Toward Strengthening the Competitiveness and Growth Potential of Japan's Economy

Speech at the Executive Member Meeting of the Policy Board of Nippon Keidanren (Japan Business Federation) in Tokyo

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Introduction

It is a great honor to have this opportunity to address the executive member meeting of the Policy Board of Nippon Keidanren today. Before I start, let me express my deepest appreciation for the information and views on current developments in economic and financial activities as well as on policy conduct provided to us by all the member firms.

Today's speech is the last one I will give as Governor of the Bank of Japan. However, it was not difficult for me to decide today's main topic, "toward strengthening the competitiveness and growth potential of Japan's economy," because it is the most pressing issue for Japan at present. It is also a very important theme for the Bank of Japan. As you know, at the Monetary Policy Meeting in January, the Bank decided to introduce a "price stability target" and set it at 2 percent.1 This target was introduced based on the recognition that progress would be made by a wide range of entities in their efforts toward strengthening the competitiveness and growth potential of Japan's economy (Chart 1). For this reason, it is extremely important in conducting monetary policy whether such efforts will actually make progress. In the following, I would like to talk about this theme while paying due regard to the perspectives of macroeconomics, corporate behavior, and economic policymaking.

I. The Aim of Economic Policy

While there has been active discussion regarding the conduct of economic policies in Japan, I will first consider the aim of economic policy and the kind of situation we expect Japan's economy to attain. Needless to say, the ultimate aim of economic policy is to raise the living standard of each citizen. While there is no single indicator for gauging people's quality of life, if we were to put this in approximate terms, the key aim of macroeconomic policy is to raise the per capita consumption level, or to raise the real gross domestic product (GDP), which is closely related to the former, in a sustainable manner (Chart 2). Having said this, a more detailed discussion is necessary when considering the various

1 For details on decisions made at the Monetary Policy Meeting on January 22, 2013, including the introduction of the "price stability target," please see Masaaki Shirakawa, "The Roles, Missions, and Challenges of the Central Bank" (Speech at the Japan National Press Club in Tokyo), January 25, 2013.
options regarding economic policy on the basis of the situation facing Japan's economy.

First, there is a need to consider the effects of the decline in the labor force due to the rapid aging of Japan's population. Japan's current real GDP remains below the level seen prior to the Lehman shock. Looking at per capita real GDP figures, the drop for Japan is relatively small compared with countries such as those in Europe (Chart 3). Furthermore, in terms of the level of real GDP per working-age person, Japan has exceeded the pre-crisis level, which is a better performance than that of the United States. While "population decline" is one of the clichés used in discussing Japan's economy, this fundamental fact is oftentimes disregarded when discussing economic developments. Of course, figures do not differ significantly within short time periods of a quarter or a year, but when considering Japan's economic policy in the medium to long term, it is important to think in terms of changes in per capita or per worker data.

Second, we need to take account of the progress in economic globalization. Specifically, it is necessary to look not only at real GDP but also at real gross national income (GNI). Real GNI is a concept of income that results from making the following two adjustments to real GDP. One source of adjustment is the overseas income of Japanese nationals. Looking at figures for 2012, overseas income amounts to 14.3 trillion yen -- that is, 3.0 percent of nominal GDP. In recent years, profits from outward direct investment have been increasing in addition to profits from outward portfolio investment (Chart 4). The other source of adjustment is the change in real purchasing power due to changes in the foreign terms of trade. Japan's terms of trade have been deteriorating in recent years, mainly due to the rise in commodity prices against the background of high growth in emerging economies. Trade gains/losses -- in other words, real purchasing power arising from changes in the terms of trade -- have thus been on a declining trend (Chart 5). Terms of trade undergo changes, not only due to commodity prices but also in response to the pricing power of Japanese firms through the non-price competitiveness of exports. Fluctuations in foreign exchange rates, for example depreciation of the yen, will raise real GDP through an increase in exports but may at times adversely affect trade gains/losses. Effects on real GNI depend on the net result that takes into account these two adjustments (Chart 6). Setting 2000 as the base year, real overseas income increased by about 2.5
times in 2012, pushing up real GDP for 2012 by 1.9 percent compared with that in 2000. On the other hand, the trade gains pushed real GDP downward by 5.8 percent.

Third, another topic for discussion is how to treat nominal GDP and real GDP in considering economic policy. On this point, both of these increase when the economy grows in a sustainable manner, suggesting that the direction of medium- to long-term policy is not all that different depending on which figure we take into account. What I must mention here is the cause-and-effect relationship between the two. The basic causal relationship is that, as real GDP rises, the output gap tightens and prices subsequently rise, resulting in a rise in nominal GDP (Chart 7). There are situations, of course, where prices fluctuate first, as seen during the time of the oil crises. In such a situation, however, economic conditions deteriorate, and this is different from what we wish to see. What we are trying to achieve through economic policy is to raise real GDP, as a result of which nominal GDP will rise.

In relation to this, the results of the Opinion Survey on the General Public’s Views and Behavior that the Bank conducts on individuals on a quarterly basis provide some interesting findings. The survey results reveal that approximately 80 percent of the respondents -- irrespective of their sex, age, and occupation -- have consistently viewed the price rise as “rather unfavorable” throughout the past surveys (Chart 8). Underlying the survey results is the concern that wages may not rise even if prices rise. A considerable portion of the Japanese public is not simply looking for a situation in which prices rise. In the phrase “overcoming deflation,” people are looking for a situation in which one’s salary rises, employment is secured, and profits increase; in other words, a situation characterized by a well-balanced improvement in economic conditions and consequent rise in prices.

The fourth point involves the problem of how to distribute the fruits of economic growth. While market mechanism plays a key role in order for the economy to grow, this requires a perspective of society as a whole that accepts such mechanism at large. On this point, the situation surrounding income distribution is one of the crucial factors. In the United States, during the period of economic expansion preceding the Lehman shock -- from 2002 to 2007 -- the real incomes of the highest-income households in the top 1 percentile increased by 86
percent and household average income increased by 20 percent. In contrast, the “median” household income -- that is, the income that represents the middle of a series of all household incomes arranged in order of size -- increased only by 10 percent, which amounts to just half the growth of the average income (Chart 9). The situation surrounding income distribution partly depends on the proportion of the elderly that does not have any earnings, and reviewing this through a single indicator can therefore be challenging. Japan’s case may not be as extreme as that in the United States. Nevertheless, awareness of the need to achieve well-balanced economic growth, especially for the middle class, has increased around the globe.

II. The Need to Strengthen Competitiveness and Growth Potential

Bearing these issues related to the aim of economic policy in mind, let me now move on to the need to strengthen competitiveness and growth potential.²

Looking at developments in a country’s economic growth rate over the longer term, factors affecting it can be broken down into real or supply-side factors -- namely, capital stock, labor force, and technological innovation. Explaining this within the framework of so-called growth accounting, the growth rate can be broken down into growth in the number of workers and that of value-added per worker, in other words, the labor productivity growth rate (Chart 10). Mechanically estimating future growth in the number of workers, based on the assumption of the most recent labor participation rate by gender and age, the number of workers in Japan will change at a rate of -0.6 percent per annum in the 2010s and -0.8 percent in the 2020s. Meanwhile, the labor productivity growth rate for the years 2000 through 2008 -- a period characterized by relatively favorable economic conditions -- was 1.4 percent on an annual basis. Adding this to the aforementioned growth in the number of workers, the average growth will become 0.8 percent for the 2010s and 0.6 percent for the 2020s. This will merely amount to maintaining positive growth over the next two decades. Japan’s economy faces a considerably strong headwind in the form of a decline in the labor force, and we need to more seriously acknowledge its implications.

² The importance of strengthening growth potential and of the supply side is something many central banks emphasize. Please see, for example, Speech given by Mervyn King, Governor of the Bank of England, at the CBI Northern Ireland Mid-Winter Dinner, Belfast, 22 January 2013. http://www.bankofengland.co.uk/publications/Documents/speeches/2013/speech631.pdf
Raising the labor productivity growth rate further will alleviate the problem, of course. Japan has achieved a growth rate slightly exceeding the average for the G-7 countries for the past 10 years, however, and it is not very plausible to think that we can raise it by 1 percent or more at once (Chart 11).

At any rate, raising Japan's growth potential continuously into the future requires work, especially strenuous work, on both the number of workers and the labor productivity growth rate. While efforts by a wide range of entities are necessary in such case, the main actors here, above all, are private firms. The corporate sector has consistently had a savings surplus, together with households, since 1998 (Chart 12). A significant savings surplus by the corporate sector is a phenomenon now observed outside of Japan as well: it has spread to major advanced countries since the start of the 2000s. In terms of the amount of savings surplus relative to GDP, figures for the United Kingdom, Japan, and the United States are 6.1 percent, 4.6 percent, and 4.1 percent, respectively. The most significant underlying cause of this savings surplus is the lack of attractive investment opportunities at home amid expanding investment opportunities in the emerging markets. Recently, other causes have also been pointed out, including the securing of funds to offset additional costs that may arise from a lack of funds for corporate pensions mainly resulting from a decline in interest rates.

I presume that in your day-to-day decision making, you cannot muster enough confidence to invest at home despite having ample liquidity on hand (Chart 13). In fact, on-hand cash and deposits at Japanese firms has been increasing steadily: the proportion of Japanese firms listed on the First and Second Sections of the Tokyo Stock Exchange (TSE) holding cash and deposits exceeding the amount of interest-bearing debt -- in other words, firms without net external borrowings -- has recently become as high as 43 percent.

Of course, firms' ample on-hand liquidity itself is reasonable up to some level, taking into account experiences such as the post-bubble financial crisis and the aftermath of the failure of Lehman Brothers -- that is, the shortage of U.S. dollar funds and the decline in the functioning of the CP market. The current level of on-hand liquidity, however, appears to go well beyond the amount of such precautionary demand. As for the use of excess funds,
there are only three options: making real or financial investments at home and abroad; disbursing funds to employees in the form of wages; and returning them to stockholders through dividend payments and share buybacks. The economy will not see positive outcomes unless some kind of change is brought about to the increased liquidity via one of the aforementioned routes. In that sense, it is extremely important to change the business environment, thereby modifying firms' incentives. That is why in achieving sustainable growth with price stability, efforts toward strengthening the competitiveness and growth potential of Japan's economy are necessary as much as monetary policy is indispensable in this regard.

III. Outline of the Course of Future Measures

Next, I would like to outline the course of future efforts toward strengthening the economy's competitiveness and growth potential.

Capturing Increasing Overseas Demand

The first course is to capture increasing overseas demand in the form of expanding Japanese firms' overseas business activities. It is inappropriate to negatively describe such efforts as the "hollowing-out" of industries in an environment where overseas economies -- mainly emerging economies -- have grown much faster than Japan. With regard to international division of labor, while manufacturing and assembly overseas expands, increasing the export of intermediate goods from Japan and reinforcing domestic R&D activity, whose value-added is relatively higher, will contribute to raising Japan's real GDP. In addition, if surplus funds that have accumulated in the corporate sector are being used for overseas investment with high returns, the benefit of such investment will be passed back to Japan in the form of interests and dividends. This will not directly contribute to raising real GDP, but it does raise real GNI. While globalization of the economy continues, it is deemed imperative to make balanced efforts as a nation by combining domestic production with exports as well as with foreign direct investment, or local production overseas.

Indeed, overseas investment by Japanese firms has been increasing, especially in Asia. Such a trend has spread from large manufacturing firms to nonmanufacturing ones, as well as small and medium-sized enterprises (Chart 14). Nevertheless, the outstanding amount
of Japan's foreign direct investment remains at a low level compared with that of other advanced countries (Chart 15). Similarly, in terms of the profitability of foreign investment, which is the combination of portfolio investment and direct investment, Japan falls a little behind countries such as the United States, partly because of its small share of direct investment, which has a high rate of return (Chart 16).

Huge potential demand exists in emerging economies, particularly Asia, in the area of building core infrastructure for transportation systems, energy supply, and communication systems. According to the estimates of the Asian Development Bank, such demand will amount to approximately 8 trillion U.S. dollars from 2010 to 2020 (Chart 17). There are ample business opportunities for Japanese firms to make use of their globally recognized cutting-edge technologies and wealth of experience -- such as upgrading metropolitan infrastructure and implementing environmental and energy-saving technologies, as well as deploying factory automation systems to address labor shortages and wage rises -- that have been nurtured in Japan over the years. It has become increasingly apparent that Japanese firms in such sectors as retail, healthcare, and education, which have focused mainly on the domestic market, are able to formulate sweeping business strategies in large Asian markets, where consumer demand is increasing briskly as these countries' middle-income populations continue to expand.

**Responding to the Aging Population**

The second course is to respond to the rapidly aging population. The long average life expectancy of the Japanese people implies that health, the condition most vital to well-being, is being fulfilled at a high level. Having said that, it is necessary to adjust the economic structure and social infrastructure as the population continues to age. Otherwise, it becomes difficult to maintain the current high quality of life. While this is sometimes misunderstood, the demographic change of population aging itself is not triggering the problem for Japan's economy; the real issue is that Japan's economic structure and social infrastructure have not sufficiently caught up with such demographic changes.

The aging of the population brings about various changes to the economy. First, it will become a downside factor for economic growth via the economy's supply side -- namely, a
decline in the labor force. In order to counter this trend, it is most important to increase labor participation, particularly of the elderly and women. The labor participation rate of 60-69 year-olds has increased continuously over the last few years (Chart 18). The labor participation rate of women is also increasing, but remains at a relatively low level compared with other advanced economies (Chart 19).

Aging will also substantially change the demand structure of the economy. The area of medical and nursing care is one worth mentioning. In the United States, the elderly population aged 65 and older increased by 13 percent in the ten years from 2000, and as a result, the expenditure in medical and nursing care rose by 82 percent. By contrast, in Japan, while the elderly population increased by 29 percent, such expenditure only rose by 17 percent (Chart 20). In relation to this, it has often been pointed out that, in Japan, due to a number of regulations and a shortage in the workforce, sufficient service in this sector has not been provided relative to demand. While one should be mindful of the fiscal implications, appropriate system design and regulatory reforms are likely to turn the potential demand in medical and nursing care, as well as in medical equipment and infrastructure, into actual demand. At the same time, medical and nursing care could become one of the most promising domestic employers as Japanese firms expand their overseas operations (Chart 21).

Population aging also brings about an expansion in demand in the housing market. For the child-raising generation, potential demand for larger housing is believed to be high, but such demand has not been satisfied, particularly in the metropolitan areas. On the contrary, members of the elderly generation continue to live in large houses that had been acquired during their working age. Indeed, in Japan, the share of second-hand dwellings in the total housing market (i.e., combining new and second-hand dwellings together) is only 12

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4 In the United States since 1990, while the number of employees in manufacturing has decreased by about 6 million, mainly due to an acceleration in the shift of production overseas, that in the healthcare industry has increased by 6 million.
percent, far less than the 79 percent in the United States and 86 percent in the United Kingdom (Chart 22). Once the housing market is reorganized, potential demand for housing will be cultivated by meeting the different needs in different stages of life, and this will eventually invigorate related markets, such as electric home appliances and other household items, as well as remodeling. Change is also desirable on the financial front. It is often pointed out that, in Japan, household financial assets are concentrated in cash and deposits. This partly reflects that the share of residential assets, that is, real assets with large price fluctuations and low liquidity, among total household assets tends to be high (Chart 23). If household assets start flowing into financial assets other than cash and deposits, we might enjoy an increase in the supply of long-term risk money.

**Promoting Smooth Transfer of Resources**

The third course is to promote the smooth transfer of resources. In the medical care and housing areas that I just talked about, not a shortfall in demand but the mismatch between demand and supply has become the essence of the problem in the sense that potential demand and actual supply do not correspond to each other. In recent years, sales of pre-packaged tours to the elderly and sales in health-related industries have shown marked increases. This suggests that firms have succeeded in cultivating potential demand by making efforts to develop new products through shifting their human resources and capital to those businesses.

Changes will surely create new demand and promote the introduction of new goods and services. It is imperative to realize the optimal resource allocation by shifting labor and capital resources within a firm, as well as among firms, industries, and regions, in accordance with a changing demand structure. In short, the metabolic process is also crucial in achieving economic growth. Looking at the founding years of the top 300 firms in terms of market capitalization, there are more firms with long corporate histories in Japan than in the United States (Chart 24). This is evidence that firms themselves have made efforts to self-transform and have successfully managed to cope with a series of environmental changes. It can also be said that dynamism is absent in terms of birth of firms. Changes are surely taking place, however. For instance, looking at developments in the stock market after the Lehman shock, comparatively small firms have recently been
performing relatively well (Chart 25). The number of initial public offerings -- which showed a large decline in recent years -- is gradually on a recovery trend, and such movements are now also being observed outside large metropolitan areas. I am quite encouraged by this development.

IV. Regulatory and Institutional Reforms, Corporate Governance Reform, and Social Values

So far, I have talked about the outline of the measures toward strengthening competitiveness and growth potential. In principle, this should happen in an economy as a result of individual firms’ rational choice. The fact that this is not happening in reality must be the result of economic, institutional, or social factors. Accordingly, there is a need to improve the economic environment, i.e., remove those obstructing factors.

Regulatory and Institutional Reforms

First, there needs to be an improvement, promoted by the government, in the environment that will serve to back firms' efforts aimed at bringing about change. More specifically, it is necessary for the government to carry out bold regulatory reform in order for firms to broaden the areas in which they may embark on new challenges, and to make institutional improvements to the labor market so as to allow workers to move more smoothly into businesses and industries with high growth potential. In order to avoid an increase in excessive social friction arising from responses to changes in the economic environment, it is also necessary to provide support for career changes and to enhance the safety net.

Corporate Governance Reform

Second, it is necessary to ensure the appropriate functioning of corporate governance by stockholders and investors. On this issue, Germany is a good source of reference. Until the beginning of the 2000s, Germany was named as a country putting off essential structural reforms, and the country indeed suffered from slow economic growth in the first half of the

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2000s. Under such circumstances, however, it engaged in various reforms surrounding corporate activity, including institutional reforms that allowed for flexible adjustments to employment as well as enhanced information disclosure to investors. On this point, Japan falls behind Germany, especially when it comes to reforming enterprise law in such areas as corporate rehabilitation, as well as mergers and acquisitions. This is said to hinder dynamic corporate restructuring, thereby eroding the international competitiveness of industries across the board. It is also said that such an environment has accentuated the anxiousness over legal liquidation or removed the fear of being taken over, and encouraged to some extent the excessive accumulation of cash and deposits at firms.

**Social Values**

Third, society needs to face possible trade-offs between stability and change. Japan has been somewhat dominated so far by a perspective that stressed the importance of stability. The method of adding gradual "improvements" to one's company's products in accordance with consumer needs in the existing domestic market can be considered a business management style that puts importance on stability. Merely making improvements focused on the domestic market amid a population decline, however, carries the risk of the economy falling into a shrinking cycle. Corporate profits will suffer even more in the long term if firms continue to keenly compete in terms of prices while maintaining their commitment to securing employment. If I may make a sweeping generalization, firms are facing a judgment call of choosing between "improvement," which represents continuity, and "innovation," which represents discontinuity. If the shock against the economy is temporary, there may be a point to overcoming any difficulties in the immediate future via "improvements," thus prioritizing stability in the long term. Confronting long-lasting shocks such as globalization and population aging by means of the same "improvement" as before, however, may delay responses to significant changes.

Reform cannot proceed without public consensus. Bringing about innovation requires firms' willingness to take on challenges as well as the transfer and reallocation of necessary resources. Frictions may well be experienced in the process. While this is not necessarily an issue with one indisputable solution, if environmental change is long-lasting, I find it extremely important for society as a whole to accept such changes and adopt a view
that encourages any and all efforts to take on new challenges, in order to successfully carry out reforms toward strengthening growth potential.

V. Relationship with Prices

So far, I have talked about the efforts to strengthen the economy's competitiveness and growth potential. Next, getting slightly off track, I will touch upon the relationship between economic growth and prices.

The year-on-year rate of change in the consumer price index (CPI) is currently around 0 percent, but is expected to reach 0.9 percent in fiscal 2014, according to the Bank's forecasts. This is based on the view that Japan's economy will continue to grow above its potential growth rate and the output gap will be filled, assuming that overseas economies moderately improve. However, considering the fact that the output gap has narrowed significantly compared with its peak, and given the sensitivity of prices to the gap, the closing of the gap alone will not allow us to reach the target of 2 percent right away. What is the general image of an economy that achieved 2 percent inflation, and what is the mechanism behind the process leading up to this state? In theory, one can come up with several cases.

The first involves a push from rising import prices as a result of the yen's depreciation or rising international commodity prices. The second is related to rising wages. In the medium to long term, wages and prices are closely correlated. The third sees rising inflation expectations. Finally, the fourth corresponds with rising growth expectations of firms and households.

Which case are we looking for? In the case where import prices push up inflation, household real income is squeezed. The ideal situation is that a rise in wages, a rise in inflation expectations, and a heightening of firms' and households' growth expectations take place at the same time. What should be noted here is the relationship between wages and prices. One of the main factors behind low inflation rates in Japan relative to other economies is Japan's employment practice. Specifically, Japanese society since the second half of the 1990s has prioritized securing employment, and it effected reductions in costs largely by cutting back wages; consequently, prices fell (Chart 26). Looking at
development patterns of corporate profits, wages, and prices during economic recovery phases, these three indicators moved together in the same direction during the high-growth era in the 1970s (Chart 27). At present, neither wages nor prices have changed materially even in the economic recovery phase, as corporate profits have acted as a buffer to absorb shocks, with the labor distribution rate rising during economic recession phases and declining during recovery periods. The primary cause for this is the decline in firms' profitability, which in turn reflects the decline in the potential growth rate. On this point, looking at the relationship between medium- to long-term inflation expectations and potential growth rates, there is a clear positive correlation in Japan (Chart 28). If firms' and households' growth expectations improve, this will have a positive effect on wages and prices in a sustainable manner. Consequently, "deflationary expectations" that had taken hold over a prolonged period will fade away.

VI. The Will to Reform
While it generally has been recognized that there is a need to work toward strengthening competitiveness and growth potential, and that meeting these challenges is essential in overcoming deflation and achieving sustainable growth with price stability, why is it that such efforts have not made progress? On this point, the key lies in the sense of urgency regarding the need for reform. The problems currently facing Japan's economy, namely, the rapid aging of the population and accompanying issues, are not temporary. They are steadily affecting the economy in the manner of a chronic illness. Deterioration of fiscal conditions is a textbook example of such problems. In order to maintain fiscal sustainability, it is necessary to reform the structure of expenditures and revenues as well as strengthening growth potential. Unless the growth rate rises, a modest increase in the rate of inflation alone will barely improve the fiscal balance. While such chronic symptoms exist in Japan, acute ones have not appeared. The biggest reason for this lies in the fact that Japan holds a massive amount of external net assets reflecting the current account surplus that has continued over a prolonged period. Because of this, Japan tends to experience inflows of capital that search for a safe haven, even in the event of a global economic shock, and enjoy stable long-term interest rates while facing an appreciation of the yen. Japan has not experienced any sell-off of its currency in a crisis.
In this regard, I would like to make reference to recent developments in financial markets. The keywords to understanding movements in the global financial markets over the last several years are risk-on and risk-off. When faced with a great amount of uncertainty about the future, investors stay away from risks -- in other words, they become risk-off -- but when such uncertainty is judged small, they become risk-on (Chart 29). The basic background to the yen's appreciation that lasted until summer 2012 was investors' preference for safe assets as the European debt problem intensified. Indeed, it was in late July that the yen hit its recent peak in the nominal effective exchange rate and the Spanish and Italian sovereign rates reached the most elevated levels. After that, a variety of safety valves to cope with the European debt problem were put in place in Europe and the fiscal cliff was avoided in the United States. Against the background of these developments, global investors' risk aversion has substantially receded. Broadly speaking, the yen's recent depreciation and rise in stock prices in Japan are also taking place amid such changes in those investors' risk aversion. Put differently, investors' attitude toward risk may influence market conditions. I believe this could be easily understood by looking back at the fact that yields on government securities of member states of the euro area had remained at practically the same levels for nearly ten years. What ultimately drives market developments is economic fundamentals. Over the last 15 years in Japan, there were several phases when the yen depreciated. Although exports and production increased during those phases, we regrettably did not succeed in raising the potential growth rate (Charts 30 and 31). The important thing is to make use of the current favorable conditions and make steady efforts to strengthen the competitiveness and growth potential of the economy.

VII. Conduct of Monetary Policy by the Bank of Japan

Lastly, I would like to go over the recent monetary policy measures by the Bank of Japan. As I mentioned at the outset, the Bank recognizes that the inflation rate consistent with price stability on a sustainable basis will rise as efforts by a wide range of entities toward strengthening competitiveness and growth potential of Japan's economy make progress. Based on this recognition, at the Monetary Policy Meeting held in January, the Bank set and announced the "price stability target" at 2 percent in terms of the year-on-year rate of change in the CPI. As stated in the Bank of Japan Act, the Bank conducts monetary policy
based on the principle that the policy shall be aimed at "achieving price stability, thereby contributing to the sound development of the national economy." Put differently, the Bank aims at achieving price stability with which Japan's economy will grow in a sustainable and balanced manner, and under such a principle, the Bank has been pursuing aggressive monetary easing with the aim of achieving this price stability target at the earliest possible time. The Bank, under the Asset Purchase Program, will additionally purchase financial assets amounting to about 36 trillion yen, mainly JGBs, by the end of this year. Furthermore, from January 2014 onward, it will purchase about 13 trillion yen worth of assets, 2 trillion yen of which will be JGBs, every month without setting any termination date. The Bank is committed to pursuing, without loosening the reins, aggressive monetary easing with the aim of achieving the "price stability target."

Efforts by the government, in parallel with appropriate monetary easing measures, are important in order to overcome deflation early and achieve sustainable growth with price stability, for the following reasons.

First of all, if the government's efforts to strengthen competitiveness and growth potential make progress, economic agents will take further advantage of the accommodative financial conditions and the effects of monetary easing will be increasingly amplified. At present, money, or liquidity that the Bank has been supplying, is increasing significantly; however, prices have not been responding accordingly (Chart 32). Private financial institutions have been increasing their government bond holdings rather than lending (Chart 33). On this point, the government has stated its intention to advance structural reform of the economy by making use of all possible decisive policy actions, including carrying out bold regulatory and institutional reforms. The Bank expects that forceful efforts will be forthcoming in this regard.

Meanwhile, the Bank itself has established a "Loan Support Program" through which to

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encourage proactive efforts by firms and financial institutions, using the levers of finance. Together with the aforementioned Asset Purchase Program, the Bank will supply additional funds amounting to over 60 trillion yen in the next two years. The amount outstanding will exceed 130 trillion yen, which is about 30 percent of nominal GDP (Chart 34). While monetary easing by the central bank has a stimulating effect on current economic conditions by bringing forward tomorrow's demand to today, so to speak, such effect will wane once it becomes tomorrow and unless demand for the day after is brought forward. At any rate, the size of the demand brought forward depends on future growth potential. This makes efforts to raise the potential growth rate itself all the more important. If such efforts by the Bank on the financial side and those by the government to strengthen the growth potential could instigate a virtuous cycle and bring about synergies, the policy effects are likely to be amplified.

Second, in order to pursue aggressive monetary easing, ensuring confidence regarding fiscal policy is also important. As part of its monetary easing, the Bank has been purchasing a substantial amount of government bonds. Given the severe fiscal conditions, however, if such purchases were regarded as monetizing government debt in the markets at home and abroad, there is a risk that long-term interest rates would rise. In particular, if efforts to strengthen the growth potential do not make progress and the Bank's holding of JGBs continues to increase, that risk becomes more imminent. Were this to occur, not only would the effects of monetary easing weaken, but there would also be adverse effects on the real economy through the impacts on the businesses of financial institutions holding a large amount of government bonds. In that sense, discipline is expected of both the government and the Bank. Discipline within the Bank is stipulated by the purpose imposed on the central bank, that is, contributing to sustainable growth through price stability and financial system stability. Meanwhile, the government is required to uphold

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7 The Bank established the "Loan Support Program" by integrating the "Growth Supporting Funding Facility" introduced in June 2010 and the "Stimulating Bank Lending Facility" introduced in October 2012.

fiscal discipline. On this point, the government stated clearly that it "will steadily promote measures aimed at establishing a sustainable fiscal structure with a view to ensuring the credibility of fiscal management." Once credibility is eroded and the economy falls into a state of confusion, there will be limited room for maneuver by the central bank. Economists generally refer to this kind of situation as "fiscal dominance." In order to prevent such a situation from materializing, it is important to engage in efforts to achieve fiscal reform, thereby maintaining fiscal discipline in the medium to long term.

**Final Remarks**

While there is active discussion regarding the conduct of economic policy in Japan, I personally feel there is a need to earnestly discuss what it is that we truly want to achieve when referring to "overcoming deflation," and what it is that we must carry out in order to accomplish this. The opportunity is right in front of us now. Once we find what we want, we must take action.

The Bank will continue to do its utmost toward overcoming deflation early and achieving sustainable growth with price stability. The purpose of the central bank is to lay stable economic and financial foundations that support the sustainable growth of the economy. In doing so, it goes without saying that the Bank will thoroughly examine the outlook for economic activity and prices and risk factors to sustainable growth. Independent central banks are obviously expected to explain the effects as well as costs of measures in the longer term. I believe this is what accountability means.

As the experience of the global credit bubble in the mid-2000s suggests, time and again, the seeds of new problems and unexpected crises have already been sown as authorities respond to a problem. This provides us with a renewed sense of awareness of the importance of humility to learn from history and of stability from a medium- to long-term perspective. The Bank of Japan will continue to listen to a variety of views and conduct monetary policy appropriately on the judgment and under the responsibility of its Policy Board with the aim

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of overcoming deflation early and achieving sustainable economic growth with price stability. I ask for your continued support.

Thank you for your attention.
Toward Strengthening the Competitiveness and Growth Potential of Japan's Economy

Speech at the Executive Member Meeting of the Policy Board of Nippon Keidanren (Japan Business Federation) in Tokyo

February 28, 2013

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Final Remarks
The Bank of Japan introduced the "price stability target" and set it at 2 percent, based on its recognition that efforts to strengthen the competitiveness and growth potential of Japan's economy will make progress.

**Introduction of the "Price Stability Target" (Jan. 2013)**

- The Bank recognizes that the inflation rate consistent with price stability on a sustainable basis will rise as efforts by a wide range of entities toward strengthening competitiveness and growth potential of Japan's economy make progress. Based on this recognition, the Bank sets the price stability target at 2 percent in terms of the year-on-year rate of change in the consumer price index (CPI).

- Under the price stability target specified above, the Bank will pursue monetary easing and aim to achieve this target at the earliest possible time. Taking into consideration that it will take considerable time before the effects of monetary policy permeate the economy, the Bank will ascertain whether there is any significant risk to the sustainability of economic growth, including from the accumulation of financial imbalances.

Chart 2

The key aim of macroeconomic policy is to raise real GDP in a sustainable manner.

*Japan's Real GDP*
When adjusting for the effects of the population decline, a different picture emerges from developments in real GDP following the Lehman shock.

**Chart 3**

<table>
<thead>
<tr>
<th>Year</th>
<th>Japan</th>
<th>United States</th>
<th>Euro Area</th>
<th>United Kingdom</th>
</tr>
</thead>
<tbody>
<tr>
<td>CY 2007=100</td>
<td>106</td>
<td>106</td>
<td>106</td>
<td>106</td>
</tr>
<tr>
<td>CY 2007=100</td>
<td>104</td>
<td>104</td>
<td>104</td>
<td>104</td>
</tr>
<tr>
<td>CY 2007=100</td>
<td>102</td>
<td>102</td>
<td>102</td>
<td>102</td>
</tr>
<tr>
<td>CY 2007=100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Notes: 1. Figures are for 2012/Q4 calculated on the assumption that the average for 2007 is 100.
3. Working-age person refers to those from 15 to 64 years old.
Sources: Cabinet Office; BEA; ONS; Eurostat; World Bank.

**Chart 4**

Profits from outward investment by Japanese firms have been increasing.

**Amount Outstanding of Outward Investment Assets and Income Balance**

<table>
<thead>
<tr>
<th>Year</th>
<th>Foreign exchange reserves</th>
<th>Other investment</th>
<th>Portfolio investment</th>
<th>Direct investment</th>
<th>Income balance (right scale)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CY 00</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>CY 01</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>CY 02</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>CY 03</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>CY 04</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>CY 05</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>CY 06</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>CY 07</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>CY 08</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>CY 09</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>CY 10</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>CY 11</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>CY 12</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

**Income Balance**

<table>
<thead>
<tr>
<th>Year</th>
<th>Portfolio investment income</th>
<th>Direct investment income</th>
<th>Gross income received</th>
<th>Income balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>CY 00</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>CY 01</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>CY 02</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>CY 03</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>CY 04</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>CY 05</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>CY 06</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>CY 07</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>CY 08</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>CY 09</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>CY 10</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>CY 11</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>CY 12</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Source: Bank of Japan.
Japan's terms of trade have been deteriorating.

Changes in the Terms of Trade

Export price index
Import price index
Terms of trade (export prices/import prices)

Note: Both export and import price indices are based on the GDP deflator.
Source: Cabinet Office.

Real GNI depends on developments both in net income from the rest of the world and in trading gains/losses.

Note: Trading gains/losses are changes in real income (purchasing power), reflecting changes in the terms of trade (export prices / import prices).
For example, when commodity price rises cause import prices to rise more than export prices, trading gains decline in reflection of deteriorated terms of trade.
To be specific, the definition of trading gains/losses is “nominal net exports / weighted average of export and import deflators – real net exports.”
Source: Cabinet Office.
Tightened demand-supply conditions resulting from economic improvement cause prices to rise, not the other way around.

Cross Correlation between CPI and Output Gap

time-difference correlation coefficient

Notes: 1. Figures for the CPI are adjusted to exclude the effects of the consumption tax introduction in 1989 (3 percent) and the consumption tax hike in 1997 (from 3 to 5 percent).
2. The output gap is estimated by the Research and Statistics Department, Bank of Japan.
3. Shaded areas indicate recession periods.
4. Figures for the cross correlation are calculated using data between 1990/Q1 and 2012/Q3.
Sources: Ministry of Internal Affairs and Communications; Cabinet Office, etc.

A considerable portion of the Japanese public is not simply looking for a situation in which prices rise alone.

Notes: 1. Surveys were conducted in March, June, September, and December. Results of the questionnaires were obtained via the in-home survey method through June 2006, thereafter via the mail survey method.
2. Figures for differences by sex, by age and by job are newly calculated using raw data of the December 2012 survey.
3. "Self-employed, agriculture, etc." includes agriculture, forestry, fisheries, self-employed, working for a family business, and professional worker. "Others" includes full-time homemaker, student, unemployed, etc.

Source: Bank of Japan.
Chart 9

Awareness of the situation surrounding income distribution has increased around the globe.

Average Income and Median Income of U.S. Households

![Graph showing average and median income trends from CY 1985 to 2007]

Notes:
1. Median income is household income that represents the middle of a series of all household incomes arranged in order of size.
2. Figures for income are adjusted to exclude price fluctuations, transfers from the government to households, and taxes.

Chart 10

A decline in the labor force population represents a considerably strong headwind facing Japan's economy.

![Graph showing labor productivity growth, rate of change in the number of workers, and real GDP growth rate]

Note: The rates of change in the number of workers from 2013 onward are calculated using the projected future population (medium variant) and the projected labor force participation rates (assuming that the labor force participation rates in each age/sex group remain the same as those in 2012).
Sources: Cabinet Office; Ministry of Internal Affairs and Communications; National Institute of Population and Social Security Research.
Chart 11

Japan's labor productivity growth rate is comparable with those for the G-7 countries.

Productivity Growth (Average after 2000)

<table>
<thead>
<tr>
<th>Year</th>
<th>Japan</th>
<th>United States</th>
<th>Germany</th>
<th>United Kingdom</th>
<th>France</th>
<th>Italy</th>
<th>Canada</th>
<th>G7 average</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>2.0</td>
<td>1.5</td>
<td>1.0</td>
<td>1.0</td>
<td>0.5</td>
<td>0.0</td>
<td>0.0</td>
<td>0.9%</td>
</tr>
</tbody>
</table>

Notes: 1. Productivity = GDP / number of employees.
2. The productivity growth rate of the G-7 refers to the average of the seven countries.
Source: OECD.

Chart 12

A savings surplus by the corporate sector is a phenomenon now observed in other advanced countries as well.

Savings Surplus of the Corporate Sector

Note: The corporate sector is calculated by removing two sectors -- general government and households -- from the domestic sector.
Sources: Cabinet Office; BEA; Eurostat; ONS.
While their on-hand liquidity has increased, firms cannot muster enough confidence to invest at home.

Chart 13

Expansion of Japanese firms' overseas business activities has spread to small and medium-sized enterprises.

**Chart 14**

**Number of Overseas Affiliates**

**Number of Overseas Employees**

Sources: Bloomberg; Ministry of Finance; Cabinet Office.

**Chart Notes:**
1. The ROA for each country is weighted by the market capitalization of sample firms (excluding financial institutions) which are composed of each index (TOPIX for Japan, S&P for the United States, DAX for Germany, and CAC40 for France).
2. Sample firms for the middle and right-hand graphs are of all industries excluding finance and insurance.
3. Company savings/net operating surplus for up to 2000 refers to 2000 base figures.
4. Cash flow = depreciation expense + ordinary profit/2
5. Sample firms in the right-hand graph consist of 1,260 firms listed on the First or Second Section of the Tokyo Stock Exchange, with March year-ends, and for which data can be obtained consecutively from fiscal 1995 onward (excluding financial institutions). Firms without net external borrowings are those for which cash, deposits, and cash equivalents exceed their interest-bearing debt. Cash equivalents are short-term assets such as CP, CD, and bond investment trusts.

Source: Ministry of Economy, Trade and Industry.
Chart 15
The outstanding amount of Japan's foreign direct investment remains at a low level compared with that of other advanced countries.

Outward Direct and Portfolio Investment Position

<table>
<thead>
<tr>
<th>Region</th>
<th>Portfolio investment</th>
<th>Direct investment</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States</td>
<td>12</td>
<td>8</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>10</td>
<td>6</td>
</tr>
<tr>
<td>Japan</td>
<td>8</td>
<td>4</td>
</tr>
<tr>
<td>Germany</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>France</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Italy</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>Canada</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

% of nominal GDP

<table>
<thead>
<tr>
<th></th>
<th>Direct investment</th>
<th>Portfolio investment</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States</td>
<td>42</td>
<td>36</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>133</td>
<td>70</td>
</tr>
<tr>
<td>Japan</td>
<td>57</td>
<td>17</td>
</tr>
<tr>
<td>Germany</td>
<td>67</td>
<td>46</td>
</tr>
<tr>
<td>France</td>
<td>85</td>
<td>51</td>
</tr>
<tr>
<td>Italy</td>
<td>59</td>
<td>36</td>
</tr>
<tr>
<td>Canada</td>
<td>18</td>
<td>31</td>
</tr>
<tr>
<td>Total</td>
<td>78</td>
<td>203</td>
</tr>
</tbody>
</table>

Note: Rates of return on outward direct investment are calculated by dividing the amount of total direct investment income by the direct investment position for the previous year-end. Sources: OECD; IMF; Bank of Japan.

Chart 16
In terms of the profitability of foreign investment, Japan falls somewhat behind the United States.

Rate of Return on Outward Investment (Direct and Portfolio Investment)

Note: Figures are for 2011. Rates of return are calculated by dividing the amount of total investment income by the investment position for the previous year-end. Source: IMF.
**Chart 17**

Huge potential demand in the area of building core infrastructure exists in Asia.

![Chart 17](image)

**Investment Demand on Infrastructure in Asia**

<table>
<thead>
<tr>
<th>Category</th>
<th>Replacement demand</th>
<th>New demand</th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy/Electricity</td>
<td></td>
<td>2 tril.</td>
</tr>
<tr>
<td>Transportation</td>
<td></td>
<td>1 tril.</td>
</tr>
<tr>
<td>Communications</td>
<td></td>
<td>1 tril.</td>
</tr>
<tr>
<td>Water supply/hygiene</td>
<td></td>
<td>1 tril.</td>
</tr>
<tr>
<td>Roads</td>
<td></td>
<td>3 tril.</td>
</tr>
<tr>
<td>Seaports</td>
<td></td>
<td>1 tril.</td>
</tr>
<tr>
<td>Railways</td>
<td></td>
<td>0.5 tril.</td>
</tr>
<tr>
<td>Airports</td>
<td></td>
<td>0.5 tril.</td>
</tr>
</tbody>
</table>

*Total: about 8 trillion dollars*

**Share of Companies in Infrastructure Order (CY2011)**

- Japanese firms 9%
- South Korean firms 4%
- U.S. or Canadian firms 9%
- Chinese firms 20%
- European firms 45%
- Others 9%

*Note: Figures for investment demand are the accumulated value from 2010 to 2020. Sample countries are 30 countries or regions located in the Asia-Pacific region. Sources: Ministry of Economy, Trade and Industry; Asian Development Bank.*

---

**Chart 18**

The labor participation rate of the elderly has increased in recent years.

![Chart 18](image)

**Life Expectancy of 60 Year-Olds**

- Female
- Male

**Labor Participation Rate of the Elderly**

- 60 to 64 years old
- 65 to 69 years old

*Sources: Ministry of Internal Affairs and Communications; Ministry of Health, Labour and Welfare.*
The labor participation rate of women remains at a relatively low level compared with other advanced economies.

**Labor Participation of Women in 2010**

Expenditure in medical and nursing care has increased at a pace lower than that of population aging in Japan.

**Population Aging and Expenditure in Medical and Nursing Care**

<table>
<thead>
<tr>
<th>Population aged 65 and over (Change from 2000 to 2009, percent)</th>
<th>Japan</th>
<th>Germany</th>
<th>United States</th>
<th>France</th>
<th>United Kingdom</th>
</tr>
</thead>
<tbody>
<tr>
<td>29</td>
<td>24</td>
<td>13</td>
<td>9</td>
<td>9</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Expenditure in medical and nursing care (Change from 2000 to 2009, percent)</th>
<th>Japan</th>
<th>Germany</th>
<th>United States</th>
<th>France</th>
<th>United Kingdom</th>
</tr>
</thead>
<tbody>
<tr>
<td>17</td>
<td>31</td>
<td>82</td>
<td>98</td>
<td>49</td>
<td></td>
</tr>
</tbody>
</table>
The service sector, including medical and welfare industries, are offering increased employment opportunities.

Employees of Service Industries

Employees of Medical and Welfare Industries

Note: Service industries include all industries other than the manufacturing, agriculture, forestry and fisheries, mining, and construction industries.

Source: Ministry of Internal Affairs and Communications.

Chart 22

Japan's secondary housing market is smaller than other countries.

Notes: 1. Figures are for 2007. Those in parentheses represent each share.
2. For the United Kingdom, the number of second-hand dwellings is derived by subtracting the number of new dwellings from the total housing market.

Sources: Ministry of Land, Infrastructure, Transport and Tourism; U.S. Census Bureau; U.K. Department for Communities and Local Government.
Chart 23

The share of residential assets among Japanese household assets tends to be high.

*Breakdown of Household Assets*

<table>
<thead>
<tr>
<th></th>
<th>Japan</th>
<th>United States</th>
<th>Euro area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Currency and deposits</td>
<td>40%</td>
<td>40%</td>
<td>40%</td>
</tr>
<tr>
<td>Mutual fund</td>
<td>20%</td>
<td>20%</td>
<td>20%</td>
</tr>
<tr>
<td>Government and Corporate Bond</td>
<td>30%</td>
<td>30%</td>
<td>30%</td>
</tr>
<tr>
<td>Insurance and pension fund reserves</td>
<td>10%</td>
<td>10%</td>
<td>10%</td>
</tr>
<tr>
<td>Equity</td>
<td>5%</td>
<td>5%</td>
<td>5%</td>
</tr>
<tr>
<td>Other financial assets</td>
<td>5%</td>
<td>5%</td>
<td>5%</td>
</tr>
<tr>
<td>Fixed assets</td>
<td>10%</td>
<td>10%</td>
<td>10%</td>
</tr>
</tbody>
</table>

Note: Figures are as of end-2010. Sources: Ministry of Internal Affairs and Communications; FRB; Eurostat.

Chart 24

Compared with the United States, Japanese large-cap firms have longer corporate histories.

*Establishment Year of Top 300 Large-Cap Firms*

Note: Figures are based on the top 300 large-cap firms as of end-2012. Those for Japan for 2000 onward, however, exclude the establishment of stock-holding companies. Source: Thomson Reuters.
Looking at developments in the stock market after the Lehman shock, comparatively small firms have been performing relatively well.

*Difference in Market Capitalization Developments by Size*

<table>
<thead>
<tr>
<th>Market capitalization increased</th>
<th>Market capitalization declined</th>
</tr>
</thead>
<tbody>
<tr>
<td>50 billion yen or above (762)</td>
<td>29.4</td>
</tr>
<tr>
<td>5 billion yen or above and less than 50 billion yen (1,440)</td>
<td>44.9</td>
</tr>
<tr>
<td>Less than 5 billion yen (1,153)</td>
<td>58.7</td>
</tr>
</tbody>
</table>

Notes: 1. Sample firms are those that were listed on stock exchanges in Japan as of end-August 2008 and which remained so through January 2013.
2. Figures are comparisons of market capitalization from August 2008 to January 2013.
3. Firms are categorized based on their market capitalization as of end-August 2008.
4. Figures in parentheses represent the number of firms that apply to each category.

Source: Bloomberg.

Japan has prioritized securing employment, reducing costs largely by cutting back wages.

*Unemployment Rates*  
*Hourly Wages*

Sources: Cabinet Office; Ministry of Internal Affairs and Communications; BLS.
As firms' profitability has been declining recently, neither wages nor prices have changed materially.

**Developments in Corporate Profits, Wages, and Prices following Cyclic Peaks**

<table>
<thead>
<tr>
<th>Year Range</th>
<th>Latest Peak</th>
<th>Peak</th>
<th>Trough</th>
</tr>
</thead>
<tbody>
<tr>
<td>1971/Q4 ~ 73/Q3</td>
<td>100</td>
<td>70/Q3</td>
<td>71/Q4</td>
</tr>
<tr>
<td>1986/Q4 ~ 90/Q4</td>
<td>100</td>
<td>85/Q2</td>
<td>86/Q4</td>
</tr>
<tr>
<td>2002/Q1 ~ 07/Q4</td>
<td>100</td>
<td>00/Q4</td>
<td>02/Q1</td>
</tr>
<tr>
<td>2009/Q1 ~</td>
<td>100</td>
<td>08/Q1</td>
<td>09/Q1</td>
</tr>
</tbody>
</table>

**Note:**
- "Wages" refers to hourly cash earnings (monthly labour survey base, establishment with 30 or more employees, all industries).
- "CPI" refers to CPI for all items.
- "Corporate profits" refers to operating profit figures in "Financial Statements Statistics of Corporations by Industry, Quarterly" (all size, all industries).

**Sources:**
- Ministry of Health, Labour and Welfare
- Ministry of Internal Affairs and Communications
- Ministry of Finance
- Cabinet Office

---

There is a clear positive correlation between inflation expectations and potential growth rates in Japan.

**Potential growth rate (per capita, left scale)**

**Medium- to long-term inflation expectations (6 to 10 years ahead, right scale)**

**Sources:**
- Cabinet Office
- Consensus Economics Inc., "Consensus Forecasts"
- CBO
- OECD, etc.
Changes in global investors' risk aversion significantly affect developments in financial markets.

**Long-Term Yield Spreads over German Government Bond Yields (%)**

<table>
<thead>
<tr>
<th></th>
<th>Beginning of 2011</th>
<th>July 24, 2012</th>
<th>Recent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Italy</td>
<td>1.8</td>
<td>+3.6</td>
<td>5.4</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>-1.9</td>
</tr>
<tr>
<td>Spain</td>
<td>2.5</td>
<td>+3.9</td>
<td>6.4</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>-2.5</td>
</tr>
<tr>
<td>Greece</td>
<td>9.6</td>
<td>+17.2</td>
<td>26.8</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>-17.1</td>
</tr>
</tbody>
</table>

**Equity Prices**

<table>
<thead>
<tr>
<th></th>
<th>Beginning of 2011</th>
<th>July 24, 2012</th>
<th>Recent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Japan (Nikkei 225)</td>
<td>10,998.1</td>
<td>-18.4%</td>
<td>8,488.1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>+32.6%</td>
<td>11,254.0</td>
</tr>
<tr>
<td>United States (Dow Jones)</td>
<td>11,670.8</td>
<td>+8.1%</td>
<td>12,617.3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>+10.2%</td>
<td>13,900.1</td>
</tr>
<tr>
<td>Euro area (Euro STOXX)</td>
<td>2,839.4</td>
<td>-24.2%</td>
<td>2,151.5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>+19.5%</td>
<td>2,570.5</td>
</tr>
<tr>
<td>Emerging economies</td>
<td>100.0</td>
<td>-14.7%</td>
<td>85.3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>+11.9%</td>
<td>95.4</td>
</tr>
</tbody>
</table>

**Nominal Effective Exchange Rates (% chg., "+" means appreciation, "-" means depreciation)**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Yen</td>
<td>+ 6.3</td>
<td>- 13.9</td>
</tr>
<tr>
<td>U.S. dollar</td>
<td>+ 3.2</td>
<td>- 2.6</td>
</tr>
<tr>
<td>Euro</td>
<td>- 4.8</td>
<td>+ 5.4</td>
</tr>
<tr>
<td>Pound sterling</td>
<td>+ 4.4</td>
<td>- 2.3</td>
</tr>
<tr>
<td>Korean won</td>
<td>- 1.2</td>
<td>+ 6.5</td>
</tr>
</tbody>
</table>

Notes: 1. Figures for equity prices for emerging economies are taken from the MSCI Emerging Markets Index, adjusted such that the figure for the beginning of 2011 is 100.
2. Figures for "Equity Funds Inflows/Outflows" are calculated using each fund's net money flow data divided by its total assets.

Sources: Bloomberg; EPFR Global; BIS.

**Exports and production increased during the mid-2000s when the yen depreciated.**

Sources: Ministry of Economy, Trade and Industry; Bank of Japan; BIS.
The medium- to long-term growth rate has not risen.

*Foreign Exchange Rates, Exports, and Real GDP Growth*

**Notes:**
1. The nominal effective exchange rate is an indicator that measures the overall value of individual currencies. It is derived by calculating the weighted average of each currency's exchange rate against other currencies using the annual value of each country's trade with its counterparties as its weights.
2. The real effective exchange rate is an indicator of a country's overall international competitiveness, calculated as follows. First, each of the exchange rates of the country's currency against other currencies (i.e., nominal exchange rates) is deflated by the price indices of those countries to calculate the real exchange rate. Then, the weighted average of the real exchange rates is calculated using the annual value of each country's trade with its counterparties as its weights.

**Sources:** Cabinet Office; BIS.

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Money is increasing.

*Relationship between Money and Prices*

**Notes:**
- CPI (less fresh food)

**Sources:** Cabinet Office, Ministry of Internal Affairs and Communications; Bank of Japan.
The Bank of Japan has provided considerable funds through large-scale purchases of JGBs. Private financial institutions have been increasing their JGB holdings rather than lending.

Chart 33

The Bank of Japan will supply additional funds amounting to over 60 trillion yen in the next two years.

Amount Outstanding of "Asset Purchase Program" and "Loan Support Program"

For some time, the Bank will purchase financial assets of about 13 trillion yen, 2 trillion yen of which is JGBs, every month.