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Monetary Policy and Forward Guidance in Japan

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I. Introduction

It is a great honor to have this opportunity to address you today on Japan's economy and its monetary policy. Since April 2013, when the Bank of Japan introduced *quantitative and qualitative monetary easing* (QQE) that further strengthened existing monetary easing, nearly six months have passed. In these six months, a number of positive outcomes have materialized: these also reflect stimulus measures taken by the Japanese government. Compared with last year, stock prices have been higher; more active transactions are taking place in the financial and real estate sectors; the yen's exchange rate has been at more depreciated levels; and funding costs for firms and households in the loan and bond markets remain very accommodative.

Most importantly, the growth momentum of Japan's economy is gaining traction -- this is evidenced by the positive economic growth rates seen in the last three consecutive quarters (with an annualized real GDP growth rate of 3.8 percent in the second quarter of 2013). The unemployment rate dropped to 3.8 percent in July 2013, approaching the lowest level in recent years of 3.6 percent recorded in July 2007, before the financial crisis. There are some signs of the economy moving out of deflation with the year-on-year rate of change in the consumer price index (CPI) for all items less fresh food, or the core CPI, turning positive at 0.4 percent in June and 0.7 percent in July.

Given the amount of global media attention being paid to QQE, it appears that its content is becoming increasingly familiar to many experts and market participants. For this reason, I would rather talk today about QQE from a somewhat different perspective, namely from the standpoint of "forward guidance" -- a topic that has been hotly debated globally in recent years. In general, forward guidance refers to communication strategy undertaken by a central bank to provide information to the markets and the public (households and firms) on its future monetary policy stance. Forward guidance is currently used by some central banks in advanced economies facing the zero lower bound on short-term interest rates (hereafter called the zero lower bound) as an accommodative monetary policy.

I will begin my speech by explaining why forward guidance is important for Japan in Section II. Section III will focus on general issues related to forward guidance. I will then give my viewpoint on the current practice of monetary policy as adopted by the Bank, compare it with previous monetary policy practices, and highlight some of the ways the practice differs in Japan compared with other economies. Section IV will review QQE

progress to date through an overview of current price performance and its outlook, followed by an overview of economic activity.

II. Why Is Forward Guidance So Important for Japan?

I want to first address the question of why forward guidance is so important for Japan. As you know, the Bank is attempting to overcome the mild deflation that has lasted in Japan for nearly 15 years since 1998 and to achieve the 2 percent price stability target adopted in January 2013. The rate of price changes since 1998 is averaged at minus 0.3 percent. Before proceeding with my speech, let me pause here for a moment. I would like to bring up a question that I often encounter abroad. That is *What is the problem with having mild deflation in Japan when the unemployment rate has remained so low even throughout the global financial crisis?*

Long-Standing Mild Deflation

It is a legitimate question. It is true that Japan's unemployment rate has been much lower than that of other economies: the highest level it reached so far during the global financial crisis was only 5.5 percent in July 2009. Certainly, deflation is persistent, but it is mild and has avoided a deflationary spiral. On the surface, therefore, it may be difficult to comprehend Japan's fundamental problems.

My response is normally provided as follows. Mild deflation has been exerting adverse effects on Japan's economy because it reflects a long-standing negative output gap (chronic demand shortage), low expectations of future economic and market growth by firms, as well as sluggish expectations of future income growth by households (Chart 1). Deflation is also closely associated with the long-term yen appreciation trend that adds to the pessimism of firms already struggling to maintain price competitiveness. These phenomena -- together with a decline in total population, the rapid pace of aging of the population, and the slow pace of structural reforms -- have discouraged firms from actively engaging in business fixed investment and innovative activities, have led to households saving more because of growing concerns about the future, and have prompted financial institutions to undertake risk-averse investment strategies.

In this environment, households take the lower prices of goods and services for granted as they develop a *deflation-oriented mindset* and thus believe that prices will not increase. In addition, firms follow a *deflation-oriented pricing behavior* and hence use the sales prices

of their rivals and the purchasing behavior of customers to set their prices, even when the supply-demand balance improves. Moreover, financial institutions become increasingly accustomed to *deflation-oriented investment strategies,* and shift their investments from risk assets (such as stocks, corporate bonds, mutual funds, loans, real estate, and foreign securities) to safer assets (such as Japanese government bonds [JGBs], deposits, and cash).

Why Was the 2 Percent Target Adopted?

As I mentioned earlier, in January of this year the Bank established a target of 2 percent to achieve price stability. I would like to explain here why this course was decided on. In essence, Japan's economy had been quite depressed and gradually eroding for some time. Given this background the reason for setting the 2 percent target, in my view, is the belief that deflation is more harmful to an economy than inflation, and that it is important to achieve a comparable level of (mild) inflation to that of major advanced economies.[1] The Bank's aim of achieving the 2 percent price stability target is particularly challenging. It implies that the medium- to long-term inflation expectations of both the markets and the public need to be *increased and anchored at around the 2 percent level.* No other major economies have ever had to face such an undertaking. In more formal economic terms, the important point is that by raising inflation expectations toward 2 percent, the Phillips curve shifts upward and its slope steepens, thereby enhancing the responsiveness of price changes to the supply-demand balance (Chart 2).

Forward Guidance Used for Anchoring Inflation Expectations

I stress that "forward guidance" is essential to anchor inflation expectations, particularly in the case of Japan, with its requirement to firmly establish 2 percent medium- to long-term inflation expectations in the minds of the markets and the public. We should note here that the Bank needs to undertake an accommodative monetary policy with two main aims: (1) achieving economic recovery, and (2) anchoring inflation expectations at the target level. Contrast this with the situation of other economies' central banks. Their inflation expectations are already well-anchored at the target level of inflation, and thus, their primary aim is achieving economic recovery (see Section III). In Japan, the second aim of anchoring inflation expectations requires the Bank to first help transform the deflation-oriented behavior of all entities and then to steadily raise their inflation

[1] See Sayuri Shirai, "Japan's Economic Activity, Prices, and Monetary Policy: Monetary Policy in the Past and Present," Speech at a Meeting with Business Leaders in Asahikawa, Bank of Japan, 2013.

expectations. In this context, the Bank's task can be considered more challenging than in other economies, and its forward guidance operates under different circumstances. It needs to particularly target price movements and have a stronger commitment regarding monetary easing policies.

III. General Issues on Forward Guidance and Its Implementation in Japan

Forward guidance is now a popular topic among the central banks of advanced economies; however, it has been practiced in Japan for some time. Indeed, the Bank was the pioneer in using forward guidance as an accommodative monetary policy tool in the face of the zero lower bound, initiating the practice as early as 1999 when the zero interest rate policy was adopted (Chart 3). Since then, the Bank has come up with various forms of forward guidance at each monetary easing period, as I will later discuss. Moreover, since the onset of the global financial crisis, forward guidance has attracted global attention mainly as a result of its active use by the Federal Reserve under the zero lower bound. It has also recently been implemented as a tool by the European Central Bank (ECB) and the Bank of England (BOE), which is discussed in the Appendix to my speech.

A. General Issues Relating to Forward Guidance

The term "forward guidance" is now frequently used by a number of central banks and experts but it appears to have different meanings under different contexts. For clarity here, I assume that forward guidance simply refers to the provision of information by a central bank about future monetary policy to the markets and the public, regardless of whether or not the central bank calls it forward guidance. For example, the Bank does not officially use the term "forward guidance" to describe its communication strategy, but it could be regarded as such.

Essentially, forward guidance is aimed at enhancing the effectiveness of monetary policy. It can be classified into two types depending on the objective. The first objective is to clarify a normal monetary policy reaction function (or the conduct of normal monetary policy) envisaged by a central bank. By contrast, the second objective commits to the continuation of a more accommodative policy under the zero lower bound than would otherwise have been anticipated with the normal policy reaction function. I will further explain these objectives shortly, but one difference between them is that the impacts on financial markets -- such as generating downward pressure on long-term interest rates (and raising asset prices) -- are not necessarily intentional and present in the case of the first objective, but are

always deliberately pursued as a result of the unconventional monetary policy tool in the case of the second objective. While forward guidance has attracted recent attention for the role it takes in formulating exit strategies from monetary accommodation, as is the case in the United States, my speech today focuses instead on its role in introducing and maintaining a monetary stimulus.

Forward Guidance to Clarify a Normal Monetary Policy Stance

Forward guidance with the first objective may be regarded as communication strategy by a central bank to inform the markets and the public about the normal policy reaction function of the monetary policy (such as the Taylor rule). This can be classified as "Delphic forward guidance" according to Campbell *et al.* (2012).[2] Forward guidance in this instance can take the form of (1) indirect signals about a future monetary policy stance (for example, about a future policy interest rate path) through publishing comments and projections on the outlook for prices and economic activity with risk balance assessments, or it can take the form of (2) direct signals through releasing the future policy interest rate numerical projections. In any case, the future policy stance of a central bank is a forecast based on the currently available information and the normal reaction function. This forecast is updated as new information becomes available. The important point here is that the central bank makes no commitment on its future monetary policy.

Generally, this type of guidance is used to enhance transparency and predictability for the markets and the public, so it does not necessarily affect financial markets. Nonetheless, there are some cases where this guidance may favorably influence financial markets. An example of this would be a case where forward guidance results in a clearer understanding by the markets and the public of a central bank's policy reaction function. They thus adjust their expectations accordingly, even if the central bank's monetary policy stance is constant. There may also be cases where their better understanding contributes to lowering the degree of uncertainty, and may result in, for example, reducing the volatility of the bond market and term premiums. Finally, there may be instances where the markets and the public believe that a central bank has superior information that can be used for assessing future prices and economic activity.

[2] Jeffrey R. Campbell, Charles L. Evans, Jonas D. M. Fisher, and Alejandro Justiniano, "Macroeconomic Effects of Federal Reserve Forward Guidance," *Brookings Papers on Economic Activity*, Spring 2012: 1-54.

Forward Guidance Used to Signal a More Accommodative Policy Stance

The second objective of forward guidance is to signal a more accommodative policy stance. In this instance, it is used as communication strategy for a central bank at the zero lower bound and also as a deliberate additional monetary easing measure, by shifting from the normal policy reaction function. Campbell *et al.* refer to this type of guidance as "Odyssean forward guidance." Here the central bank commits to a *longer* duration of accommodative monetary policy than is generally anticipated by the markets and the public. This commitment to a longer accommodative monetary policy is needed to compensate for the period constrained by the zero lower bound. There has been gradual accumulation of theoretical and empirical analyses on this perspective in the last decade.[3] Its most extreme form is an "unconditional commitment" to continue the current monetary easing policy in the future. In other words, a central bank will maintain its already-promised accommodative stance even after economic recovery strengthens and whatever shocks take place in the future.

The lower the degree of conditionality, the more effective monetary policy is. However, there is a trade-off between greater effectiveness and higher flexibility regarding the conduct of future monetary policy. In practice, it is not realistic for a central bank to make an extreme unconditional commitment because of the *time-inconsistency* issues. It is difficult for a central bank to commit to a current accommodative monetary policy in the long term without taking any consideration of the fact that an excessive rise in inflation may dis-anchor medium- to long-term inflation expectations. A similar concern is often raised in relation to the impacts on excessive financial instability and asset price bubbles when a policy of low interest rates is sustained for too long. Therefore, "conditional commitment" or the use of expressions that reduces the degree of commitment is a form generally undertaken by central banks.

Open-Ended, Calendar-Based, and State-Contingent Forward Guidance

Forward guidance can take various forms. For example, it can be applied solely to the

[3] See, for example, Paul R. Krugman, "It's Baaack: Japan's Slump and the Return of the Liquidity Trap," *Brookings Papers on Economic Activity*, 1998 (2); 137-205; David Reifschneider and John C. Williams, "Three Lessons for Monetary Policy in a Low-Inflation Era," *Journal of Money, Credit and Banking*, 32 (4) Part 2, 2000: 936-66; Gauti B. Eggertsson and Michael Woodford, "The Zero Bound on Interest Rates and Optimal Monetary Policy," *Brookings Papers on Economic Activity*, 2003 (1); 139-211; and Michael Woodford, "Methods of Policy Accommodation at the Interest-Rate Lower Bound," Speech delivered at the 2012 Economic Policy Symposium, Federal Reserve Bank of Kansas City, 2012.

policy interest rate or to a broader set of monetary stimulus measures including the policy rate and asset purchases. It can be categorized as *open-ended*, *calendar-based*, or *state-contingent (or threshold-based)*.[4] Open-ended guidance can refer to an abstract description of the monetary easing policy duration (such as "a considerable period" or "an extended period") or of the economic conditions under which the accommodative policy will be maintained (such as "until deflationary concerns are dispelled"). Calendar-based guidance uses specific date expressions for monetary easing, such as "over the next six months." Some people consider that calendar-based forward guidance is superior to open-ended forward guidance from a transparency and effectiveness perspective.

State-contingent guidance provides a clear description of the economic conditions under which the accommodative policy will be maintained by using, for example, a threshold on the inflation outlook. When comparing calendar-based and state-contingent forward guidance, the state-contingent approach is regarded as being superior for two reasons. First, it provides assurance of a central bank's intention to maintain its accommodative monetary policy even after economic recovery strengthens by introducing such specific expressions in the guidance. Second, a clear description of the relationship between the conduct of future monetary policy and the economic conditions contributes to enhancing transparency and predictability in the eyes of the markets and the public. The major drawback of the calendar-based approach is the difficulty in distinguishing whether an extension of the period for maintaining the current accommodative monetary policy is, for example, (1) the result of more pessimistic forecasts by a central bank on prices and economic activity or (2) the result of a more accommodative policy. The former may discourage aggregate demand while the latter may promote aggregate demand. The state-contingent approach may help to distinguish between these two cases.

In relation to economic conditions (or thresholds), forward guidance can focus solely on prices or can include a wide set of economic variables (e.g., the unemployment rate). The different forms here reflect (1) the presence of other mandates given to the central bank, such as the dual mandate in the case of the Federal Reserve; (2) the specific environment surrounding monetary policy at the time (e.g., whether current inflation trends are above or below the inflation target); and (3) the detailed measures adopted (e.g., policy interest rate, asset purchases, or a combination of both). The most important point I wish to highlight here is that the degree of details contained in the description of forward guidance can vary

[4] See, for example, Bank of England, "Monetary Policy Trade-Offs and Forward Guidance," 2013.

over time. It can be refined over time as economic recovery becomes firm, by giving more specific information about the duration of monetary accommodation or the economic conditions.

B. Forward Guidance in Japan

Let me now focus on forward guidance in Japan. The Bank has a long history of practicing communication strategy to generate monetary easing under the zero lower bound. There are a number of empirical analyses pointing to the effectiveness of this policy in Japan, particularly in regard to the impacts on financial markets.[5] Forward guidance also constitutes an important element of QQE. I will first explain the forward guidance used under the current QQE, then provide my personal views on the rationale for its structure, followed by a comparison with past measures and other countries' experiences.

Forward Guidance under the Current QQE

The Bank released a statement on April 4, 2013, with the introduction of QQE, containing the following two descriptions regarding the time span of monetary accommodation:

(1) The Bank will achieve the price stability target of 2 percent . . . at the earliest possible time, with a time horizon of about two years (I will call this "the first set of forward guidance").

(2) The Bank will continue with QQE, aiming to achieve the price stability target of 2 percent, as long as it is necessary for maintaining that target in a stable manner. It will examine both upside and downside risks to economic activity and prices, and make adjustments as appropriate (I will call this "the second set of forward guidance").

You might wonder what the relationship between these two descriptions is. In answer to this, Bank of Japan Governor Haruhiko Kuroda explained in his speech on April 12, 2013, that QQE included all the necessary measures to achieve the 2 percent target with a time horizon

[5] See, for example, Nobuyuki Oda and Kazuo Ueda, "The Effects of the Bank of Japan's Zero Interest Rate Commitment and Quantitative Monetary Easing on the Yield Curve: A Macro-Finance Approach," Bank of Japan Working Paper Series, No. 05-E-6, 2005; Hiroshi Ugai, "Effects of the Quantitative Easing Policy: A Survey of Empirical Analyses," Bank of Japan Working Paper Series, No. 06-E-10, 2006; and Jouchi Nakajima, Shigenori Shiratsuka, and Yuki Teranishi, "The Effects of Monetary Policy Commitment: Evidence from Time-varying Parameter VAR Analysis," IMES Discussion Paper Series, No. 2010-E-6, Bank of Japan, 2010.

of approximately two years. He stressed, however, that because there is uncertainty in any economy and there is always a degree of latitude in people's expectations, it was appropriate to state that the Bank would continue with monetary easing as long as it was necessary to achieve the 2 percent target in a stable manner so that everyone was convinced that sufficient monetary easing would be implemented. Thus, these two descriptions are closely connected to reinforce the credibility of the Bank's commitment to achieving its stated target.

I would like to further elaborate on this with my personal view, which does not necessarily reflect the consensus among the Bank's Policy Board members, focusing on the respective roles of both parts of the released statement as forward guidance. In essence, this unique structure of providing two sets of forward guidance is attributable to the Bank's challenging tasks of transforming the deflationary mindset and of increasing inflation expectations to anchor around the 2 percent level.

The first set of forward guidance was included in the first part of the released statement and was positioned as the rationale for introducing "a new phase of monetary easing both in terms of quantity and quality" (Chart 4). To implement this bold new monetary policy, the Bank decided to shift the main operating target for money market operations from the uncollateralized overnight call rate to the monetary base. Decisions were also made to double the monetary base and the amounts outstanding of JGBs and exchange-traded funds (ETFs) in two years by end-2014, as well as to more than double the average remaining maturity of JGB purchases (from less than three years to about seven years). On an annual basis, the monetary base will be increased by about 60-70 trillion yen, JGBs (including those with maturities of up to 40 years) by about 50 trillion yen and ETFs by about 1 trillion yen (Chart 5). In addition, Japan real estate investment trusts (J-REITs) will be purchased at an annual pace of about 30 billion yen over the same period.[6]

The purpose of this first set of forward guidance was to signal to the markets and the public the Bank's strong determination to achieve its 2 percent target within a time horizon of about two years, normally pursued by other central banks under the inflation targeting framework. The guidance combines both calendar-based (i.e., about two years) and

[6] In addition, the Bank will continue the purchases of CP and corporate bonds until their amounts outstanding reach 2.2 trillion yen and 3.2 trillion yen, respectively, by end-2013. Thereafter it will maintain those amounts outstanding. The Bank also flexibly purchases treasury discount bills (T-Bills) and conduct money market operations up to the maximum duration of one year.

state-contingent (i.e., 2 percent) features. The calendar-based feature was considered to be essential to gain the confidence of the markets and the public in both the Bank's intention and the possibility of achieving 2 percent at the earliest possible time. An improvement in confidence may accelerate the pace of increasing the medium- to long-term inflation expectations and may enhance the responsiveness of price changes to the supply-demand balance.

The second set of forward guidance was placed under the subheading "the continuation of QQE" in the mid part of the statement. It is a conditional commitment, because the continuation of monetary easing is subject to the examination of upside and downside risk factors (Chart 4). It is also a state-contingent one, linking to the continuation of QQE, and plays a greater role than the first set of forward guidance in stabilizing medium- to long-term inflation expectations at around 2 percent.

As a related issue, the expression "in a stable manner" described in the Bank's second set of forward guidance may give the impression of a broad description of the conditions. However, I view this expression to be appropriate at present, because the formation of medium- to long-term inflation expectations entails uncertainty. In my opinion, this is especially true when the Bank attempts to raise inflation expectations and subjective judgment by the Policy Board members is unavoidable on whether medium- to long-term inflation expectations will be stabilized at around 2 percent, and when. Additionally, there is no example in other countries where central banks raised inflation expectations, for the Bank to use as a reference. Some measurement constraints also exist, including the fact that (1) there are no precise indicators measuring the inflation expectations of households and firms; (2) statistical bias is included in some survey data -- for example, households' inflation expectations tend to be upward-biased in Japan, while the diffusion index (DI) for expected sales prices in the *Tankan* (Short-Term Economic Survey of Enterprises in Japan) tends to be downward-biased; (3) in terms of market-based indicators, the impact of the Bank's JGB purchases needs to be taken into account; and (4) the breakeven inflation rate (BEI) indicator also reflects the differences in liquidity between fixed-rate and inflation-indexed bonds.

Nevertheless, as prices and economic activity firmly improve and as the process of increasing inflation expectations becomes clearer, I personally feel that, in the longer-term view points, there may be an opportunity to refine the second set of guidance with more

specific information.

These two sets of forward guidance are not mutually exclusive, as the first set of guidance can be considered as the "necessary condition" for achieving the second, whereas the second set of forward guidance shows a strong commitment to continue QQE for as long as necessary to stably achieve the 2 percent target (Chart 4). Therefore, while the time horizon of these two sets of guidance overlaps, the second set of guidance may imply a somewhat longer time horizon. In addition, the second set of guidance plays an essential role in reducing volatility of long-term interest rates, and in preventing them from overshooting.

In my view, this second set of guidance warrants any necessary actions by the Bank beyond the two-year horizon, if it judges it necessary to do so in light of stably achieving 2 percent. It also suggests that the Bank will not consider an exit from monetary easing before this state-contingent guidance is achieved.

Is the Bank's Forward Guidance Open-Ended?

The BOE referred to the Bank of Japan's second set of forward guidance under QQE as "open-ended" in its report released August 2013.[7] Based on my earlier arguments, this classification is not consistent with my assessment, although I fully respect the BOE's judgment and analysis. When the two sets of forward guidance are viewed together, my opinion is that the Bank's forward guidance is multi-layered, largely state-contingent, and focuses on the 2 percent price stability target with a strong (conditional) commitment. The BOE's conclusion may have been drawn from the fact that only the second set of forward guidance was referred to in the Bank of Japan's April 2013 statement under the subheading "The continuation of QQE" and that the expression "in a stable manner" may have appeared qualitative and vague. However, as described above, I feel that the expression "in a stable manner" is appropriate considering the circumstances.

C. Clearer and Stronger Commitments Compared with Past Practices

The forward guidance used by the Bank for the current QQE reflects clearer and stronger commitments compared with previous guidance. In the past, the Bank adopted forward guidance at each period of monetary easing: (1) the *zero interest rate policy* (February 1999-August 2000); (2) the *quantitative easing policy* (March 2001-March 2006); and (3) *comprehensive monetary easing* (October 2010-March 2013), as summarized in Charts 6 and 7.

[7] Bank of England, "Monetary Policy Trade-Offs and Forward Guidance."

First Round of Forward Guidance: 1999-2000

The first round of forward guidance adopted in 1999 was transmitted to the markets and the public in the form of a declaration -- rather than a statement -- by the then Bank of Japan Governor Masaru Hayami, at a press conference in April 1999, two months after the adoption of the zero interest rate policy. He indicated that he thinks *the Bank will maintain the zero interest rate policy until deflationary concerns are dispelled*. This could be classified as open-ended forward guidance, linking to the continuation of the zero interest rate policy.

However, it has been pointed out that the expression "deflationary concerns" was vague without providing any clear definition of deflation. As a result, this allowed for a wide range of interpretations of and judgments on the exit timing, thereby making it difficult for Policy Board members to make a collective judgment and for the markets and the public to be adequately convinced. For example, while industrial production and exports did improve, the rate of change in the (headline and core) CPI remained negative. Nonetheless, the Bank terminated this policy in August 2000 and raised the uncollateralized overnight call rate to an average of around 0.25 percent, claiming that downward pressure on prices stemming from weak demand had markedly receded. A number of external commentators have expressed the view that the exit timing was too early.

Second Round of Forward Guidance: 2001-2006

The second round of forward guidance was adopted when the quantitative easing policy was initiated in March 2001, after the policy rate was lowered to an average of around 0.15 percent in the previous month. Under the policy framework, the Bank shifted the main operating target for money market operations from the uncollateralized overnight call rate to the *current account balances held by financial institutions at the Bank*. The target amount of the balances was raised nine times from the initial 5 trillion yen (which was higher than the required reserve level of 4 trillion yen) to approximately 30-35 trillion yen in January 2004. The reserve targeting was achieved mainly through relatively short-term money market operations with some purchases of long-term JGBs. The Bank decided that the economic conditions warranted drastic monetary easing. It issued a statement in March 2001 stating that monetary easing would *continue to be in place until the core CPI registers stably zero percent or an increase year on year*. This was state-contingent guidance, linking to the continuation of the quantitative easing policy. It should be noted that the economic

condition used in the guidance was based on the *actual* performance of the core CPI and was thus clearer than in the earlier zero interest rate policy case.

In October 2003, the Bank provided further detailed information on the expression "stably zero percent or an increase" to clarify its commitment for continuing the quantitative easing policy. It refined the expression so that (1) *not only that the most recently published core CPI should register zero percent or above, but also that such tendency should be confirmed over a few months*, and (2) *the prospective core CPI will not be expected to register below zero percent*. These conditions were regarded as necessary to terminate the quantitative easing policy, and it was assumed that there might be cases where quantitative easing would be continued even if these conditions were fulfilled. This refined state-contingent guidance applied economic conditions based on both actual and projected price performance.

In this circumstance, the core CPI growth rate turned positive in November 2005 (that of the headline CPI turned positive in January 2006). Judging that all the conditions were fulfilled, the Bank terminated the policy in March 2006 by reintroducing the uncollateralized overnight call rate as a money market operations operating target (initially at effectively zero percent). However, these CPI figures were retroactively revised downward and the previously positive figures fell into negative territory in August 2006, when the CPI base year was shifted from 2000 to 2005. The scale of the downward revision was greater than in previous cases and was thus larger than projected. Partly because of this downward revision, there were a number of external views that the exit timing was too early.

Third Round of Forward Guidance: 2010-March 2013

The third round of forward guidance was adopted in October 2010, when comprehensive monetary easing was introduced through a virtually zero interest rate policy and the Asset Purchase Program (hereafter the Program). The type of assets purchased under the Program covered JGBs (with remaining maturity from one to three years), treasury discount bills (T-Bills), CP, corporate bonds, ETFs, and J-REITs. The total amount outstanding of the Program was increased gradually from an initial 35 trillion yen to 65 trillion yen at the end of 2012. The amount was scheduled to further expand to 101 trillion yen by the end of 2013 and to 111 trillion yen by the end of 2014. Thereafter, the amount of 111 trillion yen was to be maintained for an undefined period of time. The forward guidance statement indicated that the Bank *will maintain the virtually zero interest rate policy until price stability is in*

sight on the basis of the "understanding of medium- to long-term price stability," on the condition that no serious risk factors were identified. In addition, "medium- to long-term price stability" was defined as *a positive range of 2 percent or lower, with the midpoints of most members' "understanding" being around 1 percent*. This was state-contingent guidance, based on the outlook for prices and linking to the policy interest rate. It was also a conditional commitment, as a risk factor consideration was introduced for the first time as an additional constraint.

Importantly, in February 2012, the guidance was further strengthened with the statement *For the time being, the Bank will pursue powerful monetary easing by conducting its virtually zero interest rate policy and by implementing the Asset Purchase Program . . . with the aim of achieving the goal of 1 percent. The Bank will continue pursuing the powerful easing until it judges that the 1 percent goal is in sight*, on the condition that no significant risk factors were identified. This refined guidance was state-contingent, linking to the maintenance of both the policy interest rate and asset purchases. It was clearer and more powerful than the original one for several reasons. First, it used the word "goal" (which is uniformly set through the consensus of all members of the Policy Board) rather than "understanding" (which was simply a collection of different member views). Second, it clarified that the Bank sets the goal at 1 percent for the time being, while maintaining the medium- to long-term goal within a positive range of 2 percent or lower. However, the drawbacks were that it was not clear whether the Bank was pursing the 2 percent goal or a lower one and how monetary easing was associated with the 2 percent goal.[8]

Factors Leading to the Adoption of QQE

Taking these drawbacks into account, the Bank finally adopted the 2 percent price stability target in January 2013. The statement it released indicated that the Bank *will pursue monetary easing and aim to achieve this target at the earliest possible time*. Regarding the forward guidance, the statement indicated that the Bank *will pursue aggressive monetary easing, aiming to achieve the 2 percent target, through a virtually zero interest rate policy and purchase of financial assets, as long as the Bank judges it appropriate to continue with each policy measure respectively*. This was a remarkable leap in the history of the Bank's monetary policy conduct. Nonetheless, there were some doubts expressed as to whether the

[8] Sayuri Shirai, "Japan's Monetary Policy in a Challenging Environment," Speeches at the Bank of Italy and at the Eurasia Business and Economics Society Conference Held in Rome, Bank of Japan, 2013.

2 percent target would be achievable within the existing monetary policy framework (such as the existing asset purchase schedule and a method to purchase assets without defining the end date, which was scheduled to be introduced in January 2014). These doubts eventually led to the introduction of QQE in April of this year.[9]

Differences between QQE and Past Practices

In summary, QQE differs from the past practices in the following aspects: (1) a greater emphasis on the expectations of the markets and the public over the future monetary policy stance (this is why aggressive measures and an active use of forward guidance were adopted); (2) recognition of the importance of their medium- to long-term inflation expectations; and (3) larger-scale purchases of longer-term JGBs. Overviewing the Bank's current and past forward guidance practices, it can be said that both the price stability objective and the related monetary policy conduct are clearer under QQE than in the past (Chart 7).

Therefore, the effectiveness of QQE may be greater than that of past practices -- mainly through exerting greater downward pressure on the entire yield curve, through stronger impact on the portfolio rebalance and wealth effects, and through indirect impact on the yen's exchange rate. QQE is also likely to promote an increase in inflation expectations, thereby contributing to lowering long-term interest rates in real terms.

D. Forward Guidance: Differences between Japan and Other Advanced Economies

Next, I would like to make a brief comparison between forward guidance in Japan and that undertaken in the United States and Europe, details of which are included in the Appendix to my speech. I consider that there are two fundamental differences between the Bank's current forward guidance and those adopted in other advanced economies.

Need to Anchor Inflation Expectations at the Inflation Target

First and most importantly, major advanced economies including the United States and the United Kingdom successfully anchored the medium- to long-term inflation expectations at around 2 percent, as opposed to the case in Japan. Central banks in these economies currently hold the view that the expectations remain well-anchored, although there may be some limited concerns on dis-anchoring inflation expectations (downward in the case of the Federal Reserve because of a decline in actual inflation, and upward in the case of the BOE

[9] Shirai, "Japan's Economic Activity, Prices, and Monetary Policy."

because of a persistent deviation of actual inflation above the 2 percent target). Therefore, the Federal Reserve and the BOE focus on maintaining the anchored inflation expectations, whereas the Bank of Japan focuses on increasing inflation expectations to around the 2 percent target and anchoring them there. This difference is reflected in the design of its forward guidance.

Labor Market Issues

The second difference in Japan's forward guidance practice in contrast to other advanced economies is that both the Federal Reserve and the BOE have adopted employment-related conditions in their forward guidance, unlike Japan. The Federal Reserve has a dual mandate of promoting price stability and maximum employment, so the reason for this is clear. The BOE places price stability as its primary mandate; however, the inclusion of employment-related conditions may reflect the need to clarify the BOE's views with regard to the existing trade-off between high inflation and low economic and employment growth.

In contrast, in Japan the Bank's primary mandate, clearly stipulated in the Bank of Japan Act, is to achieve price stability. In addition, the current unemployment rate is not a significant issue in Japan. The figure for July 2013 was as low as 3.8 percent (3.3 percent for female workers), with the lowest point in recent years being 3.6 percent in July 2007 (3.4 percent for female workers). Thus, it may not be relevant for Japan to consider introducing economic conditions relating to employment. In general, nominal wage rigidity is limited in Japan compared with the United States and Europe, which partly explains why the unemployment rate remains low. The reason for this is that firms tend to flexibly adjust wages along the business cycle through active use of bonuses for full-time workers, and an adjustment of working hours and days for part-time workers. There are issues such as differential treatments of regular and non-regular workers, and greater flexibility over labor market regulations demanded by firms. However, these are structural issues that are beyond the scope of monetary policy.

IV. Price and Economic Performance under QQE

Overviewing the framework of forward guidance in the context of QQE, you may be interested in its progress to date in Japan. I would like here to quickly review the current performance of prices and their outlook first, followed by the performance of economic activity.

Some Positive Signs Observed in Prices

There are some emerging signs that actual prices have begun to increase (Chart 8). The year-on-year rate of change in the core CPI finally turned positive in June 2013 at 0.4 percent and 0.7 percent in July, after a period of consecutive negative or 0 percent change starting in May 2012. The headline CPI also turned positive at 0.2 percent in June and 0.7 percent in July, following a declining trend since June 2012. This movement reflects higher import prices, improvements in economic activity, and a rise in inflation expectations. So far, the major contribution to this movement comes from an increase in electricity fees and gasoline prices mainly as a result of the increase in import prices driven by the yen's depreciation, as well as the base effect. However, prices of a wide range of goods and services have also begun to show an increase. Moreover, the consistently-declining trends on durable goods (partly owing to the quality adjustment) appear to be mitigated. This reflects the fact that some large retail stores of home electronics are increasingly shifting from a discount price sales strategy to a higher value-added or higher unit sales price strategy. Some restaurants are also attempting to raise their unit sales prices by providing higher value-added menus and services. Hotel and lodging charges have also shown an increase.

Regarding other price indices, the domestic corporate goods price index has already shown an upward trend with a positive year-on-year rate of change for five consecutive months. This is because the pace of transferring higher imported commodity prices onto corporate sales prices tends to be much faster than that of the CPI. It should be noted here that firms are likely to find it relatively easy to pass their increased input costs onto the sales prices in the near future, as compared with the past deflationary environment. The corporate services price index has also recorded a positive year-on-year rate of change for three consecutive months and there are other positive signs such as an increase in the prices of civil engineering and architectural services, hotels, and in leasing and rental. Additionally, land prices in the metropolitan areas recorded a turnaround recently, as evidenced by more active transactions and the resultant increase in residential and commercial land prices (Chart 9). Higher land prices help to improve the balance sheets of firms and financial institutions and the value of collateral, thereby contributing to more active business fixed investment and risk-taking behavior. The unit sales prices of housing have increased recently, possibly contributing to a shift in the deflation-oriented mindset and greater wealth effects.

Price Outlook and Inflation Expectations

As for the outlook, the CPI performance is expected to improve further; and the price increase contributions arising on the back of improvements in the economy and higher inflation expectations are likely to be greater. Conceptually, the rate of price increase is mainly determined by the supply-demand balance (or the output gap) and inflation expectations. Currently, the output gap measured by the Bank and the *Tankan* composite indicator (the weighted average of the production capacity DI and the employment conditions DI) remains negative, which suggests that the economy is still operating with large slack. However, these indicators are likely to improve on the grounds of resilient domestic demand and an expected gradual pick-up in overseas demand (Chart 10).

Looking at medium- to long-term inflation expectations of market participants, economists, and households, we can see that the indicators are generally rising, but are still well below the 2 percent target (Chart 11). It should be noted that shorter-term inflation expectations tend to be more volatile. They are expected to exceed 2 percent for fiscal 2014 and 2015, if the temporary impact of the scheduled consumption tax hikes is taken into account. It is estimated that an increase in the consumption tax from 5 to 8 percent in fiscal 2014 would boost inflation by about 2 percentage points for fiscal 2014, and an increase from 8 percent to 10 percent from October 2015 would boost it by about 0.7 percentage point for fiscal 2015. Given these estimates, it appears that the short-term inflation expectations have not yet fully incorporated the impacts of the scheduled tax hikes and other impacts (such as higher import prices, and accommodative monetary policy), as shown in Chart 12. There are only very short-term indicators available on the inflation expectations of firms; however, the DI for expected sales prices for the next quarter, as well as the computed sales price inflation expectations, is now showing a rising trend (Chart 13).

Higher inflation expectations help to lower long-term interest rates in real terms. Depending on the measures undertaken, some indicators show that the real interest rates may have entered negative territory (Chart 14). This creates a more accommodative financial environment. An increase in inflation expectations may also contribute to promoting current consumption and housing investment.

According to the Bank's baseline scenario, the year-on-year rate of change in the core CPI is projected to reach around 2 percent -- the price stability target -- toward the latter half of the Bank's projection period (fiscal 2013-2015). Taking the median price forecast of the Policy

Board members, the CPI year-on-year rate of change (excluding the impact of the tax hikes) is expected to reach 0.6 percent for fiscal 2013, 1.3 percent for fiscal 2014, and 1.9 percent for fiscal 2015 (Chart 15). The pace of achieving 2 percent depends on the future movement of the Phillips curve, which appears to remain largely flat at this stage (Chart 16). The closer the medium- to long-term inflation expectations are to the 2 percent target, the larger the shift in the curve (Chart 2). Additionally, the faster the pace of changing the deflation mindset of households and the deflation-oriented pricing behavior of firms, the steeper the curve will become (Chart 2). Because it may take some time before the full impact of QQE via these processes materializes, I consider there may be some degree of uncertainty regarding the duration of achieving the 2 percent target.

Gradual Rise in Economic Activity and Outlook

The favorable price developments discussed earlier are associated with positive economic activities. Both consumer and business confidence indicators have shown improvement (Chart 17). The high level of consumer confidence reflects the wealth effects driven by higher stock prices compared with last year and steady improvements in employment. This -- together with a front-loaded increase caused by an expected rise in the consumption tax hike scheduled in April 2014 -- has contributed to a resilient performance in private consumption and housing investment (Chart 18). Moreover, improved business confidence, together with an increase in sales and profits, is likely to expand the business fixed investment further as planned by firms (Chart 19).

The outlook for the economy is consistent with the outlook for increased prices. According to the Bank's baseline scenario, the economy is expected to continue a moderate recovery on the back of the resilience in domestic demand and the pick-up in overseas economies. While the economy is likely to be affected by the front-loaded increase and subsequent decline in demand prior to and after the two scheduled consumption tax hikes, it is expected to continue growing at a pace above its potential growth rate (currently estimated to be about 0.5 percent), as a virtuous cycle of spending, production, and income operates. According to the median of the Policy Board members' forecasts, the real GDP growth rate is expected to be 2.8 percent for fiscal 2013, 1.3 percent for fiscal 2014, and 1.5 percent for fiscal 2015, averaging almost 2 percent (Chart 20).

V. Concluding Remarks

I would like to conclude my speech today by emphasizing that the Bank's task is not only to

overcome deflation by promoting a change in the deflation-oriented mindsets of the markets and the public, but also to anchor inflation expectations at around 2 percent. This is the greatest challenge facing Japan's economy. To this end, I believe that the Bank's communication strategy -- which in my view is constructed with two sets of forward guidance -- is essential to accomplish this task. At the same time, the Bank will do its utmost to revitalize Japan's economy and achieve sustainable economic growth.

Let me also add that the success of the Bank's monetary policy, QQE, is closely associated with the collective efforts of all entities involved. These include the government in implementing economic growth strategies and credible medium-term fiscal consolidation plans, firms in actively engaging in innovative activities and enhancing competitiveness, and financial institutions in generating risk money and innovative financial services needed to revitalize Japan's economy.[10]

I hope that my speech today was useful in fostering your understanding of the Bank's monetary policy. Thank you very much for your attention.

[10] In this regard, the 2013 Article IV Consultation Report on Japan released by the IMF in August 2013 concludes that the full implementation of structural reforms and medium-term fiscal consolidation, with QQE, may lead to a realization of 2 percent inflation within two years and that this level of inflation can be sustained subsequently.

Appendix

Forward Guidance Practices in the United States and Europe

A. Forward Guidance in the United States

The 2003-2004 Experience

In the United States, the Federal Reserve provided forward guidance in 2003-2004, when the economic recovery was weak and unemployment remained high. After lowering the target for the policy interest rate (i.e., the federal funds rate) to the historically low level of 1 percent in June 2003, the Federal Reserve provided forward guidance as a way to generate monetary accommodation. The statement issued in August 2003 indicated that *the [Federal Open Market] Committee [FOMC] believes that policy accommodation can be maintained for a considerable period*. This open-ended guidance was meant to signal the FOMC's intention to keep the low policy rate for a longer period than might otherwise have been expected, to exert a greater effect on longer-term yields.[11] This expression was subsequently modified in the statement issued in January 2004, stating that *the Committee believes that it can be patient in removing its policy accommodation*. In May 2004, the FOMC reversed the course with an intention to gradually raise the policy interest rate. The interest rate was subsequently raised 16 times, by 25 basis points each, from June 2004 to June 2006.

Forward Guidance on the Policy Interest Rate since the Global Financial Crisis

Since the global financial crisis onset, the Federal Reserve re-introduced forward guidance and applied it separately to the policy interest rate and to large-scale asset purchases adopted as unconventional measures, after lowering the policy interest rate target range to the lowest rate of 0 to 0.25 percent in December 2008. The descriptive style of forward guidance on the policy interest rate has become clearer and has evolved over time. The Federal Reserve initially started with the statement *the Committee anticipates that weak economic conditions are likely to warrant exceptionally low levels of the federal funds rate for some time*. The open-ended guidance was then replaced in March 2009 with the expression "an extended period," bearing the nuance of a somewhat longer duration. It was further developed into a calendar-based style from August 2011 with the expression "at least through mid-2013." It was subsequently adjusted to "at least through late 2014" in January 2012.

In September 2012, the date description was modified to "at least through mid-2015." In addition, the statement included the following description *the Committee expects that a highly accommodative stance of monetary policy will remain appropriate for a considerable time after the economic recovery strengthens*. The key here is that the expression "for a considerable time after the economy recovery strengthens" was added to the original description adopted in January 2012. The FOMC viewed that this modified description was consistent with the calendar-based description "at least

[11] Clemens J. M. Kool and Daniel L. Thornton, "How Effective Is Central Bank Forward Guidance?" Federal Reserve Bank of St. Louis Working Paper Series, 2012-063A, 2012.

through mid-2015." Moreover, Janet Yellen, Vice Chair of the Board of Governors of the Federal Reserve System, pointed out in November 2012 that the date "mid-2015" is estimated to be later than the liftoff date implied by the normal policy rule (such as the modified Taylor rule). Moreover, this date is estimated to be shorter than, but closer to the liftoff date predicted by the optimal policy simulation (a rule to minimize the deviations of inflation from 2 percent and the deviations of the unemployment rate from 6 percent with equal weight on both objectives).[12] This appears to prove that the monetary easing policy is consistent with the second objective of forward guidance (or Odyssean guidance).

The most recent style, which was adopted in December 2012, has been transformed from a calendar-based to state-contingent one. The statement indicated that *the Committee . . . currently anticipates that this exceptionally low range for the federal funds rate [0 to 0.25 percent] will be appropriate at least as long as the unemployment rate remains about 6.5 percent, inflation between one and two years ahead is projected to be no more than a half percentage point above the Committee's 2 percent longer-run goal, and longer-term inflation expectations continue to be well anchored*. The FOMC viewed that these thresholds were consistent with the previous calendar date description of "at least through mid-2015." These thresholds are regarded as a kind of zone of combinations of inflation and the unemployment rate, which is projected to allow the ongoing low levels of the policy interest rate.

This guidance also implies that the 2 percent goal is an average concept -- not a ceiling -- so that the medium inflation outlook could temporarily exceed 2 percent, although the deviation will be contained to ensure that long-term inflation expectations remain well anchored. This is a clear signal that the Federal Reserve permits a more accommodative policy to fulfill both its mandates. This latest guidance was apparently influenced by the approach proposed by Charles Evans, President of the Federal Reserve Bank of Chicago, in 2011.[13] According to his proposal, the FOMC should state that the low levels of the policy rate would be maintained until the unemployment rate falls substantially to 7 percent as long as the medium-term inflation outlook stayed below 3 percent. Narayana Kocherlakota, President of the Federal Reserve Bank of Minneapolis, meanwhile suggested thresholds of 5.5 percent for unemployment and 2.25 percent for the medium-term inflation outlook.

Forward Guidance on the Asset Purchase Program

Regarding forward guidance on the asset purchase program, the FOMC statement issued in

[12] Janet L. Yellen, "Revolution and Evolution in Central Bank Communications," Remarks at the Haas School of Business, University of California, Berkeley, Board of Governors of the Federal Reserve System, 2012.

[13] Charles L. Evans, "The Fed's Dual Mandate Responsibilities: Maintaining Credibility during a Time of Immense Economic Challenges," Speech at the Michigan Council on Economic Education, Federal Reserve Bank of Chicago, 2011.

December 2008 pointed out its plan to purchase agency debt and mortgage-based securities (MBSs) using calendar-based guidance with an expression "over the next few quarters." The subsequent statements continued to maintain calendar-based guidance (such as "this year" and "over the next six months") every time the Federal Reserve increased its asset purchases including Treasury securities. When the Federal Reserve resumed the purchase of the agency MBSs (in September 2012) and Treasury securities (decided in December 2012 to be introduced from January 2013), forward guidance was shifted from a calendar-based to state-contingent one. In the statement issued in December 2012, the economic conditions for maintaining these asset purchases were described as *until such [substantial] improvement [in the labor market] is achieved in a context of price stability*.

B. Forward Guidance in the Euro Area

The Governing Council of the ECB adopted forward guidance for the first time in July 2013. The introductory statement to the press conference indicated that *the Governing Council expects the key ECB interest rates to remain at present or lower levels for an extended period of time. This expectation is based on the overall subdued outlook for inflation extending into the medium term, given the broad-based weakness in the real economy and subdued monetary dynamics*. This is open-ended guidance, linking to the maintenance of the low policy interest rate (i.e., the main refinancing operations rate, currently set at 0.5 percent).

Peter Praet, Member of the Executive Board of the ECB, explained that the objective of adopting the guidance was to reassert the ECB's monetary easing policy.[14] He pointed out that the guidance envisages both the first (Delphic) and second (Odyssean) objectives of forward guidance mentioned earlier. It is Delphic because the guidance reveals the ECB's future monetary policy stance based on currently-available information. It is also Odyssean as it clarifies the ECB's commitment to the medium-term objective (i.e., below but close to 2 percent) and its determination to apply policy measures if necessary to meet the objective.

The ECB's action reflected concerns that the markets' expected duration regarding the low interest rate policy had shortened in May 2013 as a result of a change in global financial conditions (largely caused by a rise in U.S. long-term interest rates due to speculation over the timing of "tapering" quantitative easing). This shortening occurred even though the ECB's assessment of prices and economic activity and its monetary policy inclination remained constant. The earlier-than-projected hike in the interest rate implies a faster-than-projected monetary tightening, which may undermine the economic recovery process. In this sense, the ECB's action can be interpreted as a provision of monetary accommodation, because it helped lengthen the expected duration of the current interest rate policy by financial markets in line with the ECB's view.

[14] Peter Praet, "Forward Guidance and the ECB," Column published on VoxEU.org, Centre for Economic Policy Research, 2013.

C. Forward Guidance in the United Kingdom

In the United Kingdom, the Monetary Policy Committee (MPC) of the BOE made a new move in July 2013, although it was not forward guidance describing the future monetary policy stance. After expressing concerns about the significant upward movement in market interest rates, the statement it issued indicated that *in the Committee's view, the implied rise in the expected future path of Bank Rate [the policy interest rate] was not warranted by the recent developments in the domestic economy*. Because the statement helped to lower the market interest rates, the effects were similar to those of the ECB.

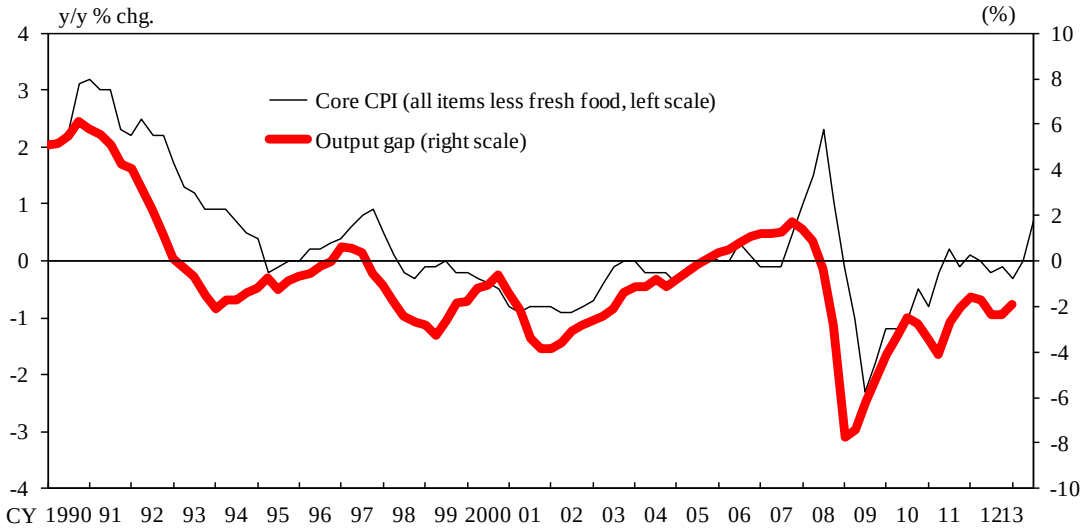
Following a new remit letter from George Osborne, the Chancellor of the Exchequer, in March 2013, the MPC released a comprehensive set of forward guidance over the future conduct of monetary policy in August 2013. The statement indicated that *the MPC intends not to raise Bank Rate from its current level of 0.5 percent at least until . . . the unemployment rate has fallen to a threshold of 7 percent, subject to the conditions below. The MPC stands ready to undertake further asset purchases while the unemployment rate remains above 7 percent, if it judges that additional monetary stimulus is warranted*. It was also stated that the stock of asset purchases would be maintained until the 7 percent threshold is reached and subject to conditions.

The conditions are then defined in the form of the following three "knockouts": (1) the CPI inflation 18 and 24 months ahead will be above 2.5 percent; (2) medium-term inflation expectations do not remain well anchored; and (3) the Financial Policy Committee (FPC) judges that the stance of monetary policy poses a significant threat to financial stability that cannot be contained by the substantial range of mitigating policy actions available to the FPC. If any of these knockouts are breached, the MPC will cease the above-mentioned guidance. It is state-contingent guidance, linking to the policy interest rate, asset purchases and sales. The BOE explained that the objective of introducing explicit forward guidance is to provide greater clarity about the MPC's views on the existing trade-off between inflation and unemployment and the associated monetary policy stance. Charlie Bean, Deputy Governor of the BOE, explained in August 2013 that the release of the guidance was to clarify the MPC's existing monetary policy stance rather than to provide additional monetary accommodation.[15] By reducing uncertainty, it aimed at lowering term premiums and preventing upward movements in market interest rates. While the MPC showed that the low policy interest rate is likely to remain throughout the three-year forecast period given the current unemployment rate outlook, there are some views that the possibility of breaching knockouts sooner than this forecast period might have added uncertainty regarding the future accommodative monetary stance.

[15] Charlie Bean, "Global Aspects of Unconventional Monetary Policies," Speech delivered at the 2013 Economic Policy Symposium, Federal Reserve Bank of Kansas City, 2013.

Chart 1

Core CPI and the Output Gap



Sources: Cabinet Office; Bank of Japan.

Chart 2

Upward Shift of the Phillips Curve

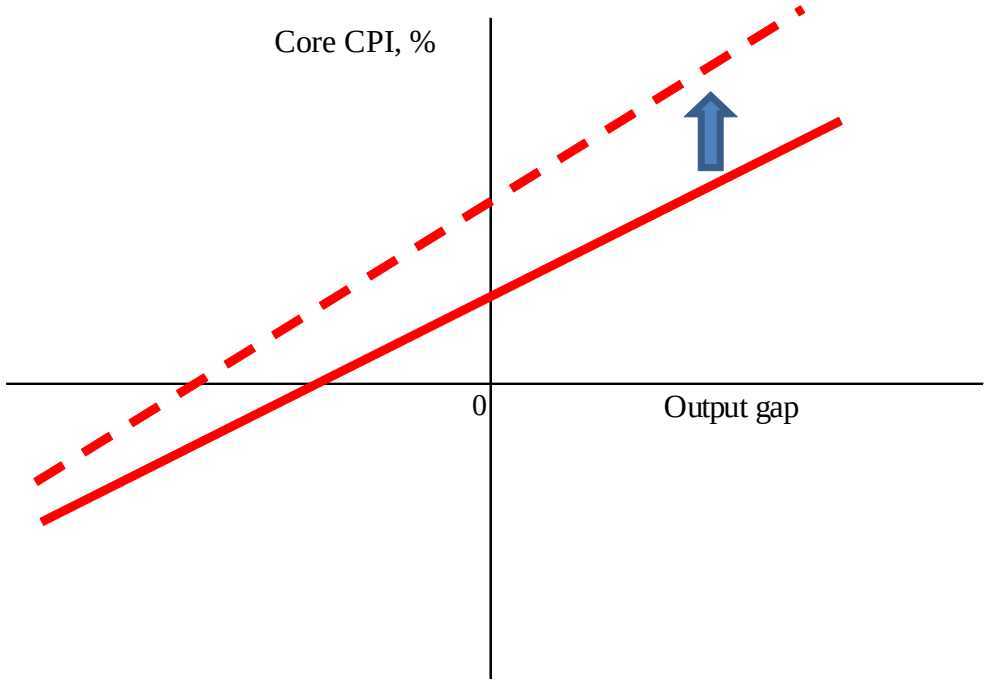
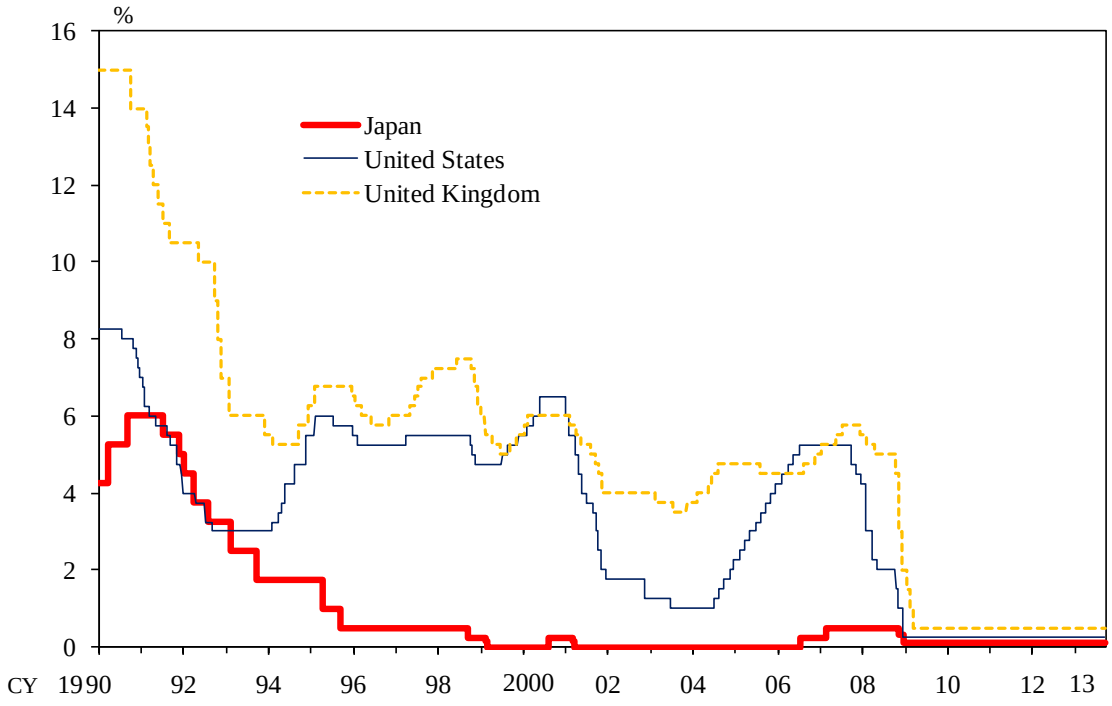


Chart 3

Policy Interest Rates: Japan, the United States, and the United Kingdom



Sources: Bank of England; Bank of Japan; Federal Reserve.

Chart 4

Current Monetary Policy Forward Guidance in Japan

The first set of forward guidance

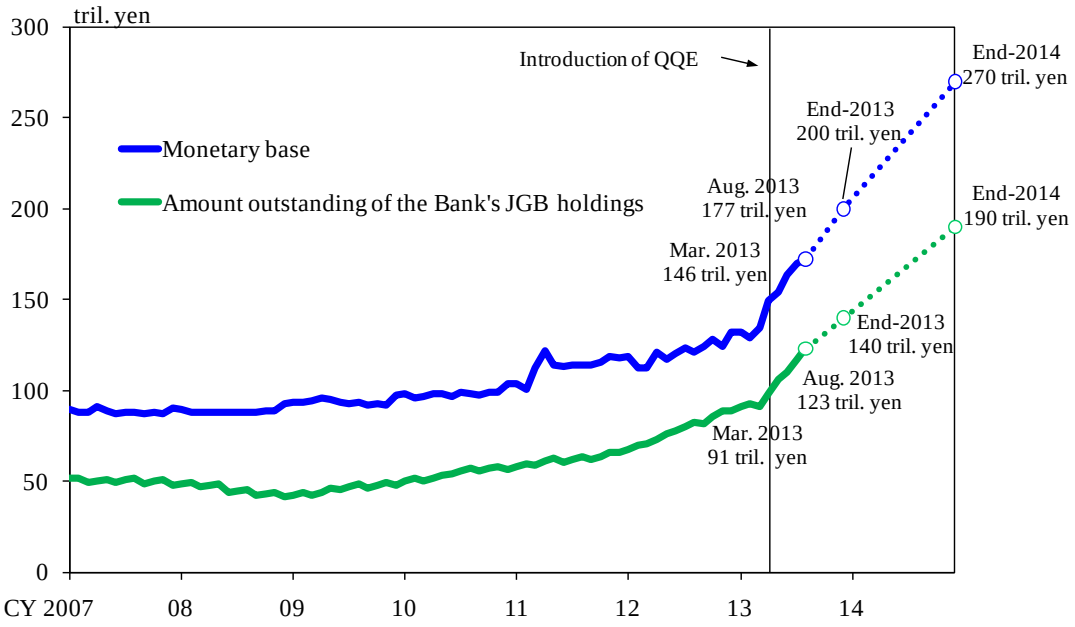
The Bank will achieve the 2 percent target at the earliest possible time, with a time horizon of about two years.

The second set of forward guidance

The Bank will continue with QQE, aiming to achieve the 2 percent target, as long as it is necessary for maintaining it in a stable manner (based on an examination of risks to economic activity and prices).

Chart 5

Monetary Base and JGB Holdings



Source: Bank of Japan.

Present and Past Monetary Policy Forward Guidance in Japan

Policy phase	Date of statement	Summary of forward guidance in place	Features of forward guidance
Zero interest rate policy (ZIRP) (Feb. 1999-Aug. 2000)	Apr. 1999: Initial Statement	*I think that the Bank will maintain the zero interest rate policy until deflationary concerns are dispelled* (remarks at a press conference by the then Governor Masaru Hayami).* * Since the text is available only in Japanese, the English translation was made by the author.	• Open-ended • Linked to the zero interest rate policy
Quantitative easing policy (QE) (Mar. 2001-Mar. 2006)	Mar. 2001: Initial Statement	*The quantitative easing policy continues to be in place until the core CPI registers stably zero percent or an increase year on year.** * The core CPI is the consumer price index for all items less fresh food.	• State-contingent • Linked to the quantitative easing policy
	Oct. 2003: **Enhancement of Monetary Policy Transparency**	*The Bank is currently committed to maintaining the quantitative easing policy until the core CPI registers stably zero percent or an increase. Such commitment is underpinned by the following two conditions.* *(1) Not only that the most recently published core CPI should register zero percent or above, but also that such tendency should be confirmed over a few months.* *(2) The prospective core CPI will not be expected to register below zero percent.* *The above conditions are the necessary condition. There may be cases that the Bank will continue with quantitative easing even if these two conditions are fulfilled.*	• State-contingent • Linked to the quantitative easing policy • Provision of further clarification on the expression "stably zero percent or an increase"
Comprehensive monetary easing (CME) (Oct. 2010-Mar. 2013)	Oct. 2010: Initial Statement	*The Bank will maintain the virtually zero interest rate policy until price stability is in sight, based on the "understanding of medium- to long-term price stability," on the condition that problem will not be identified in examining risk factors, including the accumulation of financial imbalances.** * "Understanding of medium- to long-term price stability" refers to a positive range of 2 percent or lower, with the midpoints of most members' "understanding" being around 1 percent.	• State-contingent • Linked to the zero interest rate policy • Introduction of conditional commitment
	Feb. 2012: **Enhancement of Monetary Easing**	Replacement of "understanding" with "goal": *The Bank judges the "price stability goal in the medium to long term" to be within a positive range of 2 percent or lower in terms of the year-on-year rate of change in the CPI, and sets a goal at 1 percent for the time being.*	• Replacing "understanding" (a collection of different member views) with "goal" (the consensus of all members)

		Forward guidance*:* *For the time being, the Bank will pursue the powerful easing by conducting its virtually zero interest rate policy and by implementing the Asset Purchase Program, with the aim of achieving the goal of 1 percent.* *The monetary easing will be continued until the Bank judges that the 1 percent goal is in sight on the condition of identifying no significant risk, including the accumulation of financial imbalance.*	• State contingent • Linked to the zero interest rate policy and the Asset Purchase Program • Conditional commitment
	Jan. 2013: **Introduction of the "Price Stability Target"**	Introduction of the price stability target: *The Bank sets the price stability target at 2 percent.* *The Bank will pursue monetary easing and aim to achieve the 2 percent target at the earliest possible time, on the condition that there is no significant risk to the sustainability of economic growth, including from the accumulation of financial imbalances.* Forward guidance: *The Bank will pursue aggressive monetary easing, aiming to achieve the 2 percent target, through a virtually zero interest rate policy and purchases of financial assets, as long as the Bank judges it appropriate to continue with each policy measure respectively.*	• Introduction of the 2 percent price stability target • State-contingent • Linked to the zero interest rate policy and the Asset Purchase Program • Conditional commitment
Quantitative and qualitative monetary easing (QQE) (Apr. 2013-present)	Apr. 2013: **Introduction of "Quantitative and Qualitative Monetary Easing"**	First set of forward guidance: *The Bank will achieve the price stability target of 2 percent at the earliest possible time, with a time horizon of about two years.* Second set of forward guidance: *The Bank will continue with quantitative and qualitative monetary easing, aiming to achieve the 2 percent target, as long as it is necessary for maintaining the target in a stable manner. It will examine both upside and downside risks to economic activity and prices, and make adjustments as appropriate.*	• State-contingent (2 percent target) and calendar-based (two years) • Necessary condition for the second set of forward guidance • State-contingent (2 percent in a stable manner) • Linked to the quantitative and qualitative monetary easing policy • Conditional commitment

Chart 7

Evolution of Monetary Policy Forward Guidance in Japan

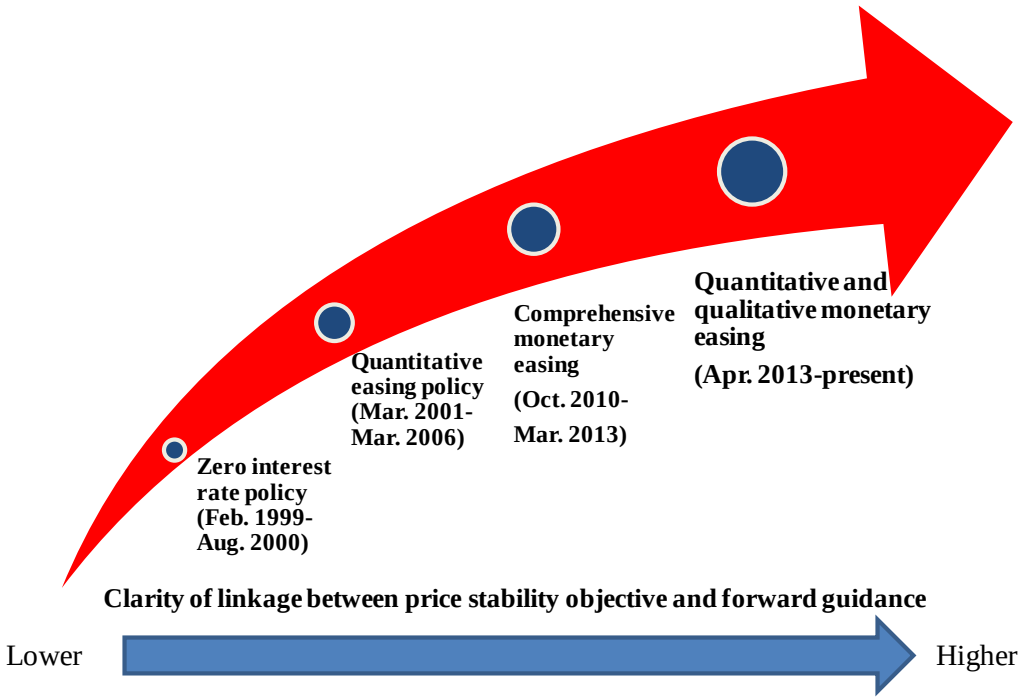
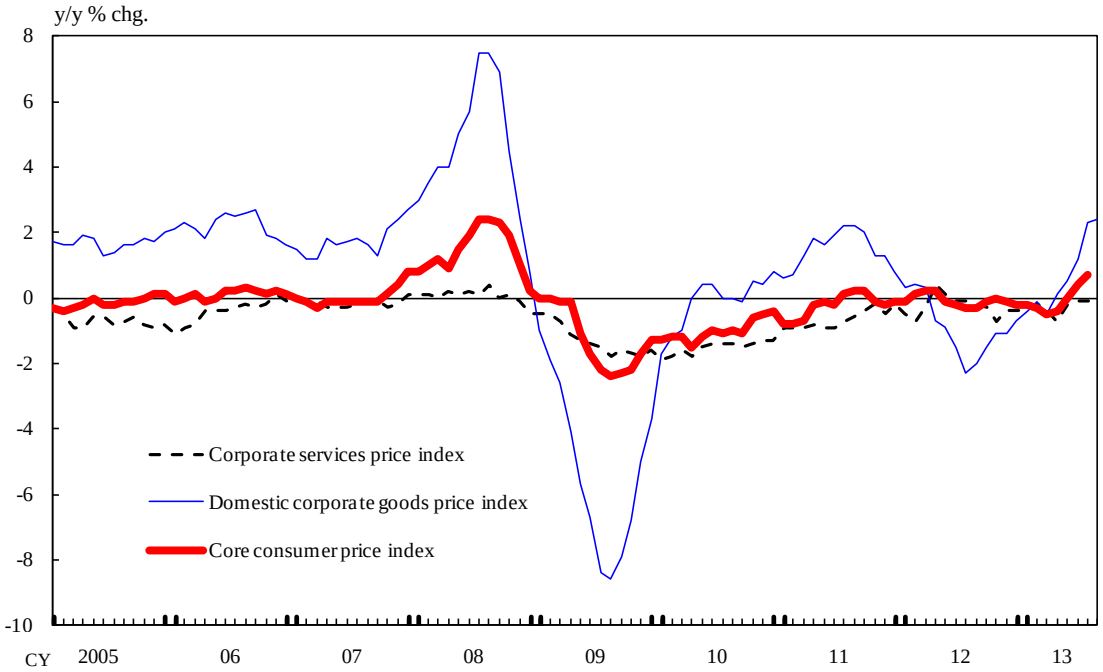


Chart 8

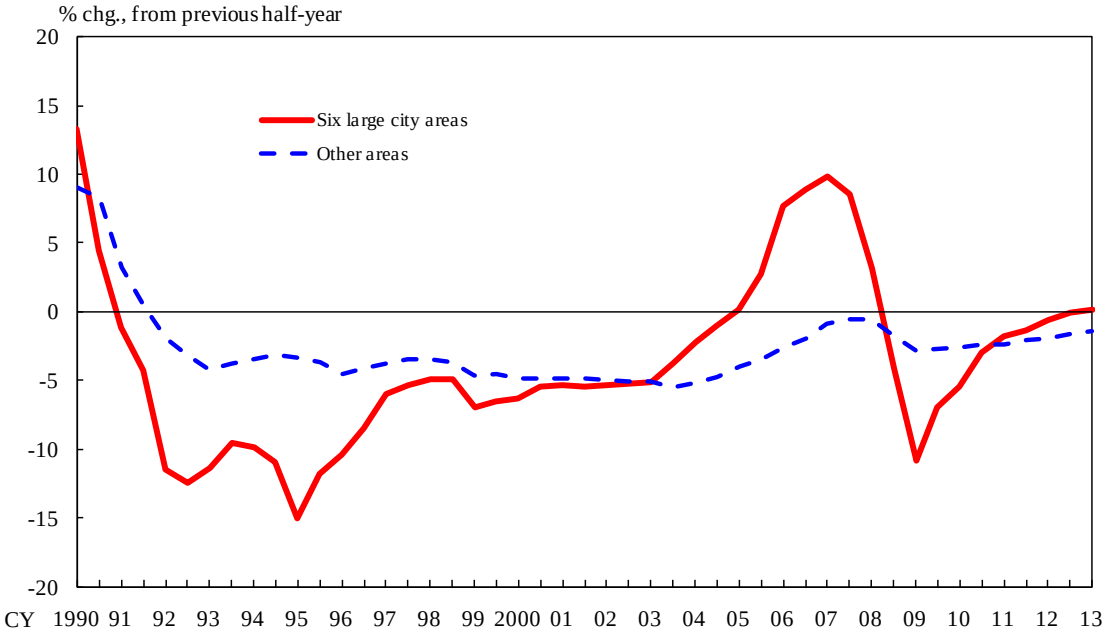
Price Developments



Note: The core CPI excludes fresh food. Corporate services price index excludes international transportation.
Sources: Ministry of Internal Affairs and Communications; Bank of Japan.

Chart 9

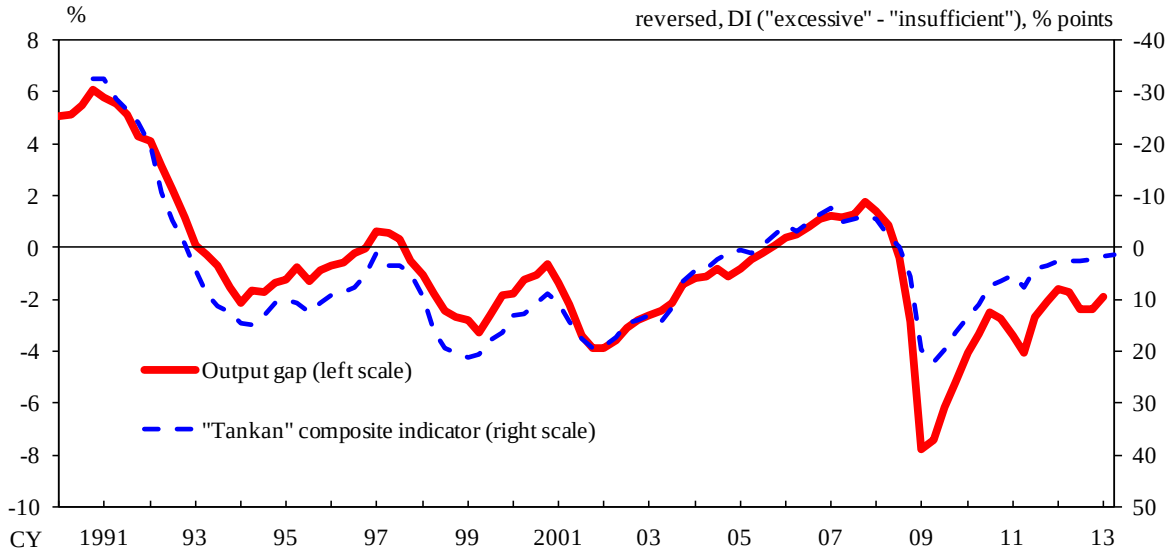
Commercial Land Prices



Note: Six large city areas are Tokyo Metropolitan wards, Yokohama, Nagoya, Kyoto, Osaka, and Kobe.
Source: Japan Real Estate Institute.

Chart 10

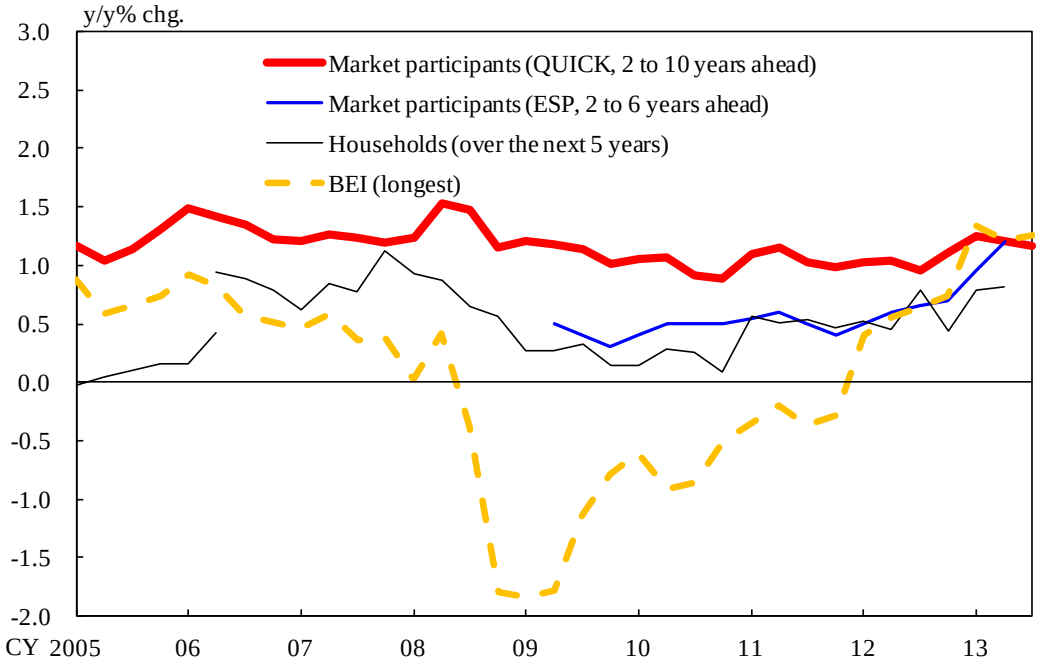
Output Gap and the *Tankan* Composite Indicator



Note: Figures for the *Tankan* composite indicator are weighted averages of the production capacity DI and employment conditions DI. Fiscal 1990-2011 averages of capital and labor shares in "National Accounts" are used as the weight.
Sources: Cabinet Office; Bank of Japan.

Chart 11

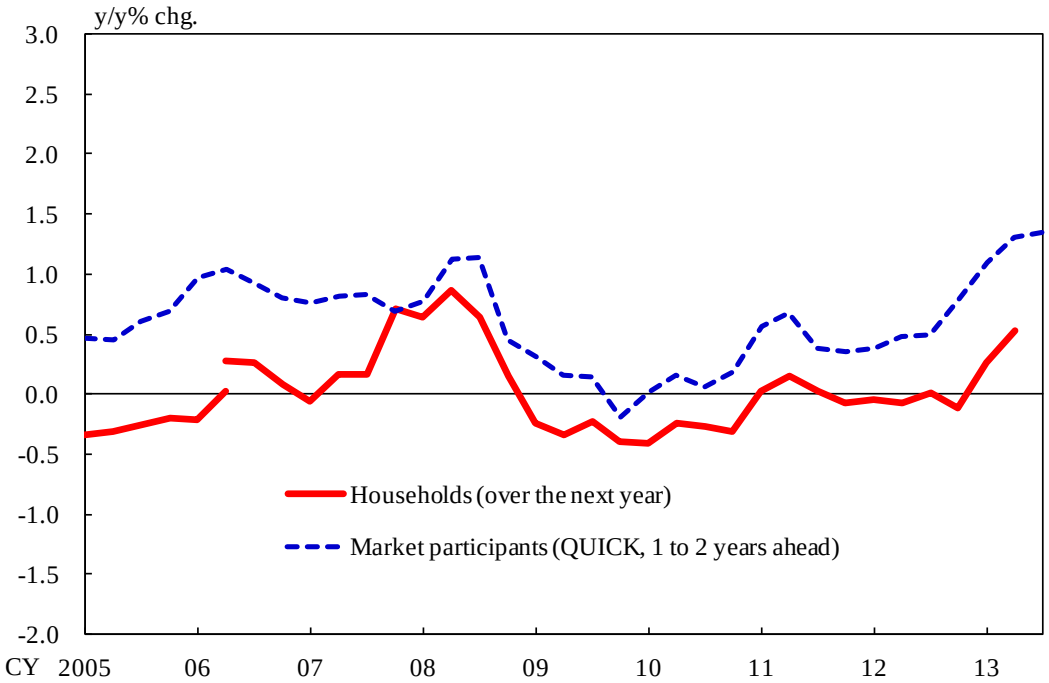
Medium- to Long-Term Inflation Expectations



Note: Figures for households' inflation expectations are estimated using the modified Carlson-Parkin method.
Sources: Bank of Japan; Japan Center for Economic Research (JCER); QUICK; Bloomberg.

Chart 12

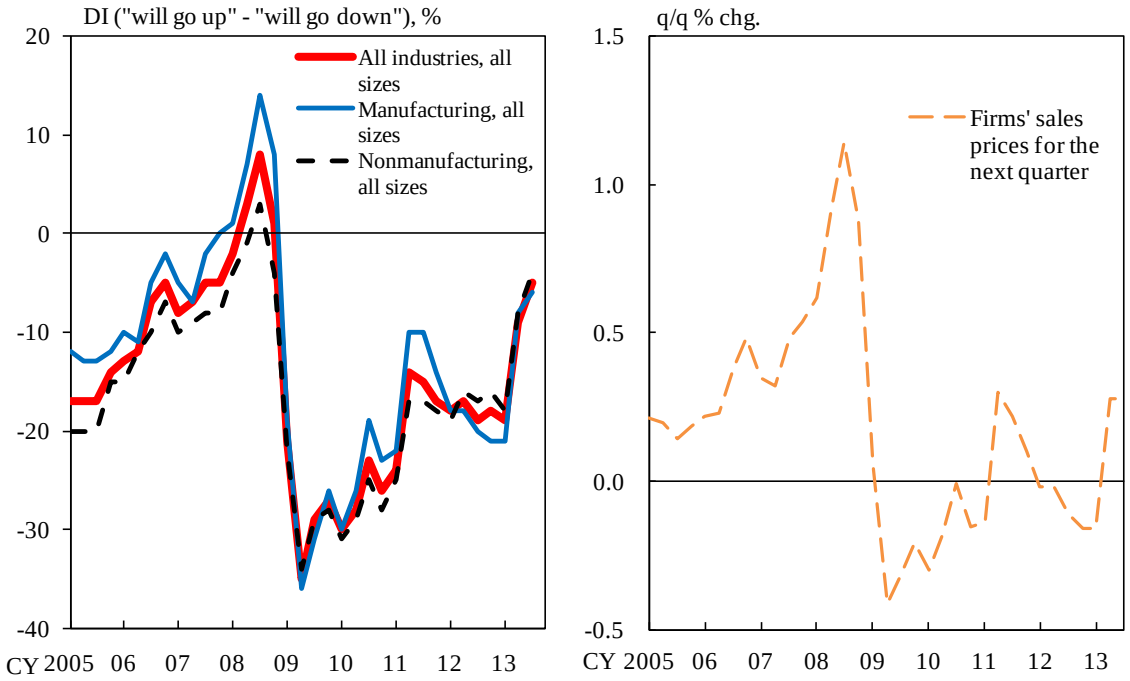
Shorter-Term Inflation Expectations



Note: Figures for households' inflation expectations are estimated using the modified Carlson-Parkin method.
Sources: Bank of Japan; QUICK.

Chart 13

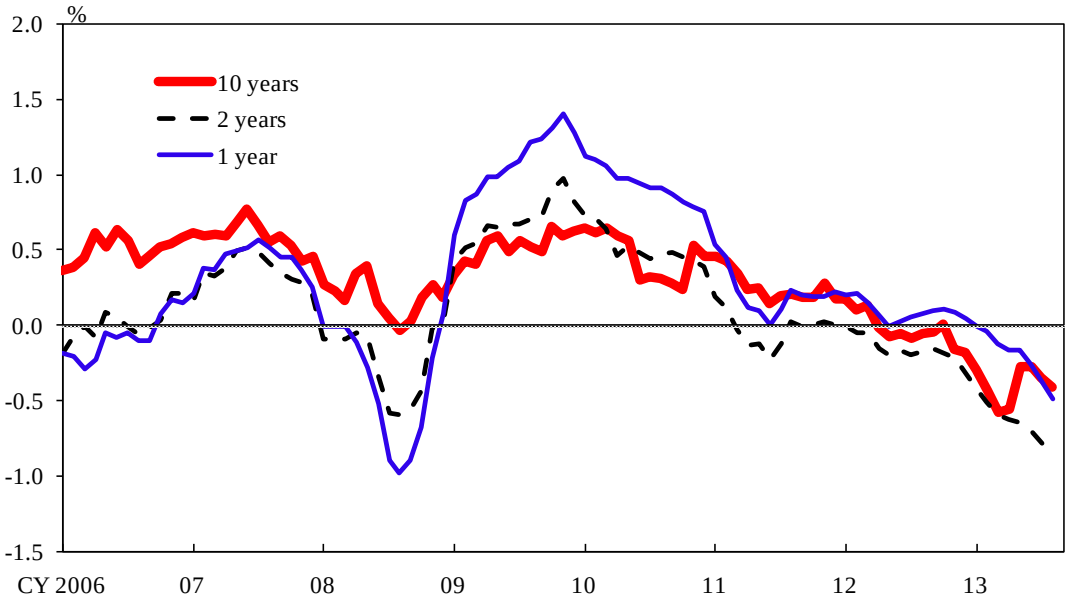
Firms' Sales Price DI and Inflation Expectations (Three Months Ahead)



Note: Figures for firms' inflation expectations are estimated using the modified Carlson-Parkin method.
Source: Bank of Japan.

Chart 14

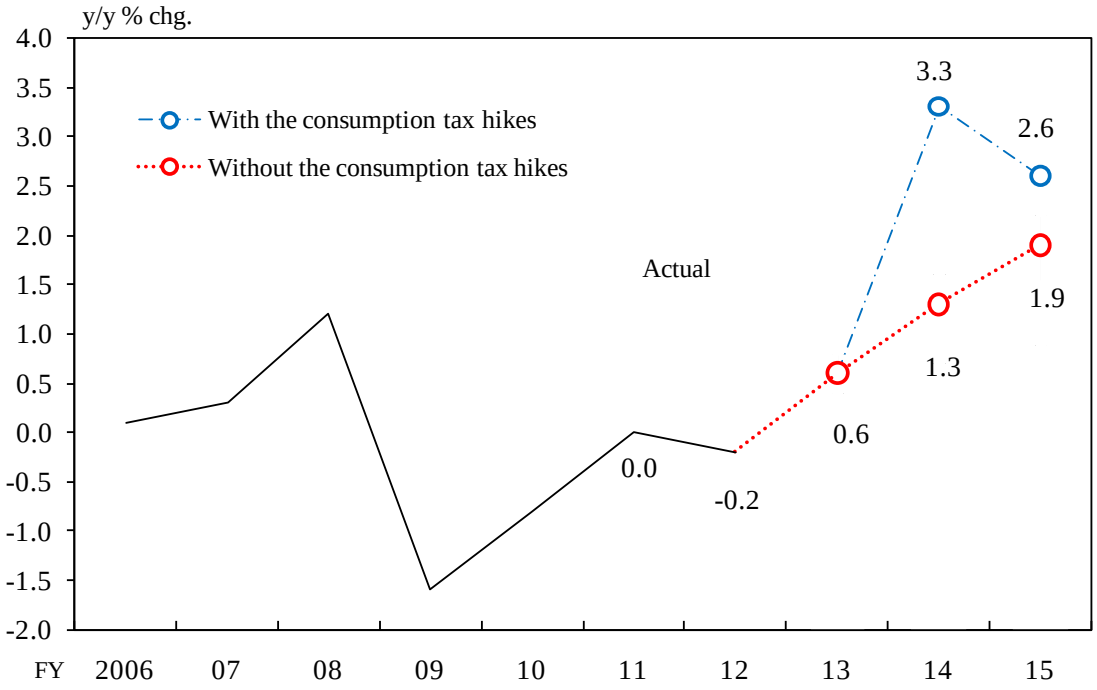
Interest Rates in Real Terms



Note: Figures are estimates using bond yields and market participants' inflation expectations.
Sources: Bank of Japan; Bloomberg; QUICK.

Chart 15

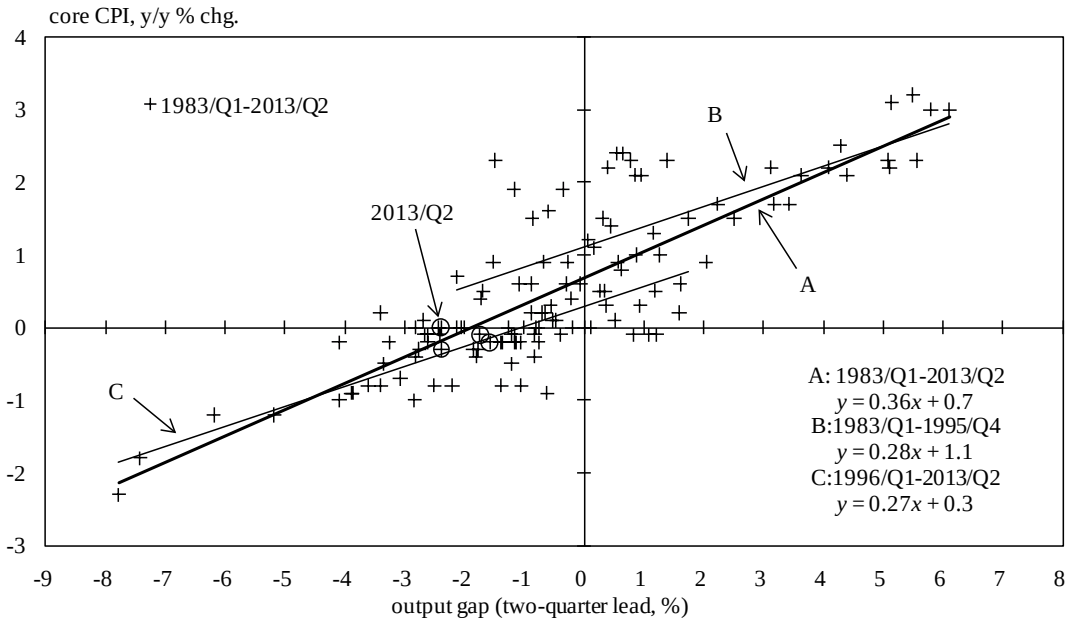
The Bank's Outlook for Prices (Core CPI)



Note: The circles in the chart indicate the median of the Policy Board members' forecasts (point estimates).
Source: Bank of Japan.

Chart 16

Estimated Phillips Curves

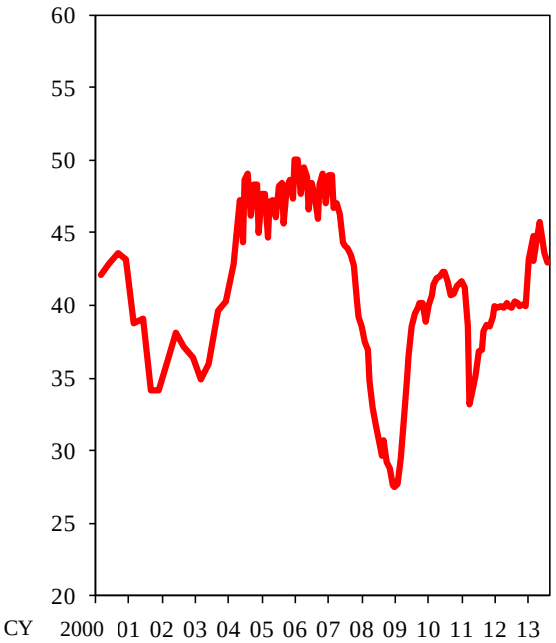


Sources: Bank of Japan; Ministry of Internal Affairs and Communications; Cabinet Office.

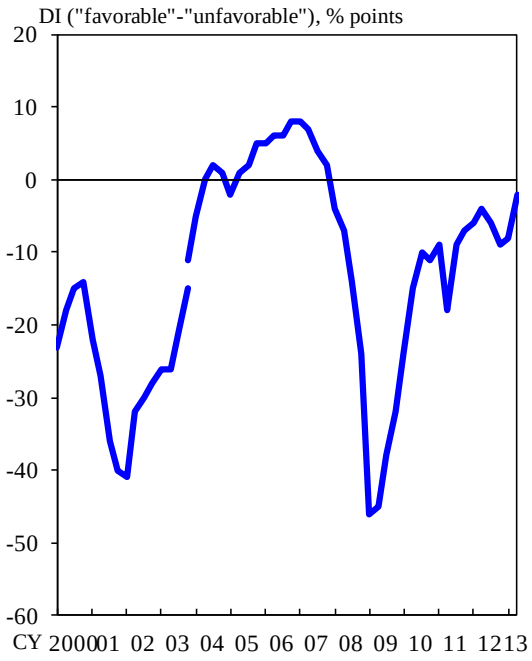
Chart 17

Consumer and Business Confidence

(1) Consumer Confidence



(2) *Tankan*: DI for Business Conditions

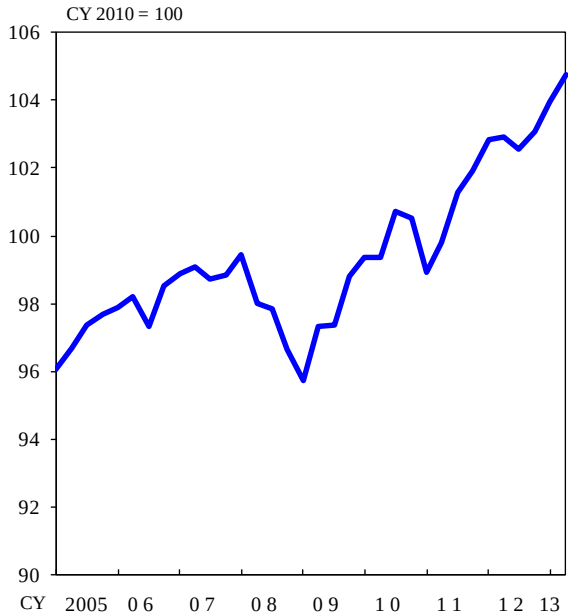


Sources: Cabinet Office; Bank of Japan.

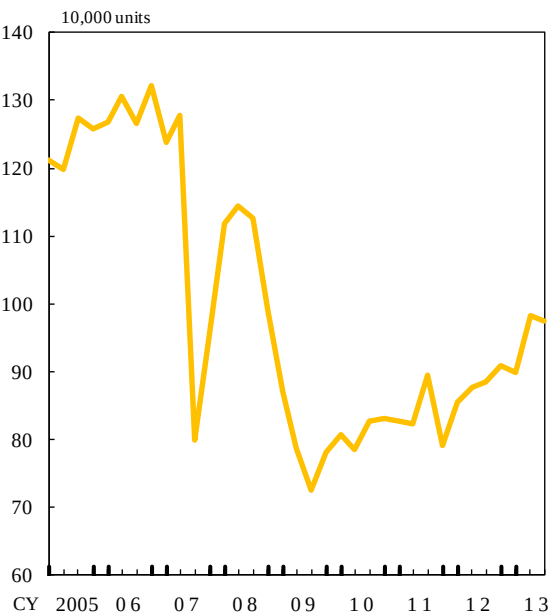
Chart 18

Private Consumption and Housing Investment

(1) Real Private Consumption Expenditures



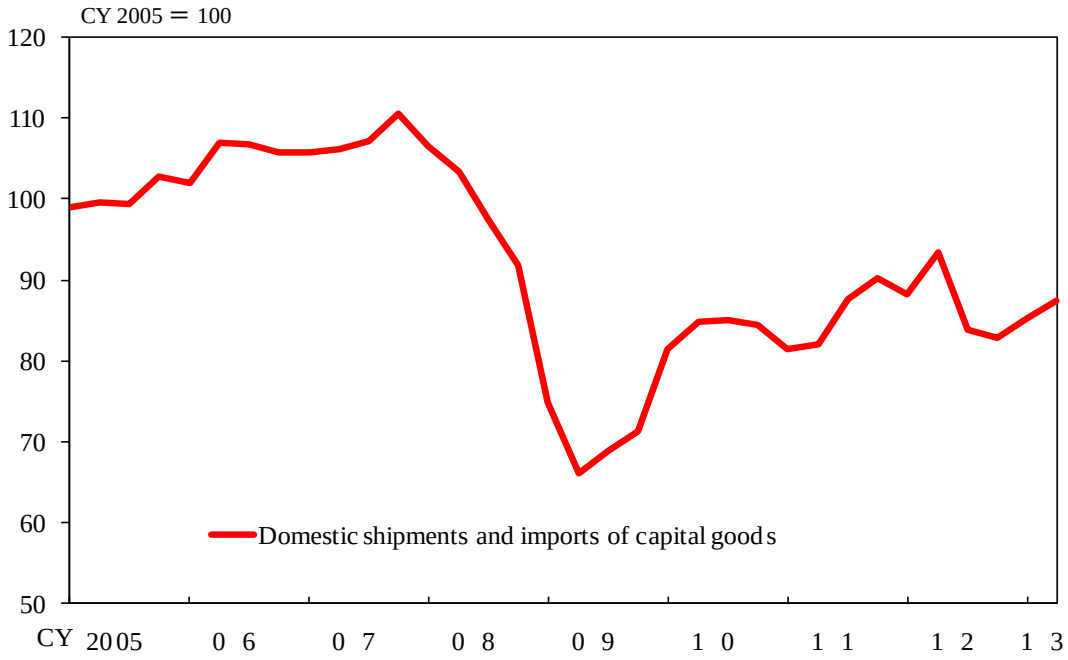
(2) Housing Starts (Annualized)



Sources: Cabinet Office; Ministry of Land, Infrastructure, Transport and Tourism.

Chart 19

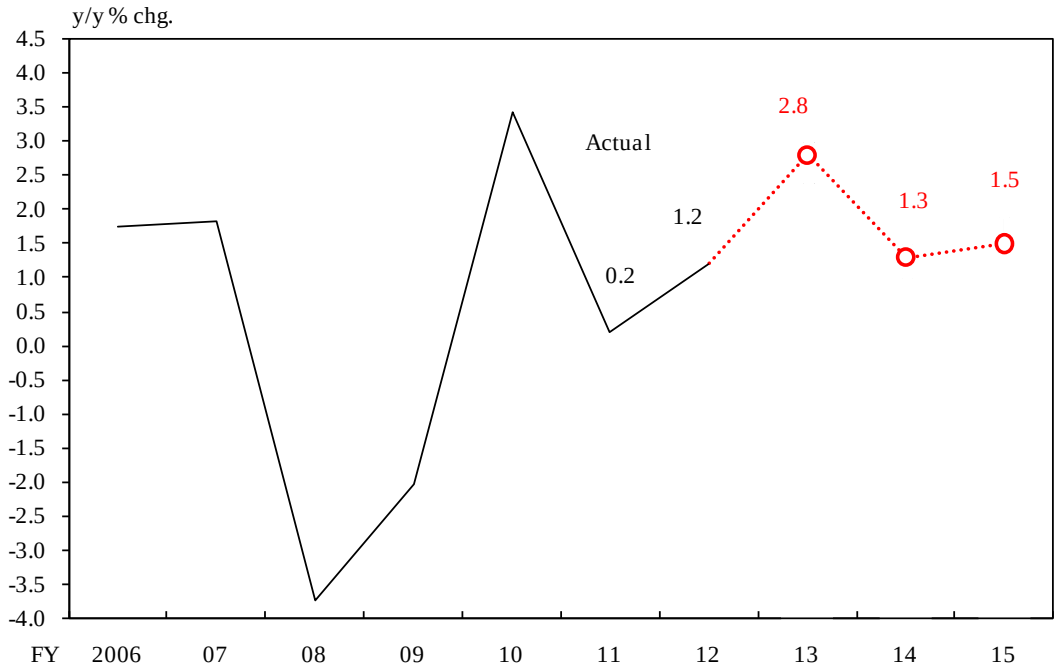
Business Fixed Investment



Source: Ministry of Economy, Trade and Industry.

Chart 20

The Bank's Outlook for Economic Activity (Real GDP)



Note: The circles in the chart indicate the median of the Policy Board members' forecasts (point estimates).

Source: Bank of Japan.