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Bank of Japan

**Recent Economic and Financial Developments
and Monetary Policy in Japan**

Speech at a Meeting with Business Leaders in Nara

Takehiro Sato

Member of the Policy Board

(English translation based on the Japanese original)

Introduction

Thank you for giving me this opportunity to exchange views with people representing the political, economic, and financial communities of Nara Prefecture. I would like to take this opportunity to express my sincere gratitude for your cooperation with the activities of the Bank of Japan's Osaka Branch.

In today's speech, I will begin by focusing on recent economic and financial developments in Japan and abroad, as well as the Bank's monetary policy. I will then touch briefly on the economy of Nara Prefecture. Following my speech, I would like to hear your views on actual conditions in the local economy and on the Bank's conduct of monetary policy.

I. Recent Economic and Financial Developments in Japan and Abroad

A. Overseas Economies

Overseas economies -- mainly advanced economies -- have continued to grow at a moderate pace, despite the slowdown in emerging economies. In a situation where commodity and energy prices remain sluggish, the growth rates of emerging and commodity-exporting economies have not risen, and advanced economies have been affected partly by the decrease in investment related to resource development. This presumably means that the decline in commodity and energy prices, which at first was expected to have favorable effects on the world economy as a whole, is not only due to the supply factor but also has been influenced to a certain degree by the demand factor; namely, a decline in demand from China and other emerging economies. Regarding the supply factor, the textbook view that supply is automatically adjusted through the price mechanism appears to not necessarily fit with reality, as resource developers continue to operate at prices below the breakeven point in order to recover the sunk cost, for example. Considering this situation, it is difficult in the short term to envision a scenario of commodity and energy prices recovering remarkably and to expect a situation where the growth rate of commodity-exporting economies would increase. Therefore, even if emerging economies gradually move out of their deceleration phase due to favorable effects of the growth in advanced economies, the pace of increase in the growth rate of the world economy as a whole may continue to accelerate only moderately. Recently, the International Monetary Fund (IMF) has also

been fairly consistently revising downward its forecast of global growth in its *World Economic Outlook* (Chart 1).

Although the Chinese economy has been slowing somewhat, mainly in the manufacturing sector, its services sector has been firm (Chart 2). Under the authorities' strong commitment to supporting growth, the economy is expected to broadly follow a stable growth path, albeit with the growth rate continuing to slow somewhat, as the authorities proactively carry out policy measures to support economic activity from both the fiscal and financial sides (Chart 3). However, there are signs of deflationary pressure from asset price adjustments, as shown in the GDP deflator turning negative again in the GDP statistics for the July-September quarter, and this warrants attention. The key to realizing stable growth will be whether the economy can shift from being investment- and export-driven to being domestic demand-driven, accompanied by structural reforms.

I see downside risks to the outlook that I have just described, and note the following three points.

First, the growth of the world economy is disproportionately led and driven by that of the United States. The expansionary phase of the U.S. economy already has lasted for around seven years since the global financial crisis, representing the fourth longest period of expansion in the postwar era, and from the perspective of the economic cycle, it can be said that the expansionary phase is maturing. Of course, under pressure from balance sheet adjustments, the pace of recovery after the global financial crisis has been moderate compared with that in past recovery phases, so making a simplistic comparison in terms of the duration of expansion may be problematic. However, if wage growth -- which so far has been lagging -- gains momentum while the slack in the labor market diminishes gradually, it seems it will be necessary to keep in mind the risk that the economy may enter an adjustment phase due to the narrowing of the margin for firms. Under these circumstances, the Federal Reserve intends to normalize the monetary policy at a moderate pace. I would like to watch how the normalization of interest rates plays out in relation to the duration of the expansionary phase.

Second, in Europe, there remain various adjustment pressures; in addition, the refugee problem is emerging as a serious challenge. For example, an agreement of sorts was reached among relevant countries on the Greek debt problem around the middle of the year. This is supposed to inject capital into banks at an early date in order to maintain financial system stability, but drastic measures to reduce sovereign debt have yet to be drafted. In this situation, there is a fair possibility that the debt problem will attract attention once again. Moreover, the influx of refugees will likely increase the fiscal burden on European countries for the moment.

Third, in emerging and commodity-exporting economies, the pace of recovery may slow on the whole, albeit with differences across countries and regions, if the slump in commodity and energy prices is prolonged, or if the outflow of funds from those economies escalates in the global financial markets due to an interest rate hike in the United States. In particular, I have concern about the impact that may hit the fiscal position of oil-producing countries and the possibility of geopolitical risks growing if the slump in crude oil prices is prolonged.

B. Global Financial Markets

The global financial markets grew risk-averse toward summer 2015 because of such factors as concerns over the slowdown in the Chinese economy. Although such concerns remain, there has been an improvement in the market's risk appetite due to last month's employment statistics, which showed the steadiness of the U.S. economy, and to the proactive stance of the European Central Bank (ECB) on additional monetary easing. Although there are heightened expectations among market participants that the interest rate hike will be implemented in the United States at the Federal Open Market Committee (FOMC) meeting this December, there has been no sign so far of the risk aversion trend flaring up again, as the Federal Reserve has carefully engaged in communication with market participants. While there remain concerns over a further outflow of funds from some emerging markets that may be triggered by the interest rate hike, I expect that the first such hike since the global financial crisis will be welcomed as an event symbolic of the U.S. economic recovery, and also will lead to dispelling the uncertainties that have hung over the global financial markets for a long time.

Looking forward, the first point that we should keep in mind under these circumstances is the impact of a decline in market liquidity. The exchange rate reform of the Chinese yuan was presumably the direct trigger of the global turmoil that occurred this summer, and issues regarding the Chinese currency and monetary authorities' communication have been pointed out on various occasions. However, at a more fundamental level, I have the sense that the global financial markets were affected to a certain degree by the fact that market liquidity declined because risk taking by major market makers was constrained by the full-fledged enforcement of the so-called Volcker rule since July, and consequently the presence of technical players -- that is, players engaging in algorithmic trading and high frequency trading (HFT) -- grew amid the thin summertime trading volume. I feel it is necessary to carefully monitor whether or not something trivial could lead to market instability not only in summer but also at other times, such as the end of the year or quarter, when liquidity tends to decline due to various constraints imposed by regulation (Chart 4).

Second, there is a possibility that the U.S. dollar funding cost will hover at a high level due to structural factors. The cost of converting yen into U.S. dollars in the swap market has been increasing and the basis swap spread has widened, as expectations for the interest rate hike in the United States have mounted, in addition to the usual end-of-year strengthening of demand for U.S. dollar funds (Chart 5). While I assume that Japanese banks already have been making efforts to enhance their stable foreign-currency funding base while expanding their overseas business, I feel that it is necessary to carefully monitor this situation. The Bank, in cooperation with the Federal Reserve, has a backstop in place in the form of the U.S. dollar funds-supplying operations, but I would like to reemphasize the importance of financial institutions' efforts to secure their own stable funding base.

The third point is the impact of additional monetary easing by the ECB on the global financial markets. In Europe, the presence of negative interest rates already has become prevalent in some countries in relation to the currency policy, even before the deposit rate reduction by the ECB to a negative rate. The ECB's recent deposit rate reduction is expected to escalate this situation. The yield curve in Germany, used as a benchmark, had temporarily turned negative with respect to bonds with maturities of six or seven years. I am keeping a close watch on how such an interest rate formation, coupled with the interest

rate hike in the United States, will affect the flow of funds in the global financial markets, and whether or not the flattening of the yield curve will undermine the sustainability of government bond purchasing by the ECB from the perspective of the sustainability of the Bank's purchases of Japanese government bonds (JGBs), which I will describe later.

C. Japan's Economy

Looking at developments in Japan's economy, indicators had been relatively weak for the April-June quarter through the July-September quarter, particularly on the industrial production side, and real GDP had declined for two consecutive quarters (Chart 6). Given this situation, there are views, mainly among overseas media, that Japan's economy has technically entered a recessionary phase due to the slowdown in emerging and commodity-exporting economies, particularly China. That being said, on the back of an increase in receipts of income from overseas business reflecting the yen's depreciation, as well as an improvement in the terms of trade due to the declines in energy and commodity prices, firms have seen record profits, which consequently is reflected in gross national income (GNI) and gross domestic income (GDI) having been on clear increasing trends compared to GDP. The mechanism of aggregate income formation has been relatively robust and business sentiment at a high level (Chart 7). Thus, it seems that the economy has been resilient recently to exogenous shocks to a certain extent, such as the slowdown in overseas economies. In fact, despite relatively weak indicators of exports and industrial production, domestic demand has maintained its resilience, mainly in private consumption, and a virtuous cycle from income to spending has continued to operate on the whole. Final demand also remained firm in the July-September quarter. This is contrary to what the economy experienced from 2007 until the global financial crisis occurred in 2008, when Japan's economy actually entered a recessionary phase triggered by the slowdown in overseas economies as the terms of trade deteriorated because of the surge in energy and commodity prices.

Let me add a few things about exports and industrial production. Real exports have been picking up slightly recently, albeit with a rising concern over the slowdown in the Chinese economy (Chart 8). This is suggested by the divergence between the volume of exports in trade statistics and figures for real exports, which might be attributable to a rise in exports

of goods with relatively high value-added -- such as electronic parts and devices -- observed after the July-September quarter, reflecting the product life-cycle of mobile phones. Moreover, strength in imports is also a reflection of firmness in domestic demand. Meanwhile, although the July-September quarter represented the second consecutive quarter of decrease in industrial production, it is expected to pick up in the October-December quarter, mainly due to the increase in production of automobiles. We are currently in a puzzling situation where exports have been more or less flat while industrial production has posted a relatively clear decrease and business sentiment has generally stayed at a high level. However, such firm business sentiment is evidence that a "mirage of demand," which commonly occurs during an economic recession, is not taking place, and weakness in industrial production might be only due to the base year of statistics on production being set at 2010, which has not been revised for a while, thus making it difficult to fully reflect the increase in the weight of goods with high value-added brought about by the recent changes in the production structure.

That being said, it is unclear whether the virtuous cycle from income to spending is strongly at work. For example, although firms' fixed investment plans have been at high levels, coincident and leading indicators such as shipments of capital goods and machinery orders suggest that actual business fixed investment has been sluggish, and real business fixed investment on a GDP basis can be assessed as having been more or less unchanged, or even fallen marginally (Chart 9). In addition, firms still seem to have a negative stance toward increasing spending that could lead to an expansion in fixed costs, as seen in the fact that base pay has increased for two consecutive years but the pace has remained only moderate (Chart 10).

One of the reasons behind firms maintaining such a cautious stance toward spending would be that the deflationary mindset has not been dispelled in a broad sense. In addition to this, even though corporate profits had registered a record high recently, this was not due to an increase in sales volume, but rather to an increase in foreign exchange gains of income from overseas business reflecting the yen's depreciation, as well as to a decrease in input costs stemming from the decline in commodity prices. Therefore, firms do not consider the improvement in their profits to be indicative of a permanent increase in income, and remain

cautious about expanding their fixed costs. In other words, their growth expectations for profits may not have risen that much.

In an effort to assist firms from the financial side, the Bank has been taking the initiative to create accommodative financial conditions through, for example, the fund-provisioning measure to support strengthening the foundations for economic growth. In raising growth expectations, however, there are many issues beyond the scope of monetary policy, and I consider it important for the government to make strenuous efforts to change firms' and households' expectations by steadily implementing the growth strategy.

In relation to firms' stance toward spending, I also would like to touch on the annual labor-management wage negotiations in spring 2016. A sustainable rise in workers' base pay is one of the key points for achieving steady recovery in household consumption expenditure and raising people's medium- to long-term inflation expectations, which appear to remain lower than those in the U.S. and European economies. Thus, I am paying attention to whether or not base pay will see a rise for a third consecutive year in the annual labor-management wage negotiations in spring 2016. Although the Japanese Trade Union Confederation (Rengo) has presented a basic stance toward the next spring wage negotiations -- namely, demanding a base pay increase of about 2 percent -- it is uncertain how rises in the underlying trend in inflation and the outlook for prices will be reflected in base pay. I therefore expect the government to take initiatives such as deregulating the labor market so that firms can find it easier to decide on a base pay increase.

D. Prices

Let me now turn to developments in prices. The year-on-year rate of change in the consumer price index (CPI) for all items less fresh food has been about 0 percent recently due to the decline in energy prices (Chart 11). The year-on-year rate of increase in the CPI for all items less fresh food and energy, on the other hand, has been about 1 percent recently, and the ratio of increasing and decreasing items in the CPI and the year-on-year rate of change in the trimmed mean have been increasing moderately. In addition, people's medium- to long-term inflation expectations appear to be rising on the whole, albeit with some weakness, partly due to changes in the behavioral patterns of firms and households

since the introduction of quantitative and qualitative monetary easing (QQE). Given these factors, the Bank is of the view that the underlying trend in inflation has been rising steadily.

I am aware that there are various views on how to assess the underlying trend in inflation. In a situation where price indicators have been affected significantly recently by the short-term fluctuations in energy prices, it does sound reasonable to look at the CPI excluding energy prices. Nonetheless, as I will describe later, I believe that it is necessary to closely examine a wide range of price indicators, including wages, as the recent rise in the CPI for all items less fresh food and energy might only be attributable to households' acceptance of price rises, mainly in daily necessities, brought about by the decline in energy prices.

With these factors in mind, I would like to discuss recent developments in the CPI for all items less fresh food and energy. There is a view that its recent rise can be inferred from the yen's depreciation observed since the expansion of QQE at end-October 2014, and that such a rise will peak out after the turn of fiscal 2016 as no further depreciation is expected. I would say, however, that it seems unreasonable to explain the recent developments in the CPI for all items less fresh food and energy in a consistent manner by the yen's depreciation alone, as prices of food products and durable goods -- leading to the recent rise in the CPI for all items less fresh food and energy -- have resumed a clear uptrend recently under the yen's depreciation trend that has generally lasted since around the introduction of QQE in April 2013. I consider that the recent rise is actually attributable to the fact that households have more readily accepted price rises on the back of moderate improvement in the employment and income situation as well as the decline in energy prices, and firms accordingly have taken a somewhat aggressive stance of setting higher prices.

Yet, it is uncertain whether or not households will continue to accept price rises if the effects of the decline in energy prices dissipate. Moreover, if no further depreciation of the yen is expected, it is likely that prices of food products and durable goods will stop rising. In view of these possibilities, the key to whether or not the year-on-year rate of increase in the CPI for all items less fresh food and energy will remain stable at around 1 percent will

likely lie in whether rises in services prices -- which have been lagging recently -- would start to be observed following the wage negotiations for fiscal 2016. There are uncertainties over future developments in the wage negotiations, as I mentioned earlier, and also downside risks as to whether price rises in daily necessities and durable goods will lead to a rise in services prices. In my opinion, however, it is possible to generally maintain the annual growth pace of around 1 percent throughout the projection period, excluding the effects of the decline in energy prices. As a member of the Policy Board -- which has the responsibility to ensure price stability -- I made all efforts to present the most probable scenario in the October 2015 *Outlook for Economic Activity and Prices* (Outlook Report). In my view, whether or not the underlying trend in inflation will jump to 2 percent depends on whether people's medium- to long-term inflation expectations will jump to around 2 percent, and this suggests that people's expectations are unlikely to become so bullish within the projection period as wages have not yet risen to that level.

II. Future Conduct of Monetary Policy

A. QQE

It has been two years and eight months since the introduction of QQE. My evaluation of the policy is that, as evidenced by economic and market developments during this period, the intended purpose of promoting the conversion of the deflationary mindset is gradually being achieved, although we are still only halfway toward accomplishing this goal. Meanwhile, in the October 2015 Outlook Report, it was projected that the timing of reaching the price stability target would be delayed to around the second half of fiscal 2016 (Chart 12). I am aware that, consequently, there are various views on the Bank's commitment to achieving the price stability target of 2 percent in a stable manner at the earliest possible time, with a time horizon of about two years. Given this situation, I find it necessary to go over what I had explained about the Bank's commitment, and would also like to share my thinking again.

I consider this commitment to be a rolling target. It is not intended to achieve a specific price level within a specific time frame but rather to achieve the price stability target at the earliest possible time with a time horizon of about two years. I also regard the price stability target itself as a flexible concept with a certain range for upward and downward

deviations of the actual inflation rate from the target. I believe such commitment is as reasonable as the framework of the inflation target adopted by central banks in other major countries.

In fact, developments in prices depend, for example, on those in crude oil prices in the short term, and inflation expectations that affect the underlying trend in inflation are susceptible to monetary policy as well as other factors that cannot necessarily be controlled directly through the conduct of monetary policy, such as the outcome of wage negotiations and growth expectations. As I have stated before, prices reflect the state of the economy and are not a variable that can be directly operated by a central bank. Therefore, the policy conduct aiming at a specific inflation rate within a specific time frame seems unreasonable in the first place, and if a central bank persists in achieving such an aim, there may be a risk that its credibility will be undermined.

Let me reiterate the significance of achieving the price stability target of 2 percent. The price stability target is set based on the CPI for all items, and as reference figures to capture its underlying trend, the Bank has used the CPI for all items less fresh food in presenting the Policy Board members' projections. However, unlike the cases in Europe and the United States, the CPI entails statistical problems in that stickiness of fees for public services is high and that private rent and imputed rent structurally exert downward pressure on it. Thus, the CPI, which is included in official statistics compiled by the government, seems to have deviated recently from being in line with people's perception of inflation that reflects a price rise in daily necessities, as shown, for example, in the University of Tokyo Daily Price Index and the SRI-Hitotsubashi Consumer Purchase Price Index. In particular, the year-on-year rate of increase in the SRI-Hitotsubashi Unit Value Price Index -- which factors in firms' strategy to maintain sales prices by making frequent changes in their products -- has been around 2 percent recently, representing somewhat more of an acceleration than that in the CPI for the same items covered by this index (Chart 13).

If the Bank conducts its monetary policy by focusing only on the CPI in official statistics, in a situation where people's perception of inflation level exceeds its growth rate, there is a possibility that people would come to feel an excessive rise in prices, and that could cause

many distortions in their sentiment and actual spending behavior (Chart 14). What matters is that the inflation rate rises in balance with wages as the level of economic activity increases. With these factors in mind, I would like to reemphasize that achieving 2 percent in terms of the year-on-year rate of increase in the CPI for all items is not the ultimate goal of the price stability target, but rather that its achievement should be assessed flexibly from various aspects while examining a wide range of price indicators.

B. Continuation of QQE

Meanwhile, it seems that market participants still hold expectations for a further expansion of QQE. I believe this might be attributable not only to interpretation of the price stability target, as I explained earlier, but also to the thinking regarding the effects of QQE; namely, that easing and tightening effects would depend on the flow -- that is, the amount -- of financial assets to be purchased by the Bank. Theoretically speaking, however, the effects of QQE have the nature of strengthening cumulatively with the progress in the Bank's asset purchases. This means that, even if the Bank maintains the same amount of asset purchases, monetary easing effects will strengthen as long as it continues with the purchases. Therefore, I hold the view that the Bank's decision at each monetary policy meeting to continue with the current QQE in and of itself is very critical in terms of monetary easing effects.

The Bank has committed to purchasing JGBs so that its net holdings will increase at an annual pace of about 80 trillion yen. Nonetheless, considering that the amount of redemption of its JGB holdings will increase, the amount of purchases on a gross basis is likely to rise even under the current policy commitment. For this reason, the Bank's presence in the JGB market could increase further, although this also will depend on the government's JGB issuance plan. Given this situation, for the Bank's explanation -- namely, that massive purchases of JGBs are carried out only in the context of the conduct of monetary policy and not in any way to finance the fiscal deficit -- to remain fully persuasive, I also would like to reiterate that the government's commitment toward fiscal consolidation is important.

As I mentioned earlier, monetary easing effects appear cumulatively in theory, but in terms of positive effects and side effects, it is likely that the easing effects have been diminishing marginally, since the pace of decline in nominal interest rates has been minimal despite the progress in the Bank's purchases, as evidenced by a limited decline in longer-term interest rates since the expansion of QQE at end-October 2014. There is no doubt that policy effects are always accompanied by side effects, and I believe that a basic approach is to decide on the continuation of monetary policy after comparing and examining its positive effects and side effects. I initially did not expect that QQE, which is a kind of shock therapy that influences formation of people's inflation expectations through massive asset purchases, would be continued for a very long time, and am concerned about a possibility that continuation of the policy will cause the positive effects to decline marginally while the side effects increase marginally.

C. Sustainability of the Bank's Market Operations

As the Bank continues with its JGB purchases at the current pace, the amount outstanding of JGBs in the markets will decrease by the difference between the amounts of the government's net issuance and the Bank's net purchases. Since the amount outstanding in the markets is limited, the Bank will not be able to continue with the purchases at the current pace indefinitely. In reality, financial institutions have reasons to hold a certain amount of JGBs, such as for use as collateral, so they would stop selling their holdings to the Bank before the amount outstanding in the markets hits the bottom. At this point, it is difficult to project when this critical point is likely to happen, because financial institutions' incentive to sell their JGB holdings is expected to depend on the interest rate level and the shape of yield curves at each point in time.

If QQE continues to exert its intended effects and market participants' medium- to long-term inflation expectations rise, the yield curve will steepen and financial institutions will have greater incentive to sell their JGB holdings. On the other hand, in a case where the conversion of the deflationary mindset does not make progress and market participants' medium- to long-term inflation expectations do not rise, the yield curve would flatten and financial institutions would have a stronger preference for JGB holdings. Therefore, the Bank's massive JGB purchases involve difficulties, in that there is a possibility that they

become easier if the probability of realizing the policy objectives rises, whereas the Bank's market operations might become problematic if realizing these objectives is considered to be difficult. Thus, when judging the necessity of continuing QQE, I would like to take into account the sustainability of the Bank's market operations.

Concluding Remarks: Economic Activity in Nara Prefecture

My concluding remarks will touch on the economy of Nara Prefecture.

Compared with the national average, the industrial structure of Nara Prefecture is characterized by the large weights of not only local industries -- such as plastics, rubber, and textiles -- but also of electrical machinery and general machinery. The prefecture is also well known for its production of such items as *cha sen* (a tea ceremony tool), *sumi* ink, ink brushes, leather products, and *somen* noodles, as well as goldfish farming. Although the economy of Nara Prefecture has shown weakness recently in terms of production, a moderate recovery is underway. Production has been declining mainly because of decreases in electrical machinery and general machinery. Meanwhile, in the household sector, the active job openings-to-applicants ratio is rising moderately and employee income has been above the previous year's levels. Private consumption has been recovering on the whole, as retail sales have remained robust, despite the continued weakness of passenger-car sales (Chart 15).

From a longer-term perspective, the transfer of production sites from Nara Prefecture to other locations, including foreign countries, has been proceeding amid intense international competition. In addition to such dwindling sources of employment, there also has been the critical challenge of responding to the aging of society coupled with the low birthrate and shrinking population, which reflects Nara Prefecture's history of development as a commuter town for neighboring large cities such as Osaka and Kyoto.

However, I hear that Nara Prefecture already has been conducting broad-ranging activities through cooperation between the public and private sectors in order to deal with this challenge. For example, as an initiative to become more than just a commuter town, the prefecture is inviting businesses from the outside and promoting the development of local

industries by creating an industrial cluster area at a convenient location close to an expressway. Over a period of eight years, the prefecture succeeded in inviting 205 projects for factories and other facilities. In addition, in the southern and eastern parts of the prefecture, where large tracts of abandoned farmland exist, agriculture promotion measures are being implemented to encourage a shift to the so-called sixth industry, including such activities as opening a privately run auberge (restaurant equipped with boarding facilities) using local food materials. In April next year, NARA Agriculture and Food International College will be opened. Furthermore, Nara Prefecture has an abundance of tourism resources, including several World Heritage sites, and the number of visitors has been rising, partly as a result of an increase in foreign visitors in recent years. Until now, there has been a scarcity of inns and hotels in the prefecture, so the rising number of visitors has failed to increase overnight stays, meaning that its tourism resources have not necessarily been utilized sufficiently. However, I hear that there is an ongoing project, in order to resolve the shortage of hotel rooms, to build a large hotel at a site in Nara City that is owned by the prefectural government.

I am hoping that Nara Prefecture will further revitalize its economy by continuing with steady efforts to do so through cooperation between the public and private sectors.



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Note: Charts are based on available data as of December 4, 2015 (2 p.m., Japan Standard Time).

Global Economy

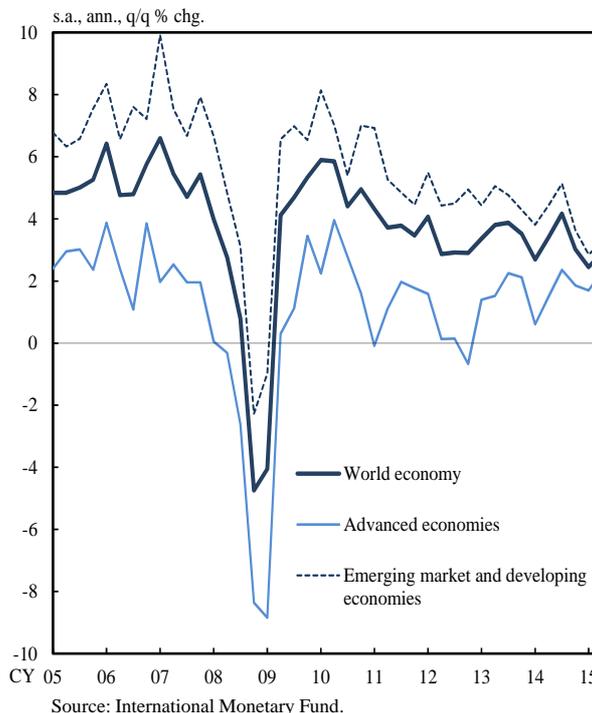
(1) IMF Projections (as of October 2015)

real GDP growth rate, y/y % chg.

CY	2014	2015 projection	2016 projection	2017 projection
World	3.4	3.1 (-0.2)	3.6 (-0.2)	3.8
Advanced economies	1.8	2.0 (-0.1)	2.2 (-0.2)	2.2
United States	2.4	2.6 (0.1)	2.8 (-0.2)	2.8
Euro area	0.9	1.5 (0.0)	1.6 (-0.1)	1.7
Japan	-0.1	0.6 (-0.2)	1.0 (-0.2)	0.4
Emerging market and developing economies	4.6	4.0 (-0.2)	4.5 (-0.2)	4.9
Emerging and developing Asia	6.8	6.5 (-0.1)	6.4 (0.0)	6.3
China	7.3	6.8 (0.0)	6.3 (0.0)	6.0
ASEAN	4.6	4.6 (-0.1)	4.9 (-0.2)	5.3
Russia	0.6	-3.8 (-0.4)	-0.6 (-0.8)	1.0
Latin America and the Caribbean	1.3	-0.3 (-0.8)	0.8 (-0.9)	2.3

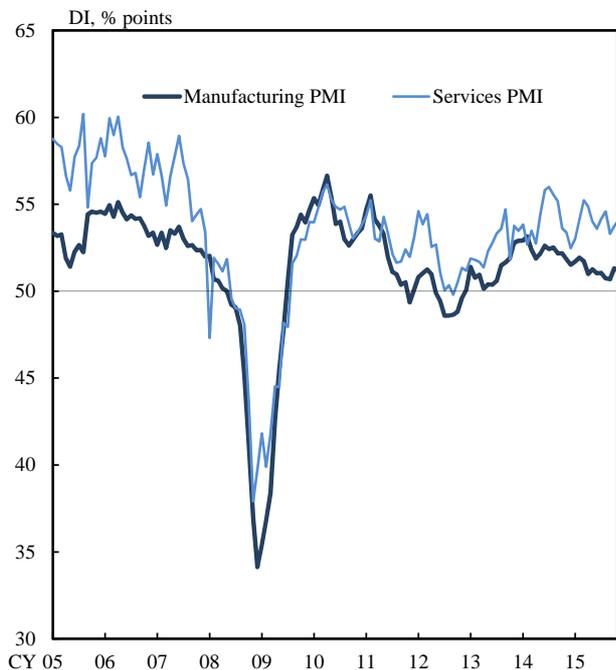
Notes: 1. Figures are calculated using GDP based on purchasing power parity (PPP) shares of the world total from the International Monetary Fund.
 2. Figures in parentheses are the difference from the July 2015 *World Economic Outlook* projections.
 Source: International Monetary Fund.

(2) Real GDP Growth Rate of the World Economy

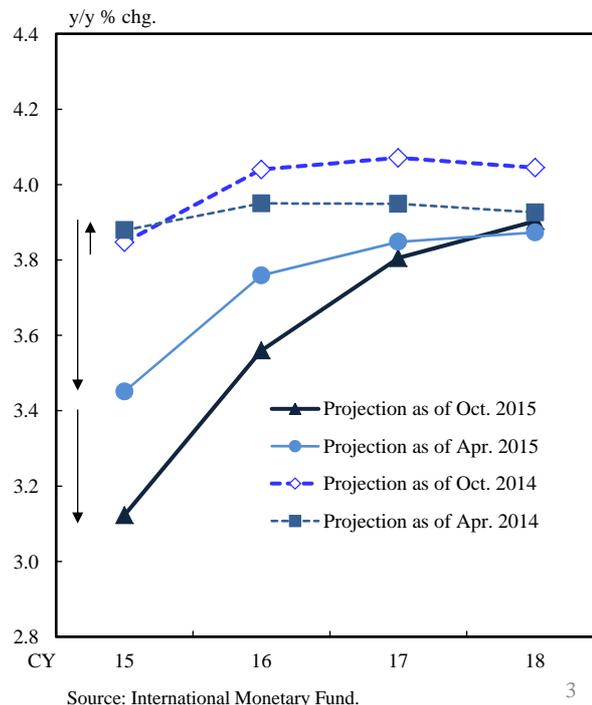


Global Economy (Continued)

(1) Global PMI

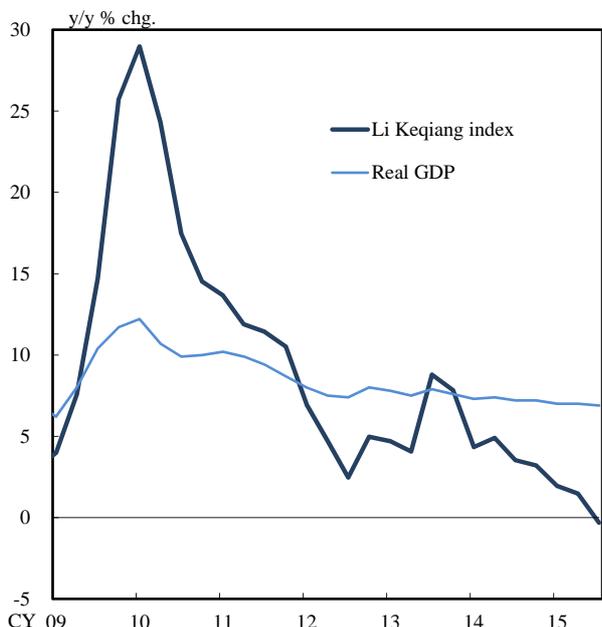


(2) Transition in IMF Projections



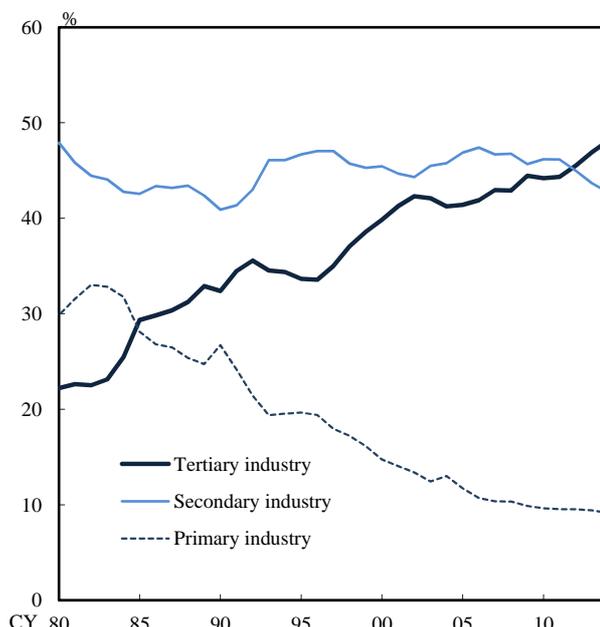
Structural Changes in the Chinese Economy

(1) Li Keqiang Index and Real GDP



Note: The Li Keqiang index is calculated by simply averaging the year-on-year changes of "Electricity consumption," "Medium- and long-term loans," and "Railway freight turnover."
Source: CEIC.

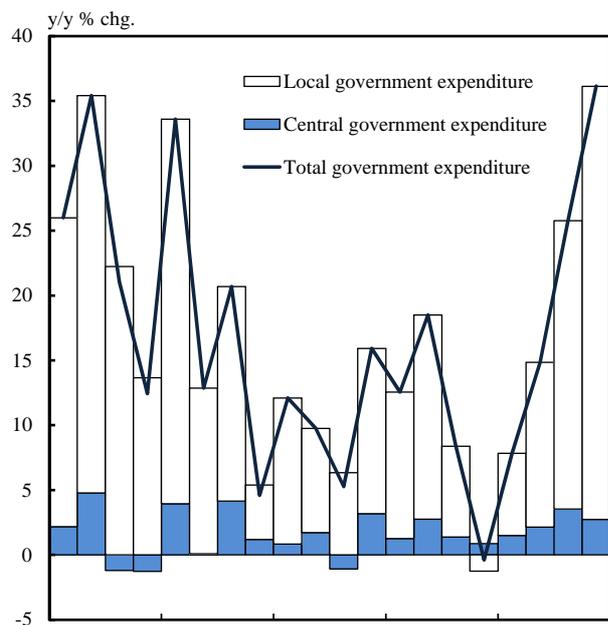
(2) Composition Ratio of Real GDP by Industry



Source: CEIC.

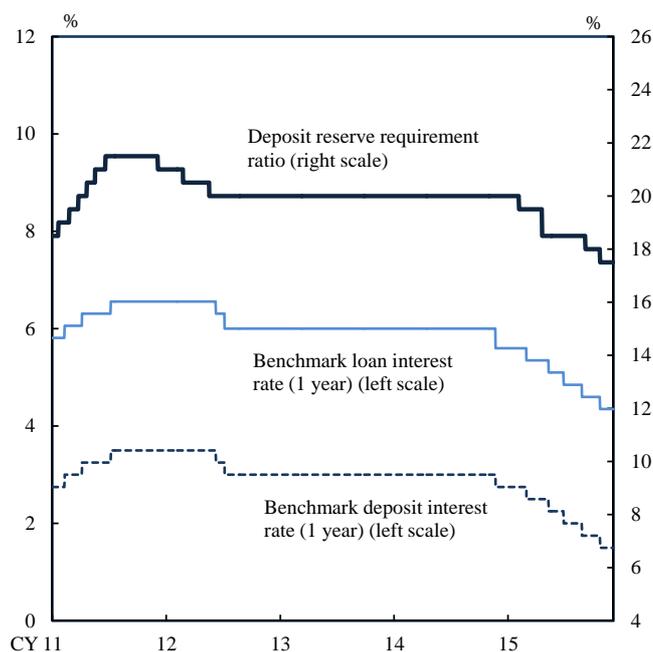
Policy Actions by the Chinese Authorities

(1) Government Expenditure



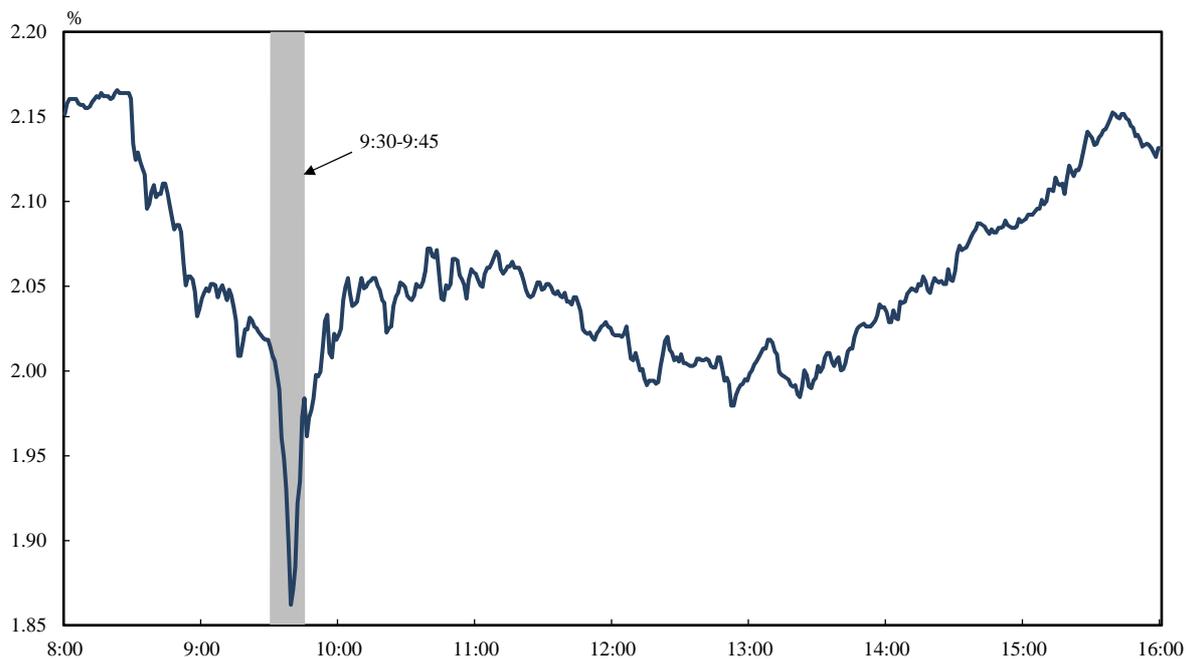
Source: CEIC.

(2) Policy Rates and Deposit Reserve Requirement Ratio



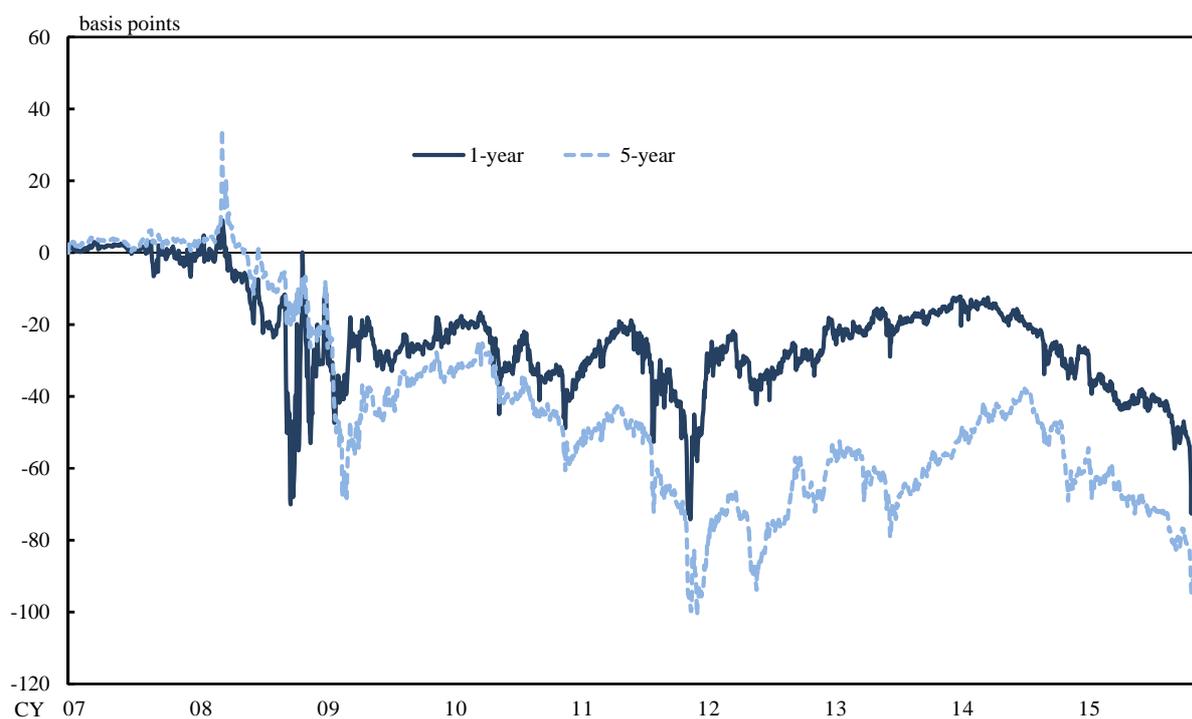
Note: Figures for the deposit reserve requirement ratio are those for large depository institutions.
Source: CEIC.

"Flash Rally" in the U.S. Treasury Market



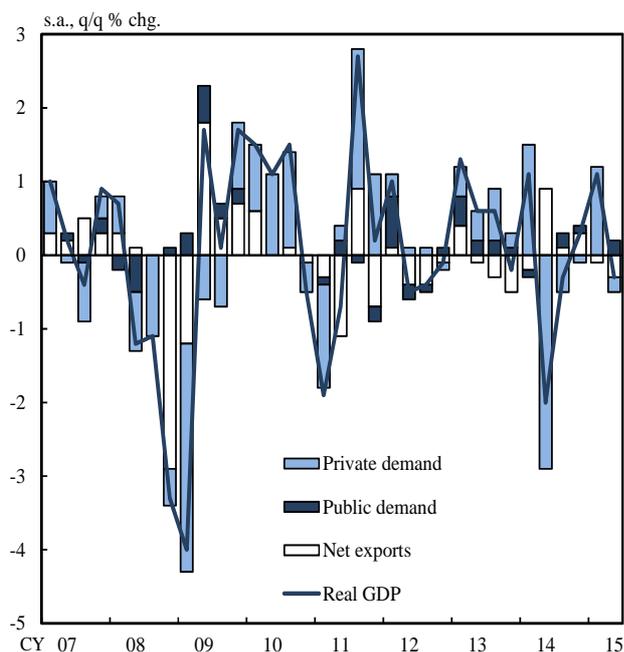
Note: Figures are those for the U.S. 10-year Treasury yield on October 15, 2014.
Source: Bloomberg.

Yen-Dollar Basis Swap Spread



Source: Bloomberg.

Japan's Economy: Real GDP

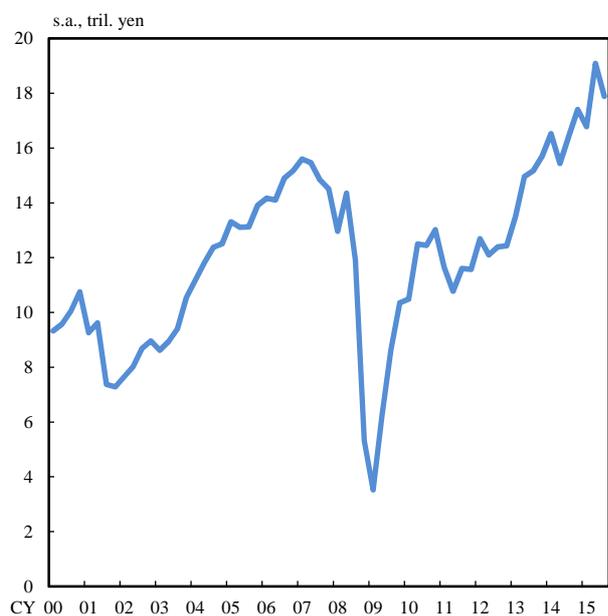


		2014			2015		
		Q2	Q3	Q4	Q1	Q2	Q3
Real GDP	a	-2.0	-0.3	0.3	1.1	-0.2	-0.2
Inventories	b	1.2	-0.5	-0.3	0.5	0.3	-0.5
Imports	c	0.9	-0.2	-0.2	-0.4	0.6	-0.4
Final demand	$d = a - b - c$	-4.1	0.4	0.8	1.0	-1.1	0.7
Real GDP	e	-2.0	-0.3	0.3	1.1	-0.2	-0.2
Trading gains/losses	f	0.5	-0.2	0.1	0.9	0.4	-0.1
Real GDI	$g = e + f$	-1.6	-0.5	0.4	2.2	0.2	-0.3
Income from/to the rest of the world	h	0.2	0.5	1.0	-0.9	0.5	-0.1
Real GNI	$i = g + h$	-1.3	0.0	1.4	1.2	0.7	-0.4

		y/y % chg.					
Real GDP		-0.4	-1.4	-0.9	-0.8	1.0	1.0
Real GDI		-0.9	-2.0	-1.1	0.5	2.3	2.6
Real GNI		-1.3	-1.5	0.1	1.5	3.3	3.1

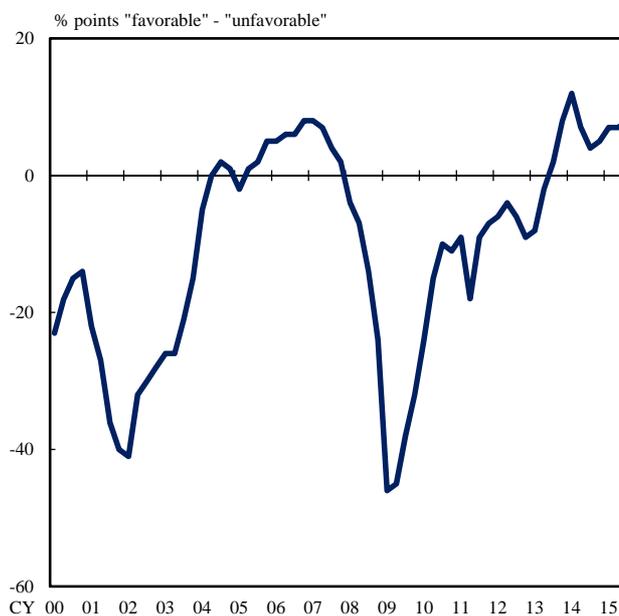
Corporate Profits and Business Conditions DI (*Tankan*)

(1) Current Profits



Note: Figures are those for all industries and enterprises (excluding the finance and insurance industry).
Source: Ministry of Finance.

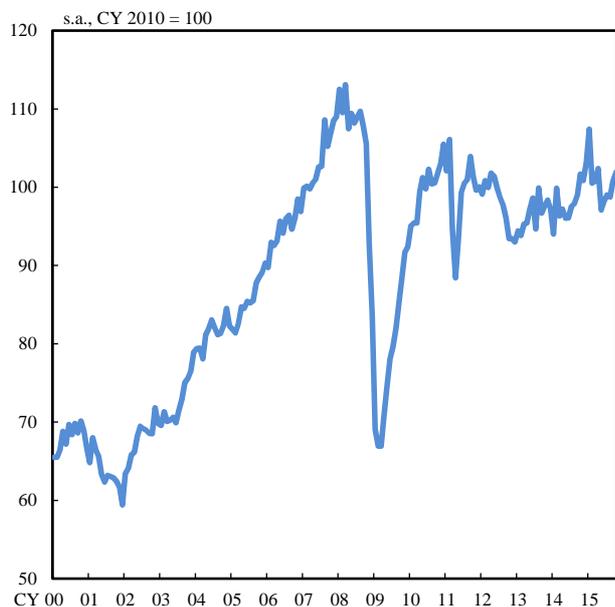
(2) Business Conditions DI (*Tankan*)



Note: Figures are those for all industries and enterprises.
Source: Bank of Japan.

Exports and Production

(1) Real Exports

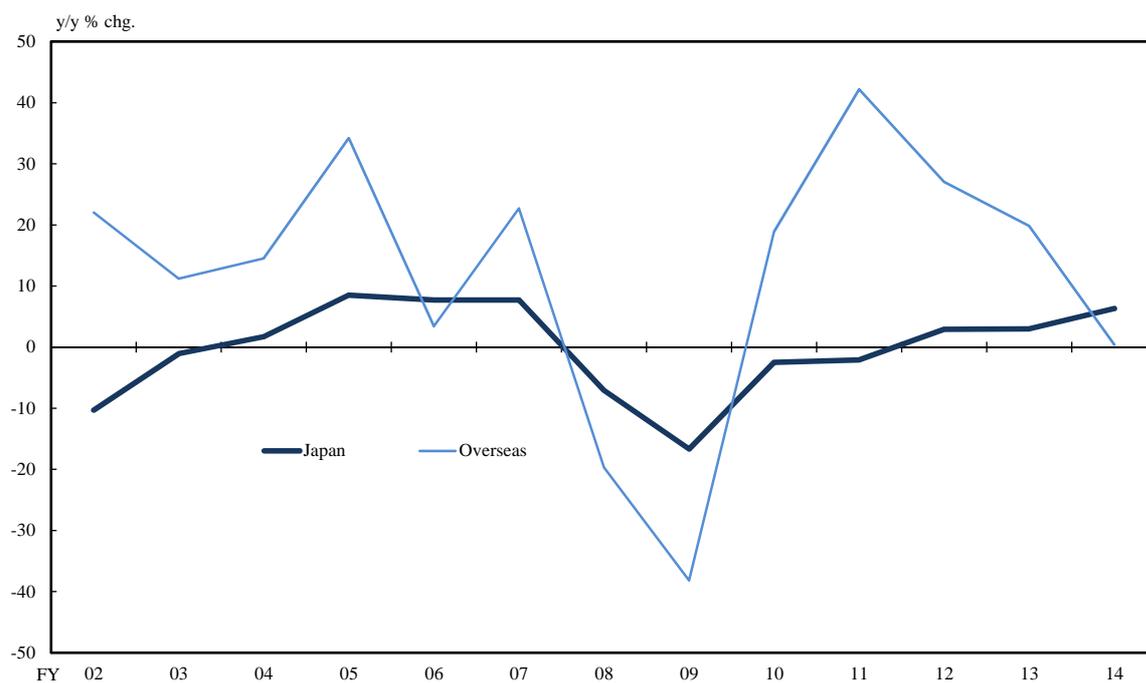


(2) Industrial Production



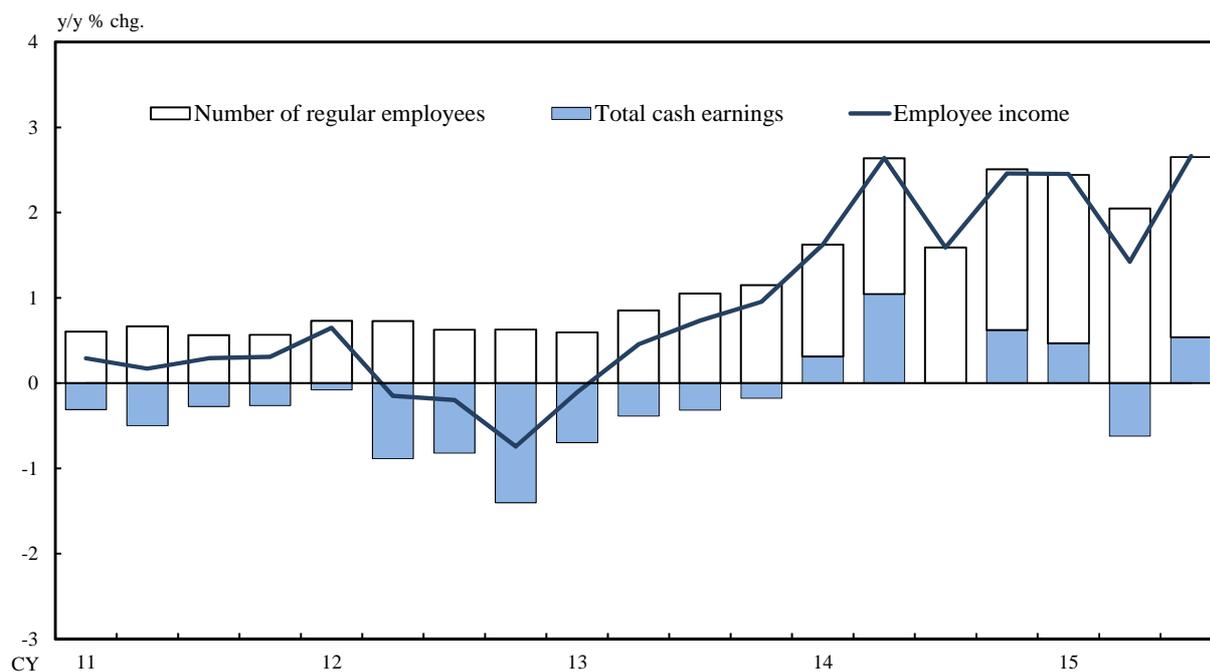
Sources: Ministry of Finance; Bank of Japan; Ministry of Economy, Trade and Industry.

Business Fixed Investment in Japan and Overseas



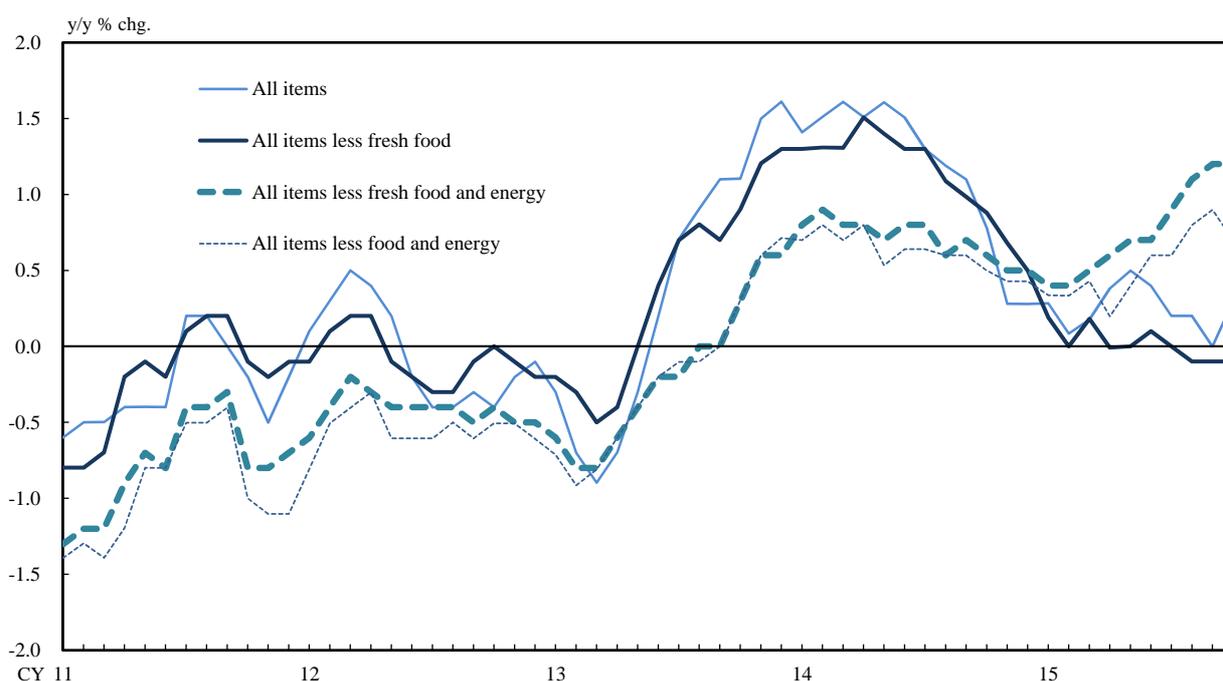
Source: Development Bank of Japan.

Employee Income



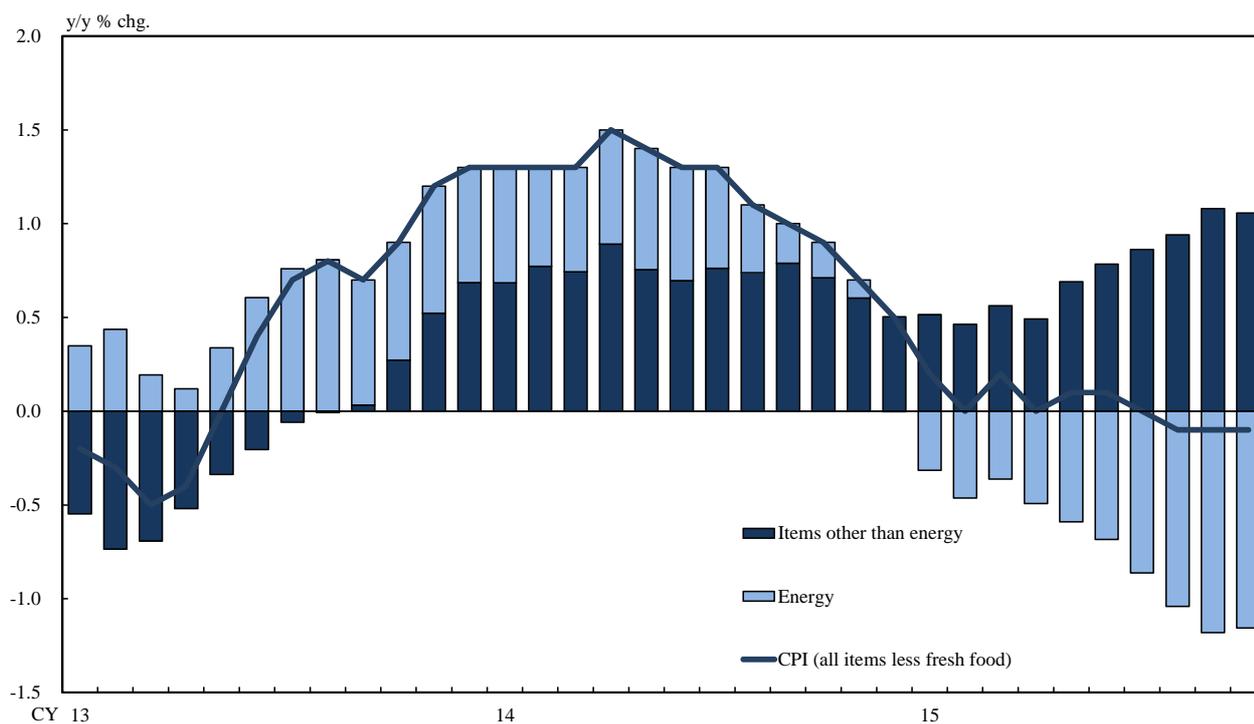
Notes: 1. Q1 = March-May, Q2 = June-August, Q3 = September-November, Q4 = December-February.
 2. Employee income is calculated as the "number of regular employees" times "total cash earnings." Figures are those for establishments with at least five employees.
 Source: Ministry of Health, Labour and Welfare.

Consumer Prices



Note: Figures from April 2014 onward are estimated by adjusting the direct effects of the consumption tax hike.
 Source: Ministry of Internal Affairs and Communications.

Consumer Prices (Continued)



Note: Figures from April 2014 onward are estimated by adjusting the direct effects of the consumption tax hike.
Source: Ministry of Internal Affairs and Communications.

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"Outlook for Economic Activity and Prices" (October 2015)

Forecasts of the Majority of Policy Board Members

	Real GDP	CPI (all items less fresh food)	
			Excluding the effects of the consumption tax hikes
Fiscal 2015	+0.8 to +1.4 [+1.2]	0.0 to +0.4 [+0.1]	
Forecasts made in July 2015	+1.5 to +1.9 [+1.7]	+0.3 to +1.0 [+0.7]	
Fiscal 2016	+1.2 to +1.6 [+1.4]	+0.8 to +1.5 [+1.4]	
Forecasts made in July 2015	+1.5 to +1.7 [+1.5]	+1.2 to +2.1 [+1.9]	
Fiscal 2017	+0.1 to +0.5 [+0.3]	+2.5 to +3.4 [+3.1]	+1.2 to +2.1 [+1.8]
Forecasts made in July 2015	+0.1 to +0.5 [+0.2]	+2.7 to +3.4 [+3.1]	+1.4 to +2.1 [+1.8]

Notes: 1. Figures in brackets indicate the median of the Policy Board members' forecasts (point estimates).

2. Dubai crude oil prices are expected to rise moderately from the recent 50 U.S. dollars per barrel to the range of 60-65 dollars per barrel toward the end of the projection period. Under this assumption, the contribution of energy items to the year-on-year rate of change in the CPI (all items less fresh food) is estimated to be around minus 0.9 percentage point for fiscal 2015, and around minus 0.2 percentage point for fiscal 2016. More specifically, this negative contribution is expected to lessen from the turn of 2016, and in the second half of fiscal 2016, the contribution is estimated to be around 0 percentage point.

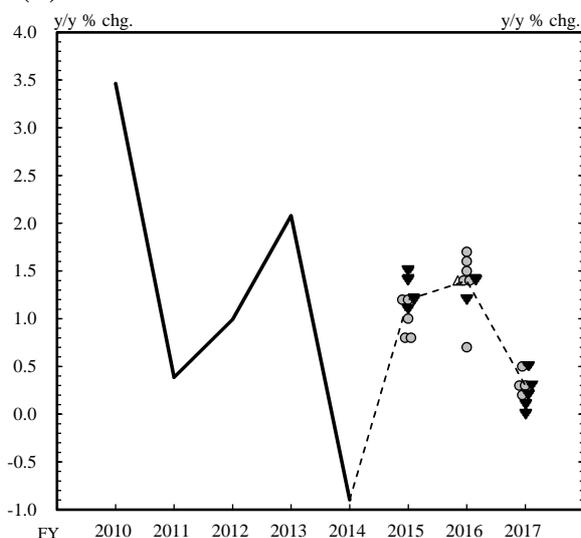
Source: Bank of Japan.

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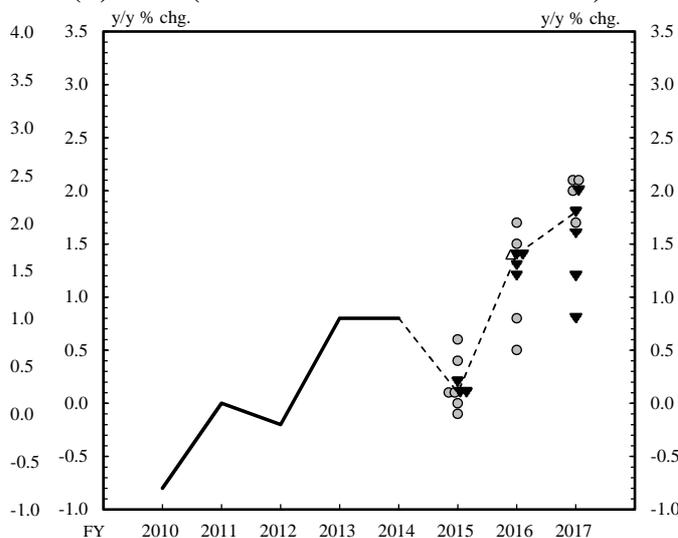
"Outlook for Economic Activity and Prices" (Continued) (October 2015)

Policy Board Members' Forecasts and Risk Assessments

(1) Real GDP

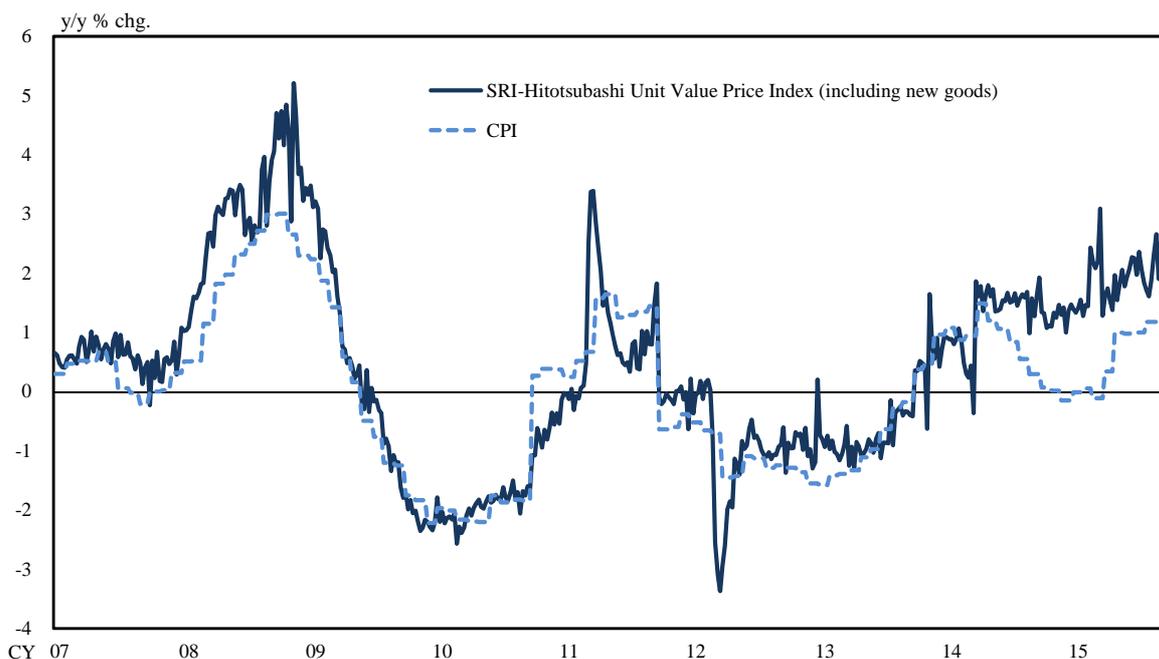


(2) CPI (All Items Less Fresh Food)



Notes: 1. Solid lines show actual figures, while dotted lines show the medians of the Policy Board members' forecasts (point estimates).
 2. The locations of ○, △, and ▼ in the charts indicate the figures for each Policy Board member's forecasts to which he or she attaches the highest probability. The risk balance assessed by each Policy Board member is shown by the following shapes: ○ indicates that a member assesses "upside and downside risks as being generally balanced," △ indicates that a member assesses "risks are skewed to the upside," and ▼ indicates that a member assesses "risks are skewed to the downside."
 3. Figures for the CPI exclude the direct effects of the consumption tax hikes.
 Source: Bank of Japan.

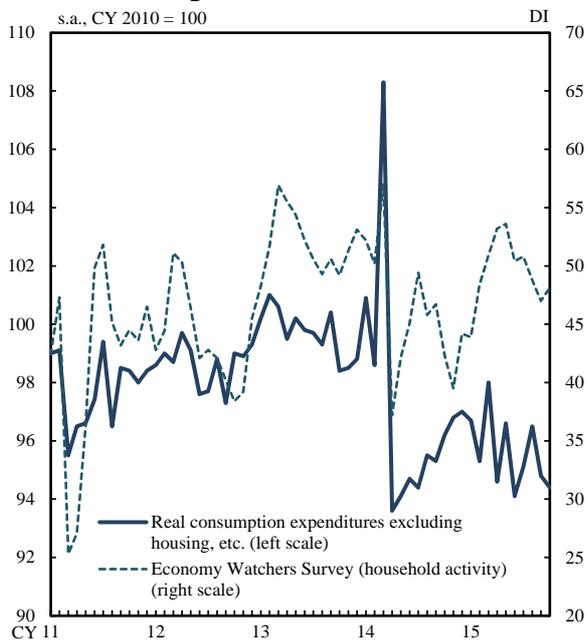
SRI-Hitotsubashi Unit Value Price Index (Comparison of the Unit Value Price Index Including New Goods and the CPI)



Note: Figures are those for supermarkets. The CPI is calculated based on the same items covered by the SRI-Hitotsubashi Unit Value Price Index. For details, see Naohito Abe, "Saikin no Kakaku Shisuu no Doukou to Shin Shohin no Eikyo ni tsuite (Recent Developments in Price Indexes and Effects of New Goods)," Newsletter No. 3, the Research Center for Economic and Social Risks (RCESR), Institute of Economic Research, Hitotsubashi University, March 2015 (available only in Japanese), and Naohito Abe *et al.*, "Effects of New Goods and Product Turnover on Price Indexes," RCESR Discussion Paper Series No. DP15-2, March 2015.
 Sources: Hitotsubashi University; New Supermarket Association of Japan; Intage Inc.

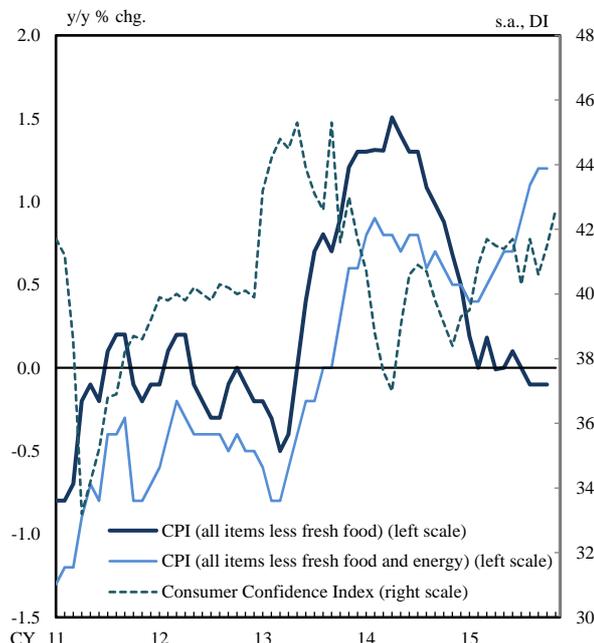
Consumer Confidence in Relation to Private Consumption and Prices

(1) Consumer Confidence and Private Consumption



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

(2) Consumer Confidence and Prices

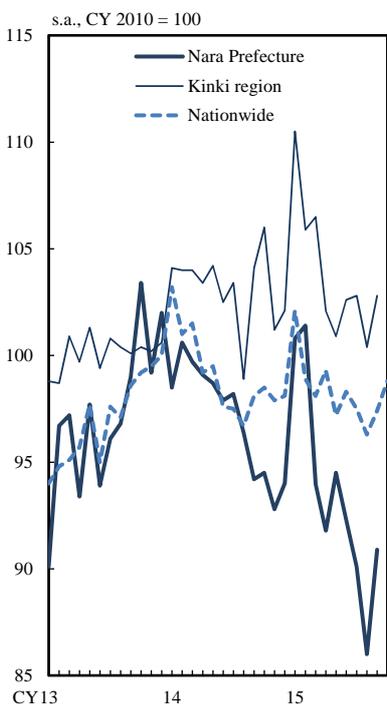


Note: Figures from April 2014 onward are estimated by adjusting the direct effects of the consumption tax hike.

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

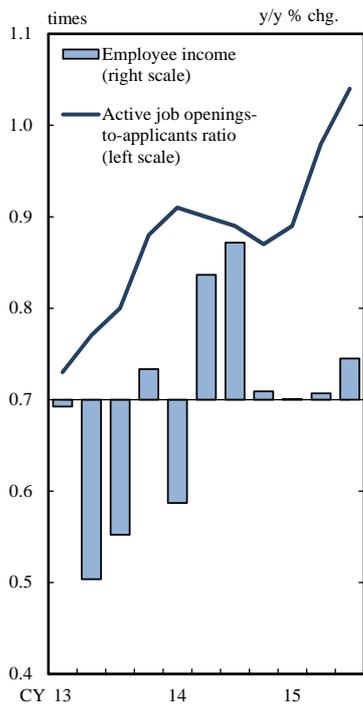
Economic Activity in Nara Prefecture

(1) Industrial Production

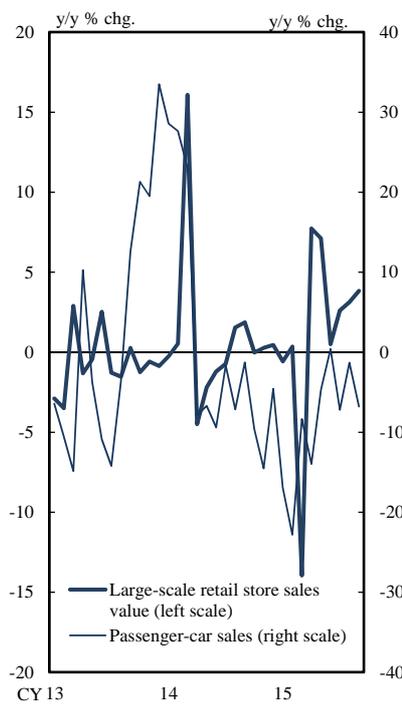


Sources: Ministry of Economy, Trade and Industry; Ministry of Health, Labour and Welfare; Japan Automobile Dealers Association; Japan Light Motor Vehicle and Motorcycle Association.

(2) Employment

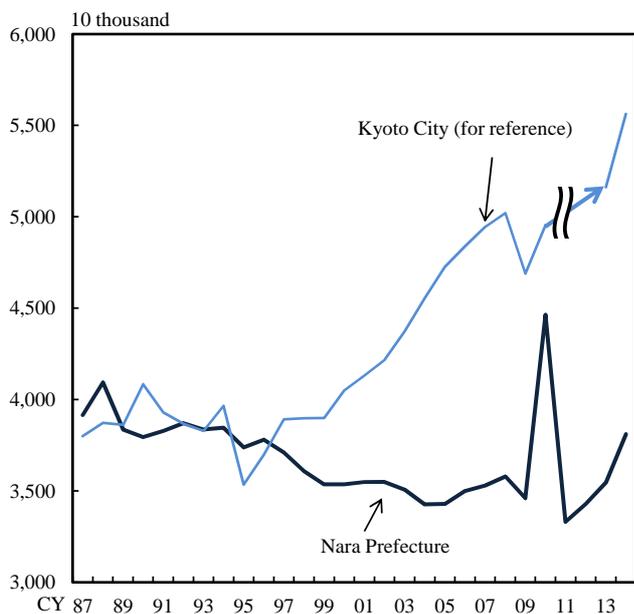


(3) Consumption

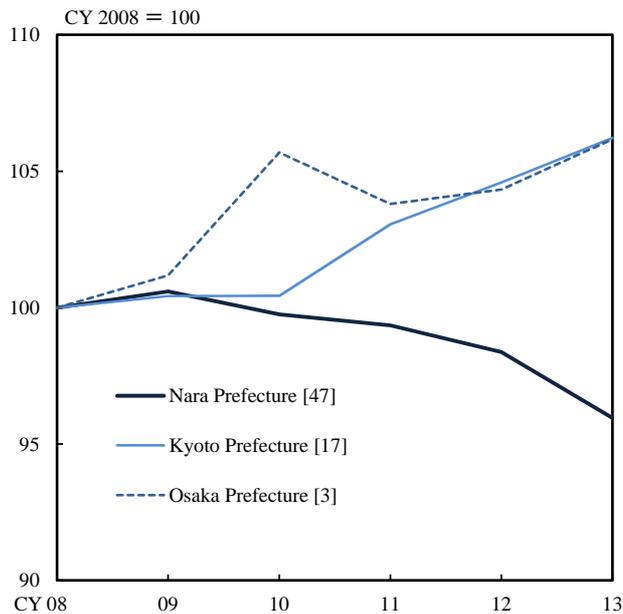


Economic Activity in Nara Prefecture (Continued)

(1) Number of Visitors



(2) Number of Hotel Rooms



Notes: 1. There are no figures for Kyoto City as of 2011 and 2012 on "Number of visitors" because surveys were not conducted.

2. Figures in brackets on "Number of hotel rooms" indicate the ranking by prefecture.

Sources: Japan Tourism Agency; Nara Prefecture; Kyoto City; Ministry of Health, Labour and Welfare.