Opening Speech
by Toshihiko Fukui, Governor of the Bank of Japan

I. Introduction
Good morning, ladies and gentlemen. I am very pleased to address the 11th international conference hosted by the Institute for Monetary and Economic Studies. On behalf of my colleagues at the Bank of Japan, I welcome the participants from all over the world.

This year’s conference is focused on “The Challenges for Sustained Economic Growth under Changing Economic, Social and International Environments.” Over the two-day conference, we will explore a broad range of issues on economic growth. What are the major engines of economic growth? What are the long-term effects of uneven growth over the economies on global resource allocation? What roles should a government and a central bank play in promoting sustained economic growth?

II. Major Engines of Sustained Economic Growth
Our understanding of economic growth has advanced significantly since the revival of growth theory in the mid-1980s. For the last two decades economic growth has been one of the most sought-after subjects of economic research. The new “endogenous” growth theory has provided various systematic expositions of technological progress, such as creation, accumulation and diffusion of new ideas.

The standard growth theory tells us that economic growth in per capita basis comes from mainly two sources: capital deepening and total factor productivity growth, or TFP growth. Capital deepening increases output along the production function. TFP growth increases output by pushing the production function upward. The former faces the diminishing marginal productivity as capital deepening progresses, and the latter becomes increasingly important in achieving sustained growth in the long-term.

As the new endogenous growth theory suggests, TFP growth is closely related to accumulation of the intangible capitals, such as human capital and research and development. We see a lot of evidence that such investments have actually trended upward. In particular, workers with high educational backgrounds and those engaged in research and development have both increased in major industrial countries.
III. Interactions between Trend Growth Paths and Business Cycles

Growth theory tends to focus on the trend growth paths in the long run. Observed growth paths, however, are not smooth. There exists a dynamic interaction between trend growth paths and business cycles. How do macroeconomic fluctuations influence the trend growth paths? How do the trend growth paths in turn influence the short-term fluctuations in the economy?

For example, during the past three decades, we have seen a contrast in the cyclical and trend behaviors of real output between Japan and the United States. From the 1970s to the mid-1980s, the Japanese economy moved in a less volatile manner around the higher trend growth path, compared with the U.S. economy. From the mid-1980s such an observation was reversed. The Japanese economy moved in a more volatile manner around the lower trend growth path.

Indeed, the 1990s are often referred to as the “lost decade” for Japan's economy. Average growth declined from the mid-3 percent in the 1980s to the mid-1 percent in the 1990s. The recoveries in the 1990s were not strong enough to lead to self-sustained growth. The recessions were deep and long enough to weaken the economic fundamentals.

Now the Japanese economy is finally reaching the end of the long and painful path of the post-bubble adjustments. Our economy has achieved significant progress in overcoming structural impediments. It is gradually gaining momentum for the restoration of sustained growth, and is showing more signs of recovery, spreading from manufacturing to non-manufacturing industries, from large to small firms, and from metropolitan to regional areas.

Yet we should remain vigilant. We cannot say for sure that the current recovery will be durable and strong enough to push the economy back to a sustained growth path. Thus, the questions we should ask here are what makes the current economic upswing different from the past two recoveries, and whether such differences are sufficient for the economy to reach the sustained growth path.

The Japanese and U.S. experiences in the past three decades I mentioned before remind us of three things. First, such experiences confirm the importance of technological progress as a major engine of economic growth. Second, at the same time, they suggest the possibility that some additional factors also play a key role in determining sustained economic growth, such as financial systems and globalization. Third, they indicate that a low inflation environment emerges as a new challenge for sustained economic growth.

Now I will elaborate on some important but often-ignored or newly-emerged factors in achieving sustained economic growth. This year's conference takes up such issues in a well-balanced manner. I am convinced we will be able to broaden and deepen our understanding of economic growth here.
IV. Implications of Globalization

Let me begin by focusing on the implications of globalization for economic growth. The increased global linkages promote economic growth in the world through two key mechanisms: the division of labor and the international spillovers of knowledge.

In this context, the current recovery in the Japanese economy is taking place in tandem with the growing interdependence with the rest of the world, particularly with the other East Asian economies. The direct investment of Japanese businesses to East Asian economies accelerates the reallocation of their production bases. Consequently, between Japan and the other East Asian countries, both exports and imports are growing substantially.

Exchange rate movements have the short run and long run influence on an economy. As for the short run effects, exchange rate movements influence the economy through changing relative prices between goods at home and abroad. Recent empirical studies, however, show such short run effects become small because the exchange rate pass-through to import prices declines.

On the contrary, exchange rate movements still play an important role in facilitating more efficient resource allocations in the long run. At the previous conference, Professor Maurice Obstfeld here mentioned in his keynote speech that exchange rates still have significant expenditure-switching effects through influencing firms’ decisions on production bases and production-goods suppliers across borders. In fact, the recent increase in intra-firm trading enables businesses to shift their activities across borders smoothly, thereby strengthening the response of economic activity to exchange rate movements in the long run.

V. Asset Price Fluctuations and Financial Systems

Asset price fluctuations have important implications for promoting more efficient resource allocations and achieving sustained growth in the long run. The staff at the Institute will present an analysis on how asset price fluctuations and subsequent structural adjustments influence sustained economic growth, based on Japan's experience since the second half of the 1980s. They emphasize the viewpoint that the protracted economic stagnation in Japan derives from incomplete economic adjustments to significant changes in relative prices.

In view of the incomplete economic adjustments during the post bubble distress, we fully realize that the malfunction of financial intermediation impedes the resource allocation mechanism in the financial markets. With weak balance sheets, banks tend to continue lending to unprofitable businesses and leave them existing. Such lending policy hampers the factor reallocation to more profitable businesses.

Good news is that banks' lending attitude seems to be gradually becoming far more accommodative than in the previous recoveries. This shows that major banks in Japan have made good progress in solving non-performing loan problems. The resultant improvement in bank balance sheets is expected to enhance their loan capacity.
Well-functioning financial systems are important in achieving sustained economic growth. They play a crucial role in channeling household savings into the corporate sector and allocating investment funds among firms.

**VI. Demographic Changes**

The aging and decreasing population is a serious problem in many developed countries today. In Japan’s case, these demographic changes are taking place at a more rapid pace than any other country has ever experienced.

The aging and declining population will have far-reaching impacts. Declining fertility rates will possibly increase immigration. The structure of family and society will inevitably change.

**VII. A New Challenge in a Low Inflation Environment**

Now let me proceed with a new challenge in a low inflation environment. During the past two decades, inflation has fallen to a low level in major industrial countries. A low rate of inflation itself now poses a new challenge of achieving and promoting sustained economic growth in the global economy.

For example, a low inflation economy has a higher risk of deflation, and the interest rates find no other way than declining. However, in spite of the general perception that monetary policy should be conducted so as to avert deflation, a central bank cannot lower interest rates below the zero lower bound.

The downward rigidity of nominal wages is often pointed out as a factor that prevents the smooth adjustment of real wages under very low inflation. This impediment to the real wage adjustment is likely to hamper the reallocation of labor forces among sectors and regions.

As a sequel to this story, the snag is that the inflation expectations could firmly be anchored at a low level, even after the demand-supply conditions turned to be tighter, aided by the high anti-inflation credibility of the central bank. By the time prices and wages start rising, a potential risk of inflation mounts. In addition, if worse to come, in the shadow of relatively stable movements of prices in goods and services, mortgage and the other asset price spikes tend to be ignored. As a result, if any, a likely possibility is that the monetary policy stays longer behind the curve.

Japan has experienced the asset price bubble in the fairly favorable price environment and resultant long-lasting economic stagnation in the last two decades. Japan’s experience suggests the importance of assessing the sustainability of price stability over a fairly long period, which many central banks have emphasized in recent years. This implies that “price stability” does not always correspond to the achievement of a specific rate of inflation in terms of a specific price index within a specific time horizon.
VIII. Conclusion

I have reviewed the challenges for sustained economic growth under changing economic, social, and international environments. I expect that through discussion, those from both academic circles and central banks will learn more, share insights, and make the most of the wisdom for the future conduct of monetary policy. I certainly welcome discussions on how central banks can best contribute to sustained economic growth and sound development of the global economy.

Thank you.