all wonderful. But the key issue right now, and it is going to come to a head in the next couple of months, is that the shadow banking system has got to be put back on the balance sheet of the real banking system. How that is done and at what price it is done for risk assets is the key downside issue for the real economy.

*Mr. Meltzer:* I found a lot of this discussion fascinating—fascinating because it is based upon the idea that somehow central banks are going to know when bubbles arise. The economic model of bubbles arises in a world without transactions. Alas, the bubbles arise in a world with transactions. So, who sells and what do they expect? When the market was rising in 1989, there were sellers. They must have expected something different than the buyers. How does the central bank decide between those things?

The same thing is true in other markets. Where are the short sellers, or the sellers in the market? If the central bank is going to be able to identify bubbles, why aren't there people, who are speculating and can make money on doing that, able to identify these things at least as well as a central bank? So, there is reason to doubt that central banks can in fact identify bubbles accurately without making as many type 2 errors as type 1 errors.

Second, regulation induces innovation to offset regulations. We see that in spades in what has happened with all the off-balance-sheet liabilities. It is hard to believe that more regulation is going to be the answer to that.

Perhaps it would be better to think about a world in which we use something called "market discipline." People fail and, when they fail, they not only lose their money but they learn something about risks they are fond of taking, and perhaps other people will learn some of that too. The ultimate solution to this cannot possibly be more regulation. It has to be more market discipline.

*Mr. Ingves:* There have been many good comments on many issues. Just let me pick one of the many fascinating topics and be very short on the issue of adjusting capital requirements. That is quite equivalent to introducing a shadow rate of interest. At some stage, of course, you end up chasing markets and adjusting capital requirements everywhere.

That means, at some stage, one needs to ask the question: Is it better then to think about it in monetary policy terms? That was what I alluded to when I talked about how we are not in a zero-one world when it comes to monetary policy versus supervision. We are actually somewhere in between. But I don't have the answer as of today what the weights are supposed to be.

*Mr. Iwata:* I also focus on this capital requirement question. The stress test on the above-trend rises in land prices and the decline in the trend can be used to indicate future damage to the financial system such as that which happened in the mid-1980s and early 1990s.

By using the data available at the end of March 1999 retroactively, the credit risk was estimated by our staff to amount to about \$22.8 trillion, utilizing the default rate available at that time under the assumption of a bursting bubble and the deterioration in the credit situation of the rated industries. So, this indicates if we had carried out this kind of simulation, then it could have indicated an apparent shortage of capital in our banking system.

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*Mr. Taylor:* I have a response to three questions. Carl Tannenbaum asked about whether the equations meaning the response of housing starts construction to the federal funds rate shifted with the other institutional changes that occurred in housing markets. Yes, I did look at that. Quite remarkably, the federal funds rate semielasticity in my equation on housing starts is almost exactly the same over these two periods I mentioned—that is, pre-early 1980s to post-1980s—just about 8. It is very, very insensitive. It is actually surprising, given the changes. Ben Bernanke mentioned some other studies, which I don't know of, so I will look at those. My results are quite consistent with that.

Frank Nothaft mentioned the reason for what's called "the Great Moderation of the housing cycle" as due to the secondary markets themselves. There is lots of debate about the Great Moderation and what caused it. There are lots of factors that would add. I placed a lot of emphasis on the timing. Something happened around the early 1980s, I think. It has to do with inflation control, the change in policy of central banks. And the changes in the securitization seem to me occurred earlier than that, and some other changes, later. So, the timing doesn't seem right, but I'll be happy to look at those other studies.

Then, Lewis Alexander asked about this response to the asset bubbles issue. Maybe this isn't the way to put it as a guest, but in some sense, it seems to me that the real concern is preventing central banks from causing asset bubbles, as much as from responding to them. My remarks were meant to raise that issue. Again, it is not the best way to put it as a guest, but more thought should be given to that as well as the ones that Stan made.

## Endnote

<sup>1</sup>Joe Peek and James A. Wilcox, "Housing, Credit Constraints, and Macro Stability: The Secondary Mortgage Market and Reduced Cyclicality of Residential Investment," *American Economic Review*, May 2006, 135-140; "Secondary Mortgage Markets, GSEs, and the Changing Cyclicality of Mortgage Flows," *Research in Finance*, Volume 20, ed. Andrew H. Chen, pp. 61-80, 2003.