Sayuri Shirai: Japan's economic activity, prices, and monetary policy – the medium-term outlook and the expansion of monetary easing

Speech by Ms Sayuri Shirai, Member of the Policy Board of the Bank of Japan, at a meeting with business leaders, Hiroshima, 26 November 2014.

* * *

The charts can be found at the Bank of Japan's website.

I. Introduction

Good morning, everyone. Today, I feel honored to have an opportunity to meet with local representatives here. Let me also express my sincere gratitude for your cooperation with the activities of the Bank of Japan's Hiroshima Branch. In my speech, I would like to talk about the Bank's baseline scenario described in the October 2014 *Outlook for Economic Activity and Prices* (hereafter the Outlook Report), as well as the Bank's decision made on October 31 to expand *quantitative and qualitative monetary easing* (QQE).

II. Outlook for economic activity and prices, and risk assessment

I will begin by describing the current economic conditions and the Bank's baseline scenario, followed by those for price developments, and then the upside and downside risks to the baseline scenario – all of which were presented in the Outlook Report. My own views will also be mentioned. The medium-term outlook is based on information available by end-October, and incorporates the expected effects of the expansion of QQE. It also assumes the implementation of the second round of the consumption tax hike in October 2015 as stipulated in the current relevant law. Let me highlight three major changes related to the economic environment that have emerged since the interim assessment made in July this year. These are (1) a decline in a wide range of commodity prices, especially crude oil prices, from around July; (2) a moderate deceleration in the pace of economic activity in Europe and emerging economies, including China; and (3) increased volatility in global financial and capital markets triggered mainly by heightened geopolitical risk and changes in investor sentiment reflecting the normalization of the Federal Reserve's monetary policy.

A. Current situation of and outlook for economic activity

Japan's economy has continued to recover moderately as a trend, although some weakness has remained in consumption and production. The weakness is due mainly to (1) a decline in domestic demand following the front-loaded increase before the consumption tax hike was implemented in April 2014, (2) somewhat weaker export developments, and (3) the effects of irregular weather during the summer. Corporate profits for fiscal 2014 remain high despite a sharp decline in domestic demand following the front-loaded increase, after rising significantly in fiscal 2013. Partly reflecting this, firms maintain a strong incentive to carry out business fixed investment; some of them, including small and medium-sized enterprises (SMEs), have actually adjusted upward their investment plans for fiscal 2014. In addition, the year-on-year change in nominal *employee income* (defined as the per capita nominal wage multiplied by the number of employees) has been on a rising trend, which continues to support consumption activity.

According to ***the Bank's baseline scenario of the outlook for economic activity***, in the second half of fiscal 2014, private consumption is likely to remain resilient with the employment and income situation continuing to improve steadily; business fixed investment is projected to increase steadily; and exports are expected to head for a moderate increase as overseas economies recover. Therefore, a virtuous cycle among production, income, and spending is likely to be maintained in both the household and corporate sectors. The accommodative financial environment, which was strengthened further by the Bank's recent decision on the expansion of monetary easing, will continue to support the economic recovery. Note that the outlook assumes a gradual increase in firms' and households' medium- to long-term growth expectations, as well as the potential growth rate, in line with progress in the government's growth strategy and firms' initiatives toward improving productivity and their tapping of potential domestic and external demand. As a result, the economic growth rates for fiscal 2015 through fiscal 2016 are projected to exceed the potential economic growth rates (Chart 1).

My outlook for economic activity – which has consistently remained lower than the median of the Policy Board members' forecasts throughout the projection period – was revised downward this time. My downward revision ***for fiscal 2014*** was mainly due to the greater-than-expected decline in private consumption caused by the consumption tax hike. At the time of the Bank's interim assessment in July, many firms had judged that the adverse impact of the consumption tax hike was largely within their expectations. In reality, however, it turned out that an actual decline in domestic demand was greater in the April-June quarter this year; the recovery process since August has also been slower than expected. These developments can be attributed to not only a decline in real disposable income but also the bad weather and the limited wealth effects reflecting a sluggish performance of the stock market.

In this regard, I had disagreed four times consecutively with the Bank's risk assessment that was described in the *Statement on Monetary Policy* released immediately after each Monetary Policy Meeting (MPM) from January through early April this year. The disagreement reflected my concern that the Bank's *Statement on Monetary Policy* referred only to developments in overseas economies as a risk factor, and did not mention *the pace of improvement in the employment and income situation in Japan* as a downside risk. It is now clear that this risk has materialized and played a major role in the downward revision to the Bank's outlook. Nevertheless, private consumption recently started to recover gradually and the consumption level will likely recover to the level observed before the front-loaded increase by around the January-March quarter of 2015.

Regarding exports, my risk assessment has also been consistently tilted downward because of concerns about sluggish external demand. This time, I revised downward my outlook on exports because the downside risk had materialized somewhat. However, since my outlook on imports was adjusted downward as well, the net impact on the trade balance is projected to remain limited.

My projection is that the growth rates ***for both fiscal 2015 and 2016*** will likely be much higher than the rate for fiscal 2014. However, they have been adjusted downward somewhat, mainly for private consumption, from my July interim assessment. This adjustment reflects my observation that the rate of increase in nominal *employee income* may slow down somewhat in fiscal 2015 and 2016 because of the following. (1) Slower growth in corporate profits for fiscal 2014 relative to that in 2013 – although still at a high level – may result in slower growth of nominal wages for regular workers in fiscal 2015. (2) A further expansion in employment is becoming increasingly difficult since unemployed workers have largely disappeared except for those caused by mismatches. (3) Additional labor hours generated by newly employed workers have been declining since many women and elderly people who are willing to work often prefer short-time working hours. (4) Current employment growth includes many non-regular workers whose wage growth remains limited, while there is a declining trend in employment growth among regular workers in manufacturing, whose productivity growth and thus wage growth have exceeded other sectors. Finally, (5) it is not yet confirmed whether households' expectations regarding future income will follow a rising trend.

The estimated potential economic growth rate has been repeatedly revised downward and currently remains below 0.5 percent (Chart 2). I judge that this decline reflects not only a deceleration in the growth of capital stock and the total factor productivity (TFP) but also a *constraint on economic growth* imposed by a labor shortage, which has become increasingly evident in the construction, restaurant, retail, transportation, and tourism sectors, notably among SMEs. The potential growth rate is expected to rise from fiscal 2015 mainly through an accumulation of capital stock, an improvement in TFP growth, and a reallocation of the labor force through restructuring of the corporate sector and a shift in existing business models toward ones that provide higher value added or goods and services that stimulate demand. It is also expected that greater efforts will be made by the government to reform the social security and tax systems, to promote female employment, resolve the problem of having too many children on waiting lists for nursery schools, and promote economic growth strategies – thereby contributing to the reduction of constraints on economic growth.

To summarize my outlook, the potential growth rate will rise gradually toward about 1 percent over the projection period. Over the same period, economic growth is projected to be around or below the potential growth rate for fiscal 2014. Economic growth will likely be much greater than the potential growth rate for fiscal 2015, due to the adjustment process of returning to the conditions observed before the front-loaded increase in domestic demand prior to the consumption tax hike. Economic growth for fiscal 2016 is likely to moderately exceed the potential growth rate.

B. Current situation of and outlook for prices

Current price developments show that the year-on-year rate of increase in the consumer price index (CPI, all items less fresh food) declined from May 2014 and is recently around 1 percent. The major factors determining inflation rates are *the aggregate supply and demand balance (the output gap), medium- to long-term inflation expectations*, and *import prices*. The output gap turned positive to around 0.4 percent in the January-March quarter of 2014, but then dropped again into negative territory, to around minus 0.1 percent in the April-June quarter owing to the adverse impact of the consumption tax hike. The output gap is very recently improving slowly, reflecting mainly a continuous increase in employment. Medium- to long-term inflation expectations are rising on the whole from a somewhat longer-term perspective. As for import prices, upward pressure – mainly from the depreciation of the yen and the rise in energy prices – has already begun to weaken.

According to ***the Bank's baseline scenario of the outlook for prices***, the year-on-year rate of increase in the CPI (excluding the direct effects of the consumption tax hikes) is likely to be at around the current level for the time being, and subsequently accelerate gradually and *reach around 2 percent around the middle of the projection period; that is, in or around fiscal 2015* (Chart 3). Thereafter, the CPI inflation is likely to *edge up as medium- to long-term inflation expectations will converge to around 2 percent and the output gap is expected to continue expanding in positive territory*. In other words, after achieving inflation of around 2 percent in or around fiscal 2015, Japan's economy is projected to shift to *a growth path that sustains such inflation in a stable manner*. It is assumed that a trend in which the output gap will be positive is likely to take root in the second half of fiscal 2014 and thereafter is expected to move further into excess demand territory, thereby increasingly exerting upward pressure on prices, and that such positive price developments will help to raise medium- to long-term inflation expectations to converge to around 2 percent. Meanwhile, import prices will likely be pushed down by the recent declining trend in commodity prices on the one hand, and pushed up by recent developments in foreign exchange rates on the other.

With regard to medium- to long-term inflation expectations, the Bank generally makes a judgment on the movements of the inflation expectations *as a whole* using a wide range of related indicators. This is because there is no single data set that represents inflation expectations and the indicators entail statistical problems, such as various biases, and exhibit divergent movements from each other. The Bank's sample indicators include the inflation expectations of households, firms, economists, and Japanese government bond (JGB) market participants, as well as those inferred from market data such as the break-even inflation (BEI) rate and the inflation swap rate. The Bank regularly releases these data under the headline chart title "Inflation Expectations" in its *Monthly Report of Recent Economic and Financial Developments* as well as in the Outlook Report. Among the data, the most relevant indicators for the Bank are those projected more than one year ahead, which are regarded as representing medium- to long-term inflation expectations (Charts 4–1 and 4–2).

As mentioned, the Bank projects that medium- to long-term inflation expectations will converge to around 2 percent, since this will sustain inflation at around 2 percent in a stable manner. Thus, the judgment as to whether medium- to long-term inflation expectations will converge is essential to realize the Bank's baseline scenario. In this regard, it may be said that the Bank has already passed the halfway point on the path toward achieving the 2 percent price stability target, but it *has not yet* attained the goal. Chart 5 shows the long-term performance of inflation expectations based on economists' survey data in Japan and the United States. In the United States, medium- to long-term inflation expectations (i.e., five years ahead) have remained stable and have been anchored at around 2 percent. By contrast, it is difficult to say that those of Japan have been anchored even at around 1 percent, accompanied by greater fluctuations compared with the United States. More importantly, it is clear that Japan *was not able to avoid* mild deflation even when medium- to long-term inflation expectations remained around 1 percent. This is why the Bank considers it important to raise inflation expectations above the current level of around 1 percent or so and is striving to stabilize them at around the 2 percent level to ensure that the economy overcomes deflation.

Regarding ***my outlook for prices***, I revised downward somewhat my projection ***for fiscal 2014*** from my interim assessment in July; it also remains lower than the median of the Policy Board members' projections. This downward revision reflects the following considerations. (1) The output gap improvement is likely to slow. (2) Some figures on medium- to long-term inflation expectations (such as those for households and those of some economists) remain leveled off, while others (such as BEI rates, inflation swap rates, those of JGB market participants, and corporate sector expectations related to changes in firms' own sales prices) declined from around this summer; moreover, due to a decline in actual inflation rates from May this year, medium- to long-term inflation expectations are unlikely to exhibit a rising trend on a sustainable basis (Charts 4–1 and 4–2). Finally, (3) the lagged impact of a commodity price drop is likely to be reflected in the CPI. As a result of the revision, the rate of inflation will likely remain *more or less* at around 1 percent for the time being, then start to pick up gradually toward the first half of fiscal 2015 – suggesting some delay in the timing of a pick-up in inflation.

My projection – ***for fiscal 2015 and 2016*** was also revised downward – but very moderately – relative to my July interim assessment. The downward revision was small because the effects of the expanded QQE were incorporated. Without such a policy action, the downward revision would have been larger. This enabled me to maintain roughly the same outlook throughout the projection period: namely, that the inflation rate of 2 percent is likely to be reached *toward the end of the projection period*. Meanwhile, the Outlook Report describes the Bank's baseline scenario as reaching around 2 percent *around the middle of the projection period; that is, in or around fiscal 2015.* However, I considered it better to replace this with the expression *by the end of the projection period* – since this better reflects the views of a greater number of Policy Board members, including myself. For this reason, I submitted a proposal to suggest such a replacement at the MPM held on October 31.

Now, let me explain why my outlook has been consistently more conservative than the Bank's baseline scenario. This is because I anticipate that the upward pressure from the labor shortage on wages will likely take place more gradually. Similarly, I judge that the upward pressure of improvement in the output gap as well as a rise in medium- to long-term inflation expectations on the inflation rate will emerge at a slower pace. In other words, a nation like Japan, given its rapid aging and low birth rate, may face somewhat limited potential domestic demand compared with other economies that enjoy more favorable demographics. Thus, the output gap improvement is unlikely to give rise to a rapid pace of wage increases and inflationary pressure compared with other economies. Moreover, I maintain the view that inflation expectations will rise gradually.

Another thing I would like to point out is that, as I have mentioned in the past, a consumption tax hike will have a certain influence on ***the judgment on underlying price developments***. For example, inflation will be pushed upward in accordance with the degree of the tax hike for the following twelve months. Thus, the Bank attempts to analyze the trend behavior of actual inflation by removing the *direct* effects of the consumption tax hike (Chart 3). Moreover, since short- and medium- to long-term inflation expectations will also be affected during the period prior to the tax hike, the Bank also takes into consideration figures that are obtained by mechanically excluding the direct effects of the tax hike (Chart 4–2). Of course, the tax hike also *indirectly* affects the inflation rate and inflation expectations through the real economy. But since it is technically difficult to remove these indirect effects of the tax hike, it should be noted that the Bank is removing only the direct effects for the sake of simplicity. Thus, in assessing whether *medium- to long-term inflation expectations are likely to gradually converge to around 2 percent,* this issue should be noted. In other words, the judgment needs to be made as to whether an increase in these expectations reflects the underlying trends based on the virtuous cycle among production, income, and spending – not the next anticipated tax hike.

C. Upside and downside risks (risk factors)

As described in the October 2014 Outlook Report, ***the upside and downside risks to the Bank's baseline scenario of the outlook for economic activity*** include (1) developments in exports, (2) the effects of the consumption tax hikes, (3) firms' and households' medium- to long-term growth expectations, and (4) fiscal sustainability in the medium to long term. The Bank assesses these risks as being *balanced*. Meanwhile, ***the upside and downside risks to the Bank's baseline scenario for prices*** cover (1) developments in firms' and households' medium- to long-term inflation expectations, (2) developments in the output gap, (3) the responsiveness of inflation to the output gap, and (4) developments in import prices. The risks to the price outlook are assessed as entailing substantial downside risks – and the overall risk assessment was revised downward from "being largely balanced" for the first time since the introduction of QQE.

As for ***my risk assessment related to the economy***, the downside risks remain somewhat greater than the upside ones. First, there is a risk that domestic private consumption will weaken because of a continuous decline in real disposable income and a potential deterioration in household sentiment. Second, there is a risk that heightened uncertainty regarding the outlook for the global economy and the tepid pace of the domestic economic recovery will result in lower exports and domestic business fixed investment. Third, households' and firms' medium- to long-term growth expectations may not rise if there is no progress in implementation of the government's growth strategy or firms' efforts to boost competitiveness.

In ***my assessment on risks to prices***, the risks remain tilted somewhat to the downside. In particular, I am paying close attention to the movements of households' and firms' medium- to long-term inflation expectations. In addition, it may take time for the slope of the Phillips curve – that is, the responsiveness of inflation to the output gap – to steepen. This is because it may take some time for firms to adjust their price-setting behavior in the new environment in which they can pass on the rise in production costs and wages to their sales prices.

III. Expansion of quantitative and qualitative monetary easing

I would now like to discuss the Bank's latest policy action, namely, the expansion of QQE decided at the MPM held on October 31, together with my personal views.

A. The Measures adopted under the expansion of QQE

In the most important change, the Bank decided to accelerate the annual pace of increase in the monetary base – *the main operating target for money market operations* – from the pace of about 60–70 trillion yen to about 80 trillion yen (an addition of about 10–20 trillion yen). To achieve this target, the amount outstanding of JGB holdings will be increased from an annual pace of about 50 trillion yen to about 80 trillion yen (an addition of about 30 trillion yen). With a view to encouraging a further decline in interest rates across the entire yield curve, moreover, the Bank will conduct purchases of JGBs in a flexible manner in accordance with financial market conditions. In doing so, the average remaining maturity of the Bank's JGB purchases will be extended from about seven years to about 7–10 years (an extension of about three years at maximum). In addition to JGBs, the Bank decided to increase the purchases of risk assets such as exchange-traded funds (ETFs) and Japan real estate investment trusts (J-REITs) so that their amounts outstanding will be tripled and increase at an annual pace of about 3 trillion yen and about 90 billion yen, respectively. The Bank will also make ETFs that track the JPX-Nikkei Index 400 eligible for purchase.

B. Reasons for expanding QQE: the bank's view

Having said this, let me discuss why the Bank decided on the expansion of QQE. As explained earlier, Japan's economy has continued to recover moderately as a trend and is expected to continue growing at a pace above its potential. However, on the price front, due to some recent concerns, the Bank found it appropriate to take pre-emptive action to address them. Namely, the Bank was concerned that somewhat weak developments in demand following the consumption tax hike and a substantial decline in crude oil prices had been exerting downward pressure on prices.

It is true that a temporary weakness in demand has already started to wane, and that the decline in crude oil prices will have positive effects on economic activity from a somewhat longer-term perspective – through improvements in the terms of trade and real disposable income – and will push up prices. Nevertheless, if the current downward pressure on prices remains, albeit in the short term, there is a risk that conversion of the deflationary mindset – which has so far been progressing steadily – might be delayed or reversed. To pre-empt manifestation of such risks and to maintain the momentum of inflation expectation formation, the Bank judged it appropriate to expand QQE. The reason behind the latest decision on the expansion was that the Bank considered Japan's economy to be facing a critical moment in the process of conquering deflation and that its unwavering determination should again be conveyed.

C. My views on additional monetary easing

On this policy action, I voted for the expansion of QQE at the MPM held on October 31. While I would like to refrain from commenting on the details, since the contents of the discussion at the MPM as a rule should be disclosed only in the form of the minutes and transcript, let me discuss here my general views on monetary easing. As pointed out earlier, I have consistently held the view – since the introduction of QQE in April 2013 – that it will likely take longer than two years to achieve the 2 percent target in a sustainable manner. And as my outlook for prices, I have stated that *the rate of CPI inflation will rise closer to 2 percent toward the end of fiscal 2015*. In April 2014, I felt it important to express my outlook more precisely since the projection period was extended by one year through fiscal 2016 – even though there was no fundamental change in my outlook. Accordingly, I have described my outlook from this April as *the inflation rate of 2 percent is likely to be reached toward the end of the projection period.*

Let me remind you that the Bank is conducting monetary easing with the aim of achieving 2 percent inflation in a stable manner with sustainable economic growth – rather than merely achieving 2 percent in a specific year and failing to meet the target in subsequent years. This approach is called a *flexible inflation targeting framework*. Under this framework, I have expressed my view that it is desirable to attempt to achieve the 2 percent target with a time span of more than two years to avoid imposing an excessive burden on firms and households. In line with this view, I made it clear this April that my outlook for economic activity and prices has assumed the continuation of QQE during and beyond fiscal 2015.

On ***the continuation of QQE***, I had considered that an annual pace of increase in the monetary base of about 60–70 trillion yen could be maintained at least until around April 2015. This time-line seemed appropriate, since the *doubling of the monetary base* – as clearly stipulated in the Bank's public statement released on April 4, 2013 – was expected to be achieved only by around April 2015 under the annual pace of increase of about 60-70 trillion yen. Thereafter, one likely option would be a *continuation of monetary easing* with the same annual pace of increase in the monetary base in an open-ended form with the same composition of asset purchases. Alternatively, since I personally viewed that the 2 percent target would likely be reached by fiscal 2016, another possibility would be a greater focus on the *continuation of monetary easing* until around then, with potential modification of the composition of asset purchases.

Last year, meanwhile, I referred to two potential cases for considering ***additional easing***. The first was the case where *downside risks to the Bank's outlook for economic activity and prices materialized and it was necessary for the Bank to sharply revise downward its outlook*. The second was the case where *the Bank's credibility over monetary policy conduct was at risk of being questioned by the public and the market.* For example, there was the risk that the Bank was perceived as not doing enough to fulfill its commitment, a commitment that has been emphasized repeatedly since the introduction of QQE. That is, if the Bank's outlook changes due to the manifestation of risk factors, the Bank will make adjustments without hesitation if this is judged necessary for achieving the 2 percent price stability target. In my view, together with the CPI inflation and some indicators related to medium- to long-term inflation expectations showing some decline, this time there was a higher likelihood that these two cases would materialize. To avoid this, I concluded that it was necessary to give first priority to ensure the path toward the 2 percent price stability target by means of additional action. By not acting, the Bank might risk its credibility. Such a circumstance would not only render my outlook infeasible but also undermine the feasibility of the 2 percent target itself.

On the effectiveness of monetary policy, I have been thinking that it might be better to put a greater emphasis on monetary easing effects that promote the portfolio rebalancing channel, as I will explain later. Therefore, I expect that the additional easing, which lengthens the average remaining maturity of long-term JGBs and increases the purchases of risk assets, would further enhance the transmission channels of monetary policy.

D. The transmission channels related to QQE

Next, I would like to touch on the transmission channels of the Banks's monetary easing. QQE aims to exert downward pressure on nominal and real long-term interest rates through a range of transmission channels, thereby *lowering funding costs* as well as *raising asset prices*. Ultimately, these changes are expected to boost the aggregate demand of firms and households, and raise the rate of inflation toward around 2 percent. Given that JGB purchases are the main instrument under QQE, I will briefly discuss *the transmission channels with a focus on JGB purchases*.

To simplify the discussion, let me categorize the transmission channels into three types. ***The first transmission channel*** is called *the signaling channel*, in which the Bank transmits its future monetary easing policy stance to the public and the market through JGB purchases. This would possibly lower market expectations over the future path of short-term interest rates, thus lowering nominal and real long-term interest rates. The resultant decline in risk-free interest rates would likely raise the prices of securities and real estate; a decline in interest rates and an increase in the value of collateral would lower firms' and households' funding costs. The resultant decline in hurdle rates would also help expand the amount of business fixed investment made by each firm; an increase in a wide range of asset prices held by firms and households would promote business fixed investment and consumption. The greater soundness of financial institutions' balance sheets and capital would likely promote greater risk-taking behavior, and thus, more active investment and lending domestically as well as abroad. This channel is likely to initially exert stronger downward pressure on nominal long-term interest rates, but as the rate of inflation begins to pick up, these interest rates are expected to rise gradually.

The second channel is called *the portfolio rebalancing channel*, in which the Bank exerts downward pressure on the term premium and thus lowers nominal and real long-term interest rates. This channel aims to encourage financial institutions (and investors) to change the composition of their portfolios, thereby lowering funding costs and raising asset prices *directly*. When the Bank purchases JGBs from the market, the amount of JGBs held by financial institutions declines against the increase in their current account balances at the Bank. Since the current account balances and JGBs are *incomplete substitutes*, financial institutions would likely try to increase JGBs again and reduce their current account balances accordingly, leading to a decline in long-term interest rates. As a result, the financial institutions may find it more attractive to invest in other potentially riskier financial assets with relatively higher returns. The lower the substitutability between the current account balances and JGBs, the greater the portfolio rebalancing incentive. Moreover, the longer the remaining maturity of JGBs purchased by the Bank, the lower the substitutability between the current account balances and JGBs. In other words, the Bank's purchases of longer-term JGBs would result in a decline in the net supply of these bonds circulating in the market, so that the average remaining maturity of JGBs transacted in the market would be shortened. This would lead to a decline in the term premium.

Generally, the longer the average maturity of government bonds purchased by a central bank, the greater the downward pressure on the term premium. As a result, financial institutions would face a decline in the interest rate risk volume, which would enhance their capacity to take on greater risk and their incentive to invest in riskier assets. Initially, investment in riskier assets would be most likely to take place in financial assets with a high degree of substitutability for government bonds – such as corporate bonds and loans – or whose expected returns are highly correlated with those of government bonds. As increased investment in such assets results in a decline in their returns, financial institutions would be encouraged to invest in riskier assets with relatively higher returns – such as low-rated corporate bonds, stocks, real estate, investment trusts, and foreign investments. Through such a continuous process, an increase in a wide range of asset prices and a decline in funding costs in a range of markets are expected to materialize.

The third channel is called *the inflation expectation channel* and focuses on increasing not only the actual rate of inflation but also medium- to long-term inflation expectations, so that real long-term interest rates are lowered. The first and second transmission channels are expected to raise the actual rate of inflation, thereby *indirectly* helping to raise the medium- to long-term inflation expectations. By contrast, the third channel stresses that the Bank's purchases of JGBs with a commitment to continue until achievement of the 2 percent target could contribute to raising inflation expectations *directly*. An increase in inflation expectations would produce upward pressure on nominal long-term interest rates, but this would be contained partially by the downward pressure on the term premium. Therefore, it is judged that real long-term interest rates would decline.

In addition to JGB purchases, the Bank purchases various types of risk assets. Thus, transmission channels other than those I have described are also present. Direct purchases of risk assets could thus be expected to directly influence risk asset markets.

E. Chances to revitalize the Japanese economy

Since the adoption of the 2 percent price stability target (based on the headline CPI) in January 2013, nearly two years have passed. The adoption of the 2 percent numerical target reflects the following factors. (1) The need to keep a sufficient buffer with regard to inflation to avoid the economy from falling into deflation again and also consider the upward bias problems inherent in CPI statistics. (2) The need to leave sufficient room for the conduct of flexible monetary policy by achieving a certain level of inflation to avoid the zero lower bound in recessionary phases. And (3) the need to set a target of around 2 percent, which is becoming a *global standard* in terms of a price stability target, to avoid the re-emergence of excessive appreciation of the yen.

In addition, the 2 percent target is essential to realize a *normal* economic condition whereby positive rates of nominal GDP growth can be seen on a sustainable basis and thereby help to increase firms' and households' medium- to long-term economic growth expectations (Chart 6). It is important to realize that a continual decline in nominal GDP over the past 15 years is a highly *unusual* economic condition, rarely seen in other economies. Given that the rate of CPI inflation often exceeds the rate of annual change in the GDP deflator in Japan, there is a wide gap between the levels of these two indices. Thus, achieving about 1 percent CPI inflation appears inadequate to ensure trend movements of the nominal GDP growth rate in positive territory, and this is also one of the reasons why I judge that the Bank should aim at achieving 2 percent CPI inflation (Chart 7).

Having said this, it appears that some among the public and the market feel uncertainty about the importance of achieving the 2 percent target, as well as the Bank's policy intention. This is particularly because people are accustomed to the deflationary environment and the pace of nominal wage growth has not yet caught up with that of the price increase, partly owing to the consumption tax hike. This is even more so when some time is required to raise expectations for future income. Therefore, as I have emphasized several times in the past, it is essential for the Bank to boost the effectiveness of its communication strategy by explaining more clearly to the public and the market why it aims to achieve the 2 percent target and how this will improve people's lives in the medium to long term. I will continue making further efforts in this regard.

In addition, views that the effectiveness of QQE has waned tend to grow particularly when the economic data appear less favorable. However, it is clear that the Japanese economy is currently in far better shape than it was prior to the introduction of QQE. A virtuous cycle from income to spending, which is the driving force of the economy, is being maintained in the household and corporate sectors. Thus, it is crucial for the Bank to continue to stick to the 2 percent price stability target without any hesitation.

Enhancing competitiveness and achieving sustainable economic growth require sensible risk-taking behavior on the part of all entities involved – firms, households, and financial institutions. However, the long-standing deflation-oriented mindset has discouraged such behavior. This is why the Bank has adopted its large-scale monetary easing policy with the aim of helping to generate the risk money necessary to energize the economy by transforming the mindset. I sincerely hope that all entities will take full advantage of the opportunity afforded by the highly accommodative financial environment generated by QQE to expand their efforts to produce innovative goods and services, which will lead to the tapping of potential demand and boosting of productivity, in concert with the economic growth strategy and structural reforms implemented by the government.

Thank you for your kind attention.