

## **Ryuzo Miyao: Economic activity and prices in Japan and monetary policy**

Speech by Mr Ryuzo Miyao, Member of the Policy Board of the Bank of Japan, at a meeting with business leaders, Hakodate, 14 September 2011.

\* \* \*

### **Introduction**

Thank you for giving me this opportunity to exchange views with people representing southern Hokkaido, particularly the area around Hakodate. And I would like to express my gratitude to everyone for your cooperation in the various business operations of the Bank of Japan's Hakodate Branch.

Japan's economy temporarily suffered a steep decline after the Great East Japan Earthquake occurred on March 11. I am aware that the Hakodate area was no exception and was likewise affected by the disaster. Nevertheless, the efforts of all parties concerned to work toward economic recovery are paying off in a number of ways. The challenge will continue for the time being, and the Bank will do its utmost to support the efforts being made.

Today, I will present an overview of economic activity and prices in Japan, which is in the process of recovery, followed by remarks on monetary policy. In my conclusion, I will touch on the economy of southern Hokkaido, particularly the area around Hakodate.

### **I. Economic activity and prices in Japan**

#### **A. Overview**

Japan's economic activity has been picking up steadily while the supply-side constraints caused by the disaster have been mostly resolved and, in particular, production and exports have recently been on an increasing trend. On the demand side, business fixed investment, housing investment, and public investment are expected to increase, on the way to restoring capital stock. Private consumption is picking up as household sentiment has improved. Japan's economy is expected to return to a moderate recovery path as production activity increases with the resolution of supply-side constraints. While the current solid recovery, mainly in production, is welcome if it continues this autumn onward, there are also some concerns. These include a slowdown in overseas economies, prolonged appreciation of the yen, a rise in electricity costs, and possible protraction of deflationary expectations.

In the following, I will give an overview of overseas economies and then Japan's economy, which is in the process of recovery, and discuss points to note in the current and future situations.

#### **B. Overseas economies**

Let me first talk about the U.S. economy. Although the economy is recovering, the pace is slowing remarkably. Since the Lehman shock, the United States has been suffering balance-sheet adjustments in the household sector, a problem in which households incur excessive debts and a protracted period is required for resolution. In addition, since April 2011, a bottleneck in supply chains associated with the Great East Japan Earthquake has surfaced in the form of disruption of supply in automobiles and automobile-related parts, and gasoline prices have surged reflecting a hike in international commodity prices. Moreover, a cutback in local government spending has proceeded. As a result, consumption has been contained due to a slowdown in real income, production has slowed, and employment has grown at a sluggish pace. Of course, positive developments have also occurred. Exports, corporate profits, and business fixed investment have been firm, benefiting from emerging economies

whose domestic demand is robust as well as the U.S. dollar's depreciation, and stock prices have been at a relatively high level. However, real GDP for the April-June quarter on an annualized quarter-on-quarter basis, announced at the end of July, was 1.3 percent (later revised downward to 1.0 percent) and real GDP for the January-March quarter was 0.4 percent, reflecting a rapid slowdown in private consumption. An annual revision conducted at the same time showed that real GDP has yet to recover to the level prior to the Lehman shock.

Particularly since late July, markets have become highly volatile, as seen in a plunge in stock prices, and household and business sentiment has declined due to various events such as political turmoil over the federal debt ceiling, a series of deteriorating economic indicators such as ISM manufacturing and nonmanufacturing indexes and consumer spending, and a downgrading of U.S. Treasuries by Standard and Poor's from triple A to double A plus. Long-term interest rates have also been declining. In response to this situation, at the Federal Open Market Committee (FOMC) meeting held on August 9, the Federal Reserve Board stated that the current economic conditions were likely to warrant exceptionally low levels of 0–0.25 percent for the federal funds rate at least through mid-2013. While volatility in the financial markets has been contained to some extent, many of the economic indicators of consumer and business confidence have remained weak. In addition, in a situation where concern over the European sovereign debt problem has been reignited, it seems that the trend of risk aversion in the financial markets is continuing.

Meanwhile, one after another, private research institutes have revised downward their real GDP outlook for the second half of 2011 and for 2012. Judging from employment statistics and a manufacturing survey for August 2011, the pace of economic recovery is likely to remain very moderate. At the FOMC meeting in late September, it is expected that the Fed will deepen discussions on additional easing by extending the duration of the meeting from one day to two, and the Fed's potential actions have been drawing attention.

The European economy grew strongly at 3.4 percent on an annualized quarter-on-quarter basis in the first quarter of 2011, but slowed to 0.6 percent in the second quarter. As in the United States, the European economy was affected by the surge in international commodity prices and partly by the disaster in Japan, but the main reason for the decline was the economic slowdown in Germany and France, which had been driving growth in the euro area. In the second quarter, Germany's growth was 0.5 percent on an annualized quarter-on-quarter basis, versus 5.5 percent in the first quarter, and France's growth was minus 0.0 percent, compared to 3.6 percent in the first quarter. The slowdown seems to reflect a drop in exports to the United States and Asian countries, and therefore it is a matter of concern whether growth in both countries will recover in the third quarter, given that European peripheral countries have been subject to low or negative growth due to fiscal austerity.

Since July, economic activity in the euro area has been lacking signs of resilience, as confirmed by various economic indicators such as business confidence indexes, industrial output, and the unemployment rate. As for the European sovereign debt problem, additional support for Greece was decided at the European Union leaders' summit on July 21 and sovereign bonds spreads against German government bonds and the credit default swap (CDS) rate temporarily narrowed significantly; however, since the root cause of the debt problem was not addressed, tensions spilled over to Italy and Spain, resulting in a spike in government bond yields in both countries, and financial markets became destabilized. Against this backdrop, the European Central Bank decided on August 4 to reinstate a liquidity-providing supplementary longer-term refinancing operation with a maturity of approximately six months, and to restart bond purchases under the Securities Markets Programme. Some countries – France, Italy, Spain, and Belgium – started to restrict speculative moves, and on August 11 they decided to ban short selling of financial stocks, with Italian and Spanish government bond yields declining as a result. European financial markets have remained unstable, however, with a rise again in Greek government bond

yields and a decline in stock prices, mainly of financial institutions. Since the outbreak of the Greek crisis in May 2010, the number of countries targeted by the markets has increased. While support by the monetary and fiscal authorities has expanded during this time, tensions have spread even to Italy and Spain, and thus risks associated with the European sovereign debt problem seem to be on the rise.

Concern from now on is the spillover of the European sovereign debt problem to the financial/banking sector and economic activity. As this spillover appears to have partly surfaced in the form of a rise in financial institution CDSs and a widening in corporate bond spreads, further developments should be monitored carefully.

Asian emerging economies have been growing at a high rate, led by China, and medium- to long-term growth expectations appear to have remained high. However, due partly to monetary tightening conducted with a view to containing inflation, recent economic indicators have been showing signs of a slowdown. This can be seen, for example, in the declining trend in China's manufacturing purchasing managers index. In addition, Japan's disaster adversely affected ASEAN countries in the April-June quarter.

While the effects of the disaster appear to have almost run their course as of July, external demand might slow down from now on reflecting a slowdown in the recovery in the United States and Europe. Domestic demand is robust, but, given continued concern over inflation, further monetary tightening is necessary. For example, while China has been intermittently raising bank lending and deposit rates as well as the reserve requirement ratio since the beginning of 2011, year-on-year growth in the consumer price index (CPI) has remained high, at 5.5 percent in May, 6.4 percent in June, 6.5 percent in July, and 6.2 percent in August. Whether the Chinese economy can make a soft landing will be critical in ensuring the sound development of the global economy, and therefore, developments in China continue to warrant close attention.

Besides the problem of inflation, it should be noted that there is a risk in China that part of the large-scale investment made through local government investment vehicles might become nonperforming. In other words, considering China's economic outlook from a somewhat longer-term perspective, the high-growth track led by investment is likely to continue for the time being. However, if such large-scale investment continues for a long time, some of it might become excessive in inefficient areas and financial institutions' massive loans might become nonperforming. I will pay close attention to whether China can maintain a balance between price stability and economic growth from a somewhat longer-term perspective.

### **C. *Japan's economy***

Japan's economy is on the path to recovery following a plunge in growth due to the effects of the March 11 disaster. The real GDP growth rate in the second quarter on an annualized quarter-on-quarter basis, was minus 2.1 percent, marking three consecutive quarters of negative growth – that is, minus 2.5 percent in the fourth quarter of 2010, minus 3.6 percent in the first quarter of 2011, and minus 2.1 percent in the second quarter of 2011. After the earthquake, firms' production activity plunged, consumer sentiment worsened, and labor and income conditions deteriorated, due mainly to the constraints of supply chains and the nuclear accident. As a result of strenuous efforts by the parties concerned, the economy has recently been recovering, mainly in production, at a high pace. Production and exports have nearly returned to their levels prior to the earthquake, and private consumption has been gradually recovering due partly to demand stemming from the transition to digital terrestrial transmission and power saving. Business fixed investment has also been picking up, and household and business sentiment has been generally improving. In the meantime, the Bank enhanced monetary easing on March 14 following the earthquake, and on April 7 decided to introduce the funds-supplying operation to support financial institutions in the disaster areas.

The real GDP growth rate on an annualized quarter-on-quarter basis in the third quarter is likely to turn positive, according to private surveys. Production, mainly that of automobiles, continues to be at full capacity, and recovery demand is likely to gradually increase. Following the removal of the supply constraints, moderate economic recovery, generated by production and exports, is likely to continue.

Having said that, the future scenario for economic recovery is associated with the following concerns and thus warrants vigilance.

First, as already stated, there is a possibility that overseas demand will be weaker than initially envisaged amid the slowdown in the economic recovery in the United States and European advanced economies, and this might make Japan's economic recovery weaker than expected.

Second, the prolonged appreciation of the yen. If the appreciation of the yen continues in response to the events such as downgrading of U.S. Treasuries, conditional maintenance of the U.S. zero interest rate policy until mid-2013, and the renewed European sovereign debt problem, concern will grow regarding the hollowing out of domestic industries.

There are both positive and adverse effects of the yen's appreciation on economic activity, and the basic response to it should be to maximize the positive benefits and mitigate the adverse effects as much as possible. In this regard, one can point to such positive effects as providing firms and consumers with imported raw materials, products, and commercial goods at lower prices, as well as facilitating domestic firms' equity investment and acquisitions of overseas firms and projects, thereby raising the domestic firms' productivity. On the other hand, the adverse effects, needless to say, include exposing domestic automakers and electrical machinery manufacturers to severe price competition with overseas firms and thus lowering profitability.

The important point here is that, while the prices of various goods and services have been steadily rising in the markets to which Japanese firms export – including Asian emerging economies and the United States – automobiles and electrical machinery products have been competing severely with overseas products and their prices have been declining markedly in these markets. Therefore, Japanese exporters of these products will be forced to fiercely compete without being able to mitigate the impact of the yen's appreciation through inflation in the export destinations. As developments in exports are linked with domestic production and thus have a substantial impact on Japan's economy, downward pressure from the yen's appreciation tends to become strong. In addition, if the yen's appreciation leads to a relocation of key factories as well as research and development (R&D) bases, the adverse effects on the economy's potential growth are a concern. Based on this consideration, I believe it is meaningful that the government is considering support for R&D in the manufacturing sector and small and medium-sized subcontractor firms, to alleviate the pain associated with the yen's appreciation and prevent the hollowing out of domestic industries.

Third, a rise in electricity costs. This summer, the shortage of electricity did not substantially affect the production level, thanks to firms' creativity and endurance as well as individuals' efforts to save electricity. As a shift from nuclear power to alternative energy sources is likely from a long-term perspective, corporate profits could come under persistent pressure and some firms might have to shift their businesses overseas if electricity costs – including the imports of alternative energy sources – increase.

Fourth, protracted deflationary expectations. In August 2011, the base year for calculating the CPI was switched from 2005 to 2010, and as a result the year-on-year rate of change in the CPI components (all items less fresh food) was revised downward by 0.5 to 0.8 percentage point. The year-on-year rate of change in the new 2010-base CPI (all items less fresh food) was minus 0.2 percent in April, minus 0.1 percent in May, minus 0.2 percent in June, and 0.1 percent in July. Private research institutes had originally forecasted that the year-on-year rate of change in the CPI (all items less fresh food), because of the change in

the base year, would decline from the recent level of around 0.6 percent to around 0 percent. The Bank's forecasts were almost within the same range, and it has been confirmed that it will still take some time to achieve price stability.

If expectations for the continuation of the zero interest rate become protracted in a situation where more time is needed to achieve price stability, there is a risk that people's deflationary expectations will intensify in a self-fulfilling manner. If by any chance deflationary expectations prevail, it will become difficult to change the behavior of people who are reluctant to take risks; people might postpone spending, and growth expectations would be unlikely to increase. There is a risk that the economy will be unable to escape from such a situation, which might be called a "deflation and low-growth trap." At present, even following the change in the base year, it is still the case that the economy is emerging from deflation amid the narrowing output gap, and careful attention should be paid to any possible changes in people's inflation expectations.

In this regard, there are factors, including an incremental rise in commodity prices, that will push up the actual price trend with a lag. From October 2011 onward, the effects stemming from a rise in tobacco tax and an increase in non-life insurance rates will disappear. Due attention should be paid to whether these factors will again put downward pressure on the CPI.

In the meantime, at the Monetary Policy Meeting held on August 4, the Bank decided to enhance monetary easing by increasing the total size of the Asset Purchase Program by about 10 trillion yen: 5 trillion yen for the fixed-rate funds-supplying operation against pooled collateral and 5 trillion yen for asset purchases. While Japan's economic activity is picking up steadily mainly in production, its economic outlook entails various downside risks. Taking into account such downside risks, including uncertainty about overseas economies and effects stemming from the base-year change in the CPI, the Bank decided to further enhance monetary easing, thereby ensuring a successful transition from the recovery phase following the earthquake disaster to a sustainable growth path with price stability. The Bank will continue to take proper measures if necessary.

## **II. Monetary policy**

### **A. *Monetary policy at the zero interest rate***

Now let me summarize the efforts taken to enhance monetary easing in a general context.

If the conduct of monetary policy, which controls the ordinary policy interest rate (the uncollateralized overnight call rate in the case of Japan) is defined as "traditional monetary policy," monetary policy that is pursued while the policy interest rate approaches the zero bound is often called "unconventional monetary policy." When the policy interest rate is lowered to around 0 percent, it becomes difficult to further enhance monetary easing. Instead, there are other policy measures to further exert powerful monetary easing effects, such as committing to continue the zero interest rate policy into the future or increasing the size of a central bank's assets, or changing the composition of its asset portfolio.

The "comprehensive monetary easing" implemented in Japan from October 2010 can be interpreted precisely as an "unconventional monetary policy package" that includes all the elements just mentioned. Namely, the Bank has confirmed that it will maintain the virtually zero interest policy until it judges that price stability is in sight, and it has been purchasing various financial assets such as government securities, corporate bonds, CP, exchange-traded funds (ETFs), and Japan real estate investment trusts (J-REITs). Successive monetary policy measures in the United States conducted following the Lehman shock were similar in that they included large-scale asset purchases such as mortgage-backed securities and government securities, changes in the composition of assets, and the continuance of the

zero federal funds rate policy, at least through mid-2013 given the conditions of economic activity and prices.

All these measures are expected to work on firms' and households' spending and investors' portfolio selection by encouraging a decline in longer-term market interest rates and various risk premiums, and to ultimately influence economic and price conditions.

Regarding the effects of comprehensive monetary easing, as far as financial market developments are concerned, we at the Bank believe that it has had certain positive effects. Credit spreads on CP and corporate bonds have declined, and stock and J-REIT prices have been firm on the whole. We consider these effects have played a role in underpinning economic activity and prices.

With regard to the unconventional policy measures in the United States, particularly the large-scale government bond purchase program – the so-called “quantitative easing II,” implemented from November 2010 to June 2011 – there has been controversy about the effects of the policy measures. Supporters of the effects have pointed out that the measures have dispelled deflationary concern, raised stock prices, improved consumer confidence, promoted exports due to the U.S. dollar depreciation, and enabled prompt repayment of injected public capital through a rise in stock prices. On the other hand, critics of the effects have indicated that economic indicators including employment have not improved markedly, a mini-bubble in stock prices has formed and burst, a surge has been induced in international commodity prices such as crude oil and gasoline, real income of low-income families (who are unlikely to benefit from the surge in asset prices) has been reduced, and inflation has been exported to emerging countries. Assessments of the policy measures are diverse, in that some emphasize the positive effects of the measures while others cast doubt on the policy effects or claim that unexpected side effects were far too large. The controversy seems to suggest that it is difficult to grasp and foresee the size and channels of the policy effects in advance.

## ***B. Effects of monetary policy measures: a comparison of traditional and unconventional policies***

Is there a substantial difference between traditional and unconventional policies concerning monetary policy effects and their transmission channels?

In traditional monetary policy, an expected transmission mechanism is to work on borrowing costs, various asset prices including stock prices and foreign exchange rates, and bank credits both through the interest rate channel and the portfolio adjustment channel. These, in turn, influence firms' and households' spending behavior and ultimately economic activity and prices.

Such a transmission mechanism of traditional monetary policy, in theory, also holds true for unconventional policy. Influencing longer-term interest rates and various risk premiums is nothing more than the interest rate channel and the channel through portfolio adjustments and asset prices, both of which I have mentioned above. Almost all of the aforementioned controversy over the policy effects in the United States can be explained in terms of the traditional transmission channels.

On the other hand, some arguments remain to be specifically pointed out about transmission mechanisms in unconventional policy, even though the qualitative mechanism in traditional and unconventional policies is the same.

The first is about the effect of stabilizing financial systems and financial markets. This is the effect of soothing anxiety about financial systems by supplying ample liquidity to financial institutions, or the effect of stabilizing financial markets by central bank interventions when the markets become excessively risk averse and the market mechanism deteriorates, resulting in a surge in risk premiums. By preventing financial anxiety and preventing the markets from plunging, adverse effects on economic activity can be prevented.

The second is about the effect of international spillover. With expectations for a protracted zero interest rate, global investors will search for yield or become active in the carry trade and risk taking, and capital will flow into high-interest-rate and commodity-exporting countries. This will then expand economic activity and raise stock prices in overseas emerging economies. As a result, there will be an effect that spills over to domestic economic activity and prices through an increase in exports to the emerging economies and an improvement in profits of global firms.

The third is about the effect through the expected rate of inflation. This is the effect that, in addition to the existing channel of influencing demand, by attaching an expectation that a central bank's balance sheet will expand for a protracted period, the expected rate of inflation will rise and real interest rates will decline, thereby affecting economic activity and prices.

While these transmission mechanisms of monetary policy effects can be considered, the side effects will be a source of concern if monetary easing becomes excessive. As for the first effect I mentioned, if a central bank excessively intervenes in the markets and suppresses risk premiums too much, this might ruin the intrinsic function of the markets of making prices according to risks. In addition, financial institutions' profits might be compressed. By encouraging excessive risk taking, the second effect could induce economic overheating or a credit bubble in the countries receiving the capital inflows and subsequently cause a serious economic downturn. As for the third effect, if excessive balance-sheet expansion continues, the expected rate of inflation might rise unexpectedly or the markets might realize that the balance-sheet expansion is an undisciplined monetary increase or the monetization of government debts, leading to a surge in government bond yields.

It is necessary to take due account of the possibility that unconventional monetary easing will be associated with such unique side effects.

### **C. *Points to keep in mind***

Based on the summary I have just given, there are several points to keep in mind.

First, as the transmission channels of the monetary policy effects overlap or are mutually related, it is quite difficult, if not impossible, to recognize each transmission channel separately or measure its quantitative effects. In particular, policymakers lack experience with respect to the effects and side effects of unconventional policy. And an economic situation that requires such a policy often occurs in the midst of severe and protracted economic stagnation following a financial crisis, in which firms and households have shouldered excessive debts. Therefore, it could indeed be an economic environment in which a normal transmission mechanism cannot function properly. Taking into account that there is limited experience with unconventional policy and such a policy is bound to face a difficult economic environment, it becomes crucial to make a comprehensive and deliberate judgment that requires vigilance for unexpected side effects, while referring to prior policy experience.

Second, in a financial and economic environment after the effects of unconventional monetary policy spread in a desirable way, interest rates will rise in a positive sense. When somewhat longer-term interest rates decline or risk premiums fall by way of accommodative monetary policy, funds' borrowers – for example, firms – can increase borrowing based on low interest rates, or can purchase many more capital goods by issuing new shares thanks to a rise in stock prices, thereby increase business fixed investment. As a result, economic activity and prices will rise. In the aggregate, stock prices will rise, and bond prices will fall and the interest rate will increase. As for investors, they feel discouraged by a decline in profitability due to the initial decline in interest rates, and they will try to sell low yield bonds and purchase other assets including stocks. As a result, asset prices including stock prices will increase and bonds will be sold and interest rates will rise.

Consequently, at the transmission channel in which monetary policy effects surface gradually and the economy grows steadily, it is natural that longer-term interest rates initially will fall and then rise in due course. On the contrary, if longer-term interest rates remain low, this would imply prolonged low growth, given that inflation expectations are unchanged.

As a footnote, let me point out that one needs to be careful in discussing the effects on an economy of a case in which interest rates are increasing in a desirable way. For example, in case of fiscal consolidation, if the assumed interest rate level rises, it will increase the interest burden in public finance. On the other hand, an increase in revenue can be expected from a rise in economic growth. Thus, it is important to discuss fiscal consolidation by taking account of these two effects.

Third, desirable strengthening of growth potential cannot be achieved by monetary policy alone. To begin with, it is understood that strengthening of an economy's growth potential will be promoted primarily by structural reform efforts in the private sector and the government's growth strategy to support such efforts. Having said that, monetary policy might have medium- to long-term effects on the economy, in addition to an effect of containing short-term and cyclical swings in economic activity. In an ideal case, monetary easing might contribute to strengthening productivity and growth potential by promoting quality business fixed investment as well as R&D investment. In an undesirable case, there is a risk that monetary easing will amplify swings in the economy in the medium to long term by encouraging excessive risk taking and excessive business fixed investment, or that undisciplined monetary easing will induce the erosion of confidence in the currency with an unexpected timing and induce a surge in interest rates. Therefore, it is important to recognize that potential effects of monetary policy could have both positive and negative effects on medium- to long-term economic growth.

In relation to strengthening the medium- to long-term growth potential, the Bank has been conducting the Fund-Provisioning Measure to Support Strengthening the Foundations for Economic Growth since June 2010. With this measure, the Bank supplies long-term funds – with an initial duration of one year and a maximum duration of four years – at a low interest rate of 0.1 percent to qualifying financial institutions. The measure has already reached the initial total amount of 3 trillion yen and has been playing the role of a catalyst. In addition, in June 2011 the Bank decided to introduce a new line of credit of 500 billion yen. Through this, the Bank provides long-term funds, with an initial duration of two years and a maximum duration of four years, at a low interest rate of 0.1 percent to financial institutions that undertake equity investments and asset-based lending. The Bank expects that the new measure will further enhance financial institutions' efforts to strengthen the foundations for economic growth through the use of a wider range of financial techniques including asset-based lending.

I have talked about the transmission channel of monetary policy effects and some points that should be kept in mind. As I mentioned earlier, when conducting actual monetary policy, deliberate and decisive actions are required while considering carefully various conditions and possibilities and identifying the timing and measures that will produce maximum positive effects and keep side effects to a minimum overall. In a highly uncertain economic environment, the Bank will continue to consistently make contributions as the central bank, by pursuing powerful monetary easing consisting of comprehensive monetary easing, ensuring financial market stability, and providing support to strengthen the foundations for economic growth.

### **Concluding remarks**

In my concluding remarks, I would like to say a few words about the economic potential of southern Hokkaido, particularly the area around Hakodate.



There has been downward pressure on economic activity in the region, mainly in the key industry of tourism, due to the effects of the Great East Japan Earthquake. Recently, as pressure stemming from the disaster decreases, there have been signs of improvement mainly in tourism, private consumption, and production.

The region offers a number of tourist attractions, such as a superb night view from Mount Hakodate – which is considered to be among the top three such views in the world – historic and cultural heritage sites such as Fort Goryokaku, fresh seafood, and numerous hot springs. It is famous as one of Japan’s leading tourist destinations, attracting 10 million visitors each year from home and abroad. In the revised second Japanese-language edition of *Michelin Green Guide Japon*, released in May 2011, the region as a whole received a high rating, with the night view from Mount Hakodate awarded three stars (worth a journey) and six sites including Fort Goryokaku awarded two stars (worth a detour). There are also many other positive aspects related to tourism, including the opening of Shin-Hakodate station on the Hokkaido Shinkansen Line planned in fiscal 2015. I sincerely hope that people here will take advantage of such opportunities.

The region is characterized by abundant marine resources and marine-related industries, such as seafood processing that utilizes such resources and the shipbuilding industry, and many related academic organizations. I have learned that efforts to take advantage of these characteristics and promote the concept of “International Fisheries and Ocean City Hakodate” have been underway through the collaboration between industry, academia, and government.

I strongly hope that the efforts to vitalize the region, by utilizing its characteristics and advantages, will lead to the further development of southern Hokkaido.