John B. Taylor

It is a difficult job to summarize a two-day conference that includes so many contributions: two comprehensive introductory speeches, seven research papers, fourteen formal discussions, and at least 100 interventions that I managed to write down. Moreover, I would estimate that there were at least a thousand small group conversations - over coffee, at receptions, during dinners - which have been an integral part of the conference and which will ultimately benefit future research and policy. I thank the Bank of Korea for the opportunity we have been given to participate in such a productive activity.

I will organize my summary around two themes: (1) the benefits of global capital mobility, and (2) the economic policy implications of this global capital mobility, including implications for banking policy, monetary policy, and international financial policy.

I. The Benefits of Global Financial Markets

In his opening speech to the conference, Governor Chon discussed how capital inflows boost economic growth by bridging the gap between domestic saving and investment. Allan Meltzer reaffirmed this benefit of capital mobility in his keynote speech, but he also emphasized the importance that domestic saving has had in domestic investment. In fact, he showed that domestic saving is the dominant form of finance of investment in most countries. Allan Meltzer also noted that a policy of keeping interest rates artificially low so as to stimulate investment could be counterproductive in discouraging saving.

Three of the conference papers also focused on the benefits of capital mobility: Michael Bordo's paper with Barry Eichengreen and Jongwoo Kim, Hong-Ghi Min's paper with Asli Demirgue-Kurt and Ross Levine, and Anne Krueger's paper. Each gives different and useful perspectives on the benefits of international capital mobility. The Bordo et al. paper reminds us that in the years before 1914 there was a high degree of capital mobility in the world. The capital mobility was at least as great as it is today but with a more limited set of financial instruments. The ratio of capital flows to GDP was very similar. That pre-1914 period of international capital mobility sent huge resources around the world, benefiting countries that were undergoing development, such as the United States. Capital flows financed the big gaps between

investment and saving that Bordo et al. document in Canada and the United States. Being from Stanford University I am particularly aware of the financing that came from abroad because one of the people who used that financing built a railroad across the United States. His name was Leland Stanford, and he founded Stanford University with some of the profits from that enterprise. Investment was much greater than saving in the United States, because of the financing that came from London and from abroad.

Few disputed Michael Bordo's claim that there was a U-shaped pattern of international capital mobility, with flows being high before 1914, low during mid-century calamities of war and depression, and high again now. However, Alan Budd argued that the absence of a savings and investment imbalance did not necessarily indicate a lack of capital mobility. He reasoned that we should think about saving and investment imbalance in terms of a consumption smoothing model. Lex Hoogduin questioned Michael Bordo's claim that the gold standard was an important reason for the greater capital mobility before 1914. Despite these disagreements about the nature of the evidence and the reasons, there was a general agreement that capital mobility was high in the late 19th and early 20th century and is high once again.

Hong-Ghi Min and his co-authors also focused on the benefits of capital mobility. They used an important and interesting data set consisting of hundreds of banks around the world to show the benefits of competition from foreign banks. Their regressions showed that bank overhead costs - a measure of efficiency — were negatively related to the number of foreign banks in a country. They could find no evidence that foreign banks cause crises or were responsible for financial instability. In discussing the Min et al. paper, Val Koromzay and Adrian Orr expressed some skepticism about the cross section regressions and the raw numbers that went into this analysis. Koromzay, Orr, and others at the conference wanted to go beyond the numbers and examine some case studies to help understand how foreign banks improved efficiency of domestic banks. In fact, Adrian Orr's description of New Zealand provided such a case study. He noted that New Zealand, where 95% of banks are foreign, benefited significantly from the greater efficiency. Robert Parry gave evidence from the United States. He noted important gains from international banking, particularly in the bankers' acceptance market, which were stimulated in the United States through Japanese competition.

Anne Krueger's paper, while not focusing directly on international capital mobility, also gave a useful perspective of capital mobility in the post-World War II period. She showed how the World Bank had played an important role in assisting capital flows in the years after World War II. As Charles Steindel indicated, this role can be explained by a market failure in the market for loans in very poor countries where the social rate of return may indeed be greater than the private rate of return.

Anne Krueger also noted how this role of the World Bank has diminished dramatically in comparison with the private capital flows. Capital flows provided by the World Bank to the poorest and middle developing countries are now small in comparison to the total.

In sum, the papers of this conference and most of the discussion focused on the benefits of capital mobility. To be sure, there were some undertones of concern about "hot money" flowing in and out of countries, but those were not documented with the same detail or discussed in the same way as the benefits of the international capital mobility.

II. Policy Implications

Let me consider the policy implications of international capital mobility. I want to focus first on banking policy, then on monetary policy, and then on the international financial institutions. This ordering means that I start where conference participants agree most and end where they agree least.

1. Banking Policy

There was a tremendous amount of agreement at the conference on government policy toward banks. Edward Kane, in his description of the zombie banks, put it most vividly. His beautiful map of the world indicates visually that this is a global problem, not simply a problem for Korea or East Asia. It is important how Governor Chon began the conference by emphasizing the need for prudential banking regulations to be tightened in order to meet the Basle standards, emphasizing the importance of cleaning up the problem of non-performing loans through a resolution trust fund. Mr. Kwak explained exactly how the resolution process is working in Korea.

However, I think there was some consensus at the conference that we need to go further than the Basle standards. Allan Meltzer began in his opening remarks by arguing that we should eliminate restrictions on banking, restrictions that prevent international branching, both of domestic banks and of foreign banks in domestic countries. This would permit diversification to reduce the risk, as well as improve efficiency. Robert Parry also recommended the same kind of removal of restrictions on foreign banking. Allan Meltzer and Robert Parry suggested that capital requirements should be bolstered beyond the Basle standards, emphasizing all aspects of risk, not simply credit risk, not simply financial market risk, not simply risk of items that are on balance sheets, but looking at off-balance sheet items as well, just

312 John B. Taylor

like any private investor would look at. Ideally, regulation should mimic what the private market would do if it had sufficient information. Allan Meltzer argued that lender of last resort activity should occur only at a penalty rate and only on assets or loans with collateral. He also suggested that there was a role for such lender of last resort activity at the international level in the case of failed banks.

Edward Kane emphasized that it is not enough to simply pass laws or regulations. One needs to worry about the incentives facing the regulators. Government officials need to have the incentives to enforce the laws efficiently and adequately. Val Koromzay asked whether it is enough for all countries to impose capital requirements in the correct way and enforce them efficiently, or whether there is also a need for international competition. Ed Kane suggested, for example, that one possible role for the IMF would be to monitor banking regulations and enforcement in countries around the world.

2. Monetary Policy

Let me now consider monetary policy and begin by recalling the words of two speakers at the conference who now have responsibility for monetary policy: Governor Chon emphasized that a global financial system requires that central banks focus on price stability, noting that Korea now operates with a freely floating exchange rate. Similarly, Robert Parry emphasized the importance of price stability as the key goal of a central bank and noted that the United States operates with a flexible exchange rate policy.

Several of the research papers presented at the conference also focused on the importance of price stability including those of Kenneth Rogoff and of In-June Kim and Yeongseop Rhee. Ken Rogoff argued persuasively that a flexible exchange rate system is more viable than a fixed exchange rate system. I noted more agreement about this than just about anything else at the conference. John Murray added his own perspective from Canada to bolster Rogoff's analysis. Nevertheless, some reservations were expressed. Mr. Lau reflected on the experience of Hong Kong and indicated the viability of a fixed exchange rate in the case of a currency board. Similarly, Carlo Monticelli and Lex Hoogduin, linking the issue to the future of the European Central Bank, argued that a fixed exchange rate system, in which there is a single currency, could indeed be quite viable. Clearly there are viable alternatives to flexible exchange rates, but the discussion drew out the idea that "nearly discretionless" policy is needed for a fixed rate system to work.

In-Jun Kim and Yeongseop Rhee also recommended against a monetary policy regime that focuses on exchange rates, instead emphasizing price stability through inflation targeting, as did Kenneth Rogoff. In the discussion of the Kim and Rhee

paper, Mr. Lindahl discussed the experience in Sweden, which has been positive with respect to inflation targeting. However, he and a number of other people raised questions about the fact that the Kim and Rhee paper hinted at some other uses for the exchange rate, suggesting that with inflation targeting the exchange rate could be used for balance of payments purposes. Several participants noted inconsistencies caused by multiple objectives and multiple targets for monetary policy.

Let me try to give a little clarification about this multiple targets issue. First, price stability means that the central bank has a target for inflation. I don't think a target for inflation needs to be explicit as in New Zealand, the United Kingdom, Sweden, and Canada. It could be implicit, as in the United States and Germany. However, even if a country has an inflation target, shocks will move the economy away from that target. Targeting the inflation rate doesn't mean you hit that target exactly each month or even every year. There are going to be fluctuations in inflation, and the fluctuations around that target entail fluctuations of GDP from normal levels as well as fluctuations of the exchange rate from a long-run equilibrium exchange rate. The task of monetary policy is to keep the inflation rate close the inflation target. That entails movements of the instruments of policy in ways that bring the inflation rate as close to possible to the target within the tradeoffs that exist in the short term in any economy. There are tradeoffs between price variability, output variability, and exchange rate variability in the short run, and in this sense policy must balance several different objectives in the short run though not in the long run.

I believe the money supply instrument should be kept on the radar screen and looked at closely, but unfortunately in many countries it has been necessary to focus more on the short term interest rate in conducting policy. When central banks think about using the interest rate to achieve an inflation target, the experience with the Fed over the last 15 years is useful, as is the experience of the Bundesbank, the Bank of Switzerland, and, more recently, the United Kingdom, Switzerland, and New Zealand. But let me focus on the Federal Reserve.

Over the last 15 years in the United States, there has been remarkable macroeconomic stability — basically 15 years of steady growth with just one small recession, two record breaking expansions. There has also been price stability, with inflation around 2% right now. There has been a reaction of interest rates to events in the economy which can be described quite simply, at least approximately, by a policy rule. That policy for adjusting the interest rates is very close to what the Fed does, what the Bundesbank does, what the Bank of Switzerland does, and what other successful central banks have done during this period of time. The same type of policy could be adapted to different countries in order to achieve an inflation target, whatever that target happens to be.

I think there is a lot of research to draw on for this purpose. At this conference

Alan Stockman's paper provides information that is very useful for making decisions about how interest rates should be set in Korea, for example. The paper documents the differences and similarities between the United States and Korea. The dynamics of the shocks that occur in Korea and the United States are similar, as he documented in his charts. There are differences in that exchange rate shocks seem to be more important for Korea. Also useful is recent research by Lawrence Ball, who has built a small macroeconomic model with stochastic shocks which is designed to find out how central banks should adjust interest rates, recognizing that for a small open economy the exchange rate fluctuations are very important. Hence, exchange rate variability and price variability tradeoff comes into consideration. As suggested by the discussion of David Gruen, I think it would be useful to compare Australia's experience with that of New Zealand, where the international shocks are very similar but the policies are somewhat different.

To summarize, with respect to monetary policy, there is a consensus at the conference about price stability and inflation targeting, but I think we need to work more on what that means for the instrument of policy, whether it be money growth or the interest rate, and the implications for exchange rate volatility.

3. International Financial Institutions

Finally, let me review the policy issues relating to the international financial institutions. Anne Krueger gave a thorough and provocative survey of the World Bank and its actions since its existence. She considered three alternative policy proposals for the World Bank. Alternative I was that the World Bank take a narrow focus and go back to making loans only to the poorest of countries where the externalities of the kind Charles Steindel focused on are most obvious. Alternative II would be to expand into softer issues, as the World Bank appears to be doing now. Alternative III would be to simply close down. Anne Krueger recommended alternative I, but there was not agreement about that. Calixto Mateos discussed the possibility of using World Bank resources for poor areas of countries in the middle stages of development. However, Professor Krueger emphasized that this would entail a much more political role for the World Bank.

Some asked whether the IMF and the Fund could work more closely together, to have one international bureaucracy to deal with. One disadvantage with that model is losing the competition that exists between the staffs of those two institutions. Allan Meltzer suggested that we limit the scope of the IMF by having its lender of last resort role be restricted to interest rates which are at penalty levels, higher than market rates, and also by requiring collateral. This would be a significant restriction in scope for the IMF, perhaps analogous to the restriction in scope of Professor

Krueger's alternative I for the World Bank. We could call this alternative I for the International Monetary Fund, with alternative III being closing down, and alternative II being continuing in its current role. Alternatively, Professor Kane suggested that the World Bank issue default guarantees. Or, as I indicated earlier, some suggested that the IMF could play a role in examining regulators and their policies and procedures in different countries.

Finally, there was discussion at the conference about whether there is a need to limit international capital mobility. The Kim and Rhee paper raised this possibility. Allan Meltzer argued against this idea in his opening remarks. In my own view, such restrictions on capital mobility would either be ineffective or get in the way of the benefits that I began my overview with.

III. Conclusion

In sum, as I look through all the results at this conference, I see many useful policy implications of the globalization of financial markets. We owe the Bank of Korea gratitude for what they have provided for us. Moreover, the Korean participants have been open and helpful in discussing the current situation in Korea. As a result, we have learned a lot about the Korean situation in the context of global capital mobility. This too will have a beneficial effect on policy in the future.

As a researcher who is very much interested in policy, it seems to me that we need to think more about translating these ideas into practice. I call such activity "translational economics." This is an analogy with other sciences. For example, "translational biology" is the part of biology where inventions in the laboratory are brought into practice to help people. Better "translational economics" could go a long way in bringing the good ideas of this conference into practice.