I. Introduction

Good morning. I am honored to welcome such distinguished guests from around the globe to the 25th BOJ-IMES Conference. On behalf of the conference organizers, I thank all the guests in this room.

This year’s conference is titled “Central Bank Design under a Continued Low Inflation and Interest Rate Environment.” The current theoretical framework for monetary policy was developed before the Global Financial Crisis. At that time, inflation and interest rates in most advanced economies—with Japan being the notable exception—were high enough to make conventional monetary policy effective. To stimulate the economy, central banks had sufficient safety margins to reduce short-term nominal interest rates. After the Global Financial Crisis, however, this situation changed significantly. Both inflation and nominal interest rates have remained far below their pre-crisis levels for more than a decade.

In my opening remarks, I will briefly review the policy agenda for central banks at the moment under a continued low inflation and interest rate environment.

II. Policy Agenda under a Continued Low Inflation and Interest Rate Environment

This year’s conference focuses on four topics: the monetary policy framework, monetary policy instruments, the relationship between price stability and financial stability, and spillovers to emerging and developing economies.

A. Monetary Policy Framework

Regarding the monetary policy framework, textbook New Keynesian models assume that long-term inflation expectations are anchored around the inflation target and the central bank sets the policy rate mechanically referring to the natural rate of interest. When these assumptions hold, all that the central bank needs to do to stimulate the economy is to keep real interest rates below the natural rate of interest. However, this conventional policy framework currently faces two major challenges.

The first challenge concerns the question to what extent policy makers should rely on the natural rate as a benchmark for monetary policy conduct. This problem is partly associated with the difficulty of measuring the natural rate of interest.¹ Of course, this problem can be overcome to some extent by looking at common trends in a range of

¹. See, for example, Powell (2018b).
estimates of the natural interest rate. In fact, various recent estimates of the natural rate of interest suggest that the current level appears to be much lower than before, giving rise to concerns about a secular decline in the natural rate of interest.

The other major challenge is related to the stability of long-term inflation expectations under “missing inflation.” In fact, a good number of advanced economies have experienced very sluggish price developments in spite of significant improvements in economic activity. This raises concerns over the credibility of inflation targets, since central banks’ track record in hitting their target provides the foundation for the credibility of such targets. Japan’s experience shows that it is difficult to re-anchor long-term inflation expectations from inflation below the target level. That suggests the importance of maintaining well-anchored inflation expectations. At the same time, if missing inflation comes from structural factors such as globalization and digitalization, central banks should continue examining how best to manage inflation expectations, while securing stability in economic and financial conditions, within the flexible inflation targeting framework.

B. Monetary Policy Instruments
Regarding the monetary policy instruments, under normal circumstances, central banks pursue their mandate by adjusting short-term nominal interest rates. However, following the Global Financial Crisis, central banks have been forced to find alternatives—policy instruments that are often labeled as unconventional such as forward guidance and the active use of the size and composition of their balance sheet—to overcome the effective lower bound on nominal interest rates.

The recent experience with regard to unconventional policy shows that such new tools are effective to counter massive adverse shocks even after hitting the effective lower bound. At the same time, our understanding of unconventional monetary policy is limited. In fact, while policy makers have developed a wide range of unconventional policy tools, their effectiveness and transmission mechanisms may differ depending on financial conditions and economic structure. It is also important to explore how central banks should use those unconventional policy tools in the future. In that regard, an interesting question is: will those unconventional policy tools become conventional policy tools in normal times?

C. The Relationship between Price Stability and Financial Stability
Regarding the relationship between price stability and financial stability, it is increasingly recognized that the prolonged low interest rate environment raises two major issues.

The first issue is that continued low interest rates can change the risk-taking behavior of financial institutions and affect financial stability. Along this line, two types of risks have been pointed out. The first is that low interest rates lead banks to take excessive risks, and the second is that any further cuts in policy interest rate beyond a “reversal interest rate” discourage risk-taking by banks. While empirical studies on this issue have been accumulating, they are not conclusive about the nature of risks
including their probability distribution.\(^2\)

The second issue is how to implement policy instruments for safeguarding financial stability. To address this issue, two different approaches are explored. One approach proposes a division of labor in the policy toolkit based on the Tinbergen rule: that is, monetary policy instruments are assigned to the pursuit of price stability, while macro-prudential policy instruments are assigned to the achievement of financial stability.\(^3\) The other approach is to “lean against the wind,” that is, monetary policy instruments are implemented not just to achieve the price stability goal but also give due consideration to financial stability goals, under the premise that monetary policy influences broad areas of financial activities.\(^4\) It should be noted that, however, a wide range of people including those supporting the first approach recognize that no macroprudential policy toolkit is perfect, and that a key part of the second approach is to stave off a catastrophic financial disruption rather than to moderate financial cycles in an orderly manner. In that regard, the two approaches should not be regarded as completely different ones.

### D. Spillovers to Emerging and Developing Economies

Regarding the spillovers, clearly, one of the issues on the policy agenda relating to prolonged low inflation and interest rates is challenges for emerging and developing economies. The reason is that such an environment in advanced economies could amplify capital flows into emerging and developing economies where inflation and interest rates tend to be higher. Although these capital inflows help boost domestic economic activity, they also carry the risk of economic disruptions such as a sudden outflow of capital or losses by borrowers due to exchange rate fluctuations. Recently, there has been a growing awareness among developing and advanced economies of the potential adverse impact of volatile capital flows.\(^5\)

### III. Conclusion

We are now about to start the 25th BOJ-IMES Conference. Following my remarks, this year’s Mayekawa lecture will be given by the former president of the European Central Bank, Mr. Jean-Claude Trichet. I am looking forward to hearing his views based on his long experience in macroeconomic policy management in the euro area.

In the keynote speech, Professor Carl Walsh of the University of California, Santa Cruz, the new Honorary Adviser to IMES, will share his views on monetary policy frameworks under a low inflation and interest rate environment from an academic perspective. As the author of the textbook *Monetary Theory and Policy*, which is a must-read for central bank economists, and of various other significant contributions to the literature, he is one of the most influential academics in this field.

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2. For example, Maddaloni and Peydró (2011) documents findings consistent with the first type of risks, and Heider, Saidi, and Schepens (2018) shows a negative relationship between the policy rate and lending volume.
3. See, for example, Svensson (2010).
4. See, for example, Borio and Lowe (2002) and White (2006).
5. See Powell (2018a) for the current view of the Federal Reserve Board. See Rajan (2015) for a discussion of the spillover.
Next, the paper presentations will focus on the following four topics: first, optimal monetary policy taking international capital inflows into account; second, the reversal interest rate; third, the Tinbergen Rule for financial stability and price stability; and fourth, the impact of prolonged low nominal interest rates on banking stability.

The final and concluding session will be the policy panel discussion, moderated by Professor Athanasios Orphanides of the Massachusetts Institute of Technology, another Honorary Adviser to IMES. As panelists, we will have Mr. Christian Hawkesby, Assistant Governor of the Reserve Bank of New Zealand; Mr. Klaus Masuch, Principal Adviser to the Director General Economics of the European Central Bank; and Mr. Masazumi Wakatabe, Deputy Governor of the Bank of Japan.

I hope that the theoretical and practical discussions in this conference will deepen our understanding of central bank design under a continued low inflation and interest rate environment.

Thank you for your attention.
References


