



July 29, 2013
Bank of Japan

**Japan's Economy and Monetary Policy:
Toward Overcoming Deflation**

*Speech at a Meeting Held by the Naigai Josei Chousa Kai
(Research Institute of Japan) in Tokyo*

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Governor of the Bank of Japan

Introduction

It is a great honor to have this opportunity to address you today at the Naigai Josei Chousa Kai.

The Bank of Japan introduced a new regime of monetary easing called "quantitative and qualitative monetary easing" (QQE) this April with a view to achieving the price stability target of 2 percent in terms of the year-on-year rate of change in the consumer price index (CPI) at the earliest possible time, with a time horizon of about two years. It has been three months since the introduction of the QQE, and there have been favorable developments spreading to financial markets and the real economy, and the public's expectations for economic activity and prices are improving. At the same time, we have received various questions regarding the policy effect of the QQE. Today, I will first summarize developments in Japan's economy and financial markets for the past three months, explain the outlook for economic activity and prices, and then provide my answers to questions regarding the QQE.

I. Progress of the QQE and Three Positive Developments

A. Progress of the QQE

Under the QQE, introduced in April, the Bank will increase the total amount of money it directly supplies to the economy -- the monetary base -- at an annual pace of about 60-70 trillion yen. As a result, the monetary base will be doubled in two years, increasing from 138 trillion yen at end-2012 to 200 trillion yen at end-2013 and to 270 trillion yen at end-2014 (Chart 1). As a means to increase the monetary base, the Bank will purchase Japanese government bonds (JGBs) so that their amount outstanding will increase at a pace of about 50 trillion yen annually. On a gross basis, this corresponds to purchasing a large amount of JGBs at a pace of over 7 trillion yen monthly. As a result of such purchases, the amount outstanding of JGBs held by the Bank will be more than doubled in two years, increasing from 89 trillion yen at end-2012 to 140 trillion yen at end-2013 and to 190 trillion yen at end-2014. In addition, the Bank decided to more than double its average remaining maturity of JGB purchases from slightly less than three years to about seven years. This monetary easing measure has both a quantitative aspect -- such as increasing the monetary base and the amount outstanding of the Bank's JGB holdings -- and a

qualitative aspect -- such as extending the average remaining maturity of the Bank's JGB purchases. Hence the name "quantitative and qualitative monetary easing."

Over the past three months, the Bank has pursued the QQE as initially planned (Chart 2). The monetary base has expanded from 146 trillion yen at end-March to 173 trillion yen at end-June, at a somewhat front-loaded pace toward 200 trillion yen by end-2013. The amount outstanding of JGBs held by the Bank has also increased to more than 110 trillion yen recently from 91 trillion yen at end-March, at a steady pace toward 140 trillion yen by end-2013. Also, the average remaining maturity of the JGBs purchased has extended to about seven years.

Next, I would like to examine the changes that have been observed in financial markets and economic activity as the Bank has pursued the QQE. Starting with the conclusion, a favorable turn has been observed in financial conditions, in expectations, and in economic activity and prices (Chart 3). These changes include positive developments that had already begun to operate before the introduction of the QQE, on the back of expectations for monetary easing, and some also reflect expectations for the government's so-called "three arrow" strategy as well as developments in the global economy. Therefore, not all of these favorable developments are attributable to the QQE; nevertheless, it most certainly is an important factor.

B. Favorable Turn in Financial Conditions

Let me explain the three positive turnarounds, respectively. First, a favorable turn in financial conditions -- in other words, financial markets and corporate finance are improving.

First, stock prices are rising (Chart 4). To be specific, these rose from around 9,000 yen in autumn 2012 to the 15,000-16,000 yen level in mid-May on the back of heightened expectations for economic improvement and of the depreciation of the yen. While there have been declining phases in order to adjust to a rapid rise, stock prices have shown some resilience, recovering to around 14,000 yen once again. The rate of increase since the beginning of 2013 has marked around 35 percent, far higher than those registered in the

United States (just under 20 percent) and Europe (over 6 percent). As I have consistently said, even during the period when stock prices fell temporarily, Japan's economy is steadily improving, and financial markets -- including stock prices -- will reflect such fundamental movements in the real economy.

Next is the developments in long-term interest rates (Chart 5). As the new policy framework has outdone prior market expectations both in terms of quantity and quality, it has taken time for market participants to digest the content and its effects, and this led to increased uncertainty in the JGB market. Such developments came to a pause toward end-April, but long-term interest rates in the United States rapidly rose from the beginning of May due to increased speculation that the Federal Reserve might taper the pace of its asset purchases, and the effects of this started to spread to Japan. Against this background, the Bank, while continuing with its massive JGB purchases, held an enhanced dialogue with market participants and conducted flexible market operations, such as making the maximum amount of those purchases per bidding smaller as well as increasing the frequency of purchases. Due mainly to such massive JGB purchases and flexible market operations, long-term interest rates in Japan have recently been almost flat, at around 0.8 percent, even in the midst of rising overseas rates.

Meanwhile, in the foreign exchange market, the yen's exchange rate against the U.S. dollar has been depreciating since autumn 2012, when it was around 80 yen to the dollar, and has recently been around 100 yen (Chart 6). Monetary easing aims at overcoming deflation and by no means intends to maneuver the exchange rate. Nonetheless, monetary easing will exert pressure toward depreciation *ceteris paribus*.

Lastly, firms' and households' financial conditions have been accommodative. That is, with regard to funding conditions, the diffusion index (DI) for financial institutions' lending attitudes as perceived by firms was on an improving trend in the *Tankan* survey (Short-Term Economic Survey of Enterprises in Japan), and issuing conditions for CP and corporate bonds have remained favorable on the whole. While the year-on-year rate of increase in bank lending had been at about 1 percent up to around last autumn, the pace of increase has gradually picked up since then and has been slightly above 2 percent most recently (Chart

7). The amount of corporate bonds issued in the April-June quarter registered the largest level since the Lehman shock. In terms of funding costs, bank lending rates, in terms of the average contracted interest rates to businesses and households, have continued to decline and remain at historically low levels.

C. Favorable Turn in Expectations

The second favorable turn is that in the public's sentiment and expectations.

First of all, consumer sentiment has been improving markedly (Chart 8). According to the Consumer Confidence Survey, which is a questionnaire survey on consumer perception conducted by the Cabinet Office, while there is discontinuity due to the change in the survey method, the DI has improved to a pre-Lehman shock level. By generation, sentiment improved not only among the elderly, who hold large amounts of stocks and are likely to benefit from stock price rises, but also for young people. It appears that expectations for improvement in economic activity and income have started to emerge across a wide range of generations.

On top of this, business sentiment has also been improving (Chart 9). The DI for business conditions (all industries, all enterprises) in the June *Tankan* survey improved by 6 percentage points from the March survey to reach minus 2. It has now reached a level as high as that registered in the December 2007 survey. Moreover, the number of industries responding that business sentiment has improved has also increased, and now stands at 26 out of 31 industries.

Lastly, the public's inflation expectations are rising. Looking at various indicators related to businesses, the DI for output prices in the June survey improved irrespective of firm size and category (Chart 10). The forecast DI of large firms has now come close to zero. This has happened only twice in the last 30 years -- once toward the end of the bubble period and the other just before the Lehman shock, when international commodity prices surged. As far as indicators related to households are concerned, according to the Opinion Survey on the General Public's Views and Behavior, the share of respondents who expected that prices will go up one year from now exceeds 80 percent (Chart 11). A number of

surveys collecting views among economists also indicate that the expected rate of inflation is rising. With regard to market indicators, break-even inflation -- that is, the yield spread between fixed-rate coupon-bearing JGBs and inflation-indexed JGBs, and representative of the expected rate of inflation in the market -- rose rapidly toward mid-May. While it has declined thereafter, break-even inflation has clearly heightened compared with the beginning of the year (Chart 12). Based on these developments in the various indicators, it can well be judged that inflation expectations on the whole are picking up.

D. Favorable Turn in Economic Activity and Prices

The third favorable turn is in economic activity and prices reflecting the improvement in financial markets and the public's sentiment.

Private consumption remains resilient on the back of sharp improvement in household sentiment and the wealth effect from the stock market rally (Chart 13). As I mentioned earlier, in addition to spreading favorable expectations for the economic outlook, given that the cohort of the senior generation that holds a large amount of stocks tends to enjoy a higher propensity to consume -- that is, they have an inclination to spend more money -- than other generations, it is likely that a stronger wealth effect from the stock market rally is at work.

Business fixed investment has stopped weakening as business sentiment and corporate profits have improved, and it is showing some signs of picking up (Chart 14). Indeed, in the June *Tankan* survey, the projections for fiscal 2013 show that firms intend to increase investment steadily on the back of improvement in sales and current profits.

On the price front, while the year-on-year rate of change in the CPI (all items excluding fresh food) had been negative, it reached 0 percent in May and turned positive in June, at 0.4 percent, reflecting improvement in the economy and the yen's depreciation (Chart 15).

In sum, there have been favorable turns in financial conditions, in expectations, and in economic activity and prices. All these developments suggest that the aim of the QQE --

to lead Japan's economy toward overcoming the deflation that has lasted for nearly 15 years -- is right on track so far.

II. The Outlook for Economic Activity and Prices (an Interim Assessment of the Outlook Report)

Next, I will move to the outlook for Japan's economy. As for the baseline scenario, the economy is expected to recover moderately on the back of the resilience in domestic demand and the pick-up in overseas economies. While the economy is likely to be affected from next year onward by the front-loaded increase and subsequent decline in demand prior to and after the two scheduled consumption tax hikes, it is likely to continue growing at a pace above its potential -- which is considered to be around 0.5 percent -- as a trend, as a virtuous cycle among production, income, and spending operates. In terms of the median of the Bank's Policy Board members' forecasts of the growth rates, this is 2.8 percent for fiscal 2013, 1.3 percent for fiscal 2014, and 1.5 percent for fiscal 2015, averaging almost 2 percent (Chart 16). The year-on-year rate of change in the CPI, excluding the direct effects of the consumption tax hikes, is likely to follow a rising trend, mainly reflecting an improvement in the aggregate supply and demand balance as well a rise in the expected rate of inflation. In terms of the median of the Policy Board members' forecasts of prices, the year-on-year rate of change in the CPI is expected to be 0.6 percent for fiscal 2013, 1.3 percent for fiscal 2014, and 1.9 percent for fiscal 2015. It is highly likely to reach the price stability target of about 2 percent toward the latter half of the Bank's projection period through fiscal 2015.

Three Key Factors toward Realizing the Outlook

For the above outlook to materialize, there are three key factors (Chart 17).

First, the sustainability of firmness in domestic demand. It is important that the aforementioned current improvement in business and household sentiment lead to sustained spending in tandem with an increase in income.

In the corporate sector, a virtuous cycle from income to spending appears to be gradually starting to operate. In terms of "income," corporate profits have been improving, and in

terms of "spending," the June *Tankan* survey results revealed solid business fixed investment plans. Since the Lehman shock, firms have long restrained business fixed investment, and thus there seems to be large potential demand, mainly for maintenance and repair as well as replacement of existing equipment. As for the outlook, business fixed investment is likely to follow a moderate increasing trend, and we will confirm this with the actual data to be released.

In the household sector, despite the absence of a marked increase in labor income, private consumption has been resilient, mainly due to an earlier improvement in consumer sentiment and wealth effects brought about by the rise in stock prices. Hereafter, it is important that the increase in private consumption and housing investment continue, backed by firmness on the "income" front, such as an improvement in employment and wages. In this regard, the supply and demand conditions in the labor market are improving moderately, with the ratio of job offers to applicants having risen to 0.90 -- a level observed for the first time since June 2008 -- and the unemployment rate heading toward a decline. In terms of wages, the year-on-year rate of decline in nominal wages per employee has slowed recently to minus 0.1 percent due to an improvement in the number of unscheduled hours worked and in bonus payments. It will be necessary to make sure that such improvements in employment and wages continue into the future, thereby supporting an increase in private consumption.

Second, among factors that determine prices, I would like to point to developments in inflation expectations. The inflation rate is determined mainly by two factors. One is the aggregate supply and demand balance of the economy -- the so-called output gap -- and the other is medium- to long-term inflation expectations. In order to achieve the price stability target of 2 percent, both factors need to operate toward raising prices.

As for the first factor -- namely, the output gap -- the intuitive view is that prices will rise if economic activity improves and the supply and demand balance tightens. In other words, as the level of economic activity increases, the capacity utilization rate would rise and the number of employees would increase, leading to a decline in the unemployment rate. The supply and demand balance would then tighten in the labor market and for products and

services, thereby leading to a rise in wages and in prices of products and services. In the baseline scenario, which I mentioned earlier, the output gap will turn from negative to positive and gradually widen as the economy continues growing at a pace above its potential. In this way, upward pressure on prices will operate through developments in the output gap.

What warrants more attention is the second factor that determines prices -- that is, medium- to long-term inflation expectations. When firms and households make decisions on investment and consumption, they take actions based on their outlook for future inflation. For example, if a view spreads among the public that prices will rise in the future, firms would likely raise the prices of products and services accordingly, and wages would also be raised. Consequently, consumer prices would be pushed up. In this regard, inflation expectations have already begun to rise, and I expect the expected rate of inflation to gradually converge toward the global standard of 2 percent, due to the effects of the Bank's strong commitment to meet the price stability target as well as the effects of its bold monetary easing.

The third factor is developments in overseas economies. We consider a downturn in overseas economies to be the largest risk factor to the outlook for economic activity and prices I have outlined so far. The baseline scenario is that overseas economies are expected to pick up against the backdrop that the U.S. economy would stay firm and the European economy would start to bottom out. However, there are also risks that warrant attention in the European economy, emerging and commodity-exporting economies, and the U.S. economy, respectively. With regard to the European economy, although the tail risk of substantial financial market turmoil having a global impact has receded due to efforts made thus far by policymakers, the European debt problem is yet to be fundamentally resolved. The Bank is paying close attention to whether the prolonged fiscal austerity measures and a receding economy would lead to political turbulence or instability in financial markets. Next is developments in the Chinese economy. There is a view that is becoming widely held that the economy will not return to the level of high growth observed earlier, as policymakers are enforcing their stance of emphasizing "quality-based" rather than "speed-based" growth. It is also likely that the over-capacity issue mainly seen in

manufacturing, such as materials, could restrain growth for the time being. As developments in the Chinese economy have substantial effects not only on Japan's economy but also on commodity-exporting economies and other emerging economies, whether the Chinese economy will be able to make a soft landing to achieve economic growth at a cruising speed warrants vigilance. Lastly, we have the effects of the Federal Reserve's tapering of its asset purchases. The discussion about such a move is based on the backdrop that the U.S. economy is recovering steadily, albeit moderately, which in itself has positive implications for the world economy as a whole, including emerging economies. Nevertheless, it is necessary to continue to pay close attention to developments in global financial markets, including capital flows to emerging economies.

III. Q&A about the Policy Effects of the QQE

I have so far described the Bank's QQE, the state of Japan's economy, and its outlook. Let me next respond to some of the questions regarding the policy effects of the QQE.

A. Effects of Putting Downward Pressure on Long-term Interest Rates

Effect of containing nominal interest rates

First is the effects on long-term interest rates. Following the introduction of the QQE, as long-term interest rates rose compared with those immediately before the introduction, some questioned whether the policy transmission mechanism of putting powerful downward pressure on long-term interest rates was working effectively.

Before examining this point, let me summarize factors that put upward and downward pressure on long-term interest rates. Long-term interest rates are formed based on expectations for future short-term interest rates and on risk premiums (Chart 18). For example, in the case of 10-year government bond yield, this will be the sum of the short-term interest rate path for the next ten years and various risk premiums associated with holding government bonds. Of those, given that expected short-term interest rates will be determined according to economic and inflation outlooks, if economic activity improves and expectations for future price increases spread, there will be upward pressure on long-term interest rates. Risk premiums will increase, reflecting such factors as a rise in interest rate volatility or in interest rates overseas, thereby putting upward pressure on

long-term interest rates. In response, the Bank's massive purchases of government bonds under the QQE will put a powerful squeeze on the risk premiums, thereby having the effect of putting downward pressure on long-term interest rates.

Let us confirm whether this effect has actually materialized, based on two facts. First is the comparison with last autumn, when long-term interest rates were almost at the same level as today. Comparing the situation of financial markets and the outlook for economic activity and prices, stock prices have risen about 60 percent from about 9,000 yen last autumn and the yen rate against the U.S. dollar has depreciated about 25 percent from 75-79 yen. When looking at the outlook for economic activity and prices using the ESP Forecast Survey, which compiles economists' forecasts, the outlook for the real GDP growth rate for fiscal 2013 has improved substantially from 1.54 percent as of October 2012 to 2.75 percent as of July 2013, and the outlook for the year-on-year rate of change in consumer prices has also increased from 0.11 percent to 0.36 percent during the same period. The economic and inflation outlooks for the longer term have also been revised upward. While such improvement in financial markets and the outlook for economic activity and prices naturally create upward pressure on long-term interest rates, actual long-term interest rates have nevertheless been contained at almost the same level as last autumn.

Second is the comparison with developments in long-term interest rates overseas. As mentioned earlier, since May this year, interest rates overseas have been rising due in part to increased speculation that the Federal Reserve might taper the size of its asset purchases. Looking at changes since mid-May, the U.S. long-term interest rate has risen by 0.5 percentage point from 2.0 percent to 2.5 percent. In contrast, Japan's long-term interest rate has been roughly flat.

These facts suggest that the Bank's massive purchases of government bonds have effectively compressed risk premiums and powerfully contained upward pressure on long-term interest rates. Hereafter, although there is likely to be upward pressure on long-term interest rates as the outlook for economic activity and prices improves, downward pressure to contain interest rates is expected to further increase as the Bank's purchases of JGBs progress.

Effect of lowering real interest rates

So far I have provided an explanation from the viewpoint of downward pressure on nominal interest rates. In terms of stimulating an effect on economic activity, what is important is "real interest rates," which affect decision-making on spending, including business fixed investment and housing investment. The real interest rate is the interest rate that has been adjusted for the effects of rises and falls in prices, and can be calculated by subtracting the expected inflation rate from the nominal interest rate. As real interest rates cannot be observed directly, you may wonder how firms will make decisions based on real interest rates. Suppose you are making a decision regarding business fixed investment. If you consider that prices will rise in the future and prices of your products will also rise, business fixed investment to that extent should pay off even if the nominal borrowing rate is high. This illustrates the importance of real interest rates.

The QQE aims at lowering real interest rates both in terms of putting downward pressure on nominal interest rates and raising expected rates of inflation. As I have been explaining, judged from various indicators, expected rates of inflation have been rising on the whole. As nominal interest rates have been more or less flat, real interest rates seem to have been declining. Also in this regard, the QQE has been exerting its intended effects.

B. Increase in Bank Lending

Next, we have sometimes been presented with the view that, even though the Bank provides massive money to the financial markets, such money might not be channeled from financial institutions to firms and households. In relation to this, what I want to focus on is the development in bank lending. As mentioned earlier, the year-on-year growth rate of bank lending has been increasing moderately since last autumn, and has recently been slightly above 2 percent. The backdrop to this is that the behavior of firms, households, and financial institutions could have become positive, reflecting various policy measures by the Bank, including the QQE.

In addition to putting powerful downward pressure on long-term interest rates, the QQE -- as a result of the Bank's massive purchases of government bonds -- exerts effects on investors and financial institutions that used to invest their funds in government bonds in

order to shift their investment in lending and other assets -- the so-called portfolio rebalancing effect. In addition, the QQE has the effect of generating proactive demand for funds, including business fixed investment and housing investment, by converting households' and firms' "deflationary sentiment" -- in other words, a natural way of thinking that prices will not rise.

Furthermore, in order to support financial institutions' efforts to increase lending, the Bank has established such facilities as the "Fund-Provisioning Measure to Support Strengthening the Foundations for Economic Growth" and the "Fund-Provisioning Measure to Stimulate Bank Lending." The amount provided through these facilities has reached about seven trillion yen, supporting financial institutions' efforts to tap firms' proactive demand for funds.

Due to prolonged deflation, many firms now hold massive cash and deposits. As firms can make business fixed investment and other investment by first using such cash and deposits, there is some uncertainty as to what extent firms' demand for investment might lead to an increase in demand for borrowing from financial institutions. In that sense, while it will not be desirable to solely focus on the growth rate of lending, be it based on own funds or external borrowing, it is important to prepare an environment that enables firms' positive actions.

C. Relationship between Wages and Prices

Lastly, we often have been asked whether, in achieving the 2 percent "price stability target," if only prices rise and wages do not, this might have a costly impact on people's lives. In this regard, the Bank does not consider it sufficient if only prices go up. With Japan's economy growing in a well-balanced manner amid a virtuous cycle among production, income, and spending, the Bank aims to create a situation in which a gradual rise in the inflation rate is accompanied by an increase in employment and wages. For wages to increase against the backdrop of such positive developments in the economy, it becomes necessary for firms to anticipate future increases in the growth rate and to become confident with regard to increasing new hiring. In addition, as mentioned earlier, if people's "deflationary sentiment" is converted thanks to the Bank's monetary policy, decisions on

wages will be changed such that they are based on the assumption that prices will rise. Looking at the developments in the growth rate of hourly cash earnings and that of the CPI, one can confirm that, when prices actually rise, wages increase almost simultaneously (Chart 19). It is therefore important that the environment I have just described be put in place, whereby wages can be raised, and to realize an economy in which a rise in inflation rates is accompanied by an increase in wages, as in the past.

Concluding Remarks

I have so far described the policy effects of the QQE, based on the situation in financial markets as well as in economic activity and prices over the past three months. The QQE itself is an extremely powerful policy, but it will exert maximum effects when combined with the various measures by the government. In relation to this, I would like to note two points in particular.

First is the government's growth strategy. I have explained the transmission channel of monetary easing in terms of the funding costs, particularly of firms, mainly based on expected inflation rates and real interest rates. In more accurate terms, the degree of monetary easing is determined by the spread between return on assets and funding costs. In other words, if firms' outlook for profitability improves due to the growth strategy, the effects of monetary easing will further strengthen. Also, as touched upon earlier, a rise in firms' expectations for growth forms the basis for wages to rise. The government has formulated concrete measures such as the "Japan Revitalization Plan," and we expect their steady implementation.

Second is securing confidence in public finance. The Bank's measures, including JGB purchases, are conducted with the purpose of achieving the price stability target, but if this is perceived as financing the fiscal deficit, the effects of the QQE could be hampered as long-term interest rates rise due to an expansion in risk premiums. The joint statement released by the government and the Bank of Japan in January stated that the government will steadily promote measures aimed at establishing a sustainable fiscal structure with a view to ensuring the credibility of fiscal management. It is essential that this be put into action in order for Japan's economy to overcome deflation and achieve sustainable growth.

I would like to finish my speech today by stating that the Bank of Japan is committed to achieving the price stability target of 2 percent at the earliest possible time, by steadily continuing with the QQE, and to overcoming deflation, which is the greatest challenge facing Japan's economy.

Thank you.

Japan's Economy and Monetary Policy: Toward Overcoming Deflation

*Speech at a Meeting Held by the Naigai Josei Chousa Kai
(Research Institute of Japan) in Tokyo*

July 29, 2013

Haruhiko Kuroda
Governor of the Bank of Japan

Chart 1

Quantitative and Qualitative Monetary Easing

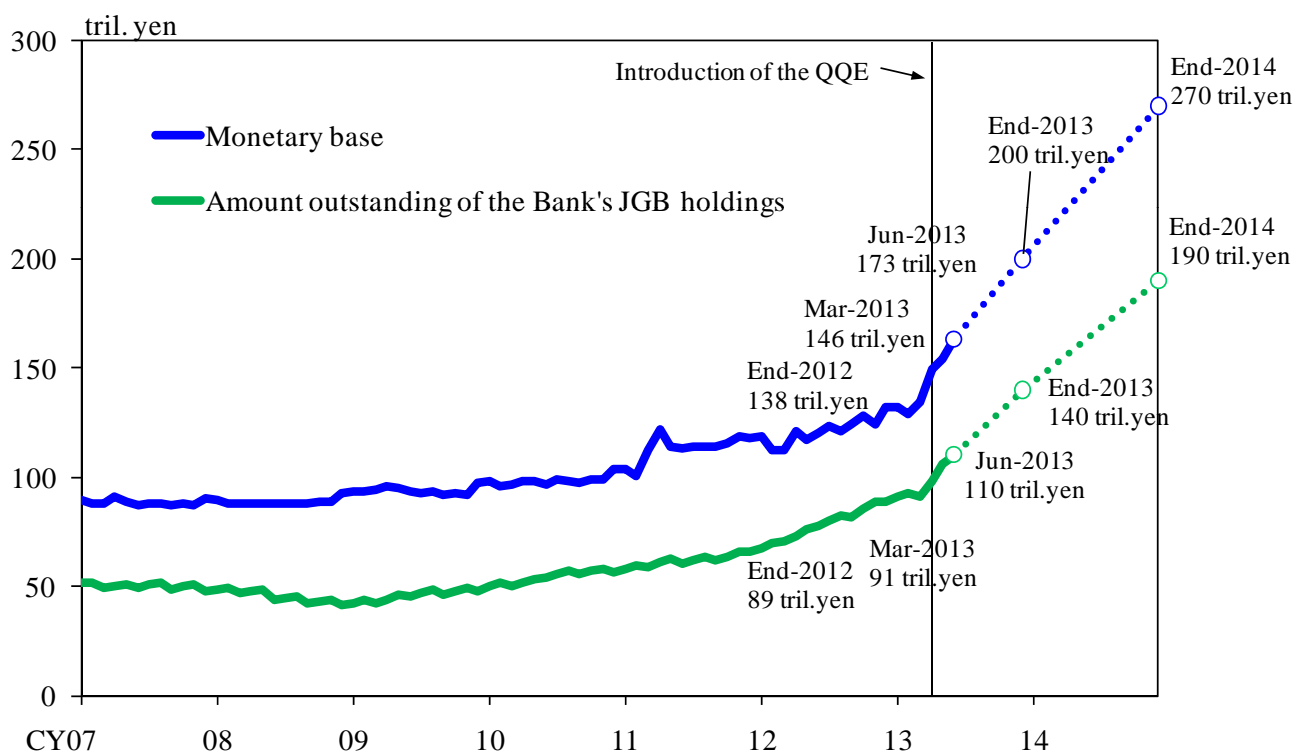
Strong and Clear Commitment

- Achieve the price stability target of 2%, with a time horizon of about 2 years.

New Phase of Monetary Easing Both in Terms of Quantity and Quality

- Monetary base: Annual increase of about 60-70 tril. yen (x2 in 2 years).
- Amount outstanding of the Bank's JGB holdings: Annual increase of about 50 tril. yen (more than x2 in 2 years).
- Average remaining maturity of the Bank's JGB purchases: Extended to about 7 years (more than x2).
- Amount outstanding of ETF holdings: Annual increase of about 1 tril. yen (more than x2 in 2 years).

Expansion in the Monetary Base and JGB Holdings



Source: Bank of Japan.

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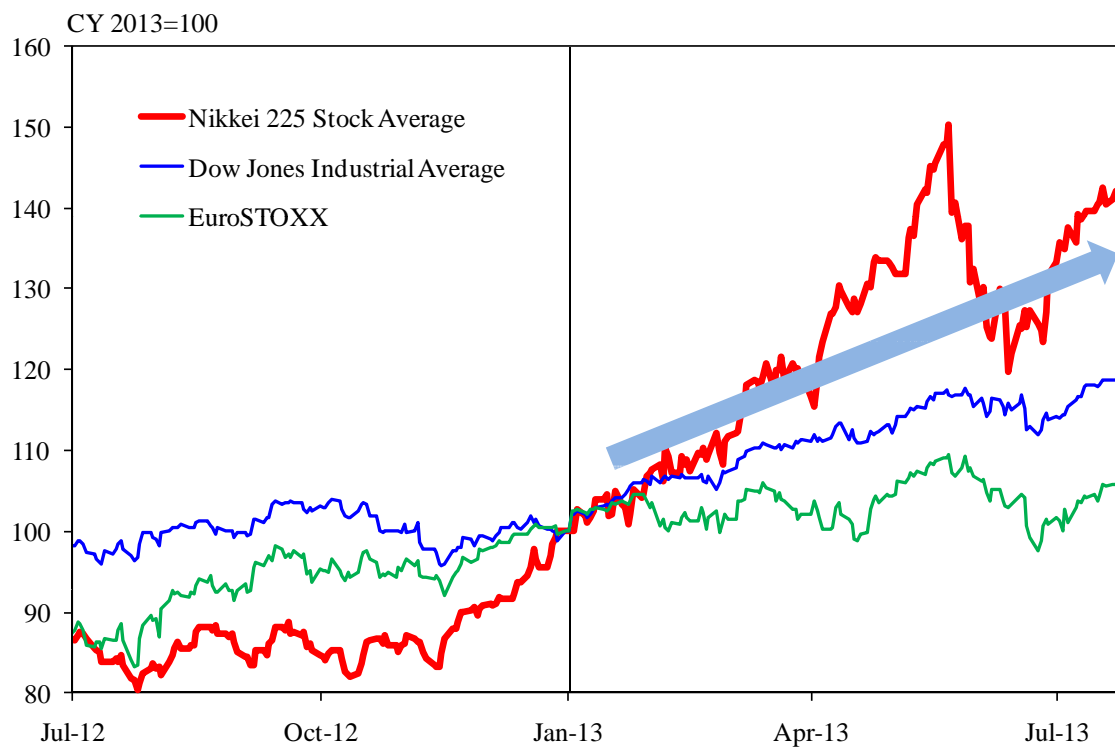
Effects of the QQE after 3 Months from Introduction

3 Positive Developments

- Favorable Turn in Financial Conditions
- Favorable Turn in Expectations
- Favorable Turn in Economic Activity and Prices

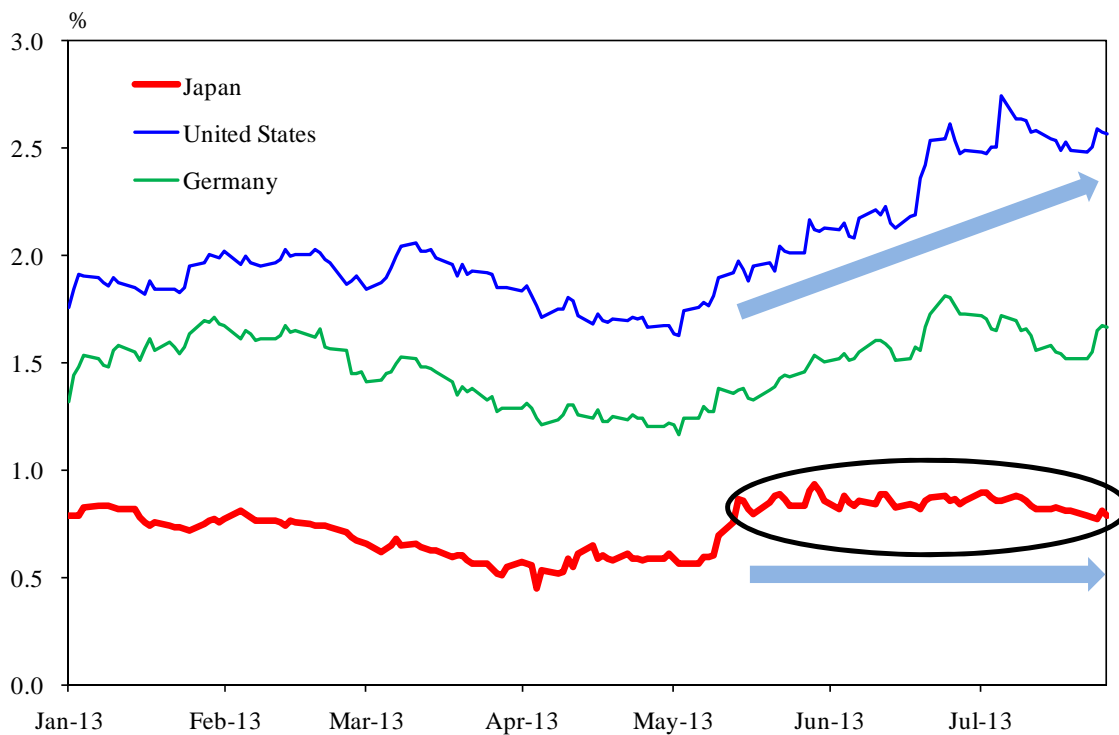
3

Stock Prices



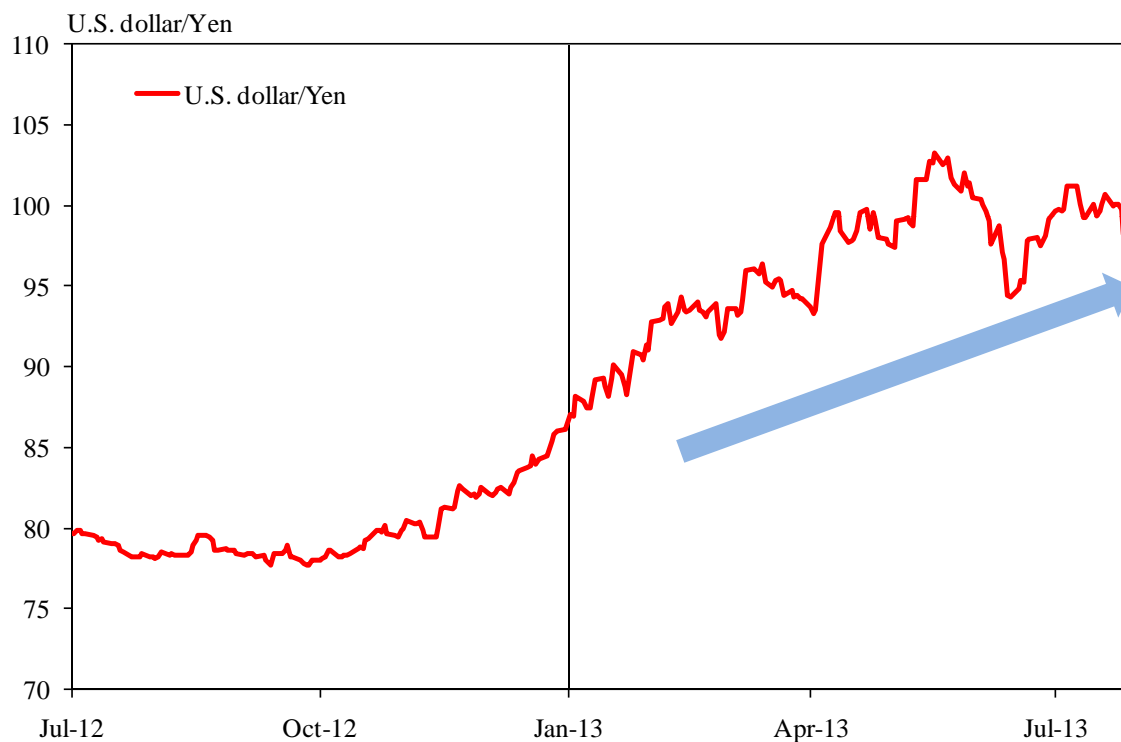
Source: Bloomberg.

Long-Term Interest Rates



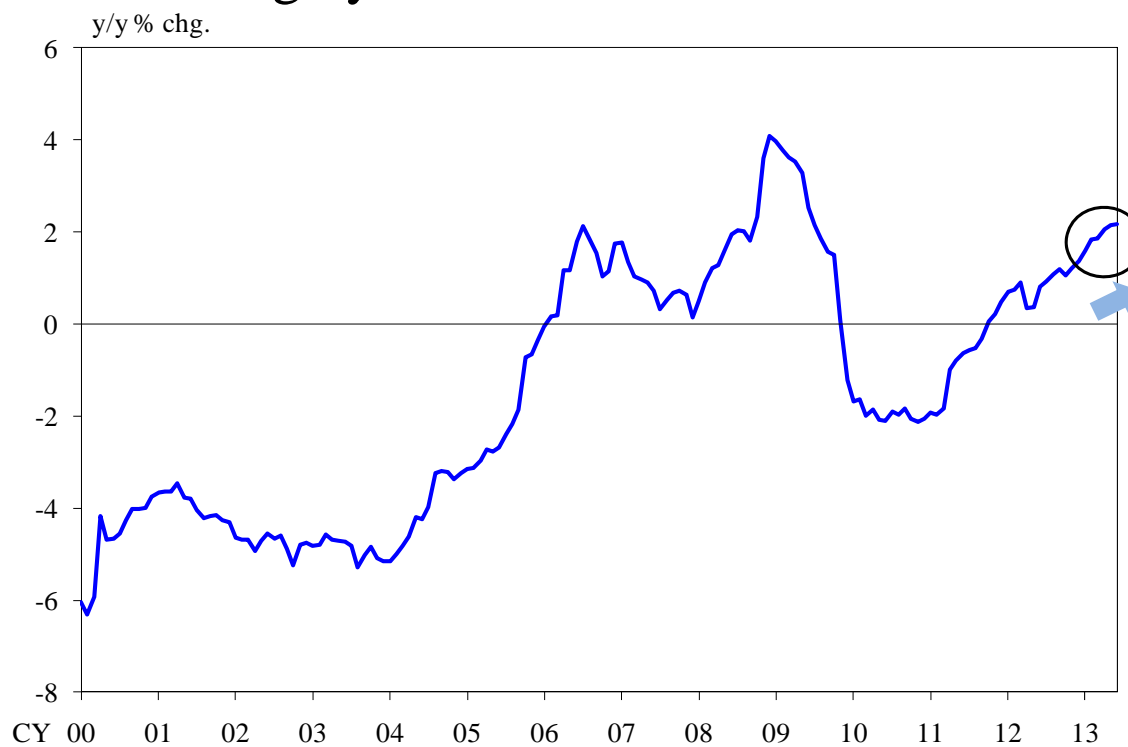
Source: Bloomberg.

Exchange Rates



Source: Bloomberg.

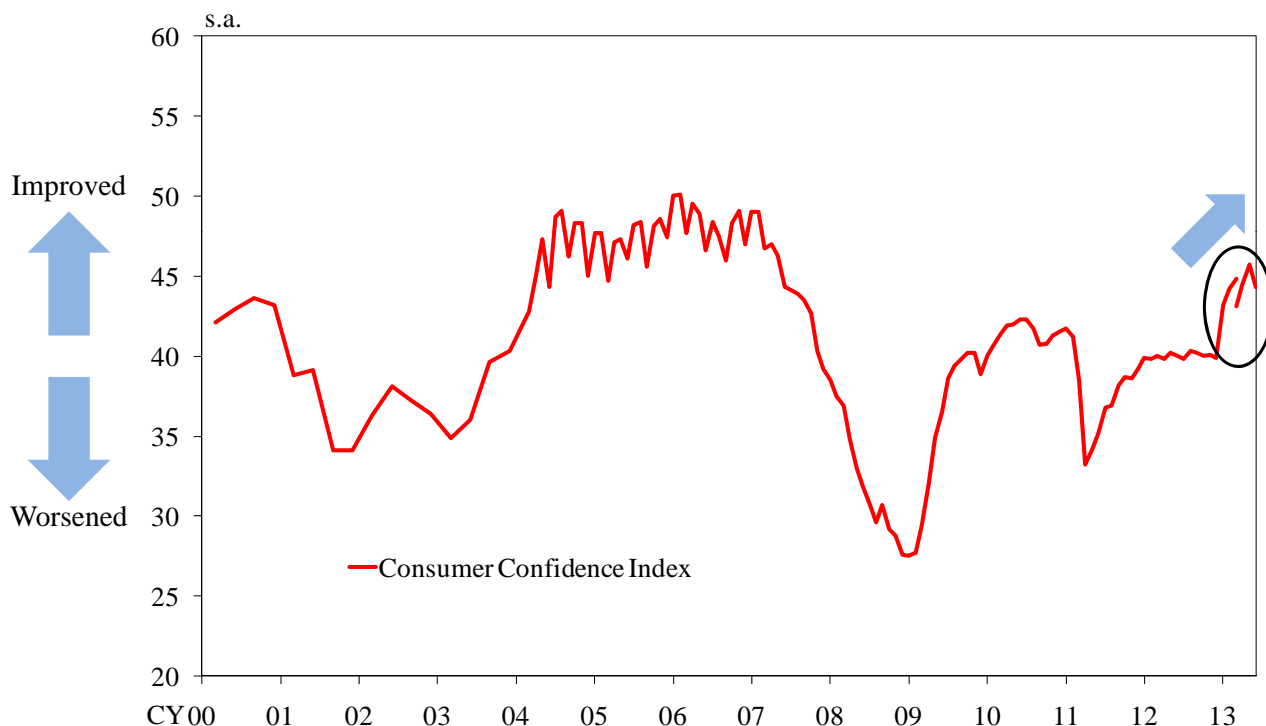
Lending by Domestic Commercial Banks



Note: "Domestic Commercial Banks" refers to major banks, regional banks I, and regional banks II.

Source: Bank of Japan.

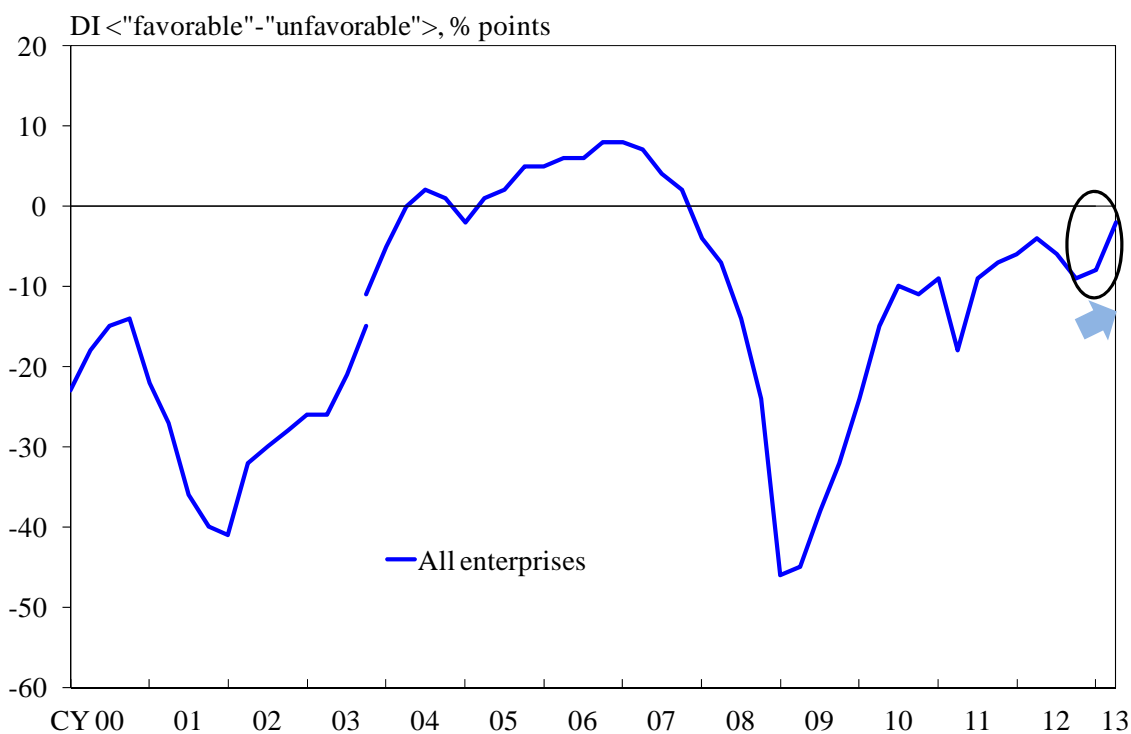
Consumer Confidence



Notes: 1. The Consumer Confidence Index is calculated by simply averaging four consumer perception indexes; "overall livelihood," "income growth," "employment," and "willingness to buy durable goods."
 2. Surveys were conducted on a quarterly basis until March 2004.

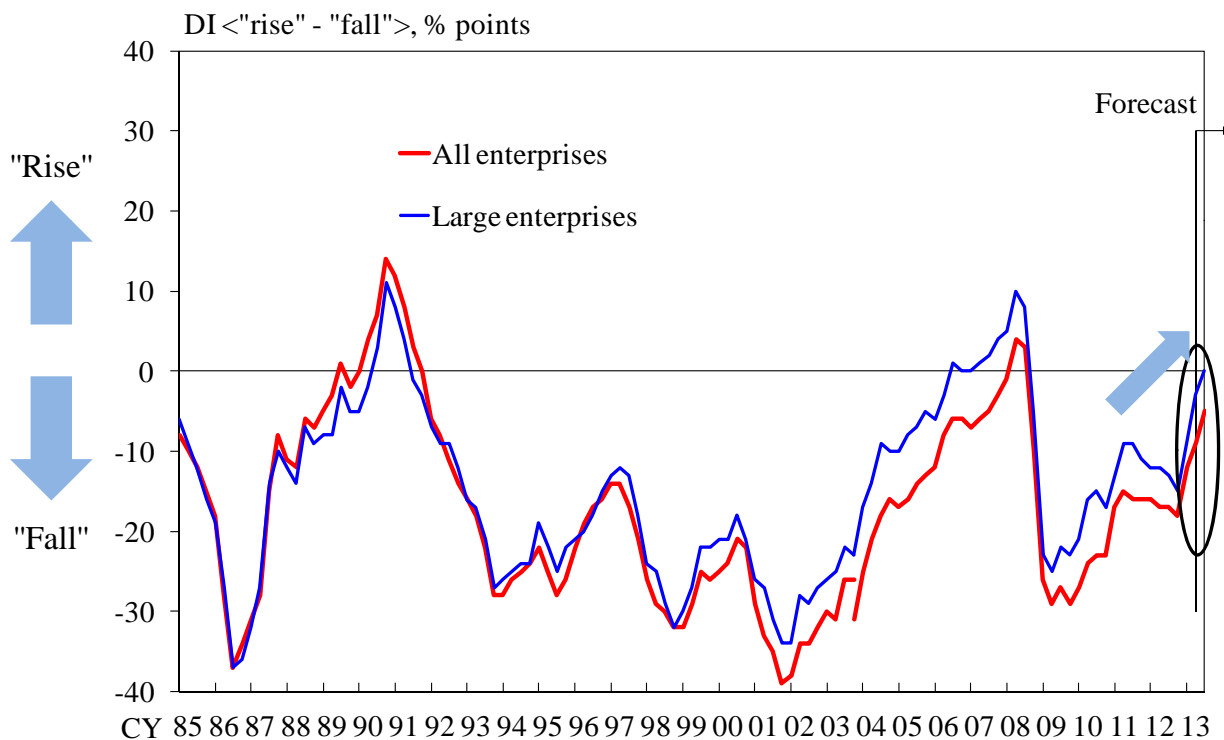
Source: Cabinet Office.

Tankan: DI for Business Conditions



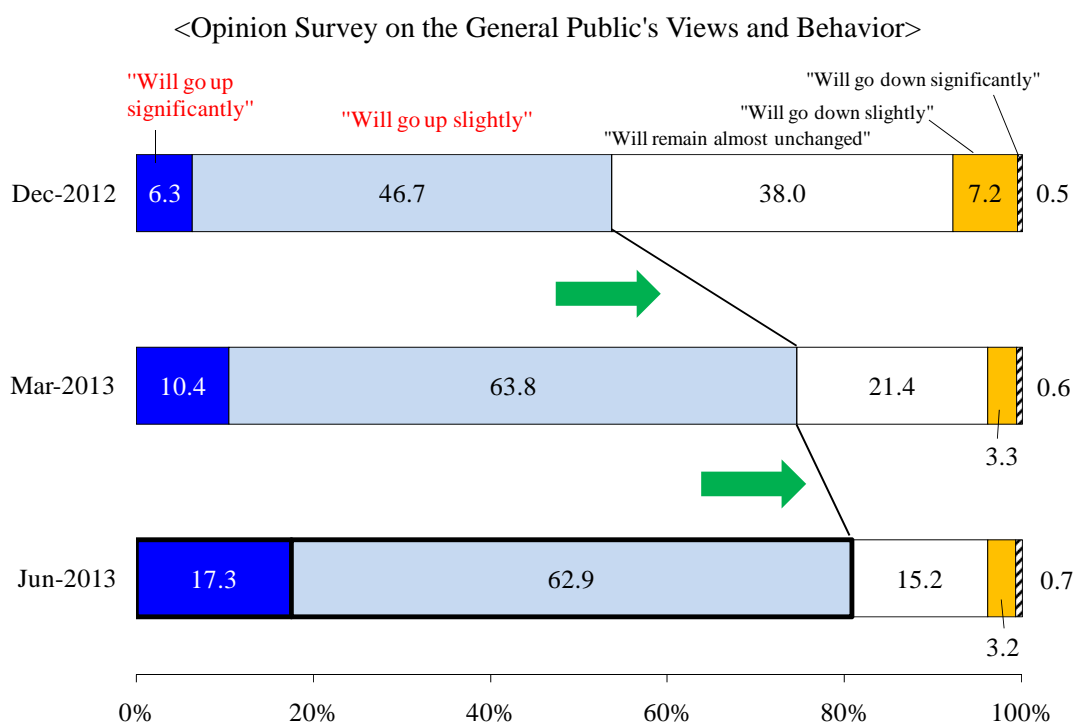
Source: Bank of Japan.

Tankan: DI for Change in Output Prices



Source: Bank of Japan.

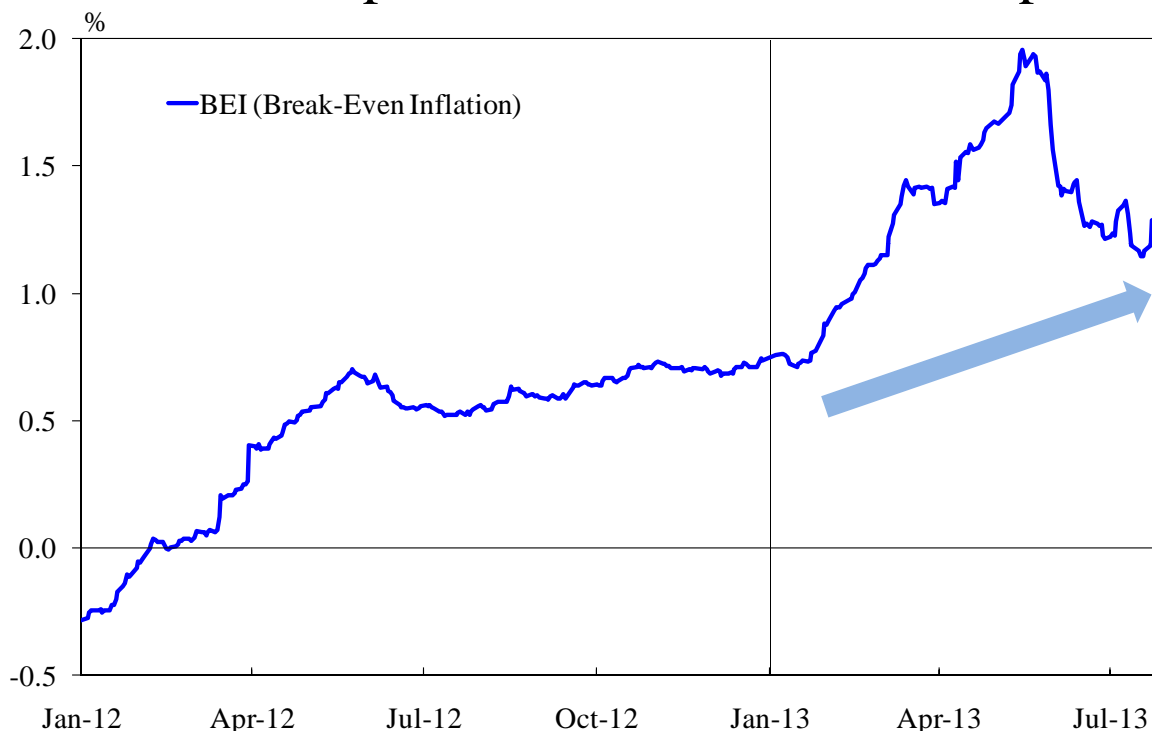
Outlook for Price Levels One Year from Now: Households' Views



Note: Outlook for price levels one year from now excludes the effects of the consumption tax hike.

Source: Bank of Japan.

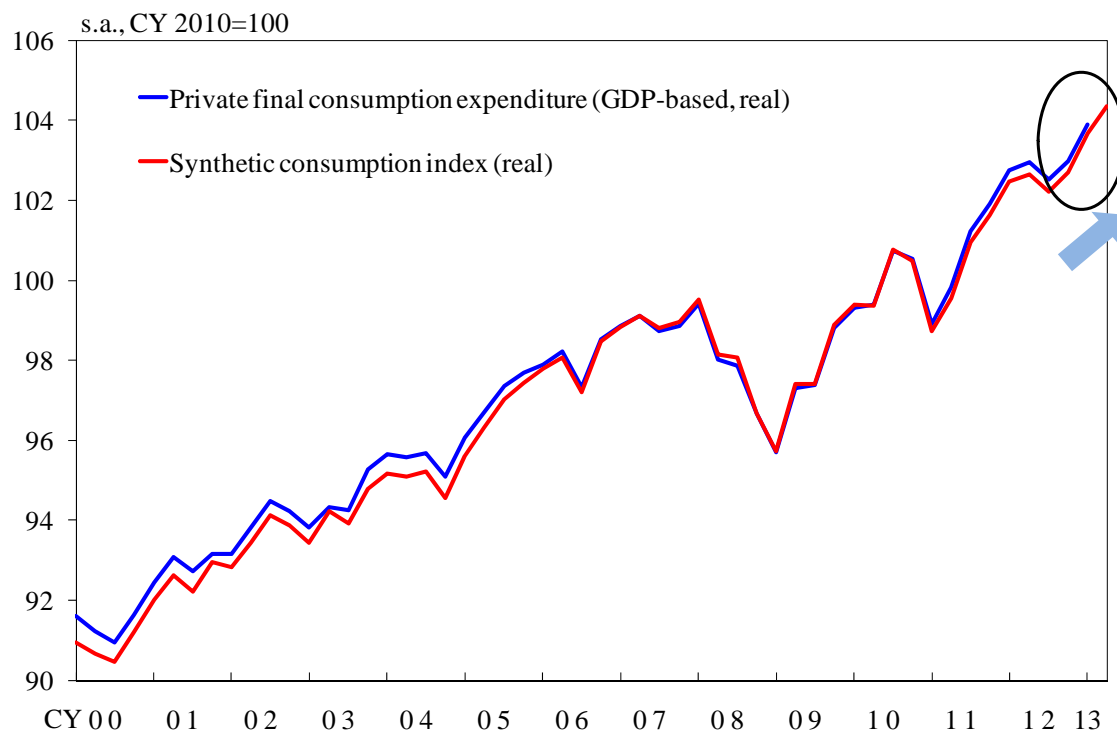
Inflation Expectations of Market Participants



Note: BEI is the yield spread between fixed-rate coupon-bearing JGBs and inflation-indexed JGBs. Figures are calculated using yield data for the inflation-indexed JGBs with the longest maturity at each period that corresponds to 5 years recently.

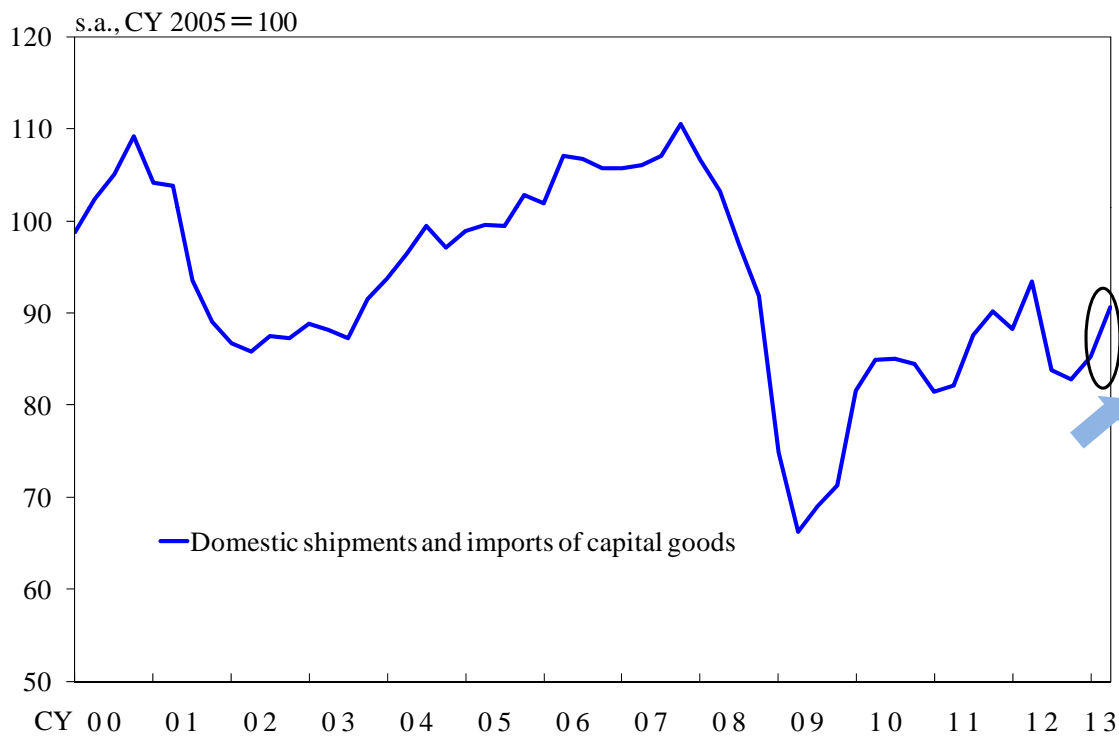
Source: Bloomberg.

Private Consumption



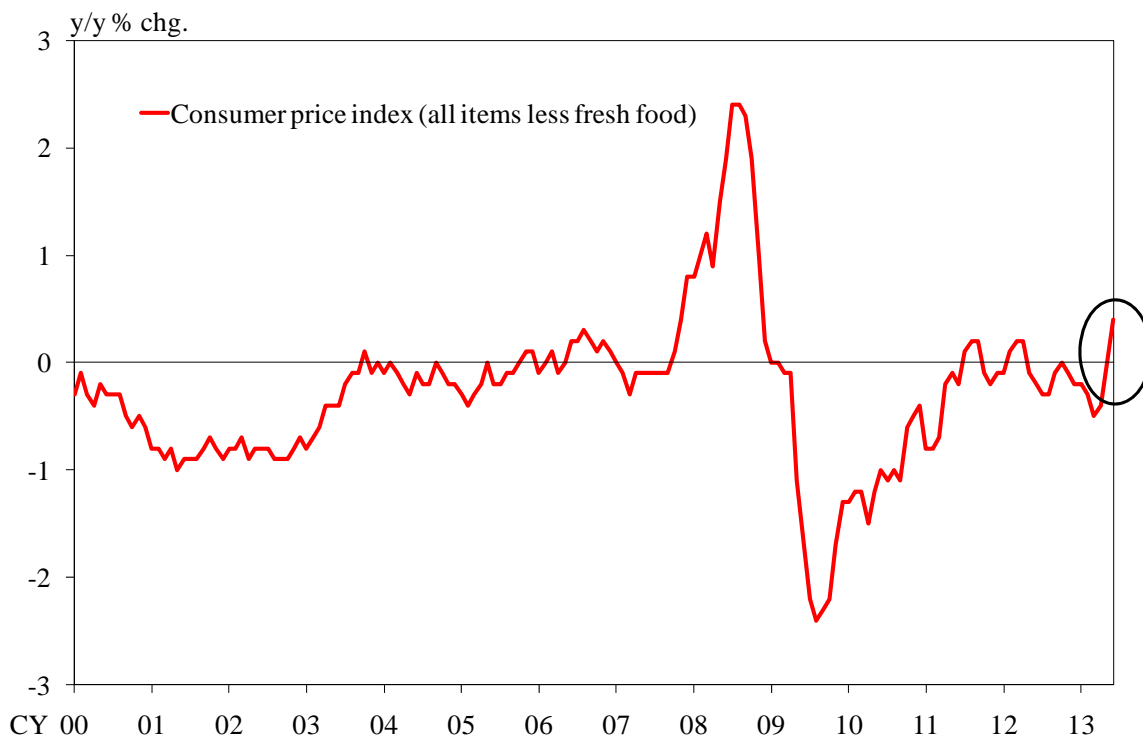
Source: Cabinet Office.

Business Fixed Investment



Source: Ministry of Economy.

Consumer Prices



Source: Ministry of Internal Affairs and Communications.

Forecasts of Policy Board Members (Interim Assessment, July 2013)

y/y % chg.

| | Real GDP | CPI (all items less fresh food) |
|-------------|-------------|---------------------------------------|
| Fiscal 2013 | +2.8 | +0.6 |
| Fiscal 2014 | +1.3 | +1.3 |
| Fiscal 2015 | +1.5 | +1.9 |

Notes: 1. Above figures are the median of the Policy Board members' forecasts (point estimates).
2. Forecasts for fiscal 2014 and fiscal 2015 exclude the effects of the consumption tax hikes.

Source: Bank of Japan.

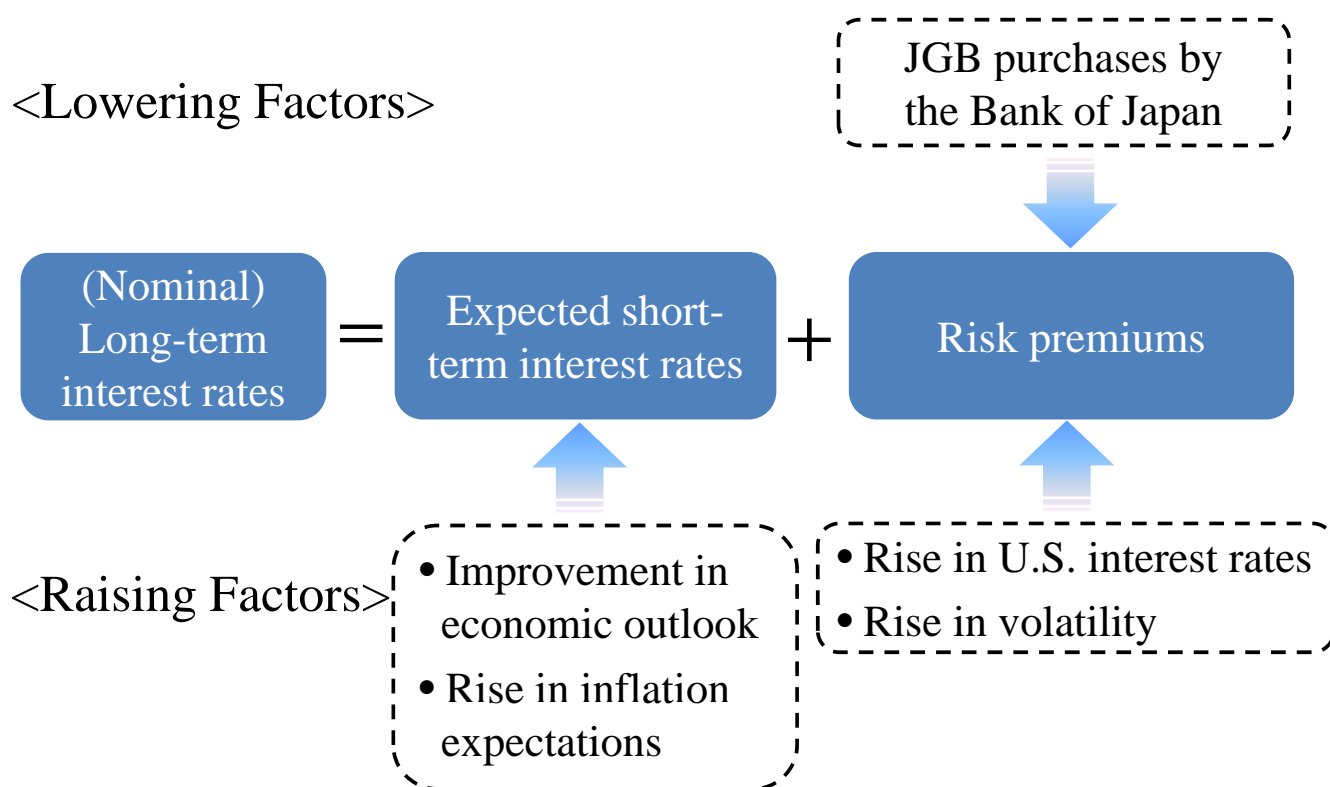
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3 Key Factors toward Realizing the Outlook for Economic Activity and Prices

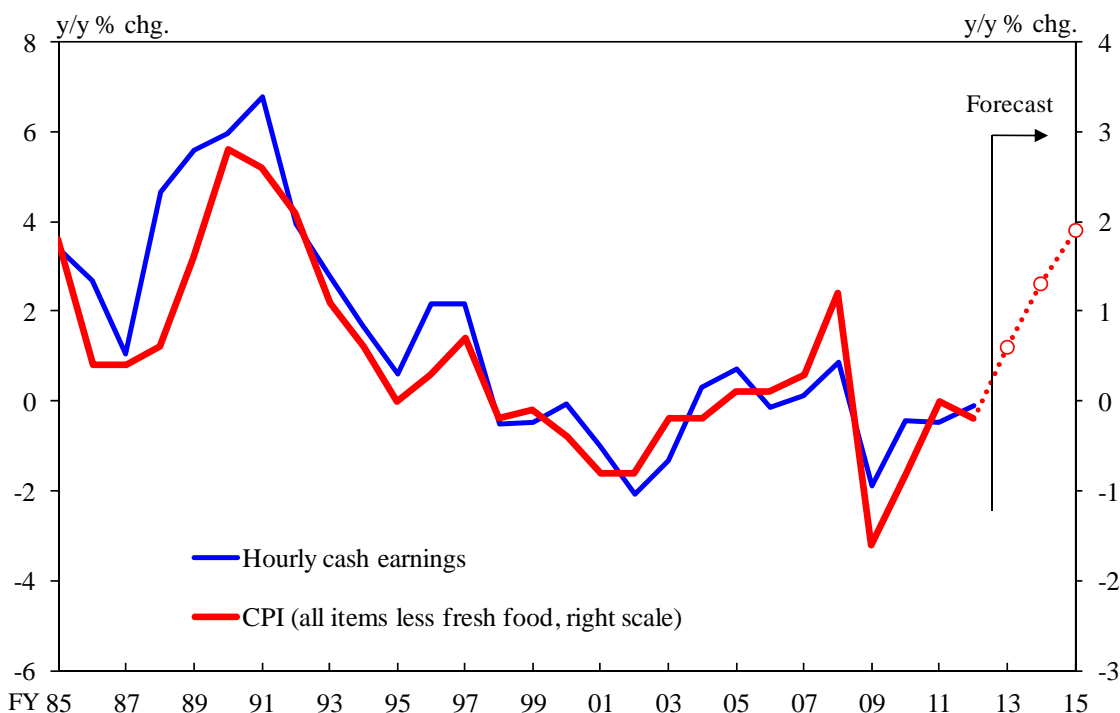
- Sustained spending of firms and households.
- Rise in inflation expectations.
- Developments in overseas economies.

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Factors Affecting Long-Term Interest Rates



Prices and Wages



Notes: 1. "Forecast" refers to the median of the Policy Board member's forecasts (point estimates).
 2. Figures for CPI are adjusted to exclude the effects of the consumption tax hikes.
 3. Figures for hourly cash earnings up through FY 1990 are those for establishments with 30 or more employees.

Sources: Ministry of Internal Affairs and Communications; Ministry of Health, Labour and Welfare; Bank of Japan.