

Masaaki Shirakawa: Japan's economy after the great earthquake – rebuilding, revival, and further growth

Speech by Mr Masaaki Shirakawa, Governor of the Bank of Japan, at a meeting held by the Naigai Josei Chousa Kai (Research Institute of Japan), Tokyo, 25 May 2011.

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Introduction

I am privileged to have the opportunity to speak before such a large audience today.

Two and a half months have passed since the Great East Japan Earthquake, but many continue to face severe hardship, including those being forced to live at evacuation sites. I would like to offer my heartfelt sympathy to those who are suffering. At the same time, moves toward rebuilding life and infrastructure are under way in disaster areas, albeit gradually. At the beginning of May, the Diet approved the supplementary budget aimed at early rebuilding following the disaster. Discussions toward revival of the disaster areas are also under way. Moreover, discussions toward formulating growth strategies for Japan's economy, which has been the great challenge since even before the earthquake, have also been regaining momentum. Those individual efforts and discussions are important and linked together. Today, I will first explain the current situation and near-term outlook for Japan's economy. I will then share with you some of my ideas on the challenge Japan's economy faces in each of the coming phases of rebuilding, revival, and further growth.

I. The current situation and outlook for Japan's economy

Downward pressure on the economy by the earthquake disaster

Let me start with the current state of Japan's economy. From early 2011, Japan's economy had emerged from the pause since autumn 2010. The earthquake disaster struck the economy when it was about to regain recovery momentum. The earthquake, tsunami, and accident at the nuclear power plant have changed the situation significantly, and Japan's economy is currently facing strong downward pressure. Let me note that industrial production for March decreased by 15 percent on a month-on-month basis, the largest one-month drop on record. The recent sharp and substantial economic plunge is similar to that following the failure of Lehman Brothers but different in terms of its mechanism: the recent downward pressure is caused by a supply-side shock. The earthquake and tsunami caused considerable damage to social capital stock, such as roads and ports, as well as private capital stock, such as factories and commercial facilities, in a wide area from the Tohoku region to the northern Kanto area. The destruction of factories led to disruptions in the supply chains of parts and materials, which affected production not only in disaster-stricken areas but also a wide range of non-affected areas. The damage to power-generating facilities constrained electricity supply mainly in the Kanto and Tohoku regions. These factors have resulted in a decline in the capacity for supplying goods and services in Japan's economy as a whole. As a result, exports have decreased substantially and domestic demand has been declining. It should be noted, however, that demand itself has not disappeared, but that it could not be realized due to supply constraints. In this regard, the current situation is significantly different in nature from that which followed the failure of Lehman Brothers, when demand both at home and abroad "evaporated" due to the rapid contraction of financial markets. There has been no significant change in the fundamental conditions that supported Japan's economic recovery prior to the earthquake – namely, the expansion of markets for Japan's exports on the back of robust growth in overseas economies. Therefore, the most vital near-term challenge for Japan's economy is to resolve supply constraints as early as possible, and this should be addressed with utmost efforts.

At the same time, however, the supply-side factor is not the sole cause of downward pressure on the economy. Additional downward pressure from the demand side, which is partly related to the supply-side shock, is also contributing. The accident at the nuclear power plant and power shortages have exerted downward pressure on economic activity through a deterioration in business and household sentiment, as well as a declining number of tourists from abroad. Voluntary restraint by consumers spread nationwide immediately after the earthquake, dampening spending particularly for services such as tourism and eating out, as well as for luxury goods. Even if the initial shock is brought about by supply constraints, if the sluggishness in production persists, there will be an increase in adverse effects on corporate profits and on employment and wages, thereby putting the brakes on business fixed investment and private consumption.

In sum, the current downward pressure differs from the “evaporation” of demand following the failure of Lehman Brothers. Nevertheless, it is necessary to carefully examine whether or not demand-side factors will exert downward pressure on the economy.

The baseline scenario for the outlook

Next, I will talk about the outlook for Japan's economic activity. The Bank of Japan judges that Japan's economy for the time being is likely to continue facing strong downward pressure, mainly on the production side. But from the beginning of autumn 2011, supply-side constraints are likely to ease as the power shortage problem is mitigated amid the progress with reconfiguration of supply chains. In fact, in the past two and a half months since the earthquake, an increasing number of factories have made progress in restoration efforts and resumed production. Against this background, some firms have brought forward their originally targeted dates to resolve supply chain disruptions. As for consumer sentiment, which deteriorated sharply immediately after the earthquake, voluntary restraint has recently eased somewhat, and from April there have been signs of recovery in sales of electrical appliances as well as sales at department stores. During the Golden Week holidays – the period from late April to early May that includes four national holidays – more than just a few tourist sites were crowded compared with the pessimistic forecast made ahead of this period.

These developments suggest that Japan's economy has started to move toward recovery from the tumble immediately after the earthquake. Overseas economies have also continued to grow rapidly. According to the forecast by the International Monetary Fund, the growth rate of the global economy will be 4.4 percent in 2011 and 4.5 percent in 2012, surpassing the average rate of 4.0 percent for the ten years preceding the financial crisis. In this situation, Japan's exports are likely to start recovering as supply-side constraints ease. The replenishment of inventories, which was significantly reduced due to the disaster, will act as a factor to boost production, and demand for restoring capital stock will gradually increase. Therefore, in the second half of fiscal 2011, the sense of recovery will be somewhat more noticeable, although it will fall short of a V-shaped recovery. In fiscal 2012, Japan's economy is projected to continue to realize relatively high growth because we will see a more effective utilization of the transmission mechanism by which the strength in exports and production feeds through into income and spending, and because rebuilding demand will continue increasing. If expressed in numerical terms, the annual real GDP growth rate is projected to expand to 2.9 percent in fiscal 2012, after staying at a low 0.6 percent in fiscal 2011 due to the drop in the first half.

Uncertainty regarding the outlook

As I mentioned earlier, the Bank's baseline scenario is that, in the second half of fiscal 2011, Japan's economy will recover from the tumble caused by the earthquake and return to a moderate recovery path. However, the Bank fully recognizes that this outlook entails various uncertainties.

First of all, there are uncertainties regarding developments in overseas economies and international commodity prices. There continues to be the two-speed pattern of overseas economies, with moderate recovery in advanced economies and very strong growth in emerging economies. In the United States, balance-sheet adjustment pressure following the bursting of the credit bubble – such as a decline in home prices and excess debt in the household sector – has continued to weigh on the economy. In Europe, concern about fiscal problems in some peripheral countries such as Greece has not been resolved. Meanwhile, in many fast-growing emerging economies, continued monetary tightening has not sufficiently calmed economic overheating and concern over inflation. This might cause another longer-term risk of more volatile fluctuations in economic activity, which could undermine sustainability in growth. Although our minds have been occupied with domestic events, we also need to pay careful attention to these developments in overseas economies.

Having said that, the highest degree of uncertainty lies in the effects of the disaster on Japan's economy. It is particularly important to consider when various supply constraints associated with the disaster will be removed. In terms of electricity, the supply and demand balance is expected to tighten in the summer, when demand peaks due to the use of air conditioners. Various measures have been taken to weather this difficult period: a strengthening of supply capacity by electric power companies; the use of in-house power generation; and firms and households' efforts to conserve electricity and to level out demand. As for supply chains, the situation has been improving. However, we should not forget the difficulty in making precise projections at this point regarding the prospect of electricity supply shortages and supply chain disruptions. The summer demand for electricity depends significantly on the temperature. Concern over electric supply might be long-lived beyond summer 2011 depending on the rate of operation in nuclear power plants across Japan, which could be affected by the recent decision to shut down the Hamaoka nuclear power plant located in central Japan. Moreover, the pace of reconfiguration of supply chains will differ across industries and products. It might take time for consumer sentiment to fully recover depending on the aftermath of the accident at the nuclear power plant and on the employment and income situation.

To put it the other way around, if problems regarding supply constraints start to be resolved at a faster pace than expected, the economy could deviate upward from the projection. While there is a high degree of uncertainty about the prospect of supply constraints, in conducting monetary policy, the Bank considers it appropriate to pay more attention to downside risks for the time being. What is certain is that the most important challenge to eliminating downside risks is to remove supply constraints as early as possible. On this point, many firms have been making their utmost efforts to restore affected facilities, carry out production at alternative sites, and secure alternative suppliers. Looking at worksites in the manufacturing industry, various continued efforts and attempts have involved putting aside the usual rivalries; for example, firms in the same industry temporarily covering the production of disaster-stricken firms and several manufacturers of final products cooperating in terms of sending staff to parts manufacturers to support their restoration efforts. The Japanese industry has proved its competitiveness in overcoming and addressing challenges in a flexible manner on many occasions. I hope that an early resolution of supply constraints will be enhanced by utilizing such "competitiveness at worksites," or *genbaryoku*, in various areas. Needless to say, it is important to prevent any deterioration in sentiment and heightening of risk aversion with a view to avoiding any additional decline in demand until supply constraints will be resolved. In this regard, the Bank has been swiftly implementing various measures since immediately after the earthquake, which I will address later.

Price developments

Next, I will talk about price developments. I have just mentioned that the recent decline in economic activity is basically caused by the supply shock. Thus, there is a view that the decrease in supply capacity will cause a tightening of the supply and demand balance,

thereby potentially increasing inflationary pressure. However, as I said earlier, the disaster has also resulted in a decline in demand. Therefore, the near-term prospect of the aggregate supply and demand balance is not so obvious. Still, in the longer run, the year-on-year rate of change in the consumer price index (CPI) is expected to remain slightly positive, as the economy returns to a moderate recovery path from the second half of fiscal 2011.

For this projection to materialize, it is important that medium- to long-term expected rates of inflation for businesses and households remain stable. On this point, as far as the results of economists' surveys are concerned, no significant change has emerged in medium to long-term expected rates of inflation. Another factor that affects prices is import costs. In this regard, developments in international commodity prices, such as prices of crude oil, grains, and nonferrous metals, are important. International commodity prices rose rapidly until spring 2011 and have experienced some adjustment since the end of April. It is difficult to forecast the short-term fluctuations of market-determined international commodity prices. Thus, in making its forecast, the Bank assumed that such prices are likely to continue a moderate uptrend given strong growth in emerging economies. Expressing the outlook in numerical terms, the year-on-year rate of change in the CPI is projected to be 0.7 percent both in fiscal 2011 and 2012.

If this projection materializes, the CPI for fiscal 2011 will become positive on a year-on-year basis for the first time in three years, although this requires a supplemental explanation. In August 2011, the Ministry of Internal Affairs and Communications, which compiles the CPI, is scheduled to conduct the base-year change to the CPI, regularly conducted every five years. It has been pointed out that there is usually a technical upward bias in the CPI compilation – namely, a greater chance of having a somewhat higher inflation rate on a year-on-year basis in the period immediately before the revision because substantial price declines in goods such as personal computers and televisions are not sufficiently reflected. Thus, the rebasing is likely to cause the year-on-year rate of change in the CPI to be revised downward.

Although there are some points that should be kept in mind, as described earlier, Japan's economy is expected to return to a sustainable growth path with price stability in the longer run. Having said that, the question we must ask ourselves is: to what kind of growth path should Japan's economy return? I would also like to stress the significant importance of serious efforts to raise Japan's economic growth rate in the medium to long term – beyond the cyclical economic recovery.

II. Efforts to address medium- to long-term challenges

Even before the earthquake, the great challenge for Japan's economy was to raise its growth potential amid a rapidly aging population that is unprecedented in other countries. Now, the task of rebuilding and revival following the disaster is added to the list of challenges. In the meantime, we cannot stop ongoing structural changes in the global economy, such as economic and financial globalization as well as emerging economies catching up. What I would like to emphasize today is that, even when doing our utmost to overcome the disaster, we should not retreat from efforts to address the medium- to long-term challenges that have been recognized for years. Rather, we need to change our way of thinking such that we regard the post-quake responses and measures, including the revival of the disaster areas, as a new starting point for the task of raising the growth potential of the economy.

A. Efforts toward raising the growth potential of the economy

The average growth rate of Japan's economy fell substantially to around 1.5 percent in the 1990s. In the 2000s, the average fell to barely 1 percent, partly due to the economic plunge triggered by the failure of Lehman Brothers. This long-term downtrend in the growth rates reflects the slowdown in the productivity growth rate from the 1990s and the accelerated

decline in the working-age population from the early 2000s. These problems need to be addressed in order to sustainably raise Japan's economic growth rate.

First, given that the decline in the working-age population is the result of demographic dynamics, it is not possible to immediately stop this long-term trend. Thus, in order to revitalize the economy based on the current demographic trends, efforts to raise the share of working people – namely, the labor force participation rate – are essential. In this regard, of key importance is how to raise the labor force participation rate of the elderly and women, especially women in their 30s, whose participation rate is low compared with abroad. With regard to the participation rate of the elderly, large firms typically used to have a retirement age of 55. Upon reaching that age, the remaining average life expectancy, which was 20 years for men and 24 years for women at the beginning of the 1970s – the last high-growth era – has risen to 27 years for men and 33 years for women, an increase of around 10 years over the past 40 years. Although their working patterns are not exactly the same as those of younger generations, it is essential that the elderly join the workforce by making use of their experience. In order to raise the labor force participation rate, it is necessary to change the way of thinking within firms and society as a whole, such that workers are able to have more flexible working patterns depending on their lifestyles and sense of values.

Second, it is also essential to raise the productivity growth rate. “Raising productivity” is often perceived as pursuing more efficient management through a reduction in personnel and equipment. It is true that, in the case of Japan, firms have a tendency to enhance productivity through intensive cost reductions. However, such “streamlining” alone in many cases does not lead to the enhancement of productivity for the economy; rather, it might end up in contracted equilibrium. Raising productivity that would contribute to economic growth is nothing more than raising individual persons' capacities for generating value-added, thereby increasing the size of the economy as a whole. To this end, of importance are efforts to discover new demand and create new markets both at home and abroad – namely, embracing the role of innovation. In what follows, I will talk about these challenges in terms of both global and domestic demand, and then the demand directly related to the earthquake disaster.

Capturing global demand

In order to raise the productivity and growth potential of Japan's economy, even in this tough situation after the earthquake, it is important to actively capture fast-growing demand in overseas markets by adjusting to accelerating globalization. Since the earthquake, mainly because of the effects of the accident at the nuclear power plant, Japan's reputation for being “safe and secure” has been undermined; as a result, the number of visitors from abroad have fallen substantially across the country and exports of food have been adversely affected. This underscored the need to accurately and actively provide information on Japan's situation, thereby dissuading from “passing on Japan,” which might otherwise occur on the basis of misunderstanding and rumors. At the same time, it is important to further increase the added value of Japanese goods and services by responding to the needs of foreign customers in a flexible manner.

Before the earthquake, the number of tourists from Asia increased by three times in 10 years, in what could almost be called a “Japan Boom.” The disaster has ruined many factories but not Japan's sophisticated technologies. The “soft power” that has supported Japanese society is still there, as epitomized by good public safety, reliable business operations, and personalized and courteous customer service. By making use of this strength, if efforts continue to be made to polish the attractiveness of Japan's goods and services, Japanese brands will see a revival and be viewed as more attractive with resolution of the nuclear power plant problems and the passing of time since the earthquake.

It is a cause for concern that the disaster might affect Japanese firms' strategies for their overseas production network and foreign firms' policies for procuring parts. Specifically, the possibility has been pointed out that disruptions to supply chains and power shortages may

accelerate Japanese firms' shift to overseas production. Some foreign firms have started to replace parts and materials obtained from Japan with products made abroad. There is a possibility that this will not be a temporary emergency measure and thus result in a permanent decline in the ratio of procurement from Japan. However, from a different point of view, the disaster has reconfirmed that Japan's high-end parts and materials occupy irreplaceable positions within worldwide manufacturing, especially in the areas of automobiles and electronics. Japanese manufacturers have been increasing the ratio of overseas production in the long run while creating new technologies and products in Japan that other countries cannot easily imitate. This process is not the so-called hollowing-out of Japan's manufacturing base, but rather product differentiation or a more advanced division of labor across the national border. Since emerging economies are becoming more competitive and sophisticated, the only way Japan can sustain itself in the global economy is by continuing to strengthen efforts to generate products and services that are always one step ahead. So long as Japanese firms maintain their fundamental strength, the global supply chains will be reconfigured, with manufacturing within Japan as the central core. Moreover, in order to provide a favorable environment in which Japanese firms and industries prosper together with the global economy, it is important to steadily expand the framework for free trade agreements and economic partnership agreements.

Exploring new domestic markets

Next, I would like to emphasize the need to explore new domestic markets. I mentioned the decline in the working-age population as one of the factors behind the decrease in Japan's economic growth rate. At the same time, however, Japan's economy has been faced with chronic excess employment, and developments in wages and prices have been weak for a protracted period. This fact suggests that simply blaming the decreasing workforce numbers due to the aging of the population as the cause of the slowdown in Japan's growth rate misses the point. The structural cause of slow growth in Japan is that firms and industries have failed to recognize changes in the content of the potential demand driven by demographic dynamics. The other side of the coin is that, once the existing markets for goods and services mature and fall into excess supply, this situation tends to persist, and this has become a factor responsible for generating excess employment and deflationary pressure. The demographic dynamics of a declining working-age population itself is not a direct cause of a decline in the economic growth rate; rather, it is more attributable to economic and social systems that have failed to appropriately adapt to such demographic changes.

The decline in the working-age population also represents the decline in the population that accounts for the bulk of consumption. This will act as a factor to shrink the domestic market, mainly the market targeting families, on the demand side. In this situation, without capturing new demand arising from the aging of the population, the domestic market would shrink as a whole. The desire to make life more comfortable is constant regardless of age. An increasingly aging population should be creating new potential demand across a wide range of areas such as health and nursing care, tourism, leisure, and cultural activity. The growth areas are not limited to global demand. If potential demand is carefully examined, there are also many seeds for growth in the domestic market. Of course, in order to explore new demand, it is essential to have a strongly motivated management and financial infrastructure that enables risk taking. In this regard, determination and efforts by the management of individual firms to take up such challenges is the starting point for everything. At the same time, it is important to have a business environment that supports such forward-looking corporate activity, and to this end, collaborated efforts by all the concerned parties in the country are needed. The aging population is not the only key area with regard to exploring new markets. Given the problems in electricity power supply after the earthquake, technological innovation in the energy area is promising as a way to increase the growth potential of Japan's economy. Having nurtured sophisticated technologies for years, Japan is well placed to explore business opportunities by pursuing the following three goals together:

“saving energy” to conserve energy through the wider use of LED lighting; “creating energy” through the use of solar power; and “storing energy” through the efficient storage of energy through improvements in battery storage. Constraints from natural resources and energy is the big challenge that the global economy faces in the long run, and becoming a forerunner in this area will be helpful in capturing global demand going forward.

Innovations to rebuilding and disaster prevention

In order to raise the growth potential of Japan's economy, the strength to develop new markets by discovering potential demand is required. This also applies to the rebuilding process in the disaster areas, which will make further progress going forward. The Tohoku and northern Kanto areas are endowed with rich resources for agriculture and fishery as well as tourism. These areas also have a solid foundation in academic research and manufacturing, indicating considerable potential for responding to prospective demand. Rebuilding of the disaster areas involves the process of reconfiguring places for industries and employment in accordance with local peoples' needs, by making use of the areas' advantages and competitiveness. Needless to say, the first priority is to return the people in the affected areas to safe and comfortable lives as soon as possible. After completing such rebuilding of lives, even if it takes some time, the disaster areas will definitely move forward into the next phase, in which measures with new innovative ideas for regenerating the regional economy will be implemented.

Moreover, the earthquake disaster has brought a renewed recognition that the Japanese Islands always hold the inherent risk of earthquakes and tsunamis. Not only the disaster areas but also Japan as a whole need to make efforts to improve both physical and human infrastructures, in order to make the country more resistant to natural disasters. There are many kinds of potential demand, and in order to meet such demand, innovation again plays an important role.

B. Efforts toward sustaining fiscal balance

I have stressed the importance of addressing the challenge of raising the medium- to long-term growth potential of the economy, which is closely related to another challenge: efforts toward sustaining fiscal balance. As the aging of the population will advance further, pension payments and the costs of health and nursing care are projected to increase substantially. In this situation, allowing the fiscal deficit to perpetuate itself would result in the uncontrollable expansion of government debt outstanding, which is not sustainable. Once concern about fiscal sustainability heightens, this could impair the smooth issuance of government bonds. Moreover, if more people expect that a greater burden on the working-age population is inevitable, the economy could fall into a vicious circle in which more cautious spending by firms and households leads to a further economic downturn and a deterioration in fiscal conditions.

As just described, the two challenges of raising the growth potential and fiscal consolidation are not independent but inextricably linked. One challenge should not be given priority over the other, but rather these must be addressed together. The large fiscal deficit has continued since the 1990s on the back of successive fiscal stimulus measures and the rise in social security costs, and addressing fiscal consolidation was an urgent task even before the earthquake. Fiscal measures for the rebuilding and revival of the disaster areas will definitely push up fiscal spending further even though it is still difficult to make an accurate estimate. The expected fiscal deterioration in the short run makes it all the more important for the government to present a more definite path toward medium- to long-term fiscal consolidation.

Fortunately, long-term interest rates in Japan remain stable at a low level on an international comparison. With regard to the issuance market for government securities, these have been issued quite smoothly since the earthquake. There are two reasons why the market for government securities remains stable in this manner. The first is with regard to the aggregate

savings and investment balance. That is, in view of the continuing net saving position in the household and corporate sectors, and given that financial institutions are maintaining a solid capital base, there is a sufficient amount of domestic funds to purchase government securities for the moment. The second reason concerns confidence in future policy management. As for fiscal policies, despite the significant deterioration in fiscal balance, market participants still expect that necessary steps will ultimately be taken to restore the balance. Regarding monetary policies, there is confidence that monetary policies are conducted with the objective to achieve sustainable economic growth with price stability. Considering the severity of fiscal conditions, none other than the confidence I just described is supporting the stability in the government securities market. People tend to believe without doubt that what has continued over a long period will stay as it is, but we should be mindful of the fact that confidence in the stability in the government securities market is only maintained by people's will to adopt such a stance. Therefore, it is essential to take concrete steps toward raising the growth potential and fiscal consideration when stability in the government securities markets is maintained. Enhancement of market stability through these efforts is also likely to contribute to promoting a supportive environment for the rebuilding and revival following the disaster.

Given the already enormous fiscal deficit, underwriting of government securities by the Bank of Japan is occasionally discussed as an option for funding new government spending. However, it should be noted that there is no magic wand that creates something from nothing. Whether government securities are underwritten by the central bank or purchased by private financial institutions in the market, there is no change to the big picture in which government securities are issued using firms and households' savings as a resource. Rather, the central bank's underwriting of government securities often comes with a serious side effect of weakening fiscal discipline. If the government depends on the central bank's underwriting and ignores the market's risk assessment function, the government debt could eventually expand to a level beyond the taxpayers' funding capacity. After the earthquake, there has been increasing public interest in the historical episode of the Bank's underwriting of government securities in the 1930s, when Mr. Takahashi was the Minister of Finance. This started as "temporal" but it soon became impossible to put a brake on the increase in the amount of underwriting and the associated expansion of currency issuance, which ultimately resulted in serious inflation. We need to reflect on this history. There are some counterarguments that, if underwriting creates such a problem, the Bank could purchase government securities from the market instead. The Bank currently purchases a large amount of government securities, but its purpose is to stably provide the markets with funds corresponding to increasing demand for banknotes, in association with economic growth. If the central bank's purchases of government securities are considered to be conducted with the aim of facilitating government financing beyond its original purpose, this will cause the same problem as underwriting.

III. The Bank of Japan's response

Lastly, let me explain the Bank's response following the earthquake. A guiding principle for a central bank's actions after a major disaster such as we suffered is very clear. That is, to maintain the functioning of payment and settlement systems as well as ensure the stability of financial markets. In other words, to prevent financial shock from developing into economic instability.

The initial task the Bank worked on following the earthquake was to maintain the functioning of settlement and financial systems, which are the basis of people's lives and economic activity. At the time of a crisis, the most important responsibility for a central bank is to firmly secure the financial infrastructures. Specifically, the Bank did its utmost to provide cash to meet the needs in the disaster areas through its branches and offices in Sendai, Fukushima, and Morioka. In the week after the earthquake, the Bank provided 310 billion yen in cash to the Tohoku region, about three times more than in the same period last year. Meanwhile,

Japan's major payment and settlement systems, including the Bank of Japan Financial Network System, or BOJ-NET, have maintained stable operations. Needless to say, the Bank's actions alone could not secure the smooth operation of payment and settlement systems. Such a level of operation became possible because many of the parties involved, including private financial institutions, have made thorough preparations for business continuity risks in normal times. Despite devastating damage to their offices, financial institutions in the disaster areas have maintained or resumed business operations at teller windows through strenuous efforts, by utilizing temporary offices and also mobile ones. I have deep respect for and feel very reassured about such efforts by those involved.

Second, the Bank worked to ensure stability in the financial markets. In the money market where financial institutions exchange funds, in order to avoid a heightening of anxiety, the Bank provided ample funds sufficient to meet demand over a period of successive days since the earthquake. In particular, on March 14, the first business day after the disaster, the Bank provided a total of 21.8 trillion yen in funds. This is almost three times as much as the 8.1 trillion yen that marked the largest daily funds provision, following the failure of Lehman Brothers.

Third, the Bank further strengthened monetary easing. Specifically, on the next business day after the earthquake, the Bank decided to increase the amount of the Asset Purchase Program, mainly of purchases of risk assets – such as corporate bonds, exchange-traded funds (ETFs), and Japan real estate investment trusts (J-REITs) – by about 5 trillion yen. Immediately after the earthquake, it was not possible to confirm an economic downturn from the macro data; nevertheless, the Bank decided to strengthen monetary easing because it was already fully aware at that time of downside risks to future developments in the economy and considered it necessary to respond to such risks in a forward-looking manner. At present, the Bank is steadily proceeding with the increase in asset purchases while also examining the effects of such increase.

Fourth, the Bank started to conduct the funds-supplying operation to support financial institutions in disaster areas. The Bank found it necessary to financially support initial response efforts by financial institutions in the disaster areas even in the very early phase before demand for funds for the purpose of rebuilding and revival becomes full-fledged. Specifically, the Bank extends loans to financial institutions that have business offices in the disaster areas with one-year funds at the very low interest rate of 0.1 percent per annum. The total amount of loans is 1 trillion yen and new applications for loans can be accepted until the end of October 2011. For the first round of funds provisioning, about 74 billion yen in loans was applied, and the Bank extended these loans two days ago, on May 23. In June 2010, the Bank introduced the fund-provisioning measure to support strengthening the foundations for economic growth, and it has already conducted disbursements three times. As I mentioned earlier, the challenge of revival following the earthquake disaster partly overlaps with the longstanding challenge Japan's economy faces – namely, of raising the growth potential. Going forward, as rebuilding efforts make further progress, the role expected of a central bank is to indirectly support financial institutions' activities. The Bank will examine how to respond effectively as the central bank while monitoring how demand for rebuilding funds emerges and how such demand is met by private financial institutions and support from the government.

Lastly, let me mention that the Bank has been working hard to exchange damaged banknotes and coins. If people in the disaster areas have banknotes and coins that are torn or soiled, they can be exchanged for new ones based on criteria specified by law. The Bank has been increasing the staff at teller windows at its branches, in the hopes that this will be of some help in restoring the economy in the disaster areas.

Concluding remarks

Today, I have explained the current situation and near-term outlook for Japan's economy. I have also talked about the challenge Japan's economy faces in each of the coming phases of rebuilding, revival, and further growth. The earthquake suddenly threw Japan into a crisis. Looking back, whenever faced with severe difficulties such as postwar hardship and oil shocks, the Japanese people have overcome them by tackling problems with a strong sense of urgency. History has proved that the Japanese people have an outstanding ability to overcome problems in the face of big shocks and associated crises. On the other hand, they do not seem to be particularly good at dealing with problems that gradually become worse over a protracted period, even though their effects on the economy are larger than the sudden shocks. This was the case with the non-performing loan problem in the 1990s. Even for the predictable problem of a change in demographic dynamics, Japan's economy still faces many challenges, including the reform of social security systems.

Due to the disaster, it is no longer possible to postpone the task of addressing the longstanding challenge of stopping the long-term downtrend in the growth potential of the economy and then revitalizing growth into the future. For the sake of our children and grandchildren, we have a great responsibility to pave the way for a bright future for Japan's economy. Whether future generations will be able to look back at 2011 as a starting point for the renewed growth of Japan's economy depends on our determination in the coming few years. The Bank, while firmly maintaining confidence in the currency, will continue to make its utmost contribution as the central bank.