Daiwa Institute of Research

17 March 2014 (No. of pages: 61)

Japanese report: 21 Feb 2014

Japan's Economic Outlook No. 180

In this report we examine four major issues facing Japan's economy: (1) The need to increase wages, (2) BOJ's price stability target, (3) The current account deficit, and (4) Economic disparity

Japan to see real GDP growth of +2.3% in FY13, +1.0% in FY14, and +1.5% in FY15, with nominal GDP growth of +2.0%, +2.7%, and +2.5%

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Main Points

- **Main economic scenario for Japan:** In light of the first preliminary Oct-Dec GDP release (Cabinet Office), we have revised our economic growth outlook. We now forecast real GDP growth of +2.3% y/y for FY13 (previous forecast: +2.5%) and +1.0% for FY14 (+1.0%). Our new outlook for FY15 is +1.5%. Japan's economy is expected to continue expanding in the future for the following reasons: (1) Firming up of exports due to US economic recovery, (2) Ongoing depreciation of the yen and stock price highs in response to BOJ's monetary easing, and (3) Effects of government's economic policy accompanying consumption tax hike.

- **Four major issues facing Japan's economy:** In this report we examine four major issues facing Japan's economy: (1) The need to increase wages, (2) BOJ's price stability target, (3) The current account deficit, and (4) Economic disparity.

- **Issue (1) The need to increase wages:** Will the government's attempt to increase wages as a means of stimulating a virtuous circle work? First, an international comparison of real wages demonstrates that wages are stagnating in Japan not because labor's share is low, but because there are issues involving labor productivity and corporate competitiveness. Thus the key is to increase labor productivity and improve corporate competitiveness by strengthening the third arrow of Abenomics (growth strategy) in order to raise real wages in Japan. Second, increasing wages promises to have a pump-priming effect. In particular, higher regular payments will invigorate personal consumption, centering on durable goods. Companies are

encouraged to initiate wage increases on the early side if possible to avoid the "fallacy of composition". Third, a simulation of the future direction of wages reveals that wages are likely to gradually trend upward as the economy undergoes a cyclical recovery.

- **Issue (2) BOJ's price stability target:** Chances that the BOJ will reach its target of a 2% rise in prices have gradually improved since new governor Kuroda took office. However, this will still depend in part on trends in exchange rates, wages, and the expected inflation rate. And while the possibilities that the BOJ will reach its target cannot be discounted, our current main scenario does not expect the rate of increase in consumer price index to reach the 2% mark. We expect additional monetary easing measures by the BOJ to carry over beyond the 2014 Jul-Sep period.

- **Issue (3) The current account deficit:** Japan's current account balance should be able to eventually achieve a cyclical recovery and shake off the deficits which seem to have become entrenched in recent years. According to our calculations, the balance of trade has worsened by 7 tril yen in 2013 due to the hollowing-out effect, and then another 4 tril due to the shutdown of nuclear power plants. Considering these structural changes, it is impossible to expect the current account balance to recover to the tune of 10 tril yen in the black anytime soon. However, the trade deficit is expected to shrink somewhat on a cyclical basis and finally shake off its worst phase backed by a US-led worldwide economic recovery and further progress in the weakening of the yen. The main reason Japan's exports have been stagnant is the economic downturn overseas, and it is too soon to declare the J-curve effect a thing of the past.

- **Issue (4) Economic disparity:** The margin of recovery has widened recently for Japan's economy, and it appears that economic disparity should narrow a bit on a cyclical basis. The current economic recovery is being led by domestic demand such as public works spending and is a factor guarding against any further widening of disparity. The government must continue to strengthen the virtuous circle of domestic demand in order to ensure that economic disparity does not widen further.

- **Four risk factors facing Japan's economy:** Risks that will need to be kept in mind regarding the Japanese economy are: (1) turbulence in emerging economies, (2) China's shadow banking problem, (3) a reigniting of the European sovereign debt crisis, and (4) a surge in crude oil prices stemming from geopolitical risk.

Our assumptions

- Public works spending will grow +18.1% in FY13 and fall back to –3.0% in FY14, then decline again by -10.3% in FY15. The consumption tax rate hike is scheduled for April 2014 with yet another hike in October 2015.

- Average exchange rate of Y100.0/$ in FY13, Y100.0/$ in FY14, and Y100.0/$ in FY15.

- US real GDP growth of +2.7% in CY14 and +3.1% in CY15.

Main Economic Indicators and Real GDP Components

Japan's Economic Outlook No. 180

	FY13 (Estimate)	FY14 (Estimate)	FY15 (Estimate)	CY13 (Actual)	CY14 (Estimate)	CY15 (Estimate)
Main economic indicators						
Nominal GDP (y/y %)	2.0	2.7	2.5	1.0	2.8	2.6
Real GDP (chained [2005]; y/y %)	2.3	1.0	1.5	1.6	1.5	1.6
Domestic demand (contribution, % pt)	2.6	0.8	1.0	1.9	2.0	1.1
Foreign demand (contribution, % pt)	-0.3	0.2	0.6	-0.3	-0.5	0.5
GDP deflator (y/y %)	-0.3	1.6	1.0	-0.6	1.2	1.0
Index of All-industry Activity (y/y %)*	1.8	1.2	2.0	0.7	1.9	1.8
Index of Industrial Production (y/y %)	3.1	4.3	6.3	-0.9	5.6	5.8
Index of Tertiary Industry Activity (y/y %)	1.0	0.3	0.9	0.6	0.6	0.8
Corporate Goods Price Index (y/y %)	1.8	3.4	2.1	1.3	3.1	2.2
Consumer Price Index (excl. fresh food; y/y %)	0.8	3.0	1.5	0.4	2.6	1.7
Unemployment rate (%)	4.0	3.8	3.7	4.0	3.8	3.7
Government bond yield (10 year; %)	0.69	0.70	0.89	0.74	0.67	0.84
Money stock; M2 (end-period; y/y %)	3.8	4.0	4.3	3.6	4.0	4.2
Balance of payments						
Trade balance (Y tril)	-12.0	-13.3	-11.8	-10.6	-14.1	-12.1
Current balance ($100 mil)	206	199	602	339	46	504
Current balance (Y tril)	2.0	2.0	6.0	3.3	0.5	5.0
(% of nominal GDP)	0.4	0.4	1.2	0.7	0.1	1.0
Real GDP components (Chained [2005]; y/y %; figures in parentheses: contribution, % pt)						
Private final consumption	2.3 (1.4)	-0.2 (-0.1)	1.0 (0.6)	2.0 (1.2)	0.9 (0.5)	0.7 (0.4)
Private housing investment	9.3 (0.2)	-1.2 (-0.0)	-1.4 (-0.0)	8.9 (0.3)	2.5 (0.1)	0.2 (0.0)
Private fixed investment	1.0 (0.1)	5.2 (0.7)	5.0 (0.7)	-1.4 (-0.2)	5.3 (0.7)	5.0 (0.7)
Government final consumption	2.2 (0.4)	1.5 (0.3)	1.0 (0.2)	2.1 (0.4)	1.6 (0.3)	1.1 (0.2)
Public fixed investment	16.1 (0.6)	-4.4 (-0.2)	-11.4 (-0.5)	11.4 (0.5)	1.8 (0.1)	-10.2 (-0.5)
Exports of goods and services	3.5 (0.6)	5.9 (0.9)	8.3 (1.4)	1.6 (0.2)	5.0 (0.8)	8.0 (1.4)
Imports of goods and services	5.8 (-0.8)	4.8 (-0.7)	5.2 (-0.8)	3.4 (-0.6)	6.7 (-1.3)	4.3 (-0.9)
Major assumptions:						
1. World economy						
Economic growth of major trading partners	3.3	3.7	3.9	3.0	3.7	3.9
Crude oil price (WTI futures; $/bbl)	99.4	100.0	100.0	98.0	100.0	100.0
2. US economy						
US real GDP (chained [2009]; y/y %)	2.3	2.7	3.1	1.9	2.7	3.1
US Consumer Price Index (y/y %)	1.4	1.8	2.1	1.5	1.7	2.0
3. Japanese economy						
Nominal public fixed investment (y/y %)	18.1	-3.0	-10.3	12.8	3.4	-9.1
Exchange rate (Y/$)	100.0	100.0	100.0	97.6	100.5	100.0
(Y/€)	135.1	140.0	140.0	130.6	140.0	140.0
Call rate (end-period; %)	0.10	0.10	0.10	0.10	0.10	0.10

Source: Compiled by DIR.
Note: Due to rounding, actual figures may differ from those released by the government.
* Excl. agriculture, forestry, and fisheries.
Estimate: DIR estimate.

Comparison with Previous Outlook

	Current outlook (Outlook 180)			Current outlook (Outlook 179 Update)		Difference between previous and current outlooks	
	FY13	FY14	FY15	FY13	FY14	FY13	FY14
Main economic indicators							
Nominal GDP (y/y %)	2.0	2.7	2.5	2.3	2.6	-0.3	0.1
Real GDP (chained [2005]; y/y %)	2.3	1.0	1.5	2.5	1.0	-0.2	0.0
Domestic demand (contribution, % pt)	2.6	0.8	1.0	2.5	0.3	0.1	0.5
Foreign demand (contribution, % pt)	-0.3	0.2	0.6	0.0	0.6	-0.3	-0.4
GDP deflator (y/y %)	-0.3	1.6	1.0	-0.2	1.6	-0.1	0.0
Index of All-industry Activity (y/y %)*	1.8	1.2	2.0	2.2	2.4	-0.4	-1.1
Index of Industrial Production (y/y %)	3.1	4.3	6.3	3.3	5.2	-0.2	-0.9
Index of Tertiary Industry Activity (y/y %)	1.0	0.3	0.9	1.6	1.6	-0.5	-1.3
Corporate Goods Price Index (y/y %)	1.8	3.4	2.1	1.8	3.8	0.0	-0.3
Consumer Price Index (excl. fresh food; y/y %)	0.8	3.0	1.5	0.6	2.9	0.2	0.2
Unemployment rate (%)	4.0	3.8	3.7	4.0	3.8	-0.0	-0.0
Government bond yield (10 year; %)	0.69	0.70	0.89	0.76	0.93	-0.07	-0.23
Money stock; M2 (end-period; y/y %)	3.8	4.0	4.3	3.7	4.0	0.1	0.0
Balance of payments							
Trade balance (Y tril)	-12.0	-13.3	-11.8	-10.3	-8.4	-1.7	-5.0
Current balance ($100 mil)	206	199	602	426	802	-220	-603
Current balance (Y tril)	2.0	2.0	6.0	4.2	8.0	-2.2	-6.0
(% of nominal GDP)	0.4	0.4	1.2	0.9	1.6	-0.5	-1.2
Real GDP components (chained [2005]; y/y %)							
Private final consumption	2.3	-0.2	1.0	2.4	-0.5	-0.1	0.3
Private housing investment	9.3	-1.2	-1.4	8.1	-2.6	1.2	1.4
Private fixed investment	1.0	5.2	5.0	0.7	4.8	0.4	0.4
Government final consumption	2.2	1.5	1.0	2.0	1.1	0.1	0.5
Public fixed investment	16.1	-4.4	-11.4	14.1	-5.8	2.0	1.5
Exports of goods and services	3.5	5.9	8.3	4.1	7.4	-0.6	-1.5
Imports of goods and services	5.8	4.8	5.2	4.4	3.8	1.4	0.9
Major assumptions:							
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Economic growth of major trading partners	3.3	3.7	3.9	3.2	3.6	0.1	0.1
Crude oil price (WTI futures; $/bbl)	99.4	100.0	100.0	100.0	100.0	-0.6	0.0
2. US economy							
US real GDP (chained [2009]; y/y %)	2.3	2.7	3.1	2.1	2.6	0.2	0.1
US Consumer Price Index (y/y %)	1.4	1.8	2.1	1.5	2.0	-0.1	-0.2
3. Japanese economy							
Nominal public fixed investment (y/y %)	18.1	-3.0	-10.3	15.9	-4.6	2.2	1.5
Exchange rate (Y/$)	100.0	100.0	100.0	99.4	100.0	0.6	0.0
(Y/€)	135.1	140.0	140.0	132.6	135.0	2.5	5.0
Call rate (end-period; %)	0.10	0.10	0.10	0.10	0.10	0.00	0.00

Source: Compiled by DIR.
Notes: Due to rounding, differences do not necessarily conform to calculations based on figures shown.
* Excl. agriculture, forestry, and fisheries.

Contents

Summary

Main Economic scenario for Japan

In light of the first preliminary Oct-Dec GDP release (Cabinet Office), we have revised our economic growth outlook. We now forecast real GDP growth of +2.3% y/y for FY13 (previous forecast: +2.5%) and +1.0% for FY14 (+1.0%). Our new outlook for FY15 is +1.5%.

Oct-Dec 2013 First Preliminary GDP growth rate up 1.0%

The GDP growth rate for the Oct-Dec 2013 period was up by 1.0% q/q annualized (+0.3% q/q), thereby achieving positive growth for the fourth consecutive quarter. However, it fell well below market consensus (up 2.8% q/q annualized and up 0.7% q/q). This was due mainly to personal consumption, which had been expected to achieve major growth but ended up falling below the market outlook. However, all demand components except for private inventories saw q/q growth, so overall, results were not bad. Contributions from domestic and foreign demand sectors saw domestic demand up 0.8 % pt, bringing in positive contribution for the fifth quarter in a row, while foreign demand fell for the second consecutive quarter by 0.5 % pt q/q. The degree of contribution from foreign demand fell due to major growth in imports associated with expanding domestic demand.

Performance by demand component shows personal consumption up 0.5% q/q, its fifth consecutive quarter of growth. Performance by type of goods was as follows. Non-durables fell for the second consecutive quarter, while performance of semi-durable goods was flat in comparison to the previous quarter. Meanwhile, durables recorded major growth at +4.0% q/q, pushing up figures for personal consumption overall. This is thought to be due mainly to certain goods, such as automobiles and so on, which experienced last minute demand associated with the upcoming consumption tax hike. Meanwhile, real employee compensation grew 0.1% q/q, exhibiting its first period of growth in two quarters. Improvements in the income environment also appear to have contributed to growth in personal consumption.

Housing investment grew for the seventh consecutive quarter at +4.2% q/q. Housing is maintaining steady growth supported by a positive environment afforded by low interest rates and the general background of recovery demand. In addition, there was last minute demand ahead of the tax hike which is to take effect in April 2014 (growth began to accelerate during the quarter prior to its taking effect).

Capex grew for the third consecutive quarter at +1.3% q/q. The margin of growth was on the small side, but it confirms that there is gradual improvement in corporate willingness to carry out capex. The growth in capex is thought to be in connection with growth in sales due to the weak yen, continued improvements in corporate earnings supported by favorable domestic demand, and the gradual recovery of capacity utilization in the manufacturing industry which had been suffering a downturn.

Public investment was up 2.3% q/q achieving its fifth consecutive quarter of growth. It appears that the growth rate has slowed since the Jul-Sep period in which major gains were recorded due to the implementation of the 2012 supplementary budget. However, public investment is continuing at a high level.

Exports recorded growth of 0.4% q/q. Exports to the US and Europe reflected a weak tone and brought down overall performance to a small margin of growth, but exports to Asia grew, winning overall figures their first increase in two quarters. As for imports, the fourth consecutive quarter of growth was won due to favorable domestic demand bringing q/q growth of 3.5%. As a result of the major increase in imports, the extent of contribution from foreign demand (net exports) posted negative figures for the second quarter in a row, falling by 0.5 % pt.

The GDP deflator was up by 0.1% q/q, winning its first increase in two quarters though it was actually down by 0.4% on a y/y basis. It was in a decline for seventeen consecutive quarters. As for individual GDP components, personal consumption, housing investment, capex, and public investment deflators all won q/q growth, while the domestic demand deflator recorded q/q growth of 0.3% increasing its margin of growth in comparison to the last quarter. Nominal GDP grew by +1.6% q/q annualized (+0.4% q/q), thereby winning its fifth consecutive quarter of growth.

Main scenario: Japan's economy to continue growing

After hitting bottom in November 2012, Japan's economy has entered a recovery phase. We believe it will continue to expand steadily. Economic policies of the Abe administration (so-called "Abenomics") represent an appropriate set of policies with the potential of jump-starting the revival of the Japanese economy, and monetary policies in particular are yielding marked results. We believe Japan's economy will continue to expand steadily supported by (1) increases in exports backed by the US economic recovery, (2) ongoing depreciation of the yen and the rise in stock prices supported by the BOJ's monetary easing, and (3) economic stimulus measures to offset the effects of the consumption tax hike.

As for the outlook for the Japanese economy, the period of Jan-Mar 2014 is expected to see a major increase in the growth rate due to the effect of last minute demand on personal consumption. The Oct-Dec 2013 GDP figures have been pushed up a certain amount due to last minute demand especially in the area of housing investment and durable goods. Meanwhile, immediately before the upcoming tax hike, non-durables and semi-durables are also expected to see last minute demand, putting increasing upward pressure on growth. But then a reaction to last minute demand in the form of a downturn is thought to be inevitable, so the period of Apr-Jun 2014 will likely see a decline in real GDP. However, exports, which moved into a growth trend this time around, are expected to strengthen that trend as overseas economies, lead by the US, continue to expand, and as Japan improves its global competitiveness thanks to the weak yen. Meanwhile, increasing exports will lead to production growth and improved earnings, and this is expected to trigger more capex. This in turn should lead to an increase in wages, and could also lead to a recovery in households. We believe that the Japanese economy will be back on the growth track by the period of July-Sept 2014.

Four major issues facing Japan's economy

In this report we examine four major issues facing Japan's economy: (1) The need to increase wages, (2) BOJ's price stability target, (3) The current account deficit, and (4) Economic disparity.

Issue (1) the need to increase wages

Will the government's attempt to increase wages as a means of stimulating a virtuous circle work? First, an international comparison of real wages demonstrates that wages are stagnating in Japan not because labor's share is low, but because there are issues involving labor productivity and corporate competitiveness. Thus the key is to increase labor productivity and improve corporate competitiveness by strengthening the third arrow of Abenomics (growth strategy) in order to raise real wages in Japan. Second, increasing wages promises to have a pump-priming effect. In particular, higher regular payments will invigorate personal consumption, centering on durable goods. But in order for this to occur, companies will also need to initiate wage increases on the early side if possible to avoid the "fallacy of composition". Third, a simulation of the future direction of wages reveals that wages are likely to gradually trend upward as the economy undergoes a cyclical recovery.

Issue (2) BOJ's price stability target

Chances that the BOJ will reach its target of a 2% rise in prices have gradually improved since new governor Kuroda took office. However, this will still depend in part on trends in exchange rates, wages, and the expected inflation rate. And while the possibilities that the BOJ will reach its target cannot be discounted, our current main scenario does not expect the rate of increase in consumer price index to reach the 2% mark. We expect additional monetary easing measures by the BOJ to carry over beyond the 2014 Jul-Sep period.

Issue (3)The current account deficit

Japan's current account balance should be able to eventually achieve a cyclical recovery and shake off the deficits which seem to have become entrenched in recent years. According to our calculations, the balance of trade worsened by 7 tril yen in 2013 due to the hollowing-out effect, and then by another 4 tril due to the shutdown of nuclear power plants. Considering these structural changes, it is impossible to expect the current account balance to recover to the tune of 10 tril yen in the black anytime soon. However, the trade deficit is expected to shrink somewhat on a cyclical basis and finally shake off its worst phase backed by a US-led worldwide economic recovery and further progress in the weakening of the yen. The main reason Japan's exports have been stagnant is the economic downturn overseas, and it is too soon to declare the J-curve effect a thing of the past.

Issue (4) Economic disparity

The margin of recovery has widened recently for Japan's economy, and it appears that Economic disparity should narrow a bit on a cyclical basis. The current economic recovery is being led by domestic demand such as public works spending and is a factor guarding against any further widening of the gap. The government must continue to strengthen the virtuous circle of domestic demand in order to ensure that Economic disparity does not widen further.

Four risk factors facing Japan's economy

Risks that will need to be kept in mind regarding the Japanese economy are: (1) turbulence in emerging economies, (2) China's shadow banking problem, (3) a reigniting of the European sovereign debt crisis, and (4) a surge in crude oil prices stemming from geopolitical risk. Of these four risks, it is worth underscoring that the first is closely related to the second and third.

Examining the world economic cycle, advanced economies led by the US drove emerging economies in the past. However, a decoupling has currently taken place—advanced economies are performing well but emerging economies are stagnating. We believe that this decoupling is occurring for three reasons: (1) the dwindling in the amount of loans from European financial institutions to emerging economies in light of the European debt crisis, (2) the sluggishness of the Chinese economy, and (3) concerns that money will be taken out of emerging economies based on worries that the Fed will implement exit measures from a quantitative easing. In the final analysis, we anticipate that the collapse of emerging economies will be avoided as the US economy continues to expand. Nevertheless, the state and the future direction of the Chinese economy will continue to require close monitoring.

1. Main economic scenario for Japan

Abenomics represents an appropriate set of economic policies in accord with global standards

In this section, we examine our main scenario for Japan's economy in light of the discussion of the previous sections. After hitting bottom in November 2012, Japan's economy has entered a recovery phase. We believe it will continue to expand steadily. Economic policies of the Abe administration (so-called "Abenomics") represent an appropriate set of policies with the potential of jump-starting the revival of the Japanese economy, and monetary policies in particular are yielding marked results. We anticipate that the economy will continue to expand, supported by (1) increases in exports based on the recovery of the US economy, (2) the ongoing depreciation of the yen and the ascent of stock prices accompanying the BOJ's monetary easing, and (3) the effect of economic stimulus measures accompanying the increase of the consumption tax.

Corporate sector rebounds

Supported in part by Abenomics, Japan's economy is on a path toward recovery. An examination of the current economic environment reveals that major economic indicators of the corporate sector have clearly turned upward.

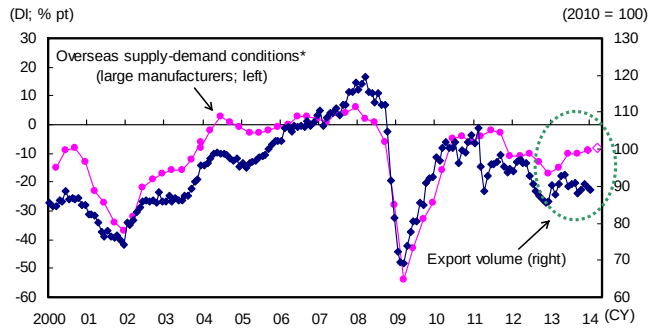
First, as indicated in Chart 1, the diffusion index for overseas supply and demand conditions for products (large manufacturers) in the BOJ Tankan survey of corporate sentiment, which displays a close relationship with Japan's export volume index, is improving.

Second, Japan's economy has rebounded sharply in terms of the inventory cycle. As shown in Chart 2, where the y/y change in shipments is plotted along the vertical axis and inventories along the horizontal axis, the y/y change in shipments has turned positive.

Third, as is shown in Chart 3, though somewhat belated, it is very likely that capex has hit bottom.

Overseas Supply and Demand Conditions vs. Export Volume

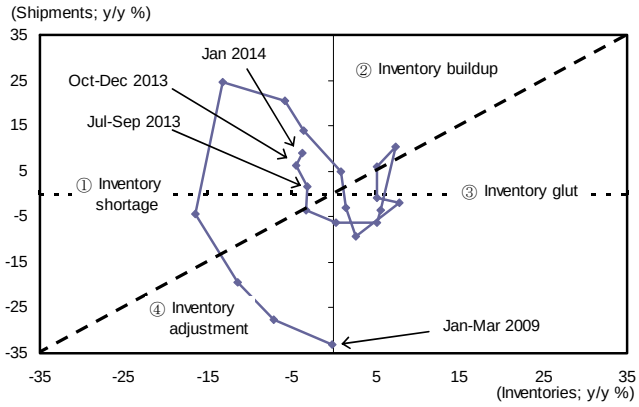
Chart 1



Source: Bank of Japan (BOJ), Cabinet Office; compiled by DIR.
*BOJ Tankan survey of corporate sentiment; "excess demand" minus "excess supply"; latest quarter=forecast.

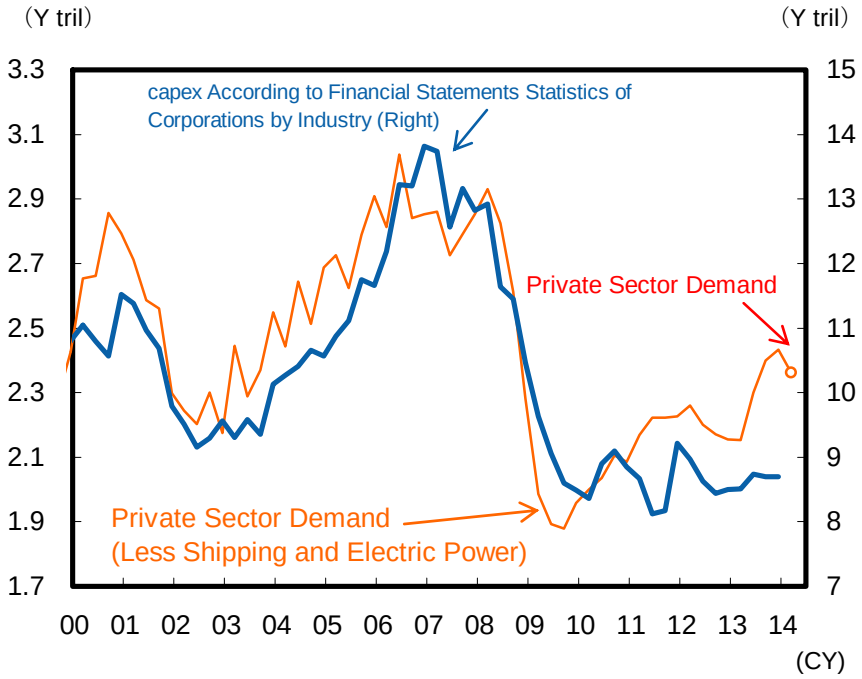
Inventory-shipment Cycle

Chart 2



Source: Ministry of Economy, Trade, and Industry; compiled by DIR.

Machinery Orders (Less Shipping and Private Sector Electric Power) and capex According to Financial Statements Statistics of Corporations by Industry **Chart 3**



Source: Cabinet Office (CAO), Ministry of Finance
Note: Figures are on a quarterly basis.

Foreign economies to recover centering on the US

The greatest factor that will support Japan's economy going forward is the prospect that foreign economies will recover centering on the US. Chart 4 portrays the trend of Japanese exports by trading partner. OECD Composite Leading Indicators (CLIs) for respective partners tend to lead the volume of Japanese exports to the corresponding region by two to three months. OECD CLIs of the US and Europe are currently bottoming out, a positive development for Japan.

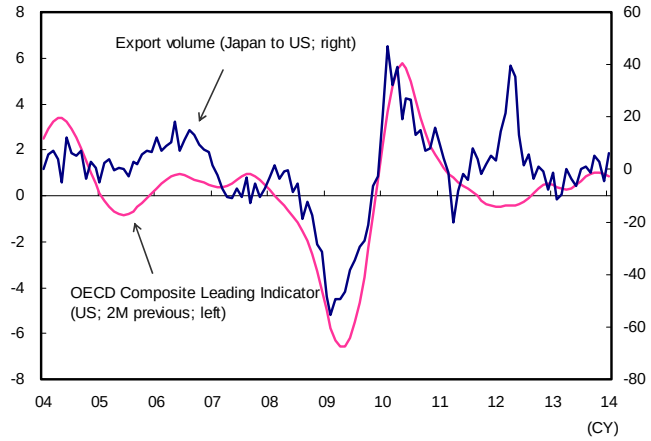
A bird's eye view of the current world economic environment shows the advanced nations performing favorably while the emerging nations are in a downturn. This means that decoupling is occurring between these economies.

Regarding the direction of the world economy, which forms the premise of our current forecast, we assume that (1) the US economy will steadily recover and drive the growth of the world economy, (2) Eurozone economies will stagnate from the sovereign debt crisis while having put the worst behind, and (3) China's economy will avoid a bottom deepening, supported for the time being by the effects of fiscal and monetary measures.

In conclusion, it is the advanced economies with the US at their helm which will determine the course of events for the world economy. We see the world economy gradually expanding in 2014, pulled along by the US.

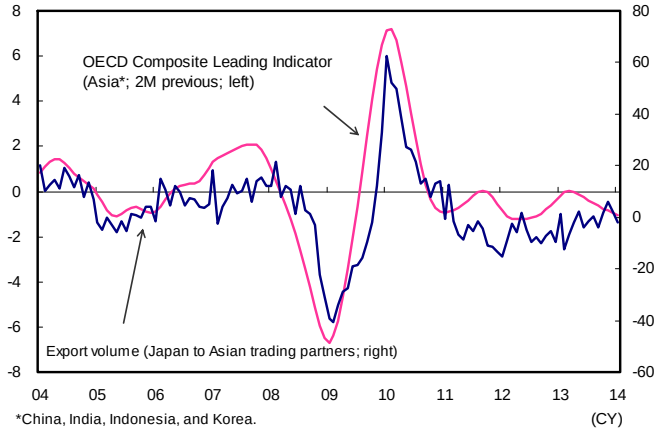
Japan's Exports by Trading Partner — Chart 4

US Economy and Japan's Exports *(y/y %)*



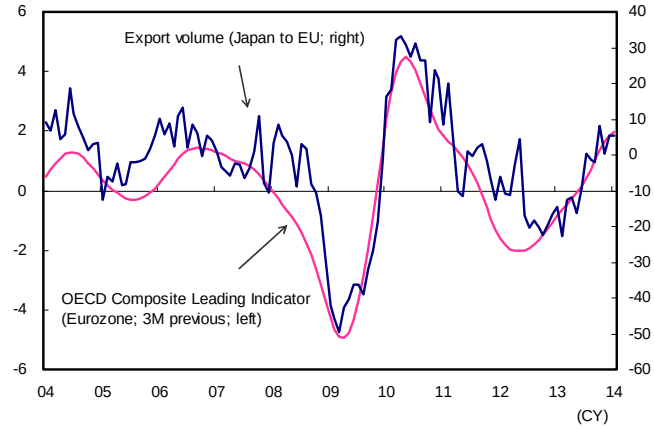
Source: OECD, Ministry of Finance; compiled by DIR.

Asian Economy and Japan's Exports *(y/y %)*



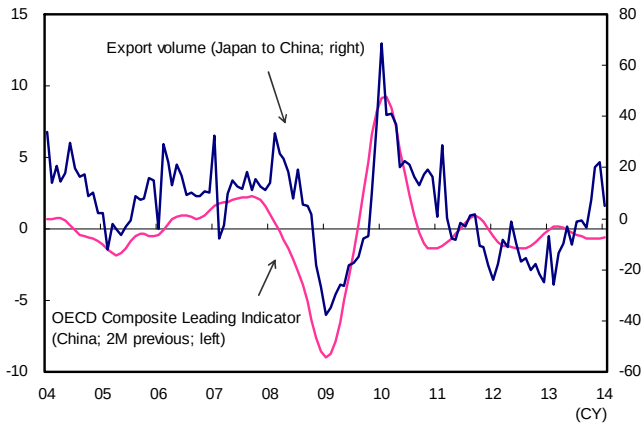
Source: OECD, Ministry of Finance; compiled by DIR.

EU Economy and Japan's Exports *(y/y %)*



Source: OECD, Ministry of Finance; compiled by DIR.

Chinese Economy and Japan's Exports *(y/y %)*



Source: OECD, Ministry of Finance; compiled by DIR.

Last minute demand has already appeared in the area of automobiles and housing

The major factor influencing the economy in the immediate future is the consumption tax hike which goes into effect in April 2014. Here we examine a phenomenon which is expected to arrive before the actual tax hike takes place, that of last minute demand.

One of the areas where obvious last minute demand can already be seen is that of automobiles. Unit sales of new automobiles are maintaining a level exceeding that experienced the last time there was a tax hike (April 1997). The number of new cars sold is around the same level as occurred as a result of last minute demand in August 2010 when sales rose dramatically just before government subsidies for eco-friendly car purchases came to an end. Therefore it is not an overstatement to say that last minute demand is already manifest in the area of automobiles. Automobile sales are expected to maintain their current level until March this year, then are likely to fall dramatically in April and beyond.

Last minute demand has also been observed in other areas. Housing is one of these. In this case, the requirement is that contracts must be signed by September 2013, while move-in must take place by the end of March 2014. Because of these parameters, condominium sales grew dramatically in September 2013 and then declined in October. Even so, the reactionary decline experienced at that time was slight in comparison to the last time a tax hike was enforced. Looking at housing starts the same pattern can be discerned, the numbers peaking in October during the last tax hike, and then entering a downtrend immediately after. However, at this point there is still no sign of a reactionary decline after the period of last minute demand. Performance continues its firm undertone. A reactionary decline should be unavoidable for housing investment as well, and the expectation is that possibilities are high that it will occur. However, this time around the government plans on implementing measures to ease possibly abrupt fluctuations in the market, such as housing benefits and special tax breaks to stimulate the market. Another tax hike is planned in 2015, but reactionary decline is expected to be less dramatic.

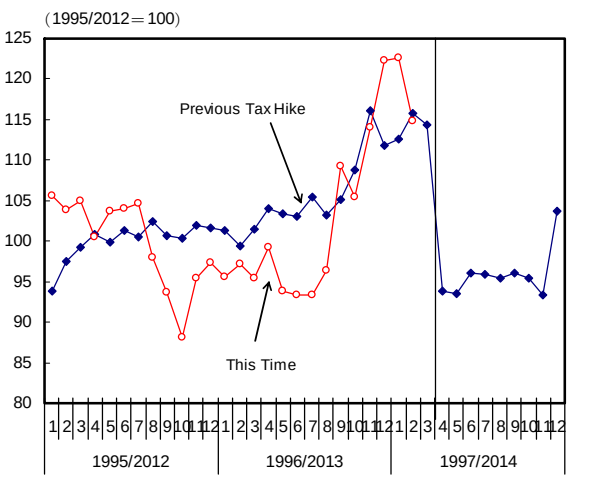
Looking at the trend in home appliances, the growth trend is gradual in comparison to the last time a tax hike was implemented. Of course, with the increase in housing investment, sales of air conditioners and other major appliances are also favorable. As for other home appliances, such as televisions, it is possible that some last minute demand will be seen, but it is expected to be at a relatively low level in comparison to other items. Home appliances overall continue at a fairly weak level in comparison to the last time there was a tax hike.

Generally speaking, last minute demand tends to appear in the major appliances (i.e. durables) which have a long service life and are therefore easier for the consumer to store up. However, taking a look at the content of personal consumption during the last tax hike, it appears that last minute demand occurred for semi-durables and nondurables. Meanwhile, this time around not much last minute demand is seen at all for either semi-durables or nondurables. However, there is still a very good chance that last minute demand will appear for these kinds of items once March rolls around, and is expected to push the numbers up for personal consumption during the Jan-Mar 2014 period.

Now perhaps we should stop and consider what kind of effect this last minute demand has on the supply side. What kind of effect will this have on production? During the last tax hike, production of consumables tended to climb just before the implementation of the tax hike just like the last minute demand for purchasing the items. However, unlike demand, production did not experience as major a decline afterwards. It is assumed that manufacturers rely more on existing inventory to absorb the extreme ups and downs caused by last minute demand and reactionary decline. In this way they can avoid excessive fluctuation in their business. In conclusion, production is expected to experience major growth just before the new consumption tax comes into force, but a major downturn in production immediately after the tax goes into effect is not likely.

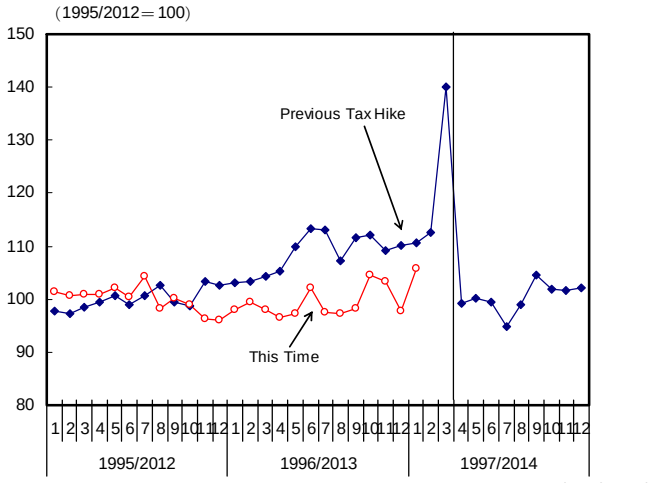
Effects of Consumer Tax Hike on Japan's Economy — Chart 5

Comparison With Previous Tax Hike: New Car Sales
(Seasonally Adjusted)



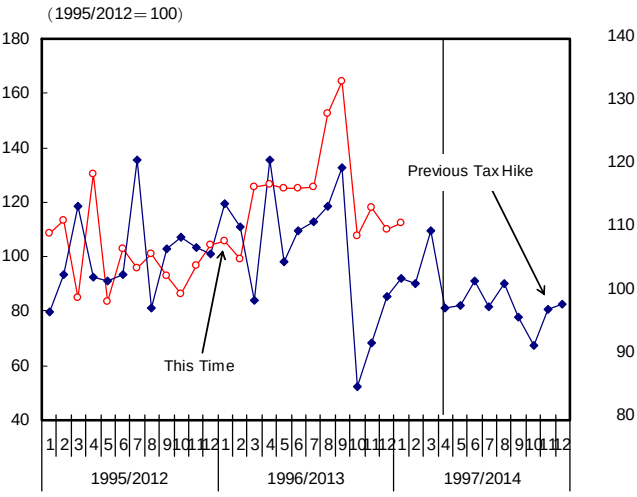
Source: Japan Automobile Dealers Association statistics, compiled by(Month; year) DIR.
Note: Seasonally adjusted figures supplied by DIR.

Comparison With Previous Tax Hike: Home Appliance Sales
(Seasonally Adjusted)



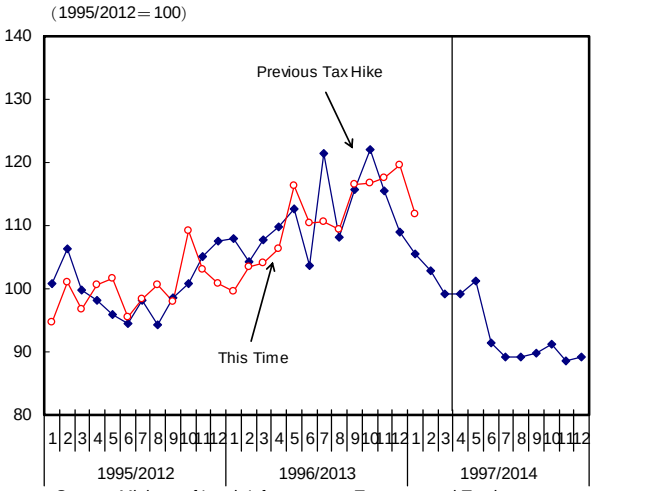
Source: Ministry of Economy, Trade, and Industry statistics, compiled by DIR.
Note: Data from the machinery and appliances retail industry, nominal sales amount

Comparison With Previous Tax Hike: Tokyo Metropolitan Area New Condominium Units Released (Seasonally Adjusted)



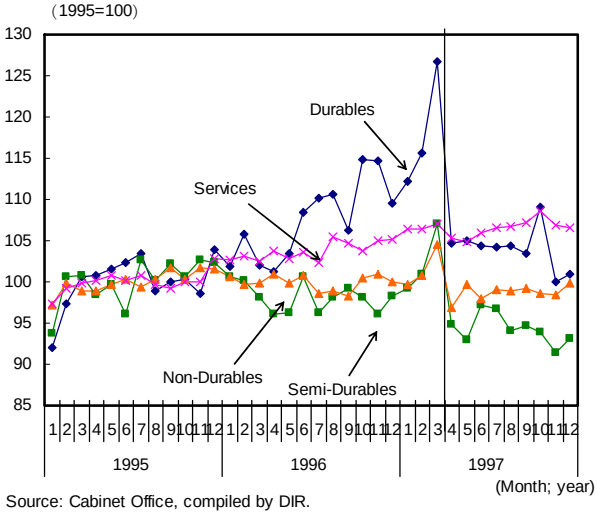
Source: Statistics from the Real Estate Economic Institute, compiled by DIR.
Note: Seasonally adjusted figures supplied by DIR.

Comparison With Previous Tax Hike: New Housing Starts
(Seasonally Adjusted)



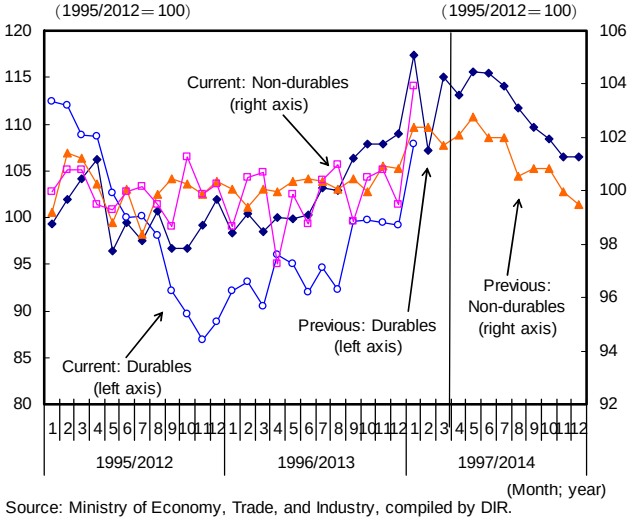
Source: Ministry of Land, Infrastructure, Transport and Tourism, compiled by DIR.

Previous Tax Hike: Consumer Trend by Type of Goods
(Seasonally Adjusted)



Source: Cabinet Office, compiled by DIR.

Comparison With Previous Tax Hike: Consumer Goods Production
(Seasonally Adjusted)



Source: Ministry of Economy, Trade, and Industry, compiled by DIR.

Effects of the consumer tax hike on Japan's economy

In this section we examine the effects of the consumer tax hike on Japan's macroeconomic situation in light of trends associated with last minute demand (see Chart 6).

Automobiles sales have surpassed the momentum seen during the last tax hike and continue to maintain positive performance. In contrast, home appliances have not experienced much last minute demand. This leads us to conclude that impact on personal consumption overall will be about the same as it was the last time there was a tax hike. Meanwhile, in the area of home sales, reactionary declines are expected to be limited throughout the year 2014.

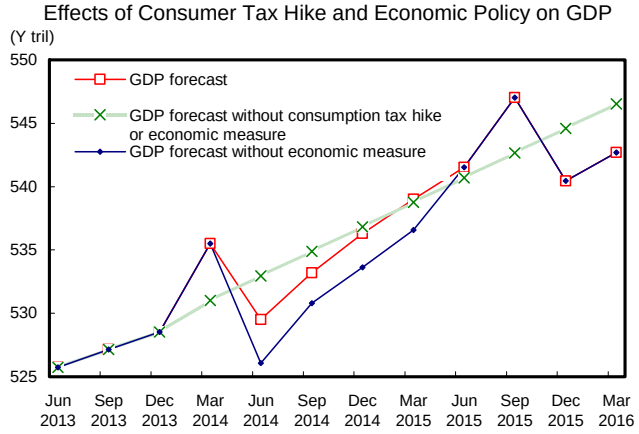
A second tax hike is planned to go into effect in October 2015 when the consumption tax is to be increased from 8% to 10%. Since a large number of households will already have purchased durables before the April 2014 tax hike, the magnitude of reactionary decline on personal consumption is expected to be relatively small. However, since a certain level of last minute demand will no doubt occur in the areas of services, semi-durables and nondurables, personal consumption is expected again to see a surge in last minute demand during the Jul-Sep 2015 period.

Some households may actually find it more advantageous to purchase a home after the April 2014 tax hike rather than before. In contrast, the purchase of a home after the October 2015 tax hike will actually be disadvantageous for most households. Hence housing investment after the October 2015 tax hike may very well suffer a decline. As a result, housing investment as recorded in GDP statistics on a progressive basis is expected to suffer a major decline after the Oct-Dec 2015 period.

Considering these various effects together, we see the consumption tax hike pushing the real GDP growth rate up by 0.67% pt in FY 2013, but then pushing it downward by 1.03% pt in FY 2014, and finally pushing the real GDP growth rate back up again by 0.35% pt in FY 2015.

Effect of Consumer Tax Hike on GDP **Chart 6**

Effects of Consumer Tax Hike and Economic Policy on GDP



Source: Cabinet Office (CAO), Compiled by DIR.

*Simulation result based on DIR macroeconomic model.

Effects of Consumer Tax Hike on Economy

	Change in level (%)			
	FY13	FY14	FY15	FY16
Real GDP	0.68	-0.32	0.02	-0.15
Real personal consumption	0.70	-0.87	-0.13	-0.18
Real housing investment	5.83	3.00	-0.61	-8.18
	Change in growth rate (% pt)			
	FY13	FY14	FY15	FY16
Real GDP	0.67	-1.03	0.35	-0.18
Real personal consumption	0.71	-1.57	0.75	-0.05
Real housing investment	5.90	-2.59	-3.45	-7.50

Source: Compiled by DIR.

*DIR estimates based on DIR short-term macroeconomic model.

2. Four Major Issues Facing Japan's Economy

Four major issues facing Japan's economy

In this section, we examine four issues facing Japan's economy. These are (1) The need to increase wages, (2) BOJ's price stability target, (3) The current account deficit, and (4) Economic disparity.

2.1 Issue (1) the need to increase wages

The first major issue facing Japan's economy is the need to increase wages. This is a major political issue in Japan at this time. Will the government's attempt to increase wages as a means of stimulating a virtuous circle work?

First, an international comparison of real wages demonstrates that wages are stagnating in Japan not because labor's share is low, but because there are issues involving labor productivity and corporate competitiveness. Thus the key is to increase labor productivity and improve corporate competitiveness by strengthening the third arrow of Abenomics (growth strategy) in order to raise real wages in Japan.

Second, increasing wages promises to have a pump-priming effect. In particular, higher regular payments will invigorate personal consumption, centering on durable goods. But in order for this to occur, companies will also need to initiate wage increases on the early side if possible to avoid the "fallacy of composition".

Third, a simulation of the future direction of wages reveals that wages are likely to gradually trend upward as the economy undergoes a cyclical recovery.

2.1.1 International comparison of real wages: Key will be strengthening the third arrow of Abenomics (growth strategy)

Main reasons for the sluggish growth of real hourly wages are the lack of labor productivity growth and corporate competitiveness

First, we examine the reasons for the sluggish growth of wages in Japan by comparing wages internationally. Chart 7 portrays the changes in real hourly wages of major nations according to (1) labor productivity (2) "GDP deflator/CPI", and (3) labor's share.

By comparing the growths of real wages between 2000 and 2009 for Japan, the US, and Germany, we find that only in Japan has real wages fallen. Compared to the US and Germany, factors for the sluggish growth of real wages in Japan are the lack of labor productivity growth and the sizable decline in "GDP deflator/CPI". By comparison, downward pressure (degree of contribution) on real wages stemming from labor's share is largely the same for all three nations. Thus, it is difficult to say that the decline in labor's share is the main reason for the sluggish growth of real wages in Japan.

Labor productivity can be broken down into real GDP and total labor hours. While there is no significant difference in total labor hours between the three nations, a decisive factor for Japan has been the sluggish growth of real GDP. An examination of the components of real GDP reveals that the contributions of fixed capital formation and total factor productivity are relatively small for Japan compared to other nations.

A factor analysis of "GDP deflator/CPI" indicates that the terms of trade and the domestic demand deflator are making negative contributions. Even in periods when import prices were rising, Japanese

companies did not pass through the cost increase to the price of export goods in order to maintain competitiveness. As a result, the terms of trade worsened and became a downward pressure on the GDP deflator.

Breakdown of Real Hourly Wages **Chart 7**

Annual growth (CY00-09 avg; %)	Japan	US	Germany
Real hourly wages	-0.5	1.3	0.2
Labor productivity	0.7	2.0	1.2
GDP deflator / CPI	-1.0	-0.3	-0.7
Labor's share	-0.3	-0.4	-0.3

Real hourly wages, labor productivity, and labor's share defined as follows:
Real hourly wages = nominal employee compensation / (no. of employees x hours worked) / CPI.
Labor productivity = real GDP / (no. of employees x hours worked).
Labor's share = nominal employee compensation / nominal GDP.

Thus, real hourly wages are expressed as:
Real hourly wages = labor productivity x GDP deflator / CPI x labor's share.

Then, % change (△ln) is expressed as:
△ln (real hourly wages) = △ln (labor productivity) + △ln (GDP deflator / CPI) + △ln (labor's share)
△ln (labor's share) = △ln (real GDP) - △ln (no. of employees) - △ln (hours worked)
△ln (labor' share) = △ln (nominal employee compensation) - △ln (nominal GDP)

Annual growth (CY00-09 avg)	Japan	US	Germany
Labor productivity (%)	0.7	2.0	1.2
Real GDP (%)	0.5	1.8	0.9
Contribution of hours worked (% pt)	-0.4	-0.2	-0.3
Contribution of labour composition change (% pt)	0.3	0.3	0.1
Contribution of capital services	0.5	1.1	0.8
Contribution of ICT capital services (% pt)	0.3	-	0.3
Contribution of non-ICT capital services (% pt)	0.3	-	0.5
Contribution of TFP (% pt)	0.1	0.3	0.3
Total hours worked (%) Plus-minus reversed	0.2	0.2	0.3
No. of employees (%) Plus-minus reversed	-0.3	-0.1	-0.3
Hours worked (%) Plus-minus reversed	0.5	0.3	0.7

Annual change (CY00-09 avg)	Japan	US	Germany
GDP deflator / CPI (%)	-1.0	-0.3	-0.7
GDP deflator (%)	-1.2	2.2	0.9
Contribution of terms of trade (% pt)	-0.3	-0.0	0.0
Contribution of domestic demand deflator (% pt)	-0.8	2.3	1.0
Contribution of import deflator (% pt)	-0.0	-0.1	0.0
Contribution of other items (% pt)	-0.0	-0.0	-0.0
CPI (%) Plus-minus reversed	0.3	-2.5	-1.6

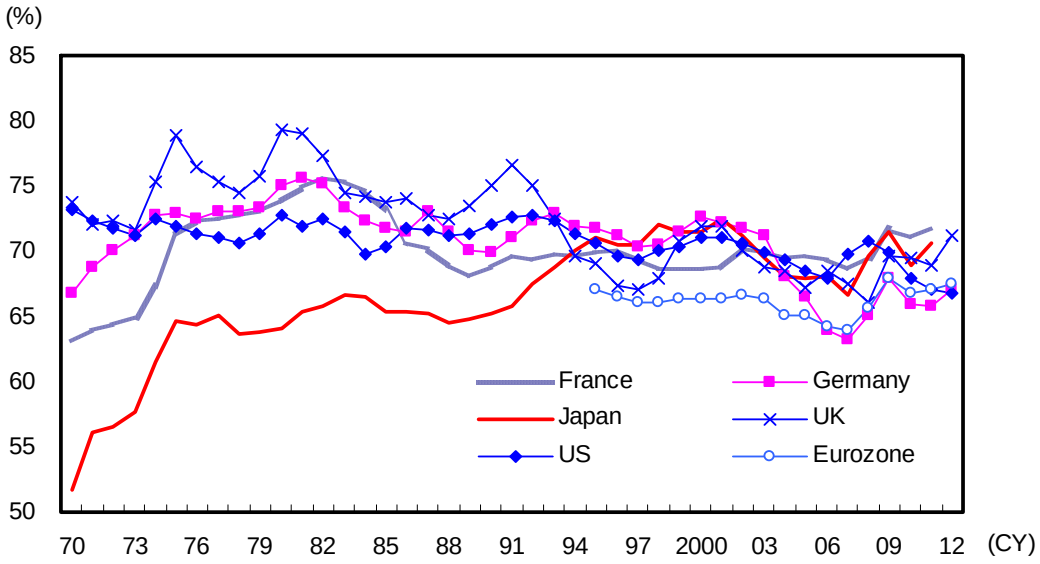
Annual change (CY00-09 avg)	Japan	US	Germany
Labor's share (%)	-0.3	-0.4	-0.3
Nominal employee compensation (%)	-1.0	3.6	1.4
Nominal GDP (%) Plus-minus reversed	0.7	-4.0	-1.7

Source: Cabinet Office, US Bureau of Economic Analysis, Bundesbank, EU KLEMS; compiled by DIR.
Note: TFP=total factor productivity.

Labor's share is not particularly low in Japan

As noted above, an international comparison reveals that labor's share is not particularly low in Japan. Chart 8 portrays the long-term trend of labor's share (employee compensation against national income) for Japan and other nations. The chart reveals that labor's share has increased notably around 1970 in Japan and that its current level is not necessarily low in international comparison. Because of the downward rigidity of wages, labor's share generally declines during economic expansions and increases during recessions. After 1990, labor's share in Japan surged temporarily during the economic downturn following the collapse of the Japanese asset bubble and after the US financial crisis, but declined in subsequent periods of economic expansion. In all, labor's share is not on a downward trend. The sluggish growth of employee income is not a problem of distribution, but of a lack of growth.

Labor's Share by Nation/Area **Chart 8**



Source: OECD; compiled by DIR.

Strengthening of the "third arrow" of Abenomics (growth strategy) is the way to regular wage increases

In conclusion, the key to achieving continued growth of real wages in Japan, the "third arrow" of Abenomics (growth strategy) must be strengthened. This will also work toward improvement in labor productivity and corporate competitiveness. Moreover, lowering the corporate tax rate and implementing major easing of "bedrock regulations" in the areas of agriculture, medical care, nursing care, and labor, areas known to have deeply entrenched interests, is a pressing issue.

2.1.2 Will wage increases have a "pump-priming effect"?

Increases in contractual cash payments will stimulate personal consumption, especially of durables

Next we would like to point out that wage increases promise to have a certain "pump-priming effect" on the economy by stimulating an increase in personal consumption. An increase in contractual cash payments would especially have a positive effect by stimulating personal consumption in the area of durables. This has the added effect of helping to avoid a "fallacy of composition". Corporations with enough financial leeway should accelerate the increase of base-pay.

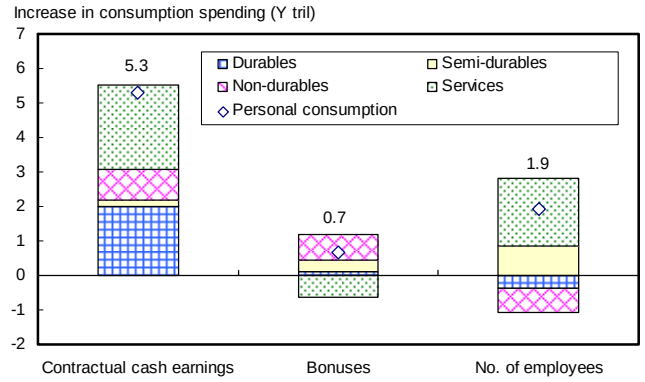
A question worth asking at this point is whether the impact on personal consumption would differ depending on how income increases. In other words, would an increase in basic pay have a different impact on personal consumption than an increase in one-time payments such as bonuses or an increase in the number of employees? To better understand these differences on a quantitative basis, we divided employee income into regular payments (regular payments plus overtime payments), bonuses, and the number of employees to estimate how each change would influence personal consumption (Chart 9). Our estimates show that an increase in regular payments would have the greatest effect in increasing personal consumption. If an increase in regular payments boosts total employee income by 2%, personal consumption would increase Y5.3 trillion, mainly through more consumption of durable goods and services. The effect of an increase in the number of employees would be Y1.9 trillion, less than half that of higher regular payments, and the effect of an increase in bonuses would be an even smaller, at Y0.7 trillion.

This situation is becoming more and more notable of late. Chart 10 shows the amount of increase in consumption in a time series when regular payments and one-time payments such as bonuses are increased by Y10,000 each. When shown in a time series, the influence on personal consumption of an increase in one-time payments actually declines over time. The difference in influence as compared with an increase in regular payments actually grows over time.

We can conclude from the above results that, in order to achieve a virtuous circle where higher wages invigorate personal consumption and improve corporate earnings, it would be more effective if the increase in wages occurs through regular payments (in other words increasing base pay) rather than through bonuses. Movement towards increasing wages has been gathering momentum in Japan, and our quantitative analysis supports this step. We believe it is a desirable move to take at this time.

Impact of 2% Rise in Employee Compensation on Personal Consumption

Chart 9

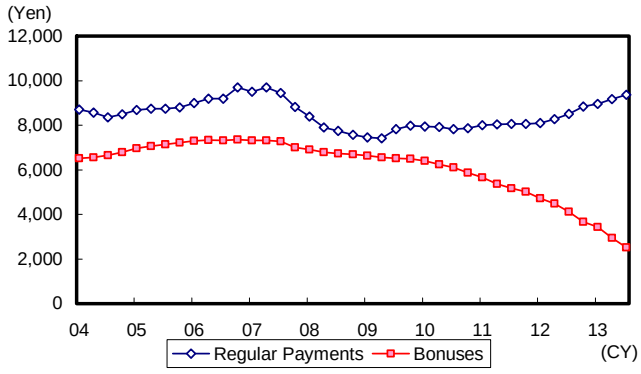


Source: Cabinet Office, Ministry of Health, Labour and Welfare, Ministry of Internal Affairs and Communications; compiled by DIR.

Note: Employee compensation expressed as “total cash payments multiplied by no. of employees”. If employee compensation rises 2%, regular payments would be up 2.4%, bonuses up 12.0%, and no. of employees up 2.0%. If this is the case, personal consumption would increase as shown in the chart. Estimation period: Jan-Mar 1994 to Apr-Jun 2013.

Increase in Consumption Amount When Wage Raised by 10,000 Yen

Chart 10



Source: Compiled by DIR

Note: We ran a rolling regression with personal consumption as the dependent variable, while independent variables were regular payments, non-scheduled payments, bonuses, and number of employees. A twenty-five year period was used as the rolling window of values. We used coefficients at each point to calculate the effect of fluctuation in each variable on personal consumption.

2.1.3 Simulation of Wage Trend

Income environment in FY 2014 depends on direction of spring wage increase

A simulation of wage trends shows us that wages should rise gradually, backed by a cyclical recovery in the economy.

The outcome of the annual spring wage increase was extremely important in putting together our outlook for the Japanese economy in FY 2014. With the consumption tax hike going into effect in April 2014, real household income is expected to shrink while prices will increase. There is a danger that this situation will have a negative effect on personal consumption, which has been an important factor in the economic recovery.

However, if corporations implement an increase in base salary as a result of the spring wage increase, regular payments will increase and the income environment will improve, resulting in a slight easing of the effects of the consumption tax hike on personal consumption.

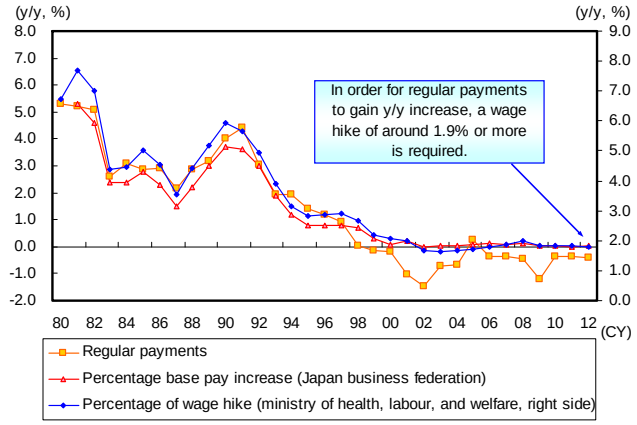
The FY 2014 spring wage increase has a very good chance of achieving positive results with the Abe administration's appeals to raise wages, and it appears that many corporations are already increasing their base pay. If at least around 20% of corporations raise their base pay by 2% or so, overall base pay would rise by around 0.4%. Based on the results of a survey of labor unions and corporate management, we expect there to be wage increases of around 2% as a result of the FY 2014 spring wage increase.

Chart 11 shows average wage hikes reached during past spring wage increases along with trends in regular payments. Based on past experience, in order for regular payments to achieve growth, wage hikes of around 1.9% are required. If our outlook of 2% for this year's wage hikes is achieved, FY 2014 regular pay is expected to grow by around 0.4%.

Meanwhile, Chart 12 shows the results of a simulation we ran using data from base pay increase rates during past spring wage increases, and GDP growth rate scenarios compared to nominal employee compensation. For FY 2014, we see a rate of increase in base pay of 0.4% and a GDP growth rate of 1.0%, meaning that nominal employee compensation should grow around 1.6% in comparison with the previous year. We expect the consumer price index to record a growth rate of 2% pt due to the consumption tax hike, but with the economic recovery and wage hikes, negative effects on real income should be eased a great deal.

Percentage of Wage Increase and Regular Payments

Chart 11



Source: Ministry of Health, Labour, and Welfare, Japan business federation, compiled by DIR.

Note: Regular payments before 1990 based on businesses with 30 employees or more.

Growth Rate in Nominal Employee Compensation by Economic and Wage Environment

Chart 12

(y/y, %)

Base Pay Increase \ GDP Growth Rate	0.0%	0.5%	1.0%	1.5%	2.0%
0.0%	0.0	0.7	1.3	2.0	2.7
0.2%	0.1	0.8	1.5	2.1	2.8
0.4%	0.3	0.9	1.6	2.2	2.9
0.6%	0.4	1.0	1.7	2.4	3.0
0.8%	0.5	1.2	1.8	2.5	3.2
1.0%	0.6	1.3	2.0	2.6	3.3

Source: DIR

Not much leeway for wage increases considering labor productivity

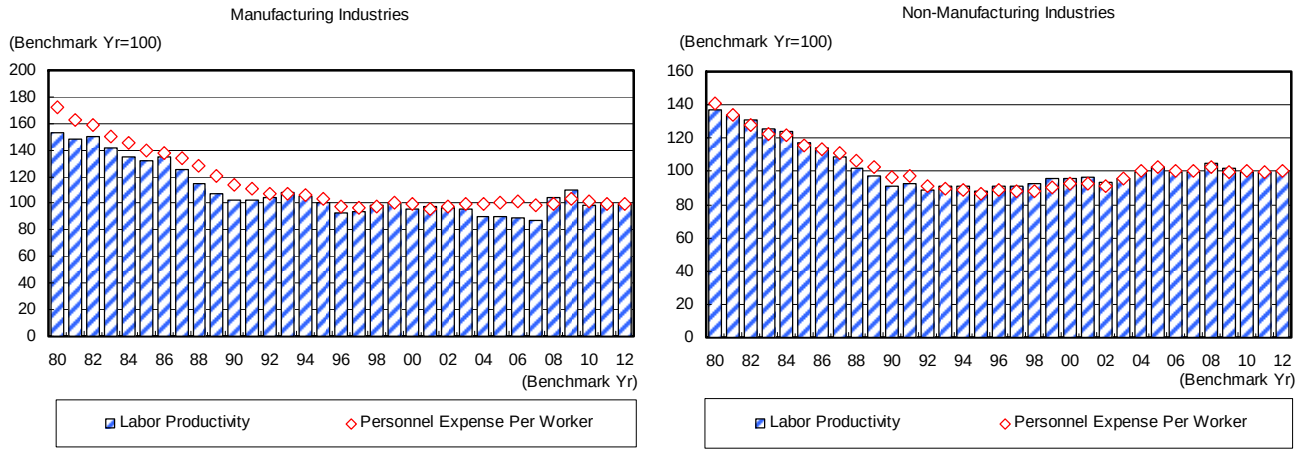
Despite the previous discussion, it should be kept in mind that when labor productivity is taken into consideration, Japan actually has little leeway for wage hikes.

The wage level should really be determined unambiguously by the trend in labor productivity. Chart 13 shows labor productivity for the manufacturing and non-manufacturing industries as of the year 2012 as compared to personnel expenses per worker during various benchmark years. (The benchmark year is shown on the horizontal axis.)

It is extremely difficult to determine at exactly what point an appropriate relationship has formed between labor productivity and personnel expenses per worker. However, taking into consideration only the relationship between labor productivity and personnel expenses per worker for the non-manufacturing industries, we see a variety of points in 1980 and beyond where we could say that in most cases, the personnel expenses per worker exceeded labor productivity. In conclusion, business performance continues to improve for the manufacturing industries due to the weak yen and expanding domestic demand, but in consideration of past relationships between labor productivity and personnel expenses per worker, it would be difficult to raise wages all that much.

Meanwhile, in the non-manufacturing industries, no matter what point one uses as a reference, the labor productivity and personnel expenses per worker levels more or less match with what is current. So from the viewpoint of labor productivity, major wage hikes in the non-manufacturing industries really can't be justified.

Labor Productivity Per Benchmark Year and Personnel Expense Per Worker (2012) **Chart 13**

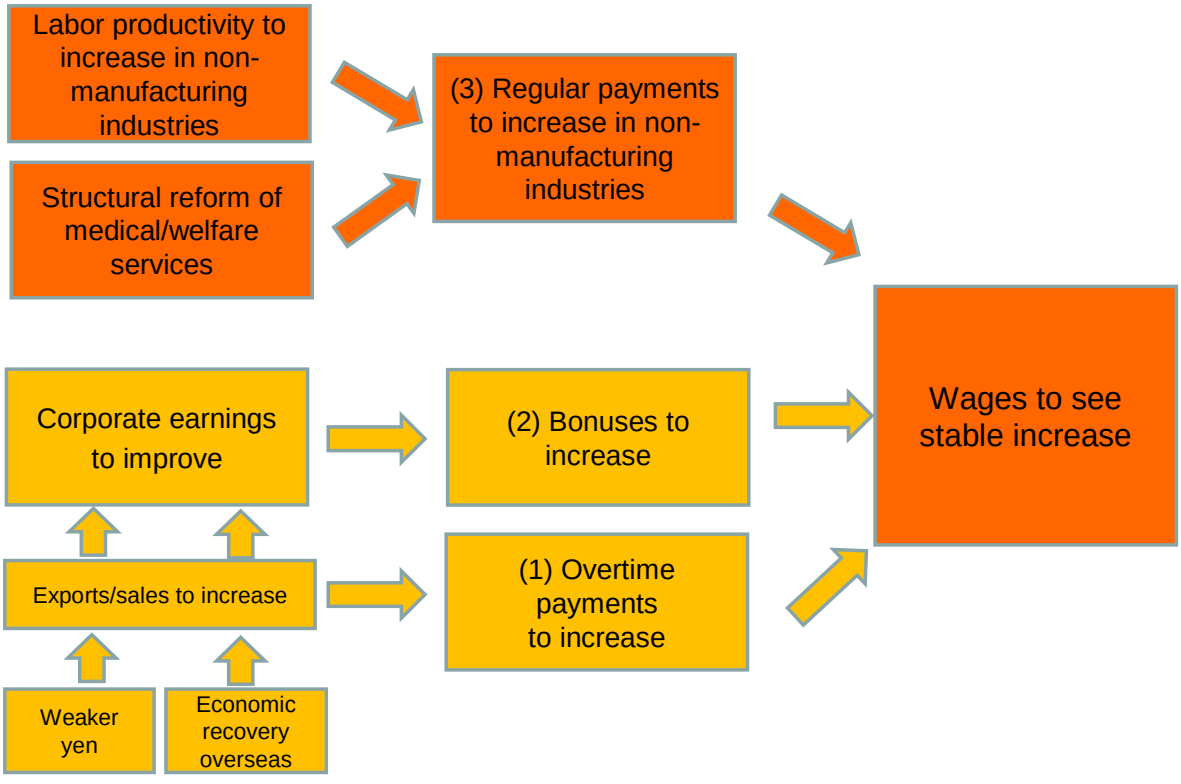


Source: Ministry of Finance, compiled by DIR

Toward a steady wage increase

In the mid to long-term, overtime payments and bonuses are expected to increase cyclically along with the expansion of the economy, while macro-based regular payments are expected to increase gradually as the supply-demand balance for labor tightens. However, in order for per-employee regular payments to steadily increase, we must overcome structural issues that are placing a downward pressure on regular payments. Specifically, we should look further into measures (1) reducing the part-time worker ratio and (2) increasing labor productivity in the services sector, especially in the healthcare and social welfare services industries where the number of employees is growing.

Path to Stable Wage Growth **Chart 14**



Source: Compiled by DIR.

Unless regular payments increase, per-employee wages will not reach their former peak

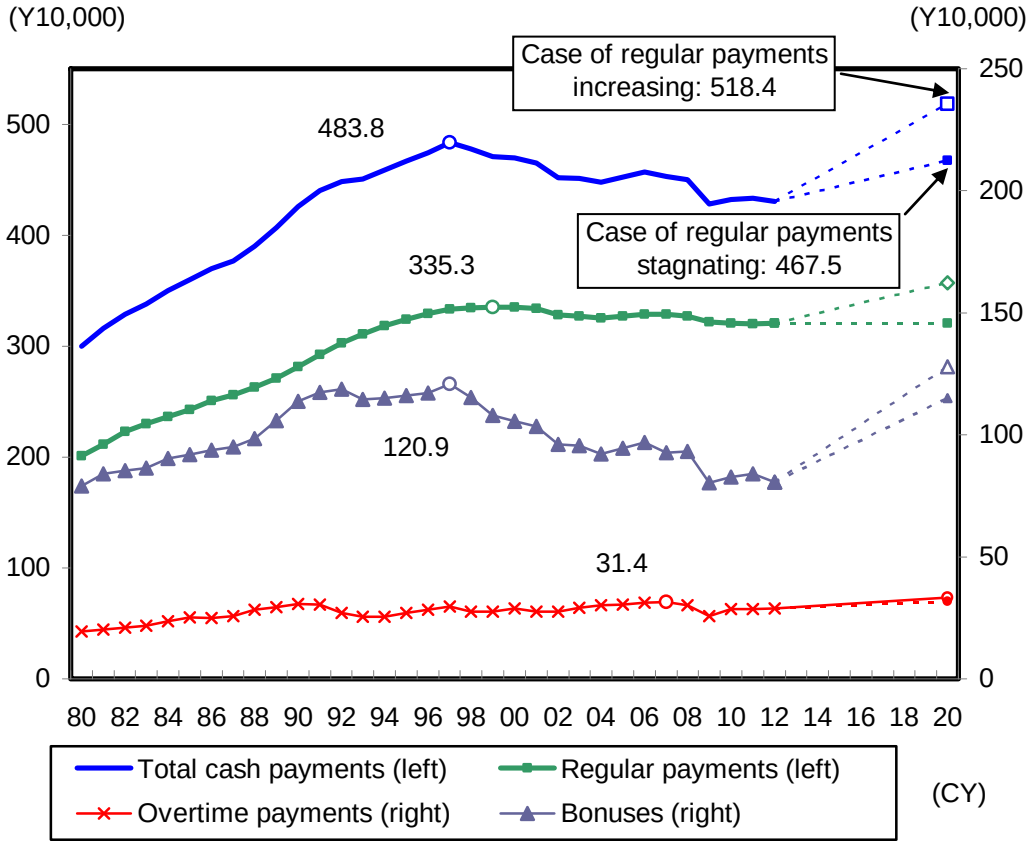
Even if overtime payments and bonuses increase cyclically, without structural reforms and deregulation, per-employee regular payments will not turn upward. In such a scenario, a sustained increase in wages will be difficult to achieve. The reasons are as follows:

First, the increase in overtime payments comes from an increase in overtime hours. Since companies cannot force employees to work excessive overtime hours, once overtime hours increase by a certain amount, companies begin to consider hiring more employees. Historical data shows that fewer companies feel that the number of employees they have is excessive once overtime hours are over 150 hours per year. Thus, should overtime hours reach such a level, companies will respond not only by extending working hours but by hiring more workers. Therefore it is unlikely that per-employee overtime pay will continue to rise.

Second, it is likely that the increase in bonuses will eventually reach a ceiling. When we examine a time series to ascertain the level bonuses reach relative to regular payments, even when the economy was growing firmly in the 1980s, total annual bonuses trended at a level corresponding to about 4.5 months of regular payments. Hence even if bonuses rebound, they are highly likely to hit a ceiling at around 4.5 months of regular payments.

Finally, Chart 15 presents the results of simulating per-employee wages for the case where regular payments increase and the case where they are flat. In the case where regular payments increase, per-employee wages will easily exceed their former peak. In contrast, per-employee wages will hit a ceiling at a level Y150,000 less than their former peak in the case where regular payments are flat. Thus, the increase in regular payments is indispensable for the stable growth of per-employee wages.

Simulation of Per Employee Wages **Chart 15**



Source: Ministry of Health, Labour and Welfare; compiled by DIR.
Notes: 1) Hollow circles in the past denote record highs.
2) Hollow marks at end-simulation period indicate cases where regular payments assumed to increase, while solid marks indicate those where regular payments assumed to decline.

2.2 Issue (2) BOJ's price stability target

Range of price increase expanding

The second issue facing Japan's economy is the question of whether or not the BOJ's price target can be reached.

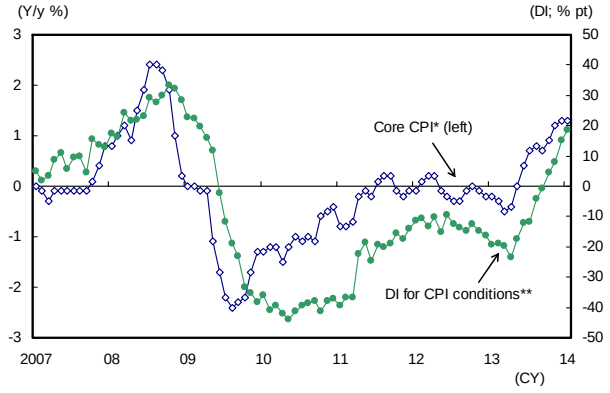
Chances that the BOJ will reach its target of a 2% rise in prices have gradually improved since new governor Kuroda took office. However, this will still depend in part on trends in exchange rates, wages, and the expected inflation rate. And while the possibilities that the BOJ will reach its target cannot be discounted, our current main scenario does not expect the rate of increase in consumer price index to reach the 2% mark. We expect additional monetary easing measures by the BOJ to carry over beyond the 2014 Jul-Sep period.

In Chart 16 the rate of change in core CPI is examined against consumer price index DI (difference in percentage of core CPI components which have risen and those which have fallen). Core CPI moved into a growth phase in June of 2013, but consumer price index DI fell below 50. In other words, prices overall were on the way up, but more than half of core CPI components were in a decline. This means that conditions were not sufficient for a rise in prices to spread throughout the economy. However, consumer price index DI moved upwards in October 2013, with the extent of the increase broadening later in the year. As import prices rose due to the weakening of the yen, corporations gradually began passing on their increases in costs to the consumer in the form of price hikes. Price increases are gradually spreading and beginning to affect most items, resulting in a higher rate of increase in prices overall.

In Chart 17, the rate of increase in purchase price is compared to the rate of increase in the consumer price index. Not only is the consumer price index on the rise, increases in purchase prices can also be readily observed. At the same time, the general rise in prices does not seem to have caused consumers to seek out cheaper prices. Rather, the tendency seems to be more on the side of purchasing items with higher prices.

During an economic expansion, the rate of increase in purchase prices can easily exceed that of prices in general. It is possible that consumers simply have stronger demand for products with a higher purchase price at this particular moment.

Core CPI and DI for CPI Conditions
Chart 16

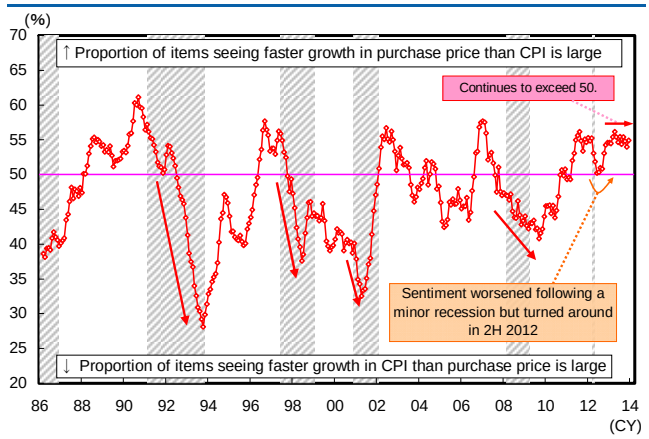


Source: Ministry of Internal Affairs and Communications: compiled by DIR.

*Consumer Price Index excluding fresh food.

**DIR estimate by subtracting a proportion of y/y gain items minus a proportion of y/y slide items; core CPI basis.

Comparison of Average Purchasing Price vs CPI*
Chart 17



Source: Ministry of Internal Affairs and Communications: compiled by DIR.
*Proportion of items seeing faster growth in purchase price than CPI; 6MMA.
Note: Shaded areas denote economic downturns.

Source: Ministry of Internal Affairs and Communications: compiled by DIR.

*Proportion of items seeing faster growth in purchase price than CPI; 6MMA.

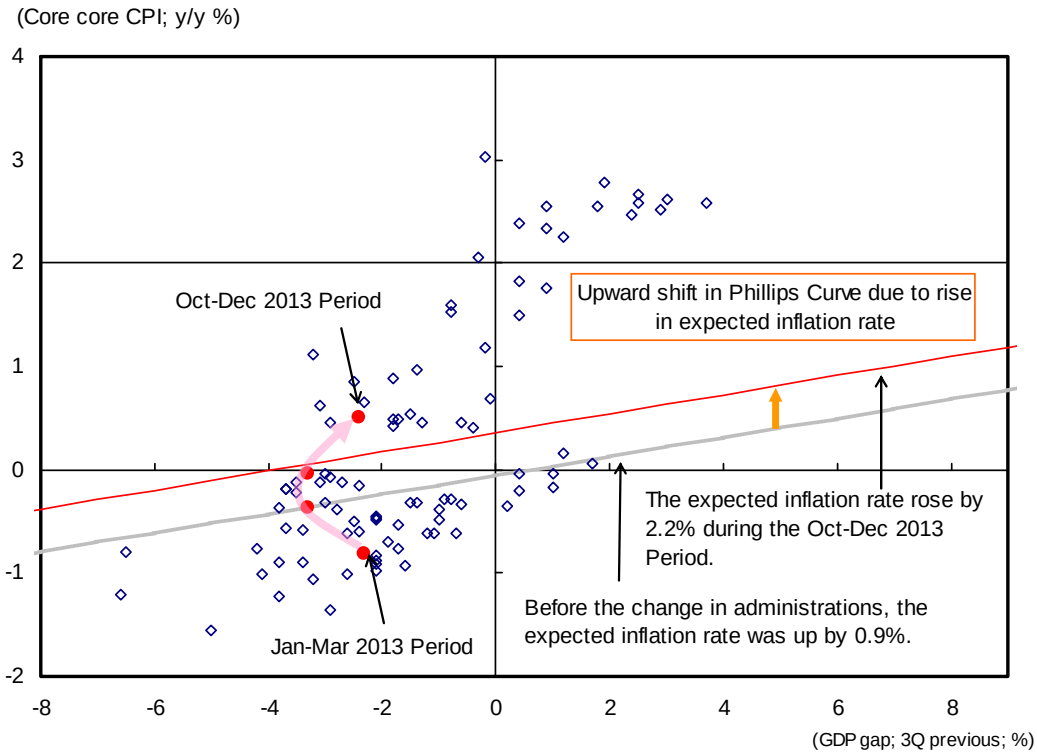
Note: Shaded areas denote economic downturns.

Expected inflation rate is on the rise and the Phillips Curve has shifted in an upward direction

The vertical axis of Chart 18 shows the year-to-year rate of change in the consumer price index less food (less alcoholic beverages) and energy (core core CPI), with GDP gap (3 qtrs in the past) shown on the horizontal axis. This is the Phillips curve. The Phillips curve is used to analyze the relationship between prices and GDP gap. The intercept of the Phillips curve shows the level of expected inflation.

The bold line in the chart show the estimated Phillips curve between 1997 when Japan was hit with deflation, and end 2012. During this period, the Phillips curve occupied an extremely low position with the rate of increases in prices below 0%, even with the GDP gap at 0% as well. However, expected inflation rate began to rise at the end of 2012, causing the Phillips curve to shift upwards. As of the 2013 Jan-Mar period, the rate of increase in prices, which had fallen below the Phillips curve before the change of government administrations, began to rise rapidly throughout the rest of 2013, due mostly to the rise in import prices brought about by the weakening yen. Expected inflation rate and prices are now mutually influencing each other, and cost-push pressure is now pushing prices up. This can be interpreted as meaning that the expected inflation rate of households is on the rise. In the near future, Japan's economy will likely shake off the effects of the weak yen. However, since the Phillips curve has been pushed up, it is expected that the consumer price will also rise with much more ease than in the recent past.

Phillips Curve Adjusted for Inflation Expectations **Chart 18**



Source: Cabinet Office, Ministry of Internal Affairs and Communications; compiled by DIR.
Equation: CPI = -0.34 + 0.31 x INFEX + 0.09 x GDP GAP (-3), figures in parenthesis are quarterly lag.
Estimation period: Oct-Dec 1997 period to Oct-Dec 2012 period, all coefficients at 5% significance level.
CPI: y/y CPI less food (less alcoholic beverages) and energy (adjusted for consumption tax hikes),
Inflation expectations through Jan-Mar 2004 based on Carlson-Parkin method; thereafter weighted average of inflation expectations (Cabinet Office survey) adjusted for discontinuity.

Weak yen the main reason behind current rise in prices

Since shifting back into a growth trend in June 2013, CPI (less perishable goods) has steadily increased its growth rate, and prices are now in a gradual upward trend. Meanwhile, taking into consideration core core CPI, which is not readily influenced by commodities, prices have continued to maintain positive growth since October 2013. As was noted in the previous section, the range of price increases is expanding. Especially noticeable here is the price of durables, which has shifted into a growth trend for the first time since September 1992. In Chart 19, change over the long-term can be confirmed, yet even compared with the year 1989 when the consumption tax was first introduced and 1997 when the consumption tax was increased for the first time, the current pace of increase in the price of durables is especially rapid.

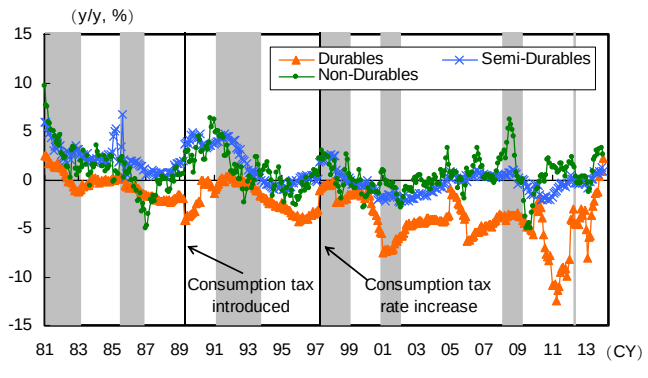
Next we have a look at trends in the corporate goods price index (CGPI) which examines consumer goods.

Chart 20 is a factor analysis of the corporate goods price index (consumer goods). Here we can see that the recent rise in the CGPI due largely to foreign exchange rates. If the current level of exchange rates remains more or less at the same level and there is no further major weakening of the yen, upward pressure on the index coming from this factor should gradually be reduced.

That is to say, when we examine the trend in durable consumer goods based on CGPI, both domestic and import goods (on a contract currency basis) have been maintaining negative figures. The reason the trends are so different in CPI and CGPI may be increases in import product prices due to the weak yen influencing the CPI based durable consumer goods price.

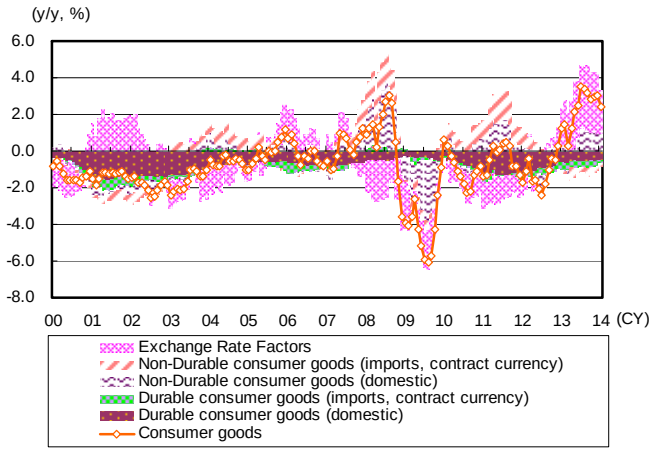
Of course, CPI and CGPI cannot be compared in such simple terms. However, it should be noted that the current rise in the CPI based durable consumer goods price is for the most part influenced by the weak yen. And with expectations that upward pressure on prices due to the weak yen will gradually be shaken off, the real key to the question of whether or not prices will continue to rise in the future lies in wage trends and the expected inflation rate.

Long-Term Changes in CPI by Type of Goods
Chart 19



Source: Ministry of Internal Affairs and Communications, compiled by DIR.
Note: Shaded areas represent economic downturns.

Factor Analysis of CGPI (Consumer Goods)
Chart 20



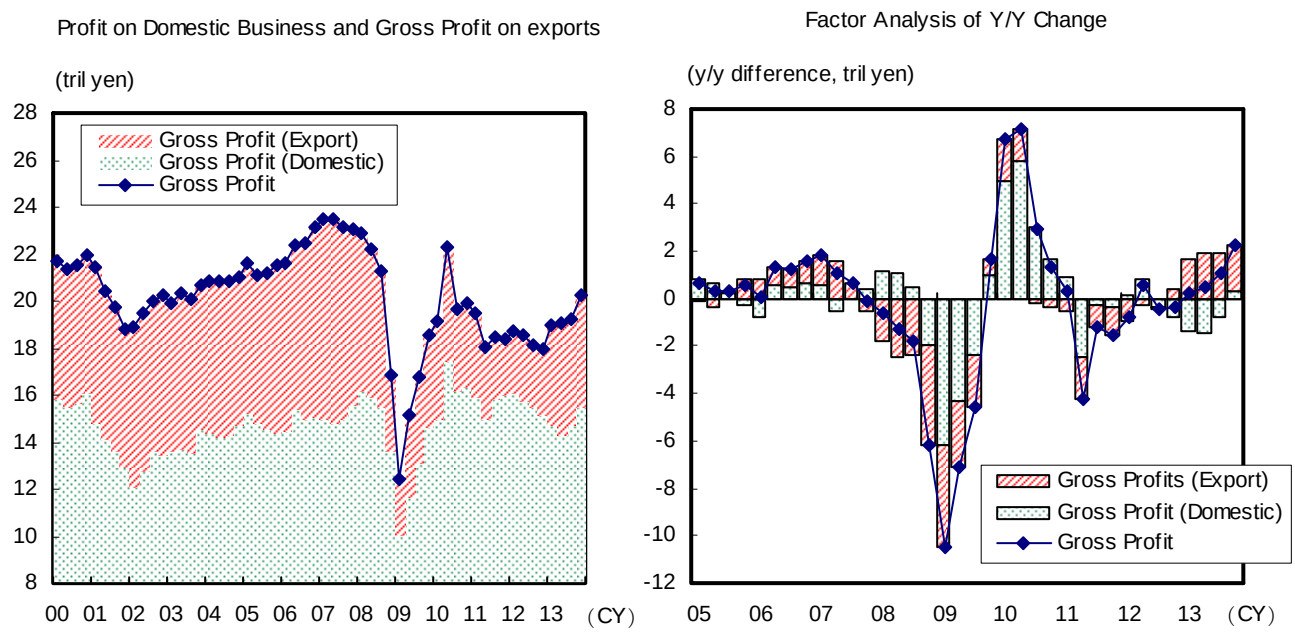
Source: BOJ, compiled by DIR.
Note: Exchange rate factors calculated using import prices based on contract currency (grand mean)

Weak yen driving export oriented profit growth of Japanese corporations

Corporate business performance is now improving, bringing higher expectations that wages may be increased and the corporate stance toward capex will gradually become more aggressive. The effect on the economy overall is expected to be very positive. The question then is what exactly is it that has led to these improvements in corporate business performance?

Gross profits of the manufacturing industries (sales – cost of sales) are examined in Chart 21 separated into domestic and export categories. First of all, we know from past performance history that export oriented profits have helped to push corporate profits up since the year 2000. Then exports fell drastically as a result of the US financial crisis. In addition, the yen rapidly strengthened, causing major declines in export oriented profit. However, the yen began to weaken at the end of 2012, and the amount won from exports by Japanese corporations grew rapidly, leading also to major growth in export oriented profits. Contribution to overall profits by domestic and export oriented business can be seen in the right side of Chart 21. While domestic profits continue to be in a downtrend, export oriented profits are achieving major growth.

Profit on Domestic Business and Gross Profit from Export Business **Chart 21**



Source: Ministry of Finance, BOJ, compiled by DIR
Notes: 1) Gross profit = sales - cost of sales.
2) It is assumed that manufacturing cost per unit of sales volume is equal for both imports and exports.

Domestic price pass-through seen progressing

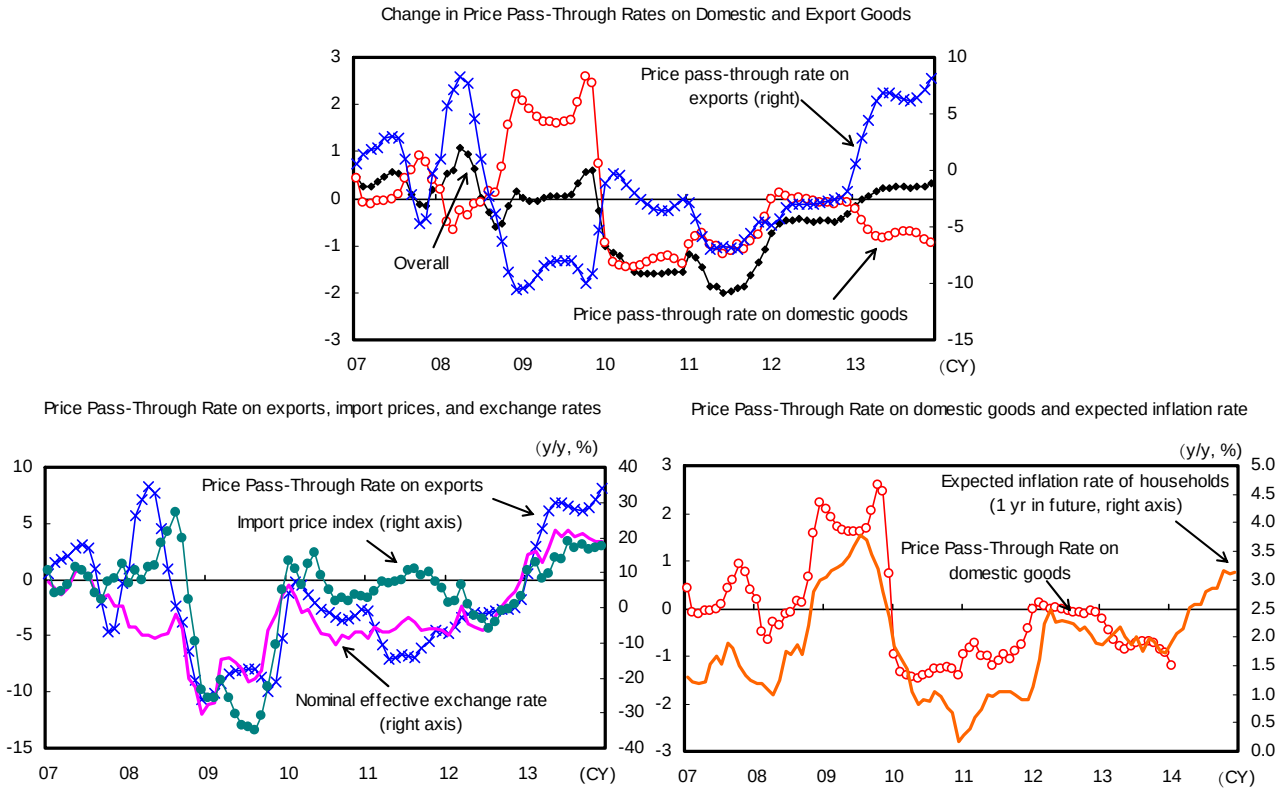
Changes in price pass-through are examined in Chart 22. The top figure shows input and output prices of the manufacturing industries and calculates price pass-through on goods meant for the domestic and export markets. According to this we see clearly that domestic price pass-through fell since 2012, while in contrast, it rose dramatically for exports.

What are the factors which determine price pass-through? First we consider export oriented price pass-through. Here we can see immediately that exchange rates and import price have very close linkage. When the yen weakens the input price rises, but at the same time, the export price rises also.

Meanwhile, trends in import prices fluctuate according to exchange rates, so changes in import price and export oriented price pass-through are closely related. However, factors other than fluctuation of exchange rates, including the international commodities market, influence changes in import price as well. For instance, during the year 2008 when the international commodities markets were recording highs, especially for crude oil, the yen was also strong and import prices rose, causing price pass-through to rise also. Products Japan exports are also included on the international commodities market, meaning that export price rose as the market rose. Since the earnings environment deteriorated as import prices rose, some corporations maintained profit by raising the price pass-through rate on exports.

The price pass-through rate on domestic products tends to lag behind the expected inflation rate of households (see Chart 22 lower right). Since the expected inflation rate of households is highly susceptible to price trends, corporations normally make decisions on the price pass-through rate some time after the domestic price trend becomes known. Since 2013, the expected inflation rate of households has been on the rise, so there is a good possibility that corporations will begin aggressively implementing pass-through in relation to their input costs on domestic products in the coming months. We see a scenario in which profitability of domestic sales improves due to the rise in domestic prices.

Change in Price Pass-Through Rate **Chart 22**



Source: BOJ, the cabinet office, compiled by DIR.
Note: The price pass-through rate is an elastic value in relation to the input price used to produce an output price. It is an estimated figure arrived at using rolling estimates from the past year.

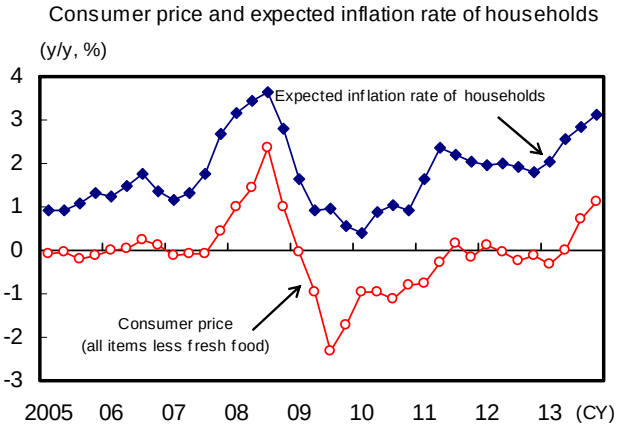
The expected inflation rate will gradually decline in the future. The inflation rate hurdle of 2% will be a difficult one to overcome.

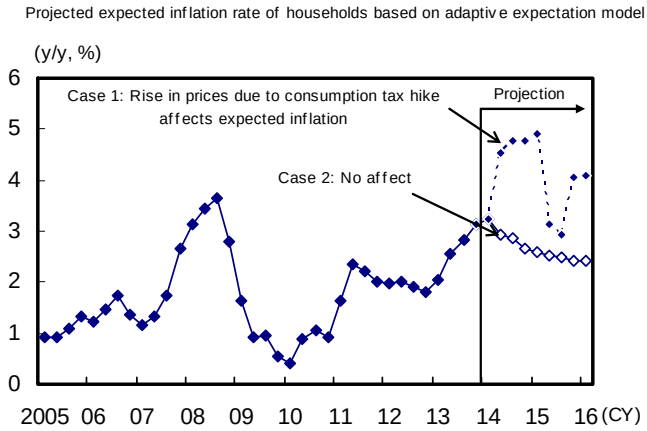
An increase in the expected inflation rate is an important factor in order for consumer prices to achieve a steady increase. However, it is known that the expected inflation rate of households is highly susceptible to price trends, and we also know that prices and expected inflation rate mutually influence

each other. Actual consumer prices and expected inflation rate are shown in Chart 23 (top left). Here we see that the expected inflation rate exceeds the rate of actual price increase, but the two rates also remain closely linked. The top right portion of Chart 23 shows the outlook for expected inflation rate based on actual price fluctuations. We also take into consideration here the fact that the rise in expected inflation also influences prices. According to our simulation, expected inflation rate, which hit bottom at the end of 2012 and since then has been on the rise, will begin a gradual decline in the future. The overriding cause of this shift is that the upward pressure on prices caused by the weak yen has now disappeared, while energy is contributing less. This means that the rate of increase in prices will gradually slow down.

The lower figure in Chart 23 shows the influence of wages and exchange rate fluctuations on consumer prices, with the interaction between expected inflation rate and consumer prices factored in to the analysis. The BOJ's target for rate of increase in prices is 2%. In order to achieve this target by the end of FY2014 assuming the yen exchange rate remains flat for the most part, regular payments by corporations to employees will have to remain on the high side (up 2.5% pt). This means that even if the yen were to weaken to the level of Y120 to the dollar, regular payments would still have to maintain this high of +2.0% pt – truly a difficult hurdle to overcome.

Price Simulation: Consumer Price & Expected Inflation Rate of Households, Wages & Change in Exchange Rates **Chart 23**





Source: Cabinet office, Ministry of Internal Affairs and Communications.
Note: The expected inflation rate is the weighted average of the outlook for prices one year from now in the cabinet office's consumer behavior survey.

Rate of Increase in Consumer Price if Exchange Rate and Wages Change

Regular payments up	Dollar-yen exchange rate as of end FY14				
	80	90	100	110	120
0% pt	0.6	0.8	0.9	1.0	1.1
+0.5% pt	0.9	1.0	1.1	1.2	1.3
+1.0% pt	1.1	1.2	1.3	1.5	1.6
+1.5% pt	1.4	1.5	1.6	1.7	1.8
+2.0% pt	1.6	1.7	1.8	1.9	2.0
+2.5% pt	1.9	2.0	2.1	2.2	2.3

Source: Ministry of Internal Affairs and Communications, Ministry of Health, Labour, and Welfare, BOJ, compiled by DIR.
Notes: 1) Values used in the table represent rate of change in each scenario and core CPI as of Jan-Mar period of FY15 (less affects of consumption tax).
2) Exchange rate assumptions (horizontal axis) - as of FY15 Jan-Mar period. We assume the pattern continues in a linear fashion after FY14 Apr-Jun period.

Additional monetary easing measures by the BOJ to carry over beyond the 2014 Jul-Sep period.

We expect additional monetary easing measures by the BOJ to carry over beyond the 2014 Jul-Sep period. There is a very good possibility that the BOJ will make a clean break from its more gradual approach of the past and implement additional monetary easing measures after a careful consideration of Apr-Jun period economic indices. This will also be long enough to see what the initial effects of the consumption tax hike initiated in April have been.

We believe that these additional monetary easing measures should be implemented in the Apr-Jun period to ensure that the economy moves safely into recovery after the consumption tax hike. This is also to make sure the positive effects are carried over into GDP for the Jul-Sep period, a question which will additionally influence decisions regarding a further consumption tax hike to the level of 10% in 2015. Not only will additional monetary easing measures influence further progress in the weakening of the yen and stimulation of stock price highs, but seeing how closely linked the BOJ is with the government, an announcement showing how determined the BOJ is in reaching its 2% rate of increase target should have a generally positive effect on the economy overall. We may begin to hear opinions at some point that the BOJ's confidence in reaching its target is faltering, and they may even be accused of using additional monetary easing measures merely to cover the fact that past measures were insufficient and targets have not been met for rate of increase in prices. However, the benefits of implementing monetary easing measures are thought to far outweigh the possibility of the central bank losing credibility.

2.3 Issue (3): The current account deficit

The third major issue facing Japan's economy is the current account deficit.

To restate our conclusion, we believe that Japan's current account balance will be able to eventually achieve a cyclical recovery and shake off the deficits which seem to have become entrenched in recent years.

First, according to our calculations, the balance of trade worsened by 7 tril yen in 2013 due to the hollowing-out effect, and then added on another 4 tril due to the shutdown of nuclear power plants. Considering these structural changes, it is impossible to expect the current account balance to recover to the tune of 10 tril yen in the black anytime soon.

Secondly, the trade deficit is expected to shrink somewhat on a cyclical basis and finally shake off its worst phase backed by a US-led worldwide economic recovery and further progress in the weakening of the yen. The main reason Japan's exports have been stagnant is the economic downturn overseas, and it is too soon to declare the J-curve effect a thing of the past.

2.3.1 Structural analysis: Contributing to the trade deficit are the hollowing out effect Y7 tril, and the shutdown of nuclear power plants Y4 tril

Current account at a historic low due to further expanding of trade deficit

According to international current account statistics (Ministry of Finance, BOJ), the current account balance (preliminary figures) for the year 2013 was Y3.3 tril, the smallest amount in the black since 1985 (a comparable year). On a monthly basis, current account has continued to record deficits even when considering seasonally-adjusted figures. Some say that if the situation remains unchanged much longer then current account deficits will be here to stay. The main reason that Japan's current account

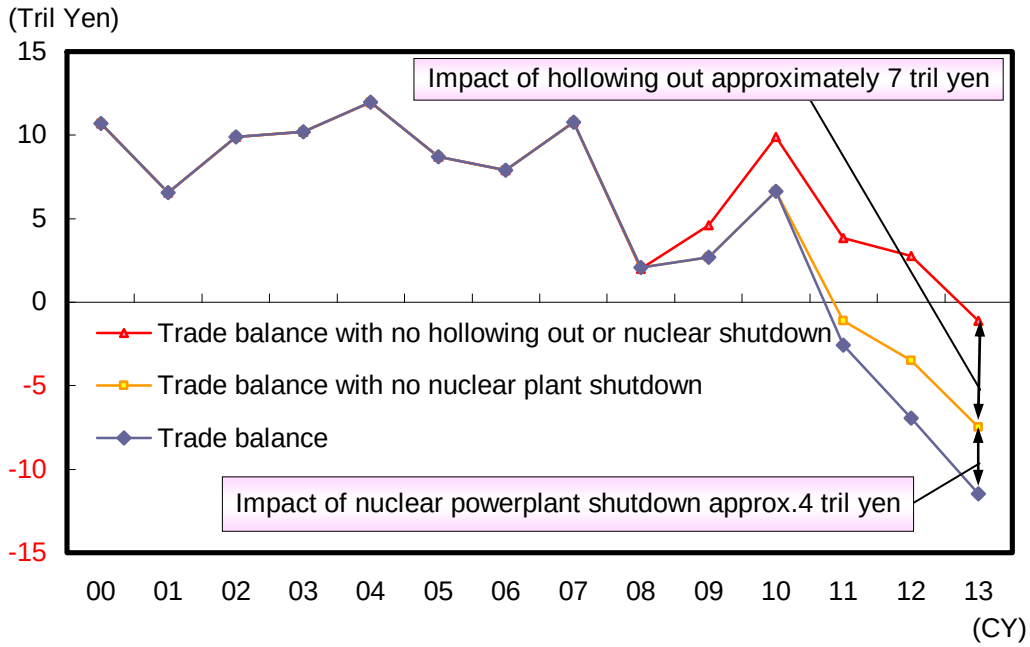
balance is in the red is the expansion of the trade deficit. Japan's trade balance on a customs-clearance basis was Y11.5 tril in the red in 2013, or Y10.6 tril on a balance of payments basis.

Will Japan's current account continue to register deficits in the future?

Japan's current account began to register deficits for the first time in 2011, and since then, the extent of these deficits has continued to expand. The main reasons are the hollowing-out effect and the shutdown of nuclear power plants after the 2011 Great East Japan Earthquake.

Chart 24 shows the influence of the hollowing-out effect and the shutdown of nuclear power plants on the trade balance. As of the year 2013, the trade deficit totaled Y11.5 tril, of which Y4 tril is attributed to a rise in imports due to the shutdown of nuclear power plants, and Y7 tril to the hollowing-out effect. Meanwhile, adverse factors were added to the deficit, including (1) the price of energy skyrocketed and the price of imports rose due to the weak yen, and (2) exports slowed due to manufacturers of electrical machinery losing their competitiveness and due to the economic slump overseas. More and more negative pressures have affected current account in recent years, but the main causes of the expanding trade deficit can still be considered the hollowing-out effect and the shutdown of nuclear power plants.

Impact of Hollowing-out Effect and Shutdown of Nuclear Power Plants on Trade Balance **Chart 24**



Source: Ministry of Finance statistics, compiled by DIR.

The hollowing-out effect progressed rapidly after the US financial crisis

In this section, we take a closer look at the progress of the hollowing-out effect in Japan and the influence it has had on the trade balance. Chart 25 shows Japan's export amount in comparison with the sales of overseas subsidiaries of Japanese companies. Until around the year 2008 these two were closely linked, but after the US financial crisis, exports suffered major declines. Even more recently when exports have recovered some of their growth, the numbers are still negligible in comparison with sales growth of overseas subsidiaries. One major reason for this is of course the trend within the manufacturing industries to move production overseas, a tendency which has progressed rapidly in recent years.

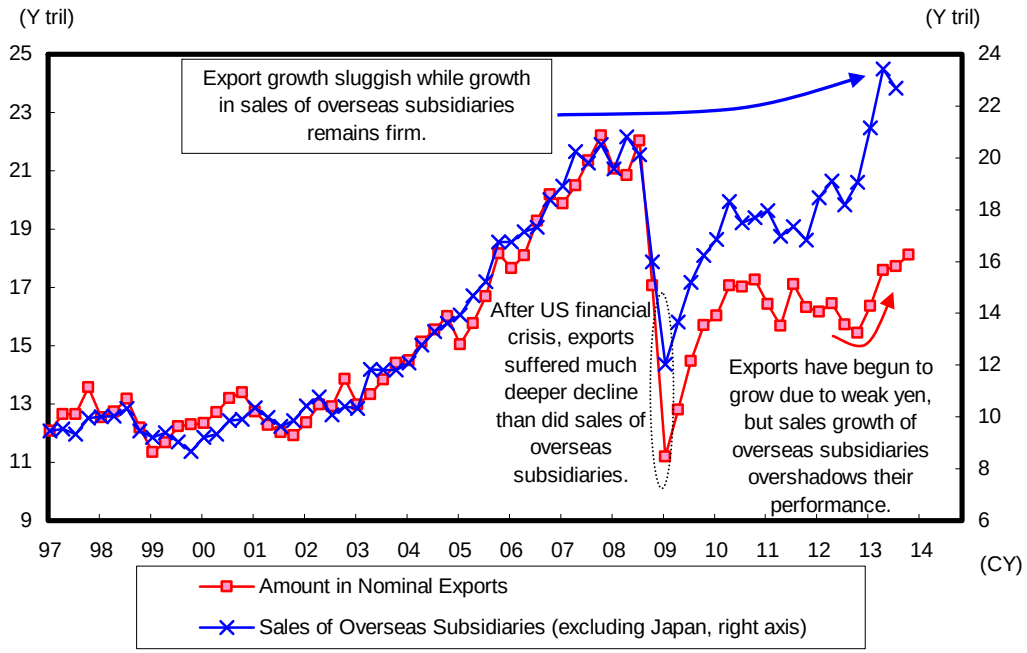
Influence of overseas expansion on the trade balance

Chart 26 shows the influence of overseas expansion on the part of Japanese corporations on the trade balance. Four major effects of the move overseas by Japanese corporations are shown in this chart. The common tendency for many observers is to assume that the export substitution effect is operating here. This is where exports decline after the move into foreign markets, and trade balance deteriorates. However, when the export substitution effect appears, it also encourages a decline in domestic production in Japan since at the same time, the import diversion effect takes hold, which counterbalances the negative effect on current account to some extent.

The most important of the four factors listed in the chart are the export inducement effect and the reverse import effect. Even when the production facility has been located overseas, exports can be increased by virtue of shipping parts and materials to the overseas factory for use in production there. This works to decrease the trade deficit. Meanwhile, if a company produces goods for domestic use at an overseas production facility, domestic production is changed into an import, and reverse imports increase.

In Chart 25, we see that a divergence occurred between the amount in exports and sales of overseas subsidiaries after the US financial crisis. This means that induced exports experienced a sudden and rapid decline. This indicates that not only are corporations producing goods overseas which once had been produced domestically, but there are also a growing number of corporations carrying out procurement of parts and materials overseas as well. At the same time, reverse imports from overseas subsidiaries are growing rapidly. Behind this we find that there are a growing number of Japanese corporations which not only produce goods in a location closer to the foreign market, but which also produce goods headed for the Japanese domestic market. Declines in induced exports and an increase in reverse imports represents a whole new dimension of business for Japanese corporations. In other words, Japanese corporations are no longer simply entering foreign markets and doing business internationally. This is a trend that is steadily progressing, and which deserves to be called hollowing out.

Nominal Amount in Exports and Sales of Overseas Subsidiaries **Chart 25**



Source: Ministry of Economy, Trade, and Industry, Ministry of Finance, compiled by DIR.

Affect of Moving Production Overseas on Trade Balance **Chart 26**

1. Reverse import effect	Import amount increases when parent company purchases goods produced by its own overseas subsidiaries.
2. Export inducement effect	Exporting parts to overseas subsidiaries causes parent company sales to grow and hence Japan's export amount as well.
3. Export substitution effect	Goods which normally would be produced in Japan are produced by overseas subsidiaries instead (substitute production), causing sales of overseas subsidiaries to grow, while Japan's export amount declines.
4. Import diversion effect	Goods normally produced in Japan are produced by overseas subsidiaries (substitute production), causing overseas subsidiary procurement expenses to increase, while Japan's import amount decreases.

Source: Compiled by DIR.

Influence of the hollowing-out effect on balance of trade

To what extent is the phenomenon of hollowing out influencing the trade balance? In chart 27, we analyze the four effects explained in the previous section and their role in the current situation, which is our base case, and then compare this with a hypothetical case in which the hollowing-out effect has not occurred.

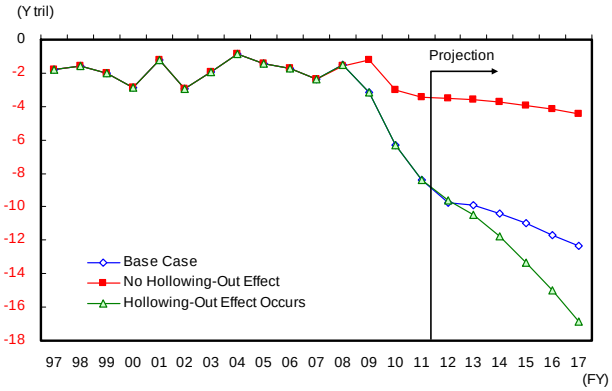
In comparing the two cases we find that since 2008, no truly relevant differences occur between the export substitution effect and the import diversion effect. However, when the export inducement effect experiences a significant drop, exports decline by around Y5 tril, and when the reverse import effect increases, imports grow by around Y2 tril. This effect results in the development of the hollowing-out effect, and the balance of trade shows a deficit of around Y7 tril.

The danger is that the hollowing-out effect may lead to a further expansion of the trade deficit. If the progress of the hollowing-out effect is not stopped, in another five years the trade deficit could grow another Y2.5 tril. Furthermore, if the hollowing-out effect progresses any further, the current account deficit may also grow another Y7 tril within the next five years. This case study also suggests that current account balance could experience a deficit.

The entry into overseas markets is still developing rapidly even in 2014, with the auto manufacturers establishing overseas production facilities one after the other. While there are also corporations which have increased domestic production due to the weak yen, thereby improving the above mentioned situation somewhat, finding a way to bring a halt to the progression of the hollowing-out effect remains a difficult issue. Implementation of government policies such as reducing the corporate tax rate and the establishment of special economic zones as a means of encouraging regulatory easing would do much to improve the domestic business environment.

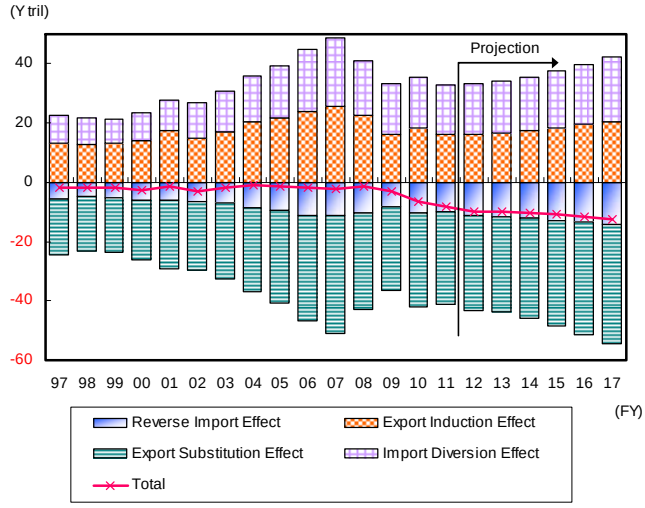
Affects of Manufacturing Industry Overseas Production on Trade Balance **Chart 27**

Affects of Overseas Production on Trade Balance

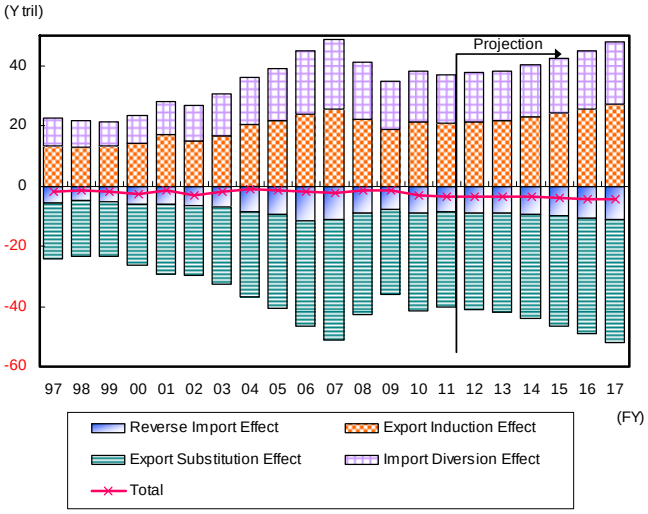


Source: Ministry of Economy, Trade, and Industry, compiled by DIR.

Affects of Manufacturing Industry Overseas Production on Trade Balance (Base Case)



Affects of Manufacturing Industry Overseas Production on Trade Balance (No Hollowing-Out Effect)



Source: Ministry of Economy, Trade, and Industry, compiled by DIR.

Note: Reverse Import Effect = Overseas subsidiaries export amount to Japan
Export Induction Effect = Overseas subsidiaries import amount from Japan
Export Substitution Effect = Overseas subsidiaries sales (except to Japan) x degree of export substitution
Import Diversion Effect = Overseas subsidiaries procurement amount (except from Japan) x degree of export substitution

2.3.2 Cyclical analysis: has the J-curve completed its course?

Too early to declare the J-curve effect a thing of the past

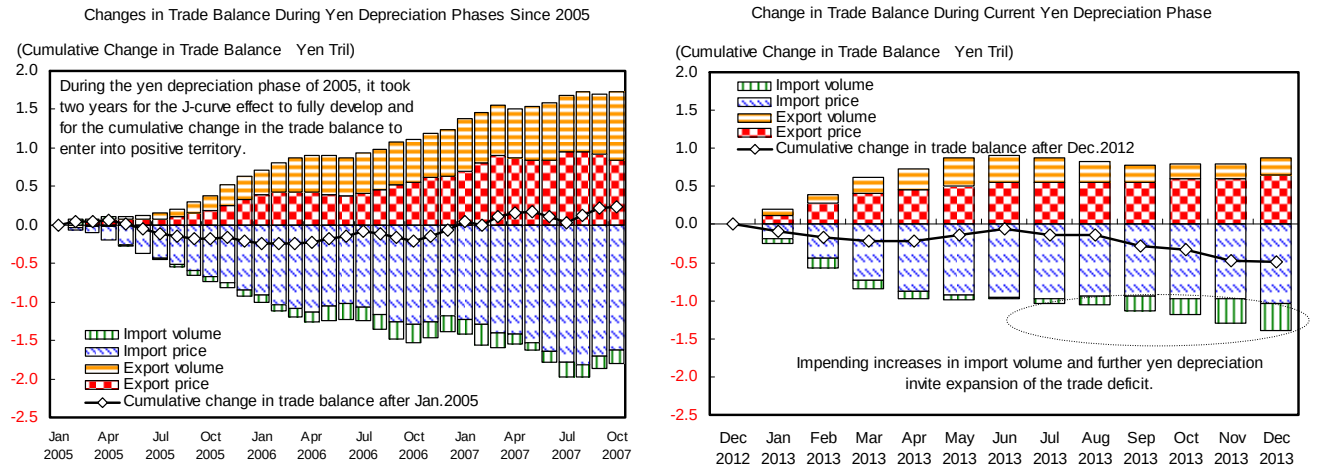
The opinion that the J-curve effect will not easily appear is often heard now from those involved in the market and from media sources. However, we believe that it is too early to declare the J-curve effect a thing of the past.

Trends in the trade balance during the year 2005 when the yen was in a depreciation phase and then since the end of 2012 are compared in Chart 28. First, as shown in the figure at left, when the yen began to weaken in 2005 a rise in import prices caused the trade balance to deteriorate, but then gradually export volume began to grow until 2007 when the cumulative variation range of the trade balance shifted toward the positive side. It took two years for the trade balance to finally move into positive numbers. In other words, even in cases where the J-curve effect occurs, it takes a fair amount of time for the trade balance to move further into the black (or for a deficit to shrink). During the current yen depreciation phase as well, chances are good that it will take some time for the J-curve

effect to develop. We see exports gradually strengthening their growth trend, and expect the trade deficit to begin shrinking on a cyclical basis beginning in early 2014.

However, during the current yen depreciation phase progress has been rapid, so the rise in import prices is steep. In addition, since growth in import volume is currently causing an expansion of the trade deficit, deterioration of the trade balance is greater than it was in 2005. Consequently, we must remain aware that it is quite possible that a shift of the cumulative variation range of the trade balance to the positive side could take more than two years.

Trends in The J-Curve Effect **Chart 28**



Source: Ministry of Finance, compiled by DIR

Note: All figures seasonally adjusted using 3-month moving average. Seasonally adjusted by DIR.

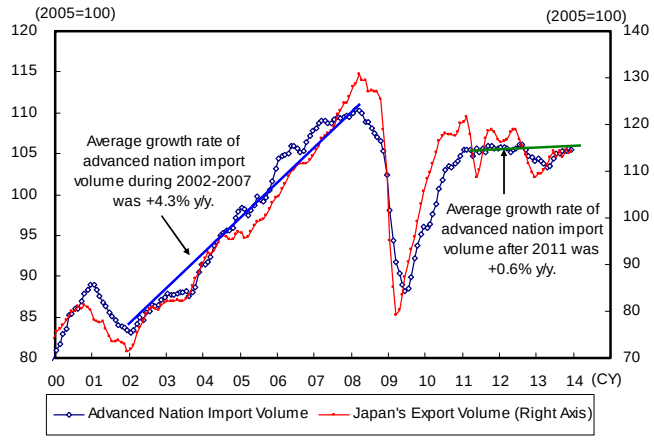
The main reason exports are slow is the advanced economies are still in the process of recovering

Despite the rapid progress of the yen's depreciation in this current phase, export volume is not growing much. This is of course related to the fact that it takes time for the J-curve effect to develop as was explained in the previous section. However, the main reason export growth is slow has little to do with the affect of the weak yen. Rather, slow export growth is more related to the still weak recovery of the major world economies.

Chart 29 shows changes in Japan's export volume as compared to import volume of the advanced nations. As the graph suggests, the two are closely linked, and one can also see that growth in import volume in the advanced countries is sluggish. The data confirms, therefore, that the reason growth in Japan's exports is slow is because recovery of the world's major economies is still underway.

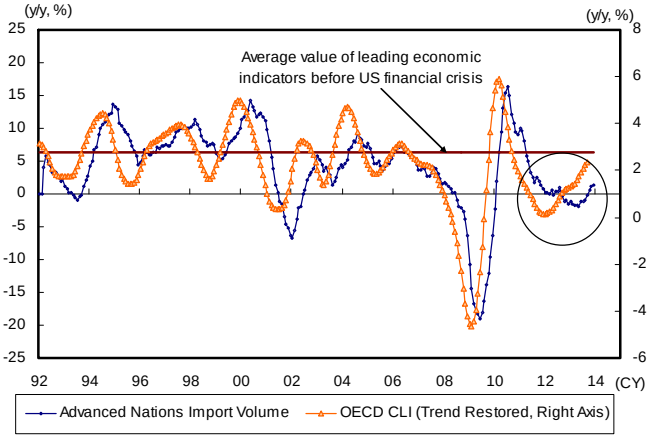
Next we take a look at Chart 30, in which composite leading indicators and import volume in the advanced nations are compared. Here we see that import growth tends to lag behind economic expansion by up to six months. Meanwhile, current year-to-year growth rate in the leading economic indicators continues to be slow in comparison to the average growth rate as it stood before the US financial crisis. Despite this, a recovery is expected in the near future. When one takes into account the US economy, which is expected to continue leading other countries in its recovery, one can also project that in all likelihood, the advanced nations overall will gradually see a strengthening of growth in import volume.

Japan's Export Volume and Advanced Nations Import Volume **Chart 29**



Source: Netherlands Bureau for Economic Policy Analysis (CPB), compiled by DIR.

Advanced Nations Leading Economic Indicators and Import Volume **Chart 30**



Source: Netherlands Bureau for Economic Policy Analysis (CPB), OECD, compiled by DIR.

The effect of the weak yen on exports is becoming apparent

The question of whether the weak yen is actually doing that much to push exports up is a worthwhile discussion.

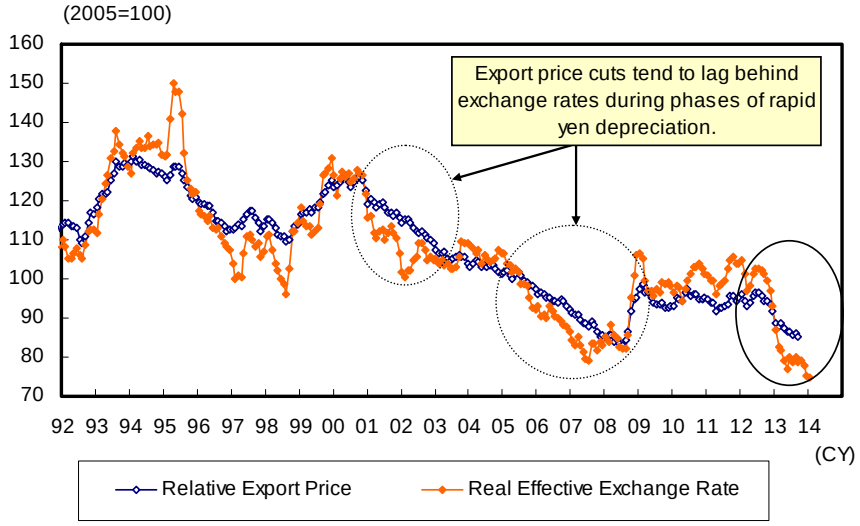
First of all, in order for the weak yen to bring about growth in export volume, Japanese export products must increase their price competitiveness with competing products of other countries. So the first thing we need to confirm is the price of Japanese exports in the countries where they are being shipped. Chart 31 shows the real effective exchange rate index as compared to Japan's relative export price. Here we see that Japan's relative export price fluctuates depending on the exchange rate.

Meanwhile, we already known that Japan's export volume and the import volumes of advanced nations is closely linked, but at the same time, the question of whether exports increases or decreases also depends on trends in overseas demand. And not only that, the export competitiveness of each country is affected by that country's share of overall exports. In other words, the second factor we need to confirm in order to find whether or not the weak yen is contributing to exports is whether Japan's share of overall exports is rising or declining.

Chart 32 shows Japan's relative export price and Japan's share of overall export volume of the advanced nations. Here we see that during the 2000s when the yen was progressively depreciating, import prices in Japan's export prices went into a relative decline while its share of exports grew. To put this in a different way, we can conclude that the weak yen effect was operating during this period. Then, when we look at more recent years, we see that in 2010 Japan's share of exports came to an end of the declines it had experienced up to that point. Export share had been falling during the previous decade because of the hollowing-out effect, but according to this data we can conclude that the weak yen put a stop to that trend.

To sum it all up, Japan's export price has been in a relative decline in comparison to other countries, but share of overall export volume of advanced nations has halted its decline. Hence we may conclude that the weak yen effect is already operating. We see the world economies strengthening the trend toward economic recovery lead by the US recovery, while possibilities are high that import volume will move into a growth trend in the future. If Japan can increase its share of overall export volume, export growth could exceed the pace of recovery in overseas economies.

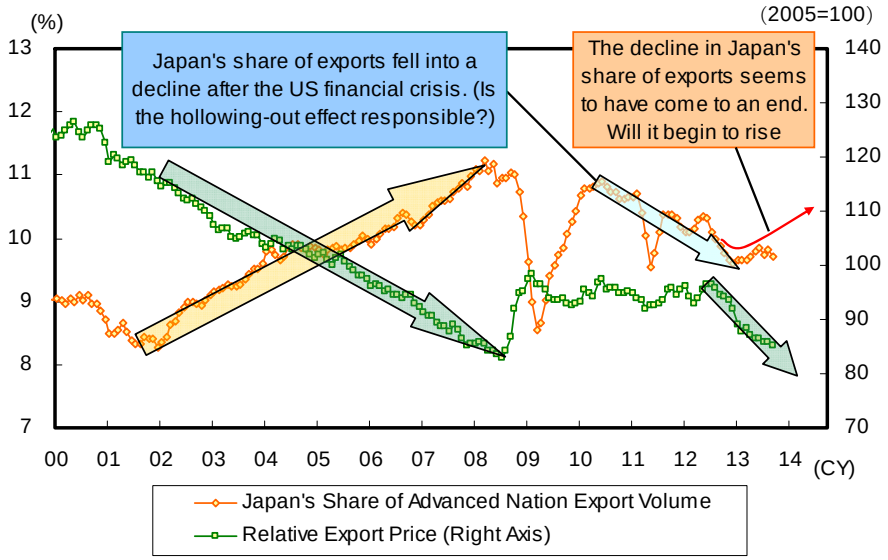
Exchange Rate and Relative Export Price — Chart 31



Source: BOJ, IMF, Compiled by DIR.

Note: Relative export price = Japan's export price (dollar denominated)/export price of advanced nations (dollar denominated).

Relative Export Price and Japan's Share of Advanced Nation Export Volume — Chart 32



Source: Netherlands Bureau for Economic Policy Analysis (CPB), IMF, compiled by DIR.

Note: Relative export price = Japan's export price (dollar denominated)/export price of advanced nations (dollar denominated).

2.4 Issue (4) Economic disparity

Performance of small sized corporations more prominent than in past recoveries

The fourth major issue facing Japan's economy is the question of Economic disparity.

During the current recovery, improvements in the performance of small corporations has been more prominent than in past recoveries, and has been noticeable from early on. Chart 33 shows the difference in the diffusion index of business sentiment (the DI spread) between large corporations and small businesses. During past recoveries, the DI spread has grown rapidly, and then after a short interval of time, replicated the process. The reason for this pattern is that usually the larger corporations lead the recovery, then later on as the recovery spreads, small businesses reap the benefits of recovery as well. However, during the recovery from the downturn which occurred after April 2012, the DI spread seemed to have already replicated. In other words, the ripple effect was extremely rapid during the current recovery, with small sized corporations benefitting from the positive influence earlier on than usual.

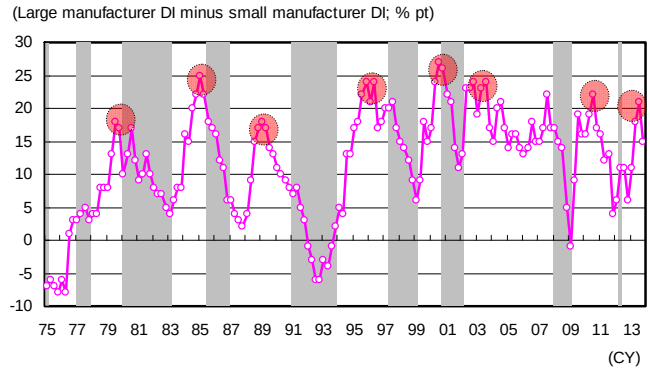
Export-driven = bigger gap, domestic demand-driven = smaller gap

Next, we examine economic disparity between corporations of different sizes based on the trend in production by size of corporation in the manufacturing industries. Chart 34 shows the growth rate in production for the manufacturing industries overall, with growth in production of small-to-medium sized corporations subtracted from this figure. When past trends in this index are viewed, we find that the difference on a year-to-year basis in percentage of real GDP accounted for by real exports is extremely similar. When exports grow, major corporations tend to experience significant growth in production volume, but the resulting ripple effect tends to reach few small-to-medium sized corporations. As a result, when GDP growth is export-driven, the gap in production volume between large corporations and small-to-medium sized corporations tends to grow wider.

To sum it all up, economic recovery is gradually spreading in Japan, and Economic disparity is shrinking on a cyclical basis. This recovery appears to be largely lead by domestic demand due to public investment, and is a factor which can prevent the gap from expanding. The government must guard against a widening of the gap by continuing to strengthen the virtuous circle of domestic demand.

Tankan Business Condition DI: Gap between Large and Small Manufactures

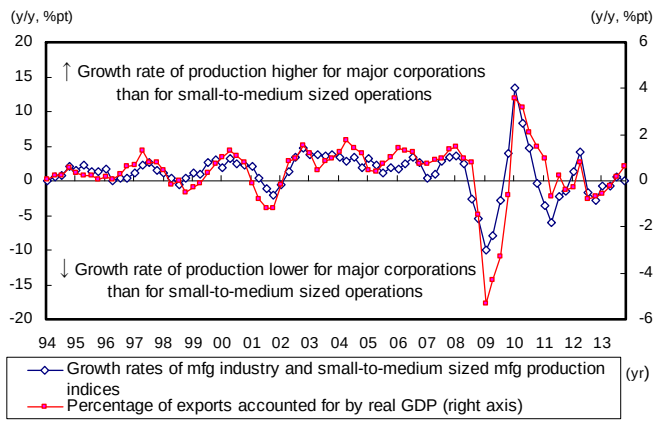
Chart 33



Source: Bank of Japan; compiled by DIR.
Notes: 1) Shaded areas denote economic downturns.
2) New criteria basis from Jan 2004.

Manufacturing Industry Production Disparity by Scale of Operations, and Percent Accounted for by GDP

Chart 34



Source: Statistics from Ministry of Economy, Trade and Industry and Cabinet office, compiled by DIR.

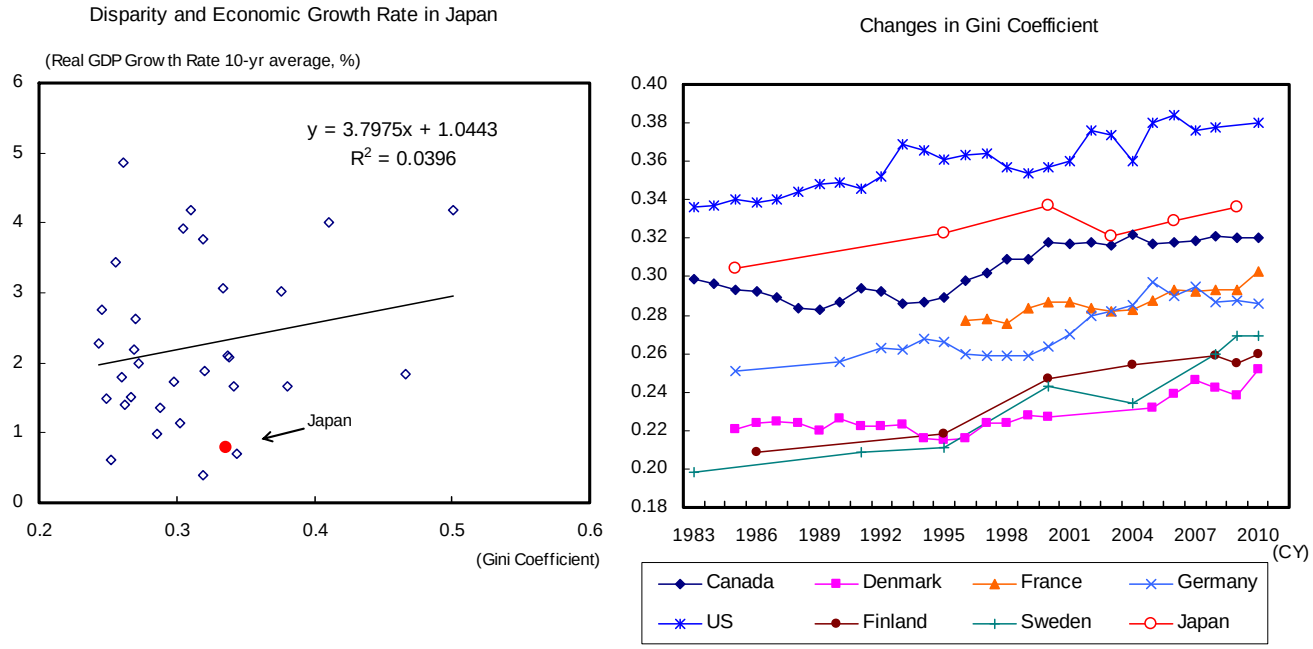
Gap uncorrelated with economic growth

When we compare the relationship between Economic disparity and economic growth in the OECD countries, no correlation is found between the existence of a gap and growth in real GDP (see Chart 35, left side). Speaking from the viewpoint of social stability, the fact is of course that social differences remain, but if nothing else, it is safe to say that the question of income gap is not a factor inhibiting economic growth

The widening income gap is a major world trend. The Japanese government's economic policy is not a major factor in the widening of the gap.

Viewing the OECD data in terms of changes in the Gini coefficient in a time-series (see Chart 35, right side), the trend of a widening income gap can be seen in the case of most countries. Even in the Scandinavian countries, well-known as major welfare states and whose Gini coefficients are the lowest in the world, a widening income gap can be detected when the Gini coefficient is placed in a time-series. As for Japan, Economic disparity widened during the 2000s when the country was in an export-lead recovery. However, this is a worldwide trend, and it does not necessarily mean that the situation was caused by the Japanese government's economic policies.

Disparity and Economic Growth **Chart 35**



Source: OECD statistics, compiled by DIR.

3. Four Risks Facing Japan's Economy

In this section, we examine four risks facing Japan's economy. Risks that will need to be kept in mind regarding the Japanese economy are: (1) turbulence in emerging economies, (2) China's shadow banking problem, (3) a reigniting of the European sovereign debt crisis, and (4) a surge in crude oil prices stemming from geopolitical risk. It is worth noting that the first is closely related to the second and third. Of these four risks, it is worth underscoring that the first and the second are of crucial importance, and we will analyze them more closely in the paragraphs below.

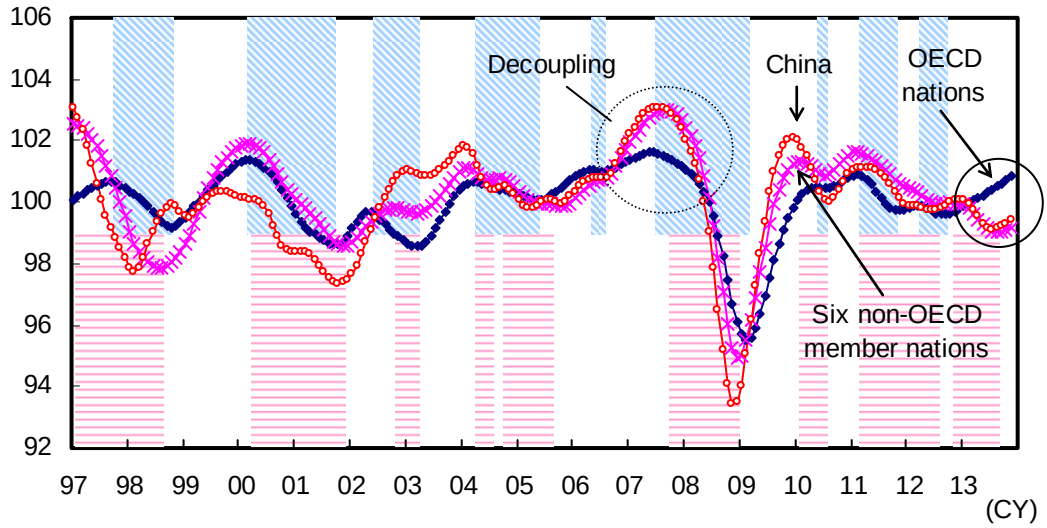
3.1 Risk (1): Turbulence in emerging economies

First, to examine turbulence in emerging economies, we analyze the world economic cycle. In the past, advanced economies led by the US drove emerging economies. However, a decoupling is currently occurring—advanced economies are performing well but emerging economies are stagnating. We believe that this decoupling is occurring for three reasons: (1) the dwindling amount of loans from European financial institutions to emerging economies in light of the European debt crisis, (2) the sluggishness of the Chinese economy, and (3) concerns that money will be taken out of emerging economies based on worries that the Fed will adopt a hasty exit from quantitative easing. We anticipate that a further deterioration of emerging economies will be avoided as the US economy continues to expand. Nevertheless, we think the state and the future direction of the Chinese economy will continue to require close monitoring.

Current situation of the world economy: Is a new decoupling occurring?

Chart 36 illustrates the trend of the composite leading indicator (CLI) for OECD member nations and for six non-OECD nations (Brazil, China, India, Indonesia, Russia, and South Africa). The former represents the business cycle of advanced economies and the latter of emerging economies.

Composite Leading Indicator (CLI): OECD vs. Non-OECD Member Economies **Chart 36**



Source: OECD; compiled by DIR.
Notes: 1) Non-OECD member economies: Brazil, China, India, Indonesia, Russia, and South Africa.
2) Blue shaded areas in upper half of graph denote periods when CLI declined m/m for OECD nations; pink shaded areas in lower half denote periods when CLI declined m/m for six non-OECD economies.

The chart tells us that the business cycles of advanced economies and emerging economies have more or less been in sync. The upper portions of shaded areas are periods when the CLI of OECD member nations declined m/m, and the lower portions are periods when the CLI of non-OECD nations declined. The chart reveals that there are hardly any periods when only advanced economies or emerging economies deteriorated. However, if we look at the current situation, the CLI of advanced economies has turned upward, but emerging economies' CLI has continued to decline since the start of 2011. In the mid-2000s, a decoupling theory came to prominence in the midst of a boom in emerging economies. It argued that emerging economies would continue to expand even if advanced economies stagnate. Currently, a decoupling in the opposite direction of that of the 2000s is occurring, where advanced economies expand as emerging economies contract.

However, recent data suggests that China and other emerging economies may soon hit bottom and begin a turnaround, at least in part lifted up by the more favorably performing advanced economies. With the economies of the advanced nations continuing to expand in a US-lead recovery, the economies of the emerging nations may ultimately be able to avoid the bottom falling out..

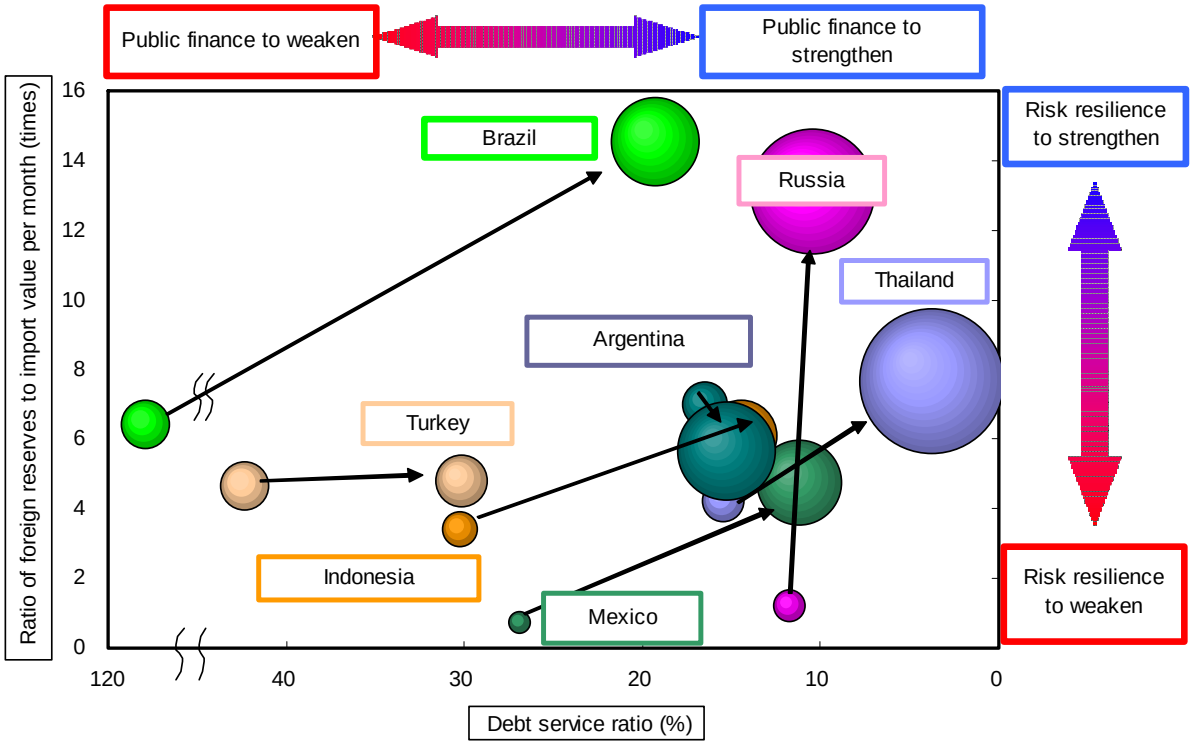
In this context, we should not overlook the clear deceleration of the Chinese economy. After peaking in 2009, China's CLI has continued to slow. Since China's economy is quite large compared to other emerging economies, it is reasonable to think that the slowing of Chinese economy is responsible for a considerable portion of the slowing of emerging economies as measured by CLI.

Possibility of a serious crisis in emerging economies is limited

We believe there is a limited possibility that emerging economies will experience a serious crisis similar to the Asian currency crisis in 1997. Chart 37 depicts changes in risk resilience of emerging market nations from the year each nation experienced a financial crisis. Learning from past financial crises, these nations have amassed huge foreign currency reserves. Not only has the absolute size of such reserves increased, but the size of foreign currency reserves relative to goods and services imports (vertical axis) and that relative to short-term foreign debt (the sizes of circles) have also improved for most nations. Moreover, the debt service ratio, defined as debt service payments for external debt as a percentage share of good and service exports, a leading indicator used to determine country risk, has fallen for the most part (conditions have improved) since the financial crisis.

As far as we can see from this chart, the possibilities of turmoil occurring in the world financial markets after January 2014 are rather slim. The ignition point for the last crisis was Argentina, but it seems to be an exception. Looking at the emerging nations overall, we see steady improvement in the fundamentals.

Risk Resilience of Emerging Market Economies **Chart 37**



Source: Haver Analytics; compiled by DIR.
Notes: 1) Arrows denote shift of positions at critical moments to 2012.
2) Year of crises defined as 1994 for Mexico, 1997 for Thailand and Indonesia, 1998 for Russia, 1999 for Brazil, 2001 for Turkey, and 2002 for Argentina.
3) Size of circles shows ratio of foreign reserves to foreign debt with less than one-year maturity. The larger the circle, the greater the resilience.

Will the US exit strategy benefit the Japanese economy?

In this section we contemplate how the global financial markets have been evaluating the US exit strategy since 2013.

We believe that the US exit strategy will hold many beneficial points for the Japanese economy. Possibilities are good that US the long-term interest rate will rise gradually in a mirroring of the recovery in the actual economy. Chart 38 shows changes in the US long-term interest rate and TOPIX. Movements of these two indices have fairly close linkage.

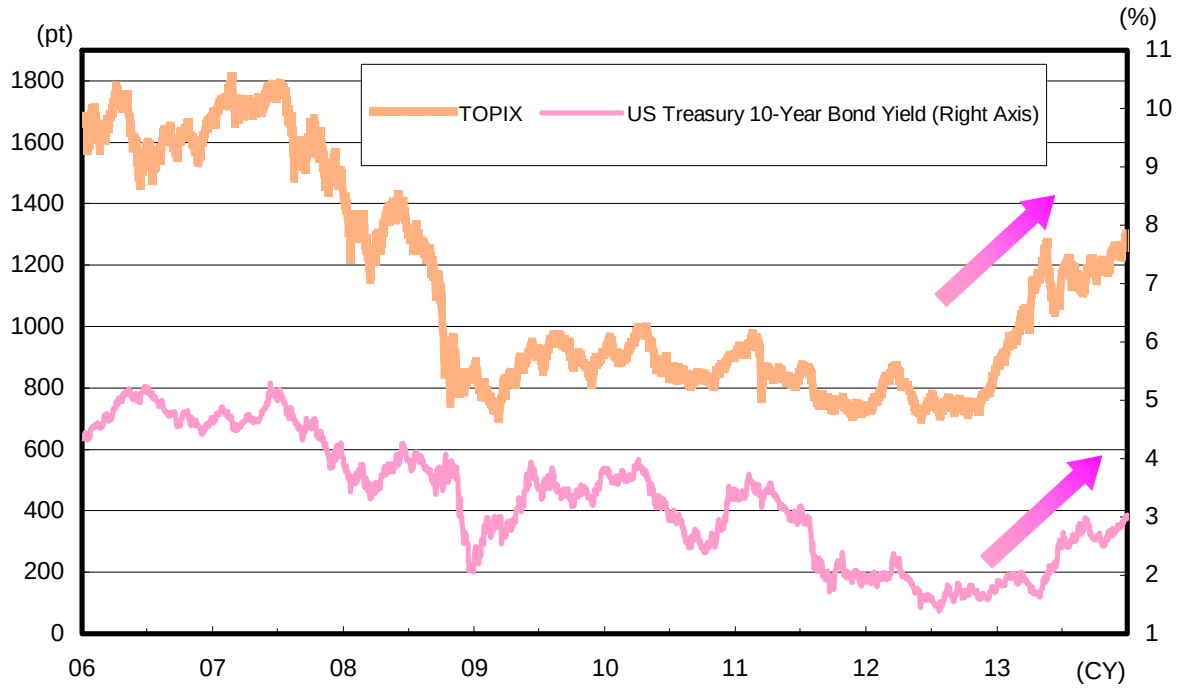
The question is why are the US long-term interest rate and Japanese stocks so closely linked?

The first reason is that the difference between US and Japan interest rates widens the more the US long-term interest rate rises, and this becomes a factor in the current weak yen/strong dollar relationship. As yen depreciation progresses, the amount of exports that Japan's corporations can achieve grows.

The second reason is that when the US long-term interest rate is tending upwards, it is usually because the US economy is strong. A favorable US economy provides fundamental support for Japan's overall exports.

Finally, if the FRB gives its official stamp to the recovery of the actual US economy, allowing for the moving ahead of a serious exit strategy, this will provide more confidence in the economy. New FRB chair Janet Yellen recently announced that she would gradually move forward with an exit strategy while carefully observing the recovery in the actual economy. In conclusion, we believe that any risk of the FRB's exit strategy being too fast, hence leading to major confusion in the international markets, especially emerging nations, is extremely limited.

TOPIX and U.S. Treasury 10-Year Bond Yield **Chart 38**



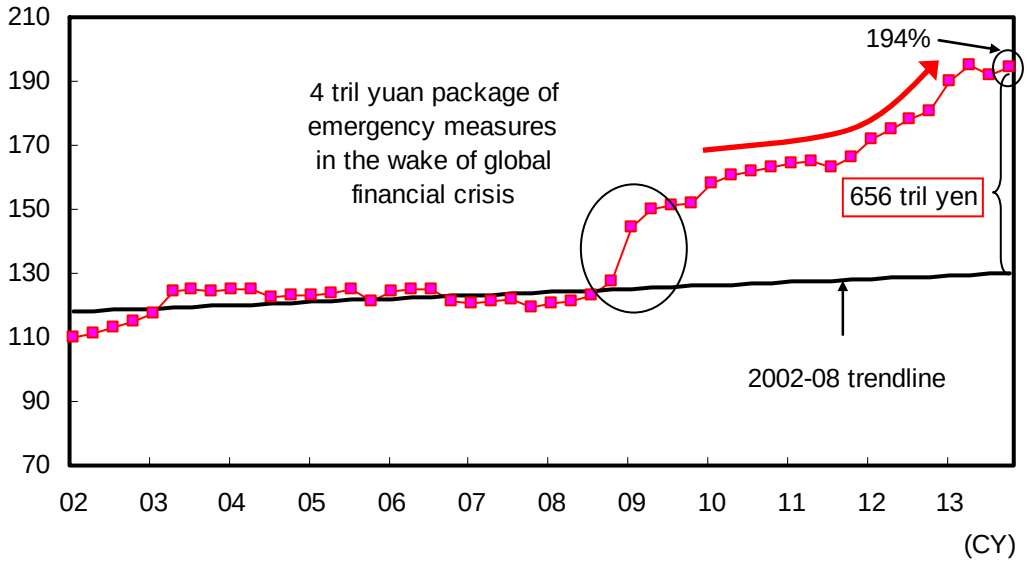
Source: Tokyo Stock Exchange and FRB, compiled by DIR.

3.2 Risk (2): China's shadow banking problem

3.2.1 China's shadow banking problem extremely serious

Excessive lending has become a problem in China in the wake of its response to the global financial crisis in 2008. Chart 39 provides an estimate of total social financing in China as a proportion of China's GDP. Such financing jumped from its long-term trend in 2009 and has continued to expand, reaching 194% of nominal GDP at the end of 2013. Comparing current levels to the long-term trend, we estimate excessive lending in China to be around Y656 trillion. Should part of these assets become non-performing, this could cause major turbulence in China and global financial markets. Risk scenarios that should be kept in mind include (1) China drawing down its foreign currency reserves (around $3.5 tril) to deal with non-performing debt, causing long-term interest rates to surge in the US, and (2) the yen appreciating from a global flight to quality.

China's Total Social Financing (% of GDP) **Chart 39**



Source: People's Bank of China, National Bureau of Statistics of China; compiled by DIR.
Assumption: Outstanding balance of total social financing as of end-Mar 2002 to be 1.1 times bank lending.

3.2.2 Impact on the world economy of the collapse of China's debt bubble should not be overstated

How will the world economy be affected by the collapse of China's debt bubble?

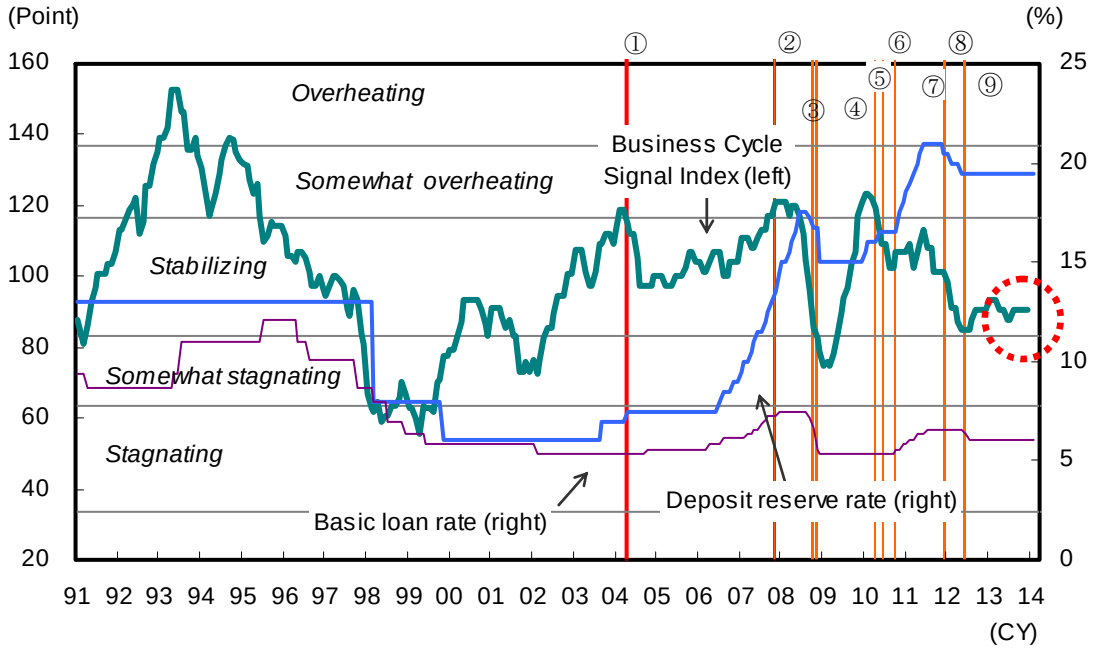
We believe that the impact on the world economy of the collapse of China's debt bubble should not be excessively overstated. Chart 40 presents the Business Cycle Signal Index for China. According to this index, we can confirm that China's economy has slowed significantly. After peaking at 123.3 in February 2010, the index has fallen to the lower bound of the zone signaling stability, between 83.33 and 116.66. Similar to previous instances when the economy has slowed to this extent, the likelihood is high that authorities will respond with some form of a stimulus measure and that the collapse of China's economy will be avoided one way or another.

Key phrases are "socialist market economy," "collective leadership," and "gradualism"

China being a socialist market economy rather than a pure capitalist economy may also be a factor supporting the economy for the time being. During the change in political leadership that occurs once a decade, it is natural for leaders to want to circumvent a rapid deceleration of the economy as much as possible. Politically speaking, collective leadership and a policy of gradualism could also be factors

that preclude a short-term relapse of the Chinese economy. In fact, there are growing views that the lower limit for the growth rate of real GDP in China is currently around 7% based on comments such as those recently made by Premier Li Keqiang.

China: Business Cycle Signal Index **Chart 40**



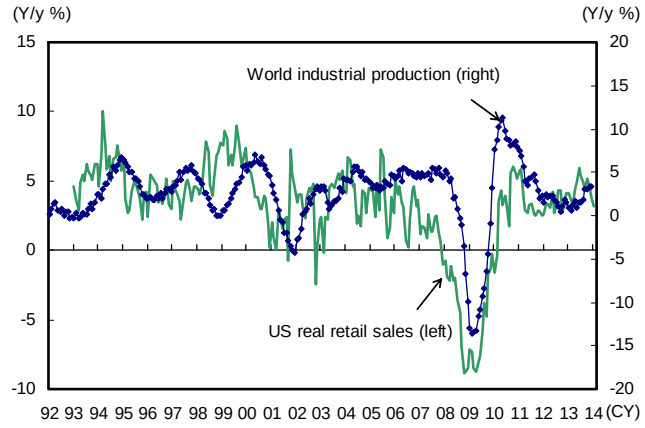
Source: National Bureau of Statistics of China, People's Bank of China, CEIC Data; compiled by DIR.

1. Apr 2004: Restrictions on aggregate loans strengthened
2. Oct 2007: Restrictions on aggregate loans strengthened
3. Oct 2008: Restrictions on aggregate loans eased
4. Nov 2008: Stimulus package of 4 tril yuan announced
5. Apr 2010: Real estate regulations strengthened
6. Jun 2010: More flexible regime for control of yuan exchange rate
7. Oct 2010-Jul 2011: Period of loan rate hikes
8. From Dec 2011: A series of deposit reserve rate lowering moves began
9. From Jun 2012: A series of loan rate cuts began

No change to the importance of the US for the world economy

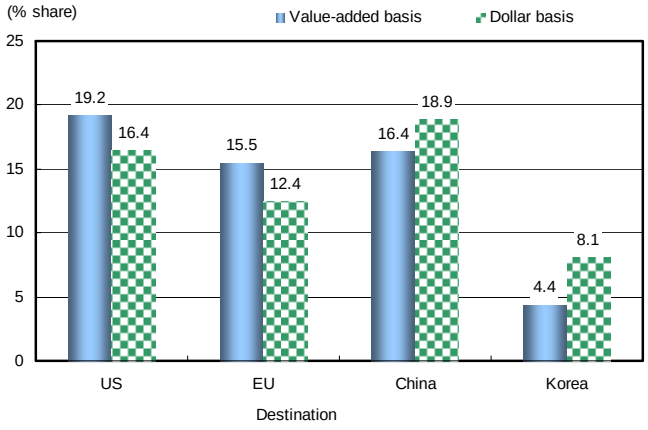
We believe that the US will remain the main engine of the world economy, a point that is worth mentioning. As indicated in Chart 41, US retail sales slightly lead global industrial production. In other words, of the sources for final demand, the US still plays the largest role. Chart 42 compares the shares of exports from Japan by trading partner on a value-added basis and on a dollar basis. Comparing the US and China, the share of exports shipped to China is larger on a dollar basis than that to the US, but exports to the US is larger on a value-added basis. This is extremely interesting since it suggests that there exists a trade structure where intermediate goods are exported from Japan to China and other Asian trading partners, assembled into finished goods and re-exported to European nations and the US, the sources of final demand.

World Industrial Production and US Retail Sales
Chart 41



Source: Netherlands Bureau for Economic Policy Analysis (CPB), US Bureau of Economic Analysis; compiled by DIR.

Export of Goods from Japan by Destination
Chart 42



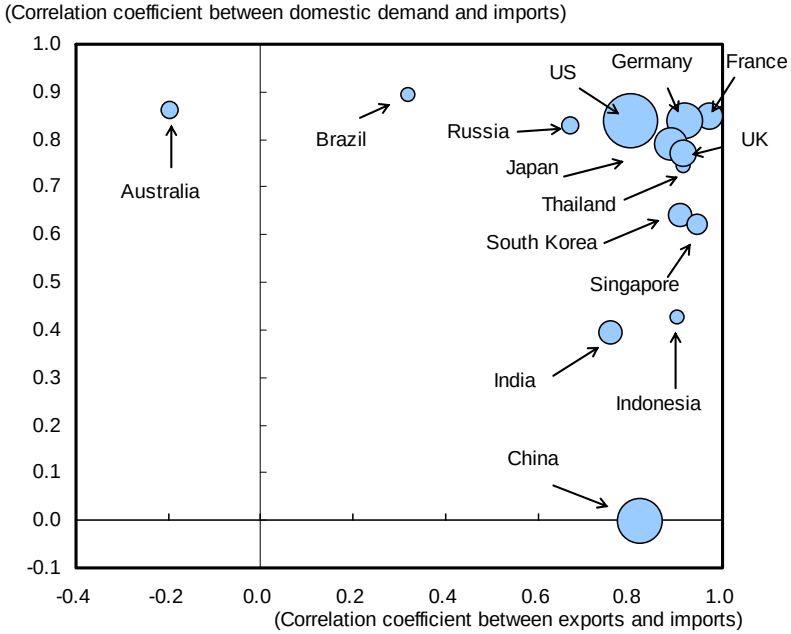
Source: OECD, Haver Analytics; compiled by DIR.
Note: Export of goods in 2009.

Slowing of China's economy will have only a limited impact on the world economy

Of the routes through which the economy of one nation influences that of another, the route through trade is the easiest to understand. If one nation's imports increase, this means that there is an equal amount of increase in the exports of others. In other words, imports determine the degree to which the real economy of a nation influences the world economy. What then determines imports? Imports can go towards satisfying domestic demand (consumption and investment), can be re-exported, or can become intermediate goods as a factor of production. The demand for intermediate goods will in the end depend on the demand for the final goods that are produced. Thus, imports are determined by domestic demand and exports.

Given the argument above, Chart 43 illustrates the relationship between imports and domestic demand and that between imports and exports for major nations. The horizontal axis shows the correlation coefficient between exports and imports, with the right-hand side indicating a higher correlation between exports and imports. The vertical axis shows the correlation coefficient between domestic demand and imports, with the upper-hand-side indicating a higher correlation between domestic demand and imports. The sizes of the circles indicate the percentage share of a nation's imports against imports as a whole. The chart reveals that a majority of major nations are positioned to the upper right, confirming that imports are correlated to a certain degree with both exports and domestic demand. China, however, is different. It is in the lower right-hand, suggesting that while its imports and exports are correlated, the correlation between domestic demand and imports is minimal. Recently, the problem of shadow banking in China has raised concerns that its economy will falter. If the Chinese economy rapidly deteriorates, as long as the deterioration comes from the contraction of domestic demand such as personal consumption and investments, the impact on Chinese imports and in turn the world economy should be minimal.

Domestic Demand vs. Exports and Imports — Chart 43



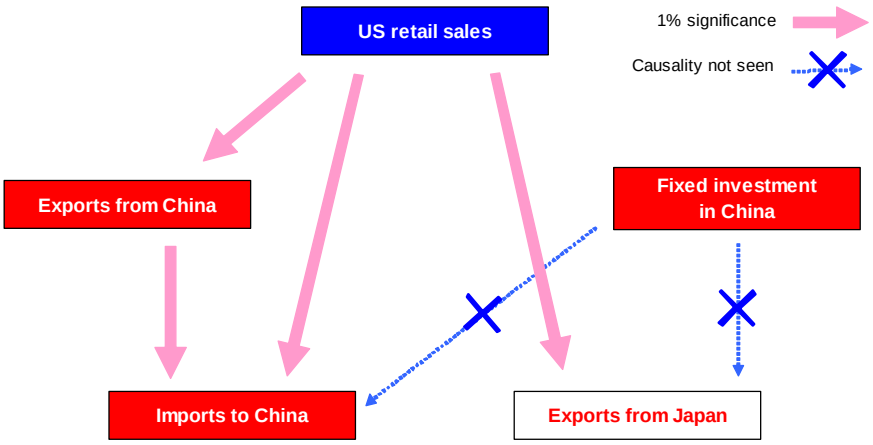
Source: UN, IMF; compiled by DIR.
Notes: 1) Size of circles denotes world import share.
2) Correlation coefficients and import shares are for 2000-11 and 2012, respectively.

US retail sales found to have causality in relation to Chinese exports, Chinese imports, and Japanese exports

To supplement the discussion above, Chart 44 illustrates a Granger causality test using a five-variable vector autoregression model with the variables being (1) US retail sales, (2) Chinese exports, (3) Chinese imports, (4) Chinese fixed investments, and (5) Japanese exports. Granger causality is set to be established when variable X is viewed as Granger-causing Y while past information about variable X is useful in improving the prediction of variable Y.

As indicated in Chart 44, when the global economy is viewed in broad terms, US retail sales are found to have causality in relation to Chinese exports, Chinese imports, and Japanese exports. In contrast, Chinese fixed investments were not found to have any significant causality in relation to Chinese imports or Japanese exports in statistical terms.

Granger Causality Test on Economic Activity in the US, China, and Japan — Chart 44



Source: Haver Analytics, Ministry of Finance; compiled by DIR.
Estimation period: Jul 2001 to May 2013.

4. Supplement: Alternative scenarios

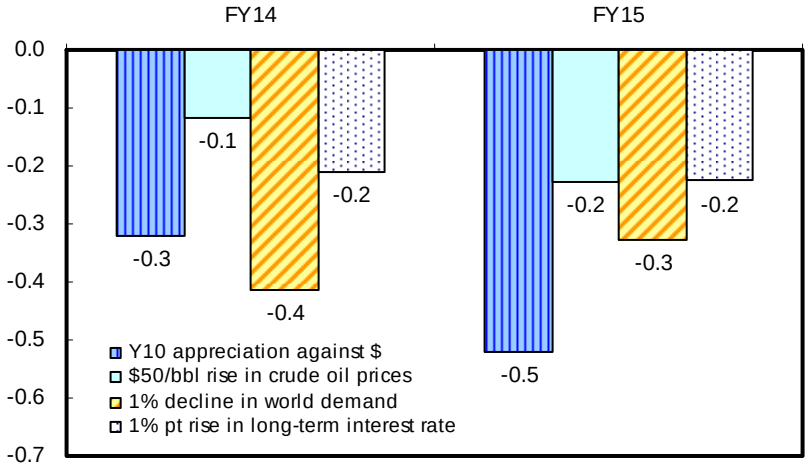
Here, we estimate likely economic effects from changes in our assumptions. The assumptions and effects of alternative scenarios are shown in the two charts below. We assumed alternative scenarios might emerge from Apr-Jun 2014.

Standard and Alternate Scenario Assumptions

	Standard scenario		Alternate scenario (in each quarter in both years)
Case 1: Forex rate	Y100.0/$ in FY14 and Y100.0/$ in FY15	→	Y10 appreciation against $
Case 2: Crude oil prices (WTI futures)	$100.0/bbl in both FY14 and FY15		$50/bbl rise
Case 3: World GDP	+3.7% y/y in CY14 and +3.9% y/y in CY15		1% contraction in world GDP level
Case 4: Long-term interest rate	0.70% in FY14 and 0.89% in FY15		1% pt rise

Source: Compiled by DIR.

Effects on Real GDP (% change from standard scenario) **Chart 45**



Source: Compiled by DIR.

4.1 Yen appreciation

Appreciation of the yen could result in a decline in exports via weakened price competitiveness, which in turn would curb the production of export industries (electrical machinery, transportation equipment) and operations of related non-manufacturing industries (transportation, electric utilities, commerce), resulting in lower sales and profits, reducing cash flow, and depressing the expected economic growth rate. Thus, capex would be restricted. Meanwhile, lower import prices (reflecting a stronger yen) would reduce general domestic prices, meaning lower prices of corporate and consumer goods. Thus, although the real purchasing power of households would increase, a stronger yen could adversely affect consumption because the decline in corporate profits could impact households through deterioration in the employment and income environment. However, considering the long time lag before effects on consumption are felt, the likely impact within our simulation period would be minimal. If the yen appreciates as indicated in our alternative scenario, real GDP level is forecast to shrink 0.3% and 0.5% in FY14 and FY15, respectively, compared to our standard scenario.

4.2 Surge in crude oil prices

If crude oil prices rise by $50/bbl above our standard scenario, real GDP level is forecast to shrink 0.1% and 0.2% in FY14 and FY15, respectively, compared to our standard scenario.

Higher crude oil prices would increase the import deflator, which would increase nominal import value, a drag on net export value. This would lower nominal GDP. At the same time, higher oil prices would increase energy prices and push up the prices of final goods through higher material prices. This would lower the real purchasing power of the household sector and depress personal spending.

Higher material costs would lower corporate profits, leading to a slowdown in capex. Weakened business sentiment would negatively affect capex the following year. Meanwhile, lower corporate profits would worsen employment and income conditions, dampening consumer sentiment. This would also depress personal spending.

4.3 Contraction of world GDP

If world demand (GDP) contracts 1% from our standard scenario, Japan's real GDP level would shrink 0.4% and 0.3% in FY14 and FY15, respectively, compared to our standard scenario.

A slowdown in world demand would reduce exports from Japan, and the lower sales of the manufacturing sector would worsen corporate profits. Also, the decline of production activities in the manufacturing sector would spread to the non-manufacturing sector and would broadly undermine corporate profits. In addition to the decrease in corporate profits, capex would diminish due to a lower capacity utilization rate stemming from the waning of industrial production and due to the growing sentiment of excess capacity. Moreover, the decrease in corporate profits would place downward pressure on wages, and demand in the household sector in the form of personal consumption and housing investment would falter with a lag. Should such a situation arise, imports would also contract from the decrease in domestic demand.

4.4 Higher interest rates

If long-term interest rates rise 1 point above our standard scenario, real GDP level would contract 0.2% and 0.2% in FY14 and FY15, respectively, compared to our standard scenario. Increased fund-raising costs due to higher interest rates would curb capex and housing investment. Such an adverse impact would accelerate once it took hold.

The direct impact on companies and households would depend on the amount of net interest-bearing liabilities. In the case of households, interest-bearing assets have exceeded interest-bearing liabilities. Earned income will suffer a decline due to the slowing of investment, but this will be offset by an increase in income from property. Therefore we believe the affect on personal consumption will be minor.

As in the other cases, we did not allow for changes in the external environment when estimating the impact of higher interest rates. Interest rates do not usually rise independently, but increase in response to economic recovery or a shift to a positive economic outlook. In such instances, the expected rate of inflation also increases, which restricts the rise of real interest rates. As a result, the marginal return on investment (difference between return on investment and real interest rates) remains unchanged, which is not particularly negative for capex. It is therefore possible that our simulation overemphasizes the adverse effects of higher interest rates.

However, increases in long-term interest rates due to worsening of the fiscal balance (owing to economic stimulus measures and other fiscal commitments to spending) translate into crowding out of capex and housing investment. Thus, the impact of higher interest rates on the economy would likely be similar to that of our simulation.

Simulation Results — Chart 46

	Standard Scenario		Case 1 Y10 appreciation against $				Case 2 $50/bbl rise in crude oil prices			
	FY14	FY15	FY14		FY15		FY14		FY15	
Nominal GDP (Y/y %)	2.7	2.5	2.0	(-0.7)	2.4	(-0.8)	2.4	(-0.3)	2.5	(-0.4)
Real GDP (Chained [2005]; y/y %)	**1.0**	**1.5**	**0.7**	**(-0.3)**	**1.3**	**(-0.5)**	**0.9**	**(-0.1)**	**1.4**	**(-0.2)**
GDP deflator (Y/y %)	1.6	1.0	1.2	(-0.4)	1.1	(-0.3)	1.4	(-0.2)	1.0	(-0.1)
All-industry Activity Index (Y/y %)	1.2	2.0	0.7	(-0.6)	1.9	(-0.6)	1.3	(0.1)	1.9	(0.0)
Industrial Production Index (Y/y %)	4.3	6.3	2.4	(-1.9)	6.2	(-2.0)	4.2	(-0.1)	6.0	(-0.4)
Tertiary Industry Activity Index (Y/y %)	0.3	0.9	-0.1	(-0.4)	0.9	(-0.4)	0.4	(0.1)	0.9	(0.1)
Corporate Goods Price Index (Y/y %)	3.4	2.1	2.1	(-1.3)	2.1	(-1.4)	4.4	(1.0)	2.2	(1.1)
Consumer Price Index (Y/y %)	3.0	1.5	2.8	(-0.2)	1.5	(-0.3)	3.2	(0.2)	1.6	(0.2)
Unemployment rate (%)	3.8	3.7	3.8	(0.0)	3.7	(0.0)	3.8	(0.0)	3.7	(0.1)
Trade balance (Y tril)	-13.3	-11.8	-12.8	(0.5)	-11.1	(0.7)	-14.9	(-1.6)	-13.5	(-1.8)
Current balance (US$100 mil)	199	602	384	(185)	570	(-32)	127	(-72)	527	(-75)
Current balance (Y tril)	2.0	6.0	3.4	(1.5)	5.5	(-0.5)	1.3	(-0.7)	5.3	(-0.7)
Real GDP components (Chained [2005]; y/y %)										
Private consumption	-0.2	1.0	-0.3	(-0.1)	1.0	(-0.1)	-0.3	(-0.1)	1.1	(-0.0)
Private housing investment	-1.2	-1.4	-1.4	(-0.3)	-1.6	(-0.5)	-1.3	(-0.1)	-1.6	(-0.3)
Private non-housing investment	5.2	5.0	3.9	(-1.2)	4.7	(-1.4)	4.8	(-0.3)	4.0	(-1.2)
Government final consumption	1.5	1.0	1.7	(0.1)	1.1	(0.2)	1.5	(-0.0)	0.9	(-0.1)
Public fixed investment	-4.4	-11.4	-3.7	(0.6)	-11.4	(0.7)	-4.8	(-0.5)	-11.4	(-0.5)
Exports of goods and services	5.9	8.3	5.3	(-0.6)	7.8	(-1.0)	5.7	(-0.2)	7.9	(-0.5)
Imports of goods and services	4.8	5.2	4.5	(-0.3)	6.0	(0.5)	4.4	(-0.4)	4.5	(-1.0)

	Case 3 1% contraction of World GDP				Case 4 1% pt rise in 10-yr JGB yield				(Reference) Y5 depreciation and $50/bbl rise in crude oil prices			
	FY14		FY15		FY14		FY15		FY14		FY15	
Nominal GDP (Y/y %)	2.2	(-0.4)	2.6	(-0.4)	2.4	(-0.2)	2.5	(-0.2)	2.7	(0.1)	2.5	(0.0)
Real GDP (Chained [2005]; y/y %)	**0.6**	**(-0.4)**	**1.6**	**(-0.3)**	**0.8**	**(-0.2)**	**1.5**	**(-0.2)**	**1.1**	**(0.0)**	**1.5**	**(0.0)**
GDP deflator (Y/y %)	1.6	(-0.0)	0.9	(-0.0)	1.6	(0.0)	1.0	(-0.0)	1.6	(0.0)	1.0	(0.0)
All-industry Activity Index (Y/y %)	1.0	(-0.3)	2.0	(-0.2)	1.1	(-0.1)	2.0	(-0.1)	1.6	(0.3)	1.9	(0.3)
Industrial Production Index (Y/y %)	3.2	(-1.1)	6.5	(-0.9)	3.9	(-0.4)	6.3	(-0.4)	5.2	(0.8)	6.1	(0.6)
Tertiary Industry Activity Index (Y/y %)	0.2	(-0.1)	0.9	(-0.1)	0.2	(-0.1)	0.9	(-0.1)	0.6	(0.3)	1.0	(0.3)
Corporate Goods Price Index (Y/y %)	3.4	(-0.0)	2.0	(-0.1)	3.4	(0.0)	2.1	(-0.0)	5.1	(1.6)	2.2	(1.8)
Consumer Price Index (Y/y %)	3.0	(-0.0)	1.5	(-0.1)	3.0	(-0.0)	1.5	(-0.0)	3.3	(0.3)	1.6	(0.3)
Unemployment rate (%)	3.8	(-0.0)	3.7	(0.0)	3.8	(0.0)	3.7	(0.0)	3.8	(0.0)	3.7	(0.1)
Trade balance (Y tril)	-13.7	(-0.4)	-12.1	(-0.3)	-13.2	(0.2)	-11.1	(0.7)	-15.2	(-1.8)	-13.9	(-2.1)
Current balance (US$100 mil)	223	(24)	612	(9)	291	(92)	410	(-192)	35	(-164)	543	(-59)
Current balance (Y tril)	2.2	(0.2)	6.1	(0.1)	2.9	(0.9)	4.1	(-1.9)	0.5	(-1.5)	5.5	(-0.5)
Real GDP components (Chained [2005]; y/y %)												
Private consumption	-0.3	(-0.1)	1.1	(-0.0)	-0.2	(-0.0)	1.0	(-0.0)	-0.2	(-0.0)	1.1	(0.0)
Private housing investment	-1.3	(-0.2)	-1.6	(-0.4)	-1.9	(-0.8)	-1.2	(-0.6)	-1.1	(0.0)	-1.5	(-0.1)
Private non-housing investment	4.8	(-0.3)	4.8	(-0.5)	3.7	(-1.4)	4.8	(-1.6)	5.5	(0.3)	4.1	(-0.5)
Government final consumption	1.6	(0.0)	1.0	(0.0)	1.6	(0.0)	1.0	(0.0)	1.5	(-0.1)	0.9	(-0.2)
Public fixed investment	-4.3	(0.0)	-11.3	(0.1)	-4.4	(-0.0)	-11.4	(0.0)	-5.1	(-0.8)	-11.5	(-0.9)
Exports of goods and services	3.8	(-2.0)	8.8	(-1.6)	5.9	(-0.0)	8.3	(-0.0)	6.0	(0.1)	8.2	(0.0)
Imports of goods and services	4.4	(-0.3)	5.3	(-0.2)	4.3	(-0.5)	5.1	(-0.5)	4.5	(-0.2)	4.0	(-1.3)

Source: Compiled by DIR.
Note: Figures in parentheses indicate changes from those under standard scenario. Due to rounding, they do not necessarily conform to calculations based on figures shown.

5. Quarterly Forecast Tables

1.1 Selected Economic Indicators

	2012	2013						2014	FY		CY	
	4-6	7-9	10-12	1-3	4-6	7-9	10-12	1-3 (E)	2012	2013 (E)	2012	2013
Nominal GDP (SAAR; Y tril)	475.2	470.5	470.6	474.1	478.8	479.6	481.5	488.0	472.6	481.8	473.8	478.4
Q/q %	-0.9	-1.0	0.0	0.7	1.0	0.2	0.4	1.3				
Q/q %, SAAR	-3.5	-3.9	0.1	3.0	4.1	0.7	1.6	5.5				
Y/y %	2.1	-1.0	-1.0	-1.0	0.6	1.9	2.4	2.9	-0.2	2.0	0.5	1.0
Real GDP (chained [2005]; SAAR; Y tril)	519.1	514.9	514.6	520.7	525.7	527.2	528.5	535.5	517.5	529.1	517.4	525.5
Q/q %	-0.4	-0.8	-0.1	1.2	1.0	0.3	0.3	1.3				
Q/q %, SAAR	-1.7	-3.1	-0.2	4.8	3.9	1.1	1.0	5.4				
Y/y %	3.2	-0.2	-0.3	0.0	1.2	2.3	2.7	2.8	0.6	2.3	1.4	1.6
Contribution to GDP growth (% pt)												
Domestic demand	-0.1	-0.2	0.1	0.8	0.8	0.8	0.8	1.4	1.4	2.6	2.3	1.9
Foreign demand	-0.3	-0.6	-0.1	0.4	0.1	-0.5	-0.5	-0.1	-0.8	-0.3	-0.9	-0.3
GDP deflator (y/y %)	-1.1	-0.7	-0.7	-1.0	-0.5	-0.4	-0.4	0.1	-0.9	-0.3	-0.9	-0.6
Index of All-Industry Activity (2005=100)	96.6	96.2	96.1	96.1	97.1	97.7	97.9	99.3	96.2	98.0	96.5	97.2
Q/q %; y/y %	-0.2	-0.4	-0.0	-0.0	1.0	0.6	0.3	1.4	0.2	1.8	1.2	0.7
Index of Industrial Production (2010=100)	99.1	95.9	94.1	94.7	96.1	97.7	99.5	102.4	95.8	98.8	97.8	97.0
Q/q %; y/y %	-2.1	-3.3	-1.8	0.6	1.5	1.7	1.8	2.9	-3.0	3.1	0.6	-0.9
Index of Tertiary Industry Activity (2005=100)	99.0	99.0	99.3	99.5	100.2	100.1	99.8	100.8	99.2	100.2	99.3	99.9
Q/q %; y/y %	0.0	0.0	0.3	0.2	0.6	-0.0	-0.3	1.0	0.8	1.0	1.4	0.6
Corporate Goods Price Index components (2010=100)												
Domestic Company Goods Price Index	100.9	100.2	100.1	100.9	101.6	102.4	102.6	102.8	100.5	102.3	100.6	101.9
Y/y %	-1.0	-1.9	-1.0	-0.3	0.6	2.2	2.5	1.9	-1.0	1.8	-0.9	1.3
CPI (excl. fresh food; 2010=100)	99.9	99.6	99.6	99.3	99.9	100.3	100.7	100.6	99.6	100.4	99.7	100.1
Y/y %	-0.0	-0.2	-0.1	-0.3	0.0	0.7	1.1	1.4	-0.2	0.8	-0.1	0.4
Unemployment rate (%)	4.4	4.3	4.2	4.2	4.0	4.0	3.9	3.9	4.3	4.0	4.4	4.0
Call rate (end-period; %)	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
Government bond yield (10 year; %)	0.85	0.78	0.76	0.66	0.77	0.73	0.64	0.63	0.76	0.69	0.80	0.74
Money stock; M2 (y/y %)	2.4	2.4	2.3	2.9	3.5	3.8	4.2	3.8	2.5	3.8	2.5	3.6
Trade balance (SAAR; Y tril)	-4.4	-6.6	-6.4	-10.1	-7.4	-11.5	-13.5	-15.5	-6.9	-12.0	-5.8	-10.6
Current balance (SAAR; $100 mil)	767	497	532	339	906	238	-121	-199	524	206	605	339
Current balance (SAAR; Y tril)	6.1	3.9	4.3	3.1	8.9	2.4	-1.2	-2.0	4.4	2.0	4.8	3.3
(% of nominal GDP)	1.3	0.8	0.9	0.7	1.9	0.5	-0.3	-0.4	0.9	0.4	1.1	0.7
Exchange rate (Y/$)	80.1	78.6	81.2	92.3	98.8	98.9	100.4	102.0	83.1	100.0	79.8	97.6
(Y/Euro)	101.2	98.2	108.2	122.0	129.6	130.7	139.9	140.0	107.4	135.1	103.5	130.6

Source: Compiled by DIR.
Notes: 1) Quarterly figures (excl. y/y %) seasonally adjusted, other unadjusted.
2) Index of All-Industry Activity Index: excl. agriculture, forestry, and fisheries.
3) Due to rounding, figures may differ from those released by the government.
E: DIR estimate.

1.2 Selected Economic Indicators

	2014	2015						2016	FY		CY	
	4-6 (E)	7-9 (E)	10-12 (E)	1-3 (E)	4-6 (E)	7-9 (E)	10-12 (E)	1-3 (E)	2014 (E)	2015 (E)	2014 (E)	2015 (E)
Nominal GDP (SAAR; Y tril)	489.5	493.1	496.5	499.7	502.7	508.6	507.6	510.6	494.6	507.2	491.7	504.6
Q/q %	0.3	0.7	0.7	0.6	0.6	1.2	-0.2	0.6				
Q/q %, SAAR	1.2	3.0	2.8	2.6	2.4	4.8	-0.8	2.3				
Y/y %	2.3	2.8	3.1	2.4	2.7	3.1	2.3	2.2	2.7	2.5	2.8	2.6
Real GDP (chained [2005]; SAAR; Y tril)	529.5	533.2	536.3	539.0	541.5	547.0	540.5	542.7	534.6	542.8	533.6	541.9
Q/q %	-1.1	0.7	0.6	0.5	0.5	1.0	-1.2	0.4				
Q/q %, SAAR	-4.4	2.8	2.4	2.0	1.9	4.1	-4.7	1.7				
Y/y %	0.8	1.2	1.4	0.7	2.2	2.6	0.8	0.7	1.0	1.5	1.5	1.6
Contribution to GDP growth (% pt)												
Domestic demand	-1.5	0.5	0.4	0.3	0.4	1.0	-1.6	0.2	0.8	1.0	2.0	1.1
Foreign demand	0.3	0.2	0.2	0.1	0.0	-0.1	0.3	0.2	0.2	0.6	-0.5	0.5
GDP deflator (y/y %)	1.5	1.6	1.6	1.7	0.4	0.5	1.5	1.5	1.6	1.0	1.2	1.0
Index of All-Industry Activity (2005=100)	98.4	99.0	99.4	100.0	100.6	101.7	101.0	101.4	99.2	101.2	99.0	100.8
Q/q %; y/y %	-0.9	0.6	0.4	0.5	0.6	1.1	-0.7	0.4	1.2	2.0	1.9	1.8
Index of Industrial Production (2010=100)	100.8	102.5	103.9	105.7	107.9	110.5	109.5	111.3	103.1	109.6	102.4	108.3
Q/q %; y/y %	-1.5	1.6	1.4	1.7	2.0	2.4	-0.9	1.7	4.3	6.3	5.6	5.8
Index of Tertiary Industry Activity (2005=100)	100.1	100.4	100.6	100.9	101.1	101.9	101.3	101.4	100.5	101.4	100.5	101.3
Q/q %; y/y %	-0.7	0.4	0.2	0.2	0.2	0.8	-0.6	0.1	0.3	0.9	0.6	0.8
Corporate Goods Price Index components (2010=100)												
Domestic Company Goods Price Index	105.5	105.7	106.0	106.3	106.6	107.0	109.1	109.6	105.8	108.1	105.0	107.3
Y/y %	3.9	3.2	3.3	3.4	1.1	1.2	3.0	3.1	3.4	2.1	3.1	2.2
CPI (excl. fresh food; 2010=100)	103.2	103.3	103.6	103.6	104.1	104.2	105.9	105.9	103.4	105.0	102.7	104.5
Y/y %	3.3	3.0	2.9	2.9	0.8	0.9	2.2	2.3	3.0	1.5	2.6	1.7
Unemployment rate (%)	3.8	3.8	3.8	3.8	3.7	3.7	3.6	3.6	3.8	3.7	3.8	3.7
Call rate (end-period; %)	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
Government bond yield (10 year; %)	0.65	0.68	0.72	0.76	0.81	0.87	0.92	0.96	0.70	0.89	0.67	0.84
Money stock; M2 (y/y %)	3.9	4.0	4.1	4.1	4.2	4.3	4.3	4.3	4.0	4.3	4.0	4.2
Trade balance (SAAR; Y tril)	-14.5	-13.7	-12.9	-12.2	-12.3	-12.6	-11.4	-10.8	-13.3	-11.8	-14.1	-12.1
Current balance (SAAR; $100 mil)	-15	125	275	411	463	470	670	806	199	602	46	504
Current balance (SAAR; Y tril)	-0.1	1.2	2.8	4.1	4.6	4.7	6.7	8.1	2.0	6.0	0.5	5.0
(% of nominal GDP)	-0.0	0.3	0.6	0.8	0.9	0.9	1.3	1.6	0.4	1.2	0.1	1.0
Exchange rate (Y/$)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.5	100.0
(Y/Euro)	140.0	140.0	140.0	140.0	140.0	140.0	140.0	140.0	140.0	140.0	140.0	140.0

Source: Compiled by DIR.
Notes: 1) Quarterly figures (excl. y/y %) seasonally adjusted, other unadjusted.
2) Index of All-Industry Activity Index: excl. agriculture, forestry, and fisheries.
3) Due to rounding, figures may differ from those released by the government.
E: DIR estimate.

2.1 Real Gross Domestic Expenditure (chained [2005]; Y tril)

	2012			2013				2014	FY		CY	
	4-6	7-9	10-12	1-3	4-6	7-9	10-12	1-3 (E)	2012	2013 (E)	2012	2013
Gross domestic expenditure	519.1	514.9	514.6	520.7	525.7	527.2	528.5	535.5	517.5	529.1	517.4	525.5
Q/q %, SAAR	-1.7	-3.1	-0.2	4.8	3.9	1.1	1.0	5.4				
Y/y %	3.2	-0.2	-0.3	0.0	1.2	2.3	2.7	2.8	0.6	2.3	1.4	1.6
Domestic demand	509.3	508.0	508.4	512.2	516.3	520.0	523.9	531.1	509.5	523.0	508.8	518.1
Q/q %, SAAR	-0.2	-1.0	0.3	3.0	3.2	2.9	3.1	5.6				
Y/y %	3.3	1.4	0.5	0.5	1.3	2.2	3.1	3.8	1.4	2.6	2.3	1.8
Private demand	389.2	387.9	387.6	390.0	392.0	393.9	396.8	404.0	388.7	396.6	388.2	393.1
Q/q %, SAAR	0.6	-1.4	-0.3	2.5	2.1	1.9	3.0	7.5				
Y/y %	4.0	1.4	-0.0	0.4	0.7	1.5	2.4	3.6	1.4	2.1	2.4	1.3
Final consumption	308.1	306.7	307.9	311.1	313.2	313.8	315.4	320.6	308.5	315.7	307.3	313.4
Q/q %, SAAR	1.7	-1.8	1.6	4.2	2.6	0.9	2.0	6.8				
Y/y %	3.0	0.9	0.7	1.5	1.7	2.2	2.4	3.0	1.5	2.3	2.0	2.0
Residential investment	13.2	13.5	13.8	14.0	14.1	14.6	15.2	15.5	13.6	14.9	13.3	14.5
Q/q %, SAAR	13.4	7.5	9.5	7.2	3.6	13.9	17.8	8.7				
Y/y %	4.7	1.5	5.8	9.3	6.9	8.6	10.5	10.9	5.3	9.3	2.9	8.9
Non-residential investment	70.1	68.7	68.0	67.4	68.1	68.3	69.2	70.8	68.5	69.2	69.2	68.2
Q/q %, SAAR	1.9	-7.3	-4.2	-3.5	4.4	0.8	5.3	10.0				
Y/y %	8.4	3.8	-4.2	-3.4	-2.6	-0.8	1.8	5.1	0.7	1.0	3.7	-1.4
Change in inventories	-2.2	-1.0	-2.1	-2.6	-3.4	-2.8	-3.0	-3.0	-1.9	-3.1	-1.5	-3.0
Public demand	120.1	120.1	120.8	122.2	124.2	126.1	127.1	127.1	120.9	126.3	120.6	124.9
Q/q %, SAAR	-3.1	0.1	2.3	4.5	7.0	6.1	3.4	-0.2				
Y/y %	1.1	1.3	2.4	0.9	3.3	4.8	5.6	4.3	1.4	4.5	1.9	3.6
Government final consumption	99.7	100.1	100.8	101.5	102.2	102.4	102.9	103.4	100.6	102.7	100.2	102.3
Q/q %, SAAR	-2.0	1.8	2.8	2.8	2.6	0.9	2.0	1.8				
Y/y %	1.3	1.5	1.9	1.4	2.5	2.2	2.1	1.8	1.5	2.2	1.7	2.1
Fixed investment	20.5	20.0	20.1	20.7	22.1	23.7	24.2	23.7	20.3	23.6	20.4	22.7
Q/q %, SAAR	-6.2	-9.0	1.6	13.3	30.3	31.9	9.3	-8.3				
Y/y %	0.2	0.7	4.8	-0.7	8.1	19.0	20.9	14.7	1.3	16.1	2.8	11.4
Change in inventories	-0.0	0.0	-0.0	-0.1	-0.0	-0.0	0.0	0.0	-0.0	-0.0	0.0	-0.0
Net exports of goods and services	10.6	7.4	6.4	8.9	10.0	7.7	5.3	5.2	8.4	7.0	9.1	8.0
Exports of goods and services	84.2	80.8	78.4	81.7	84.1	83.5	83.9	85.3	81.3	84.2	82.0	83.3
Q/q %, SAAR	-2.1	-15.2	-11.3	17.8	12.3	-2.7	1.7	6.7				
Y/y %	9.2	-4.8	-5.0	-3.3	0.0	3.2	6.9	4.2	-1.2	3.5	-0.1	1.6
Imports of goods and services	73.6	73.4	72.0	72.8	74.1	75.9	78.6	80.1	72.9	77.2	72.9	75.3
Q/q %, SAAR	5.9	-1.5	-7.3	4.5	7.2	10.1	14.9	8.0				
Y/y %	9.0	5.0	1.0	0.3	0.8	3.2	9.1	10.0	3.7	5.8	5.3	3.4
Residual	-0.8	-0.5	-0.2	-0.4	-0.5	-0.5	-0.7	-0.7	-0.4	-0.9	-0.5	-0.5

Source: Compiled by DIR.
Notes: 1) Subtotals by demand (domestic demand, private demand, and public demand) are simple aggregates of respective components, which differ from figures released by the government.
2) Y/y growth rates and FY and CY figures unadjusted; other seasonally adjusted.
3) Due to rounding, figures may differ from those released by the government.
E: DIR estimate.

2.2 Real Gross Domestic Expenditure (chained [2005]; Y tril)

	2014			2015				2016	FY		CY	
	4-6 (E)	7-9 (E)	10-12 (E)	1-3 (E)	4-6 (E)	7-9 (E)	10-12 (E)	1-3 (E)	2014 (E)	2015 (E)	2014 (E)	2015 (E)
Gross domestic expenditure	529.5	533.2	536.3	539.0	541.5	547.0	540.5	542.7	534.6	542.8	533.6	541.9
Q/q %, SAAR	-4.4	2.8	2.4	2.0	1.9	4.1	-4.7	1.7				
Y/y %	0.8	1.2	1.4	0.7	2.2	2.6	0.8	0.7	1.0	1.5	1.5	1.6
Domestic demand	523.6	526.2	528.1	529.8	531.9	537.3	529.1	530.2	527.0	532.1	527.2	532.0
Q/q %, SAAR	-5.5	2.0	1.5	1.3	1.6	4.1	-5.9	0.8				
Y/y %	1.4	1.2	0.7	-0.2	1.6	2.2	0.1	0.1	0.8	1.0	1.8	0.9
Private demand	396.9	399.2	401.1	403.1	405.9	411.9	404.0	405.2	400.1	406.7	400.2	406.1
Q/q %, SAAR	-6.9	2.4	1.9	2.0	2.9	6.0	-7.5	1.1				
Y/y %	1.2	1.4	1.0	-0.1	2.2	3.2	0.7	0.6	0.9	1.7	1.8	1.5
Final consumption	313.1	314.9	315.7	316.6	318.2	322.7	315.7	317.0	315.1	318.3	316.0	318.3
Q/q %, SAAR	-9.0	2.3	1.0	1.2	2.0	5.7	-8.4	1.7				
Y/y %	-0.0	0.4	0.1	-1.2	1.6	2.4	0.0	0.1	-0.2	1.0	0.9	0.7
Residential investment	14.8	14.5	14.7	14.9	15.2	15.4	14.2	13.2	14.7	14.5	14.9	14.9
Q/q %, SAAR	-17.2	-8.5	4.9	5.3	9.1	6.1	-28.7	-23.6				
Y/y %	4.9	-0.8	-3.6	-4.4	2.5	6.4	-3.4	-10.9	-1.2	-1.4	2.5	0.2
Non-residential investment	71.4	72.2	73.1	74.1	75.2	76.3	76.6	77.3	72.8	76.4	71.9	75.5
Q/q %, SAAR	3.2	4.5	5.3	5.6	5.7	6.0	1.6	4.1				
Y/y %	4.7	5.8	5.7	4.6	5.3	5.6	4.7	4.4	5.2	5.0	5.3	5.0
Change in inventories	-2.5	-2.4	-2.4	-2.5	-2.6	-2.4	-2.4	-2.4	-2.5	-2.5	-2.6	-2.5
Public demand	126.8	127.0	127.1	126.7	126.0	125.4	125.1	125.1	126.9	125.4	127.1	125.9
Q/q %, SAAR	-0.9	0.7	0.2	-1.0	-2.5	-1.9	-0.8	-0.1				
Y/y %	2.0	0.8	-0.3	-0.5	-0.3	-1.2	-1.8	-1.6	0.5	-1.2	1.7	-0.9
Government final consumption	103.8	104.1	104.5	104.8	105.0	105.2	105.4	105.6	104.3	105.4	104.0	105.1
Q/q %, SAAR	1.6	1.4	1.3	1.2	0.8	0.8	0.8	0.8				
Y/y %	1.6	1.7	1.5	1.4	1.2	1.0	0.9	0.8	1.5	1.0	1.6	1.1
Fixed investment	23.0	22.9	22.6	22.0	21.0	20.2	19.7	19.5	22.6	20.0	23.1	20.7
Q/q %, SAAR	-11.3	-2.5	-5.0	-10.7	-16.9	-14.6	-8.6	-4.8				
Y/y %	4.1	-3.7	-6.9	-7.5	-8.9	-11.8	-12.7	-11.3	-4.4	-11.4	1.8	-10.2
Change in inventories	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Net exports of goods and services	6.6	7.7	8.9	9.9	10.3	10.5	12.1	13.2	8.3	11.5	7.1	10.7
Exports of goods and services	86.7	88.2	89.9	91.7	93.5	95.5	97.5	99.6	89.1	96.5	87.5	94.6
Q/q %, SAAR	7.0	7.1	7.8	8.2	8.2	8.7	8.7	9.1				
Y/y %	3.0	5.7	7.2	7.6	7.9	8.2	8.4	8.6	5.9	8.3	5.0	8.0
Imports of goods and services	80.1	80.5	81.0	81.8	83.2	85.0	85.4	86.5	80.8	85.0	80.4	83.9
Q/q %, SAAR	0.0	2.0	2.4	4.1	7.0	9.1	2.0	4.9				
Y/y %	8.0	6.2	3.1	2.1	3.9	5.6	5.5	5.7	4.8	5.2	6.7	4.3
Residual	-0.7	-0.7	-0.7	-0.7	-0.7	-0.7	-0.7	-0.7	-0.7	-0.7	-0.7	-0.8

Source: Compiled by DIR.
Notes: 1) Subtotals by demand (domestic demand, private demand, and public demand) are simple aggregates of respective components, which differ from figures released by the government.
2) Y/y growth rates and FY and CY figures unadjusted; other seasonally adjusted.
3) Due to rounding, figures may differ from those released by the government.
E: DIR estimate.

3.1 Nominal Gross Domestic Expenditure (Y tril)

	2012			2013				2014	FY		CY	
	4-6	7-9	10-12	1-3	4-6	7-9	10-12	1-3 (E)	2012	2013 (E)	2012	2013
Gross domestic expenditure	475.2	470.5	470.6	474.1	478.8	479.6	481.5	488.0	472.6	481.8	473.8	478.4
Q/q %, SAAR	-3.5	-3.9	0.1	3.0	4.1	0.7	1.6	5.5				
Y/y %	2.1	-1.0	-1.0	-1.0	0.6	1.9	2.4	2.9	-0.2	2.0	0.5	1.0
Domestic demand	483.9	480.6	481.6	485.6	489.4	493.9	499.5	506.6	482.9	497.4	483.2	492.0
Q/q %, SAAR	-2.5	-2.7	0.8	3.3	3.2	3.7	4.6	5.8				
Y/y %	2.4	0.4	-0.2	-0.2	1.0	2.7	3.7	4.5	0.6	3.0	1.6	1.8
Private demand	366.7	363.1	363.6	365.9	368.0	370.5	375.2	382.3	364.8	373.9	365.1	369.8
Q/q %, SAAR	-0.9	-3.9	0.6	2.6	2.3	2.7	5.2	7.8				
Y/y %	3.3	0.4	-0.6	-0.4	0.3	2.0	3.1	4.6	0.6	2.5	1.7	1.3
Final consumption	288.9	285.7	287.5	290.3	291.9	293.3	296.0	301.1	288.1	295.5	287.7	292.9
Q/q %, SAAR	-0.3	-4.4	2.6	4.0	2.2	1.9	3.8	7.1				
Y/y %	2.2	-0.3	-0.0	0.5	1.1	2.6	3.0	3.7	0.6	2.6	1.2	1.8
Residential investment	13.6	13.8	14.2	14.5	14.8	15.5	16.2	16.6	14.0	15.8	13.7	15.3
Q/q %, SAAR	11.6	6.5	11.7	9.7	8.4	17.5	21.7	9.1				
Y/y %	3.8	0.2	5.4	9.9	9.1	11.8	14.2	14.1	4.7	12.4	2.2	11.4
Non-residential investment	66.3	64.7	64.1	63.7	64.7	65.0	66.0	67.7	64.6	65.9	65.3	64.8
Q/q %, SAAR	1.9	-9.0	-3.9	-2.2	6.1	1.7	6.5	10.8				
Y/y %	8.4	3.2	-4.5	-3.5	-2.3	0.2	3.1	6.3	0.5	2.0	3.4	-0.7
Change in inventories	-2.1	-1.1	-2.2	-2.7	-3.4	-3.2	-3.1	-3.1	-1.9	-3.3	-1.6	-3.1
Public demand	117.2	117.5	118.0	119.7	121.4	123.4	124.3	124.3	118.1	123.5	118.0	122.2
Q/q %, SAAR	-7.2	1.0	1.7	5.7	6.1	6.8	3.0	0.0				
Y/y %	-0.2	0.5	1.3	0.4	3.3	5.1	5.5	4.3	0.5	4.5	1.1	3.5
Government final consumption	96.1	96.8	97.3	98.2	98.4	98.6	98.7	99.2	97.1	98.7	96.9	98.5
Q/q %, SAAR	-6.6	3.0	1.9	3.9	0.7	0.9	0.4	1.9				
Y/y %	-0.2	0.7	0.7	0.8	2.3	1.9	1.3	0.8	0.5	1.6	0.9	1.6
Fixed investment	21.1	20.6	20.8	21.5	23.0	24.9	25.6	25.1	21.0	24.8	21.1	23.8
Q/q %, SAAR	-8.4	-8.8	2.6	15.4	31.2	35.9	12.4	-7.2				
Y/y %	0.1	-0.1	4.6	-0.5	9.0	20.9	23.5	16.9	1.1	18.1	2.6	12.8
Change in inventories	-0.0	0.0	-0.1	-0.1	-0.0	-0.1	0.0	0.0	-0.0	-0.0	0.0	-0.0
Net exports of goods and services	-8.7	-10.1	-11.0	-11.5	-10.5	-14.3	-18.0	-18.6	-10.3	-15.4	-9.4	-13.6
Exports of goods and services	71.3	68.4	67.8	74.2	77.8	78.4	79.6	81.2	70.4	79.2	69.8	77.5
Q/q %, SAAR	-2.8	-15.4	-3.1	43.1	21.1	3.1	6.4	7.8				
Y/y %	5.7	-7.6	-4.2	3.8	9.0	14.6	17.6	9.2	-0.7	12.5	-2.1	11.1
Imports of goods and services	80.0	78.5	78.8	85.7	88.4	92.7	97.6	99.8	80.8	94.6	79.2	91.1
Q/q %, SAAR	3.4	-7.6	2.0	39.5	13.2	21.0	23.0	9.1				
Y/y %	7.2	1.2	1.5	8.2	10.3	17.9	24.1	16.3	4.5	17.1	4.7	15.1

Source: Compiled by DIR.
Notes: 1)Y/y growth rates and FY and CY figures unadjusted; other seasonally adjusted.
2) Due to rounding, figures may differ from those released by the government.
E: DIR estimate.

3.2 Nominal Gross Domestic Expenditure (Y tril)

	2014			2015				2016	FY		CY	
	4-6 (E)	7-9 (E)	10-12 (E)	1-3 (E)	4-6 (E)	7-9 (E)	10-12 (E)	1-3 (E)	2014 (E)	2015 (E)	2014 (E)	2015 (E)
Gross domestic expenditure	489.5	493.1	496.5	499.7	502.7	508.6	507.6	510.6	494.6	507.2	491.7	504.6
Q/q %, SAAR	1.2	3.0	2.8	2.6	2.4	4.8	-0.8	2.3				
Y/y %	2.3	2.8	3.1	2.4	2.7	3.1	2.3	2.2	2.7	2.5	2.8	2.6
Domestic demand	506.8	509.6	512.1	514.6	517.6	524.1	521.7	523.9	510.8	521.7	508.7	519.4
Q/q %, SAAR	0.2	2.2	2.0	1.9	2.4	5.1	-1.8	1.7				
Y/y %	3.5	3.2	2.4	1.6	2.2	2.9	1.7	1.8	2.7	2.1	3.4	2.1
Private demand	381.8	384.2	386.5	389.1	392.9	399.8	397.6	399.7	385.4	397.5	383.6	394.8
Q/q %, SAAR	-0.5	2.6	2.4	2.8	3.9	7.3	-2.2	2.1				
Y/y %	3.7	3.7	2.9	2.0	2.8	4.1	2.8	2.8	3.1	3.1	3.7	2.9
Final consumption	300.0	301.7	302.7	304.0	306.3	311.5	310.0	312.0	302.0	309.9	301.3	307.9
Q/q %, SAAR	-1.5	2.3	1.3	1.8	3.0	7.0	-2.0	2.7				
Y/y %	2.7	2.9	2.2	1.0	2.1	3.2	2.4	2.6	2.2	2.6	2.9	2.2
Residential investment	16.0	15.7	15.9	16.1	16.5	16.8	15.6	14.7	16.0	15.9	16.1	16.3
Q/q %, SAAR	-12.4	-8.1	5.3	5.9	10.0	7.4	-25.8	-22.7				
Y/y %	8.1	1.6	-1.9	-2.7	3.0	7.2	-1.8	-9.3	1.0	-0.2	5.0	1.4
Non-residential investment	68.4	69.3	70.4	71.6	72.8	74.0	74.5	75.5	70.0	74.3	68.9	73.2
Q/q %, SAAR	4.1	5.5	6.6	6.8	6.7	6.9	2.8	5.5				
Y/y %	5.7	6.8	6.7	5.7	6.4	6.7	5.8	5.5	6.2	6.1	6.4	6.1
Change in inventories	-2.6	-2.5	-2.5	-2.6	-2.7	-2.5	-2.5	-2.5	-2.6	-2.6	-2.7	-2.6
Public demand	125.1	125.4	125.6	125.4	124.7	124.2	124.1	124.3	125.3	124.2	125.1	124.7
Q/q %, SAAR	2.3	1.2	0.6	-0.6	-2.2	-1.6	-0.3	0.4				
Y/y %	2.8	1.6	1.0	0.6	0.2	-0.9	-1.3	-1.4	1.5	-0.9	2.4	-0.4
Government final consumption	100.6	101.0	101.5	101.9	102.2	102.5	102.8	103.1	101.2	102.6	100.6	102.3
Q/q %, SAAR	5.7	1.8	1.7	1.6	1.2	1.2	1.2	1.2				
Y/y %	2.2	2.4	2.9	2.8	1.6	1.4	1.3	1.2	2.6	1.4	2.1	1.8
Fixed investment	24.5	24.4	24.1	23.5	22.5	21.7	21.3	21.1	24.1	21.6	24.6	22.3
Q/q %, SAAR	-10.4	-1.3	-3.9	-9.6	-15.9	-13.5	-7.2	-3.7				
Y/y %	6.2	-2.1	-5.8	-6.4	-7.9	-10.8	-11.6	-10.2	-3.0	-10.3	3.4	-9.1
Change in inventories	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Net exports of goods and services	-17.3	-16.5	-15.6	-14.9	-15.0	-15.5	-14.1	-13.4	-16.1	-14.5	-17.0	-14.9
Exports of goods and services	82.8	84.5	86.4	88.5	90.5	92.6	94.8	97.2	85.5	93.8	83.7	91.6
Q/q %, SAAR	8.3	8.5	9.3	10.0	9.3	9.8	10.0	10.4				
Y/y %	6.5	7.8	8.4	9.1	9.2	9.6	9.8	9.8	7.9	9.6	7.9	9.4
Imports of goods and services	100.1	101.0	102.0	103.3	105.4	108.1	108.9	110.6	101.6	108.2	100.7	106.5
Q/q %, SAAR	1.4	3.7	4.1	5.3	8.3	10.4	3.2	6.2				
Y/y %	13.3	9.1	4.4	3.6	5.3	6.9	6.8	7.0	7.4	6.5	10.6	5.7

Source: Compiled by DIR.
Notes: 1)Y/y growth rates and FY and CY figures unadjusted; other seasonally adjusted.
2) Due to rounding, figures may differ from those released by the government.
E: DIR estimate.

4.1 Gross Domestic Expenditure, Implicit Deflators (2005=100)

	2012	2013						2014	FY		CY	
	4-6	7-9	10-12	1-3	4-6	7-9	10-12	1-3 (E)	2012	2013 (E)	2012	2013
Gross domestic expenditure	91.5	91.4	91.4	91.0	91.1	91.0	91.1	91.1	91.3	91.1	91.6	91.0
Q/q %, SAAR	-0.5	-0.2	0.1	-0.4	0.0	-0.1	0.1	0.0				
Y/y %	-1.1	-0.7	-0.7	-1.0	-0.5	-0.4	-0.4	0.1	-0.9	-0.3	-0.9	-0.6
Private final consumption	93.8	93.1	93.4	93.3	93.2	93.5	93.9	93.9	93.4	93.6	93.6	93.5
Q/q %, SAAR	-0.5	-0.7	0.2	-0.1	-0.1	0.3	0.4	0.1				
Y/y %	-0.8	-1.1	-0.7	-1.0	-0.6	0.3	0.6	0.7	-0.9	0.2	-0.8	-0.2
Private residential investment	103.0	102.7	103.2	103.8	105.0	105.8	106.7	106.8	103.2	106.1	103.1	105.4
Q/q %, SAAR	-0.4	-0.2	0.5	0.6	1.2	0.8	0.8	0.1				
Y/y %	-0.8	-1.3	-0.4	0.5	2.0	3.0	3.4	2.9	-0.5	2.9	-0.7	2.3
Private non-residential investment	94.6	94.1	94.2	94.5	94.9	95.1	95.4	95.6	94.4	95.3	94.4	95.0
Q/q %, SAAR	-0.0	-0.5	0.1	0.3	0.4	0.2	0.3	0.2				
Y/y %	0.0	-0.6	-0.3	-0.0	0.4	1.0	1.2	1.1	-0.2	1.0	-0.3	0.6
Government final consumption	96.4	96.7	96.5	96.8	96.3	96.3	95.9	96.0	96.6	96.0	96.7	96.3
Q/q %, SAAR	-1.2	0.3	-0.2	0.3	-0.5	-0.0	-0.4	0.0				
Y/y %	-1.4	-0.7	-1.3	-0.6	-0.2	-0.4	-0.8	-0.9	-1.0	-0.6	-0.8	-0.5
Public fixed investment	103.2	103.2	103.5	103.9	104.1	104.9	105.6	105.9	103.5	105.3	103.4	104.7
Q/q %, SAAR	-0.6	0.1	0.2	0.5	0.2	0.7	0.7	0.3				
Y/y %	-0.2	-0.9	-0.2	0.2	0.8	1.6	2.1	1.9	-0.2	1.7	-0.2	1.2
Exports of goods and services	84.6	84.6	86.5	90.8	92.5	93.9	94.9	95.2	86.6	94.1	85.1	93.1
Q/q %, SAAR	-0.2	-0.1	2.2	5.0	1.9	1.5	1.1	0.3				
Y/y %	-3.2	-2.9	0.9	7.3	9.0	11.0	10.1	4.8	0.5	8.6	-2.0	9.3
Imports of goods and services	108.7	106.9	109.5	117.7	119.3	122.1	124.2	124.5	110.7	122.6	108.6	120.9
Q/q %, SAAR	-0.6	-1.6	2.4	7.5	1.4	2.4	1.7	0.3				
Y/y %	-1.7	-3.6	0.5	7.8	9.4	14.2	13.8	5.8	0.8	10.7	-0.6	11.3

Source: Compiled by DIR.
Notes: 1) Y/y growth rates and FY and CY figures unadjusted; other seasonally adjusted.
2) Due to rounding, figures may differ from those released by the government.
E: DIR estimate.

4.2 Gross Domestic Expenditure, Implicit Deflators (2005=100)

	2014			2015				2016	FY		CY	
	4-6 (E)	7-9 (E)	10-12 (E)	1-3 (E)	4-6 (E)	7-9 (E)	10-12 (E)	1-3 (E)	2014 (E)	2015 (E)	2014 (E)	2015 (E)
Gross domestic expenditure	92.4	92.5	92.6	92.7	92.8	93.0	93.9	94.1	92.5	93.4	92.1	93.1
Q/q %, SAAR	1.4	0.0	0.1	0.1	0.1	0.2	1.0	0.2				
Y/y %	1.5	1.6	1.6	1.7	0.4	0.5	1.5	1.5	1.6	1.0	1.2	1.0
Private final consumption	95.8	95.8	95.9	96.0	96.3	96.5	98.2	98.4	95.9	97.4	95.3	96.8
Q/q %, SAAR	2.0	0.0	0.1	0.2	0.2	0.3	1.7	0.2				
Y/y %	2.8	2.5	2.1	2.2	0.5	0.8	2.4	2.5	2.4	1.6	2.0	1.5
Private residential investment	108.3	108.4	108.5	108.7	108.9	109.2	110.3	110.7	108.5	109.7	108.0	109.3
Q/q %, SAAR	1.4	0.1	0.1	0.2	0.2	0.3	1.0	0.3				
Y/y %	3.1	2.5	1.7	1.8	0.6	0.7	1.7	1.8	2.2	1.2	2.5	1.2
Private non-residential investment	95.8	96.0	96.3	96.6	96.8	97.0	97.3	97.6	96.2	97.2	95.9	96.9
Q/q %, SAAR	0.2	0.2	0.3	0.3	0.2	0.2	0.3	0.3				
Y/y %	0.9	1.0	1.0	1.1	1.1	1.0	1.0	1.1	1.0	1.1	1.0	1.1
Government final consumption	96.9	97.0	97.1	97.2	97.3	97.4	97.5	97.6	97.0	97.4	96.7	97.3
Q/q %, SAAR	1.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1				
Y/y %	0.7	0.7	1.3	1.4	0.4	0.4	0.4	0.4	1.0	0.4	0.5	0.6
Public fixed investment	106.2	106.5	106.8	107.2	107.5	107.8	108.3	108.6	106.7	108.1	106.4	107.7
Q/q %, SAAR	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3				
Y/y %	2.1	1.6	1.1	1.2	1.2	1.2	1.3	1.3	1.4	1.3	1.6	1.2
Exports of goods and services	95.5	95.8	96.1	96.5	96.7	97.0	97.3	97.5	96.0	97.1	95.6	96.9
Q/q %, SAAR	0.3	0.3	0.4	0.4	0.2	0.2	0.3	0.3				
Y/y %	3.3	2.0	1.1	1.4	1.3	1.3	1.3	1.1	2.0	1.2	2.8	1.3
Imports of goods and services	125.0	125.5	126.0	126.3	126.7	127.1	127.5	127.9	125.7	127.3	125.3	126.9
Q/q %, SAAR	0.3	0.4	0.4	0.3	0.3	0.3	0.3	0.3				
Y/y %	4.9	2.7	1.3	1.5	1.3	1.3	1.3	1.2	2.5	1.3	3.6	1.3

Source: Compiled by DIR.
Notes: 1) Y/y growth rates and FY and CY figures unadjusted; other seasonally adjusted.
2) Due to rounding, figures may differ from those released by the government.
E: DIR estimate.

5.1 Contribution to Real GDP Growth by Component

	2012 4-6	7-9	10-12	2013 1-3	4-6	7-9	10-12	2014 1-3 (E)	FY 2012	FY 2013 (E)	CY 2012	CY 2013
1) Q/q %												
GDP growth rate	-0.4	-0.8	-0.1	1.2	1.0	0.3	0.3	1.3	0.6	2.3	1.4	1.6
Domestic demand	-0.1	-0.2	0.1	0.8	0.8	0.8	0.8	1.4	1.4	2.6	2.3	1.9
Private demand	0.1	-0.2	-0.1	0.5	0.4	0.4	0.6	1.4	1.1	1.5	1.9	1.0
Private consumption	0.3	-0.3	0.2	0.6	0.4	0.1	0.3	1.0	0.9	1.4	1.2	1.2
Residential investment	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.2	0.1	0.3
Private fixed investment	0.1	-0.3	-0.1	-0.1	0.1	0.0	0.2	0.3	0.1	0.1	0.5	-0.2
Change in private inventories	-0.3	0.2	-0.2	-0.1	-0.2	0.1	-0.0	-0.0	-0.1	-0.2	0.1	-0.3
Public demand	-0.2	0.0	0.1	0.3	0.4	0.4	0.2	-0.0	0.3	1.1	0.5	0.9
Government final consumption	-0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.3	0.4	0.3	0.4
Public fixed investment	-0.1	-0.1	0.0	0.1	0.3	0.3	0.1	-0.1	0.1	0.6	0.1	0.5
Change in public inventories	-0.0	0.0	-0.0	-0.0	0.0	0.0	0.0	0.0	-0.0	0.0	-0.0	-0.0
Net exports of goods and services	-0.3	-0.6	-0.1	0.4	0.1	-0.5	-0.5	-0.1	-0.8	-0.3	-0.9	-0.3
Exports of goods and services	-0.1	-0.6	-0.4	0.6	0.4	-0.1	0.1	0.3	-0.2	0.6	-0.0	0.2
Imports of goods and services	-0.2	0.1	0.3	-0.2	-0.3	-0.4	-0.6	-0.4	-0.6	-0.8	-0.9	-0.6
2) Y/y %												
GDP growth rate	3.2	-0.2	-0.3	0.0	1.2	2.3	2.7	2.8	0.6	2.3	1.4	1.6
Domestic demand	3.3	1.4	0.6	0.6	1.3	2.3	3.3	4.0	1.4	2.6	2.3	1.9
Private demand	3.1	1.1	0.0	0.4	0.5	1.1	1.8	2.8	1.1	1.5	1.9	1.0
Private consumption	1.9	0.5	0.4	0.9	1.0	1.4	1.5	1.8	0.9	1.4	1.2	1.2
Residential investment	0.1	0.0	0.2	0.3	0.2	0.3	0.3	0.3	0.1	0.2	0.1	0.3
Private fixed investment	1.0	0.5	-0.5	-0.5	-0.3	-0.1	0.2	0.8	0.1	0.1	0.5	-0.2
Change in private inventories	0.0	-0.0	-0.0	-0.3	-0.4	-0.4	-0.2	-0.1	-0.1	-0.2	0.1	-0.3
Public demand	0.3	0.3	0.6	0.2	0.8	1.2	1.5	1.2	0.3	1.1	0.5	0.9
Government final consumption	0.3	0.3	0.4	0.3	0.5	0.5	0.4	0.4	0.3	0.4	0.3	0.4
Public fixed investment	0.0	0.0	0.2	-0.0	0.3	0.8	1.0	0.8	0.1	0.6	0.1	0.5
Change in public inventories	-0.0	-0.0	-0.0	-0.0	0.0	-0.0	0.0	0.0	-0.0	0.0	-0.0	-0.0
Net exports of goods and services	-0.1	-1.6	-0.9	-0.5	-0.1	-0.1	-0.5	-1.2	-0.8	-0.3	-0.9	-0.3
Exports of goods and services	1.3	-0.8	-0.7	-0.5	0.0	0.5	1.0	0.7	-0.2	0.6	-0.0	0.2
Imports of goods and services	-1.4	-0.8	-0.2	-0.1	-0.1	-0.6	-1.5	-1.8	-0.6	-0.8	-0.9	-0.6

Source: Compiled by DIR.
Notes: 1) Q/q growth rates seasonally adjusted; y/y growth rates and FY and CY figures unadjusted.
2) Due to rounding, figures may differ from those released by the government.
E: DIR estimate.

5.2 Contribution to Real GDP Growth by Component

	2014 4-6 (E)	7-9 (E)	10-12 (E)	2015 1-3 (E)	4-6 (E)	7-9 (E)	10-12 (E)	2016 1-3 (E)	FY 2014 (E)	FY 2015 (E)	CY 2014 (E)	CY 2015 (E)
1) Q/q %												
GDP growth rate	-1.1	0.7	0.6	0.5	0.5	1.0	-1.2	0.4	1.0	1.5	1.5	1.6
Domestic demand	-1.5	0.5	0.4	0.3	0.4	1.0	-1.6	0.2	0.8	1.0	2.0	1.1
Private demand	-1.4	0.4	0.4	0.4	0.6	1.1	-1.5	0.2	0.7	1.2	1.6	1.3
Private consumption	-1.4	0.3	0.1	0.2	0.3	0.9	-1.3	0.2	-0.1	0.6	0.5	0.4
Residential investment	-0.2	-0.1	0.0	0.0	0.1	0.0	-0.3	-0.2	-0.0	-0.0	0.1	0.0
Private fixed investment	0.1	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.7	0.7	0.7	0.7
Change in private inventories	0.1	0.0	0.0	-0.0	-0.0	0.0	0.0	0.0	0.1	-0.0	0.1	0.0
Public demand	-0.1	0.0	0.0	-0.1	-0.2	-0.1	-0.1	-0.0	0.1	-0.3	0.4	-0.3
Government final consumption	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.3	0.2	0.3	0.2
Public fixed investment	-0.2	-0.0	-0.1	-0.1	-0.2	-0.2	-0.1	-0.1	-0.2	-0.5	0.1	-0.5
Change in public inventories	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Net exports of goods and services	0.3	0.2	0.2	0.1	0.0	-0.1	0.3	0.2	0.2	0.6	-0.5	0.5
Exports of goods and services	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.9	1.4	0.8	1.4
Imports of goods and services	0.0	-0.1	-0.1	-0.2	-0.4	-0.5	-0.1	-0.3	-0.7	-0.8	-1.3	-0.9
2) Y/y %												
GDP growth rate	0.8	1.2	1.4	0.7	2.2	2.6	0.8	0.7	1.0	1.5	1.5	1.6
Domestic demand	1.4	1.3	0.7	-0.2	1.6	2.2	0.0	-0.0	0.8	1.0	2.0	1.1
Private demand	0.9	1.1	0.8	-0.1	1.7	2.5	0.5	0.4	0.7	1.2	1.6	1.3
Private consumption	-0.0	0.2	0.1	-0.8	1.0	1.5	0.0	0.1	-0.1	0.6	0.5	0.4
Residential investment	0.1	-0.0	-0.1	-0.1	0.1	0.2	-0.1	-0.3	-0.0	-0.0	0.1	0.0
Private fixed investment	0.6	0.8	0.7	0.7	0.7	0.8	0.6	0.7	0.7	0.7	0.7	0.7
Change in private inventories	0.2	0.1	0.1	0.1	-0.0	0.0	-0.0	0.0	0.1	-0.0	0.1	0.0
Public demand	0.5	0.2	-0.1	-0.2	-0.1	-0.3	-0.5	-0.5	0.1	-0.3	0.4	-0.3
Government final consumption	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.3	0.2	0.3	0.2
Public fixed investment	0.2	-0.2	-0.4	-0.5	-0.4	-0.5	-0.7	-0.6	-0.2	-0.5	0.1	-0.5
Change in public inventories	0.0	0.0	-0.0	-0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Net exports of goods and services	-1.0	-0.3	0.5	0.8	0.6	0.3	0.3	0.3	0.2	0.6	-0.5	0.5
Exports of goods and services	0.5	0.9	1.2	1.2	1.4	1.4	1.4	1.5	0.9	1.4	0.8	1.4
Imports of goods and services	-1.5	-1.2	-0.6	-0.4	-0.8	-1.2	-1.1	-1.2	-0.7	-0.8	-1.3	-0.9

Source: Compiled by DIR.
Notes: 1) Q/q growth rates seasonally adjusted; y/y growth rates and FY and CY figures unadjusted.
2) Due to rounding, figures may differ from those released by the government.
E: DIR estimate.

6.1 Major Assumptions

	2012			2013				2014	FY		CY	
	4-6	7-9	10-12	1-3	4-6	7-9	10-12	1-3 (E)	2012	2013 (E)	2012	2013
1) World economy												
Economic growth of major trading partners												
Y/y %	2.9	2.9	3.6	2.4	2.9	3.1	3.3	3.9	3.1	3.3	3.3	3.0
Crude oil price (WTI futures; $/bbl)	93.4	92.2	88.2	94.4	94.2	105.8	97.6	100.0	92.0	99.4	94.1	98.0
Y/y %	-8.8	3.0	-6.2	-8.4	0.9	14.8	10.6	6.0	-5.4	8.0	-1.0	4.1
2) US economy												
Real GDP (chained [2009]; $ bil; SAAR)	15,428	15,534	15,540	15,584	15,680	15,839	15,966	16,020	15,521	15,876	15,471	15,767
Q/q %, SAAR	1.2	2.8	0.1	1.1	2.5	4.1	3.2	1.4				
Y/y %	2.8	3.1	2.0	1.3	1.6	2.0	2.7	2.8	2.3	2.3	2.8	1.9
Consumer Price Index												
(1982-84 avg=100)	229.0	229.9	231.3	232.0	232.2	233.5	234.1	235.3	230.6	233.8	229.6	233.0
Q/q %, SAAR	1.4	1.7	2.4	1.2	0.4	2.2	1.1	2.0				
Y/y %	1.9	1.7	1.9	1.7	1.4	1.6	1.2	1.4	1.8	1.4	2.1	1.5
Producer Price Index												
(Finished goods; 1982=100)	192.8	194.7	195.9	196.3	195.8	196.9	197.3	198.5	194.9	197.1	194.2	196.6
Q/q %, SAAR	-1.4	3.9	2.5	0.9	-1.0	2.3	0.7	2.4				
Y/y %	1.1	1.5	1.7	1.5	1.5	1.2	0.8	1.1	1.4	1.1	1.9	1.2
FF rate (%)	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
(Target rate for the forecast period, end-period)												
Government bond yield (10 year; %)	1.82	1.64	1.71	1.95	2.00	2.71	2.75	2.80	1.78	2.56	1.80	2.35
3) Japanese economy												
Nominal government final consumption												
Y tril; SAAR	96.1	96.8	97.3	98.2	98.4	98.6	98.7	99.2	97.1	98.7	96.9	98.5
Q/q %, SAAR	-6.6	3.0	1.9	3.9	0.7	0.9	0.4	1.9				
Y/y %	-0.2	0.7	0.7	0.8	2.3	1.9	1.3	0.8	0.5	1.6	0.9	1.6
Nominal public fixed investment												
Y tril; SAAR	21.1	20.6	20.8	21.5	23.0	24.9	25.6	25.1	21.0	24.8	21.1	23.8
Q/q %, SAAR	-8.4	-8.8	2.6	15.4	31.2	35.9	12.4	-7.2				
Y/y %	0.1	-0.1	4.6	-0.5	9.0	20.9	23.5	16.9	1.1	18.1	2.6	12.8
Exchange rate (Y/$)	80.1	78.6	81.2	92.3	98.8	98.9	100.4	102.0	83.1	100.0	79.8	97.6
(Y/€)	101.2	98.2	108.2	122.0	129.6	130.7	139.9	140.0	107.4	135.1	103.5	130.6
Call rate (end-period; %)	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10

Source: Compiled by DIR.
Notes: 1) Japanese consumption tax hike in April 2014 and a second one expected in October 2015.
2) Due to rounding, figures may differ from those released by the government.
E: DIR estimate.

6.2 Major Assumptions

	2014			2015				2016	FY		CY	
	4-6 (E)	7-9 (E)	10-12 (E)	1-3 (E)	4-6 (E)	7-9 (E)	10-12 (E)	1-3 (E)	2014 (E)	2015 (E)	2014 (E)	2015 (E)
1) World economy												
Economic growth of major trading partners												
Y/y %	3.8	3.8	3.8	3.8	3.8	3.9	3.9	3.9	3.7	3.9	3.7	3.9
Crude oil price (WTI futures; $/bbl)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Y/y %	6.2	-5.5	2.4	0.0	0.0	0.0	0.0	0.0	0.6	0.0	2.0	0.0
2) US economy												
Real GDP (chained [2009]; $ bil; SAAR)	16,131	16,236	16,366	16,497	16,620	16,748	16,881	17,017	16,308	16,817	16,188	16,687
Q/q %, SAAR	2.8	2.6	3.2	3.3	3.0	3.1	3.2	3.2				
Y/y %	2.9	2.5	2.5	3.0	3.0	3.2	3.2	3.1	2.7	3.1	2.7	3.1
Consumer Price Index												
(1982-84 avg=100)	236.2	237.3	238.4	239.6	240.8	242.2	243.5	244.9	237.9	242.9	236.8	241.5
Q/q %, SAAR	1.6	1.8	1.9	2.0	2.1	2.3	2.2	2.2				
Y/y %	1.7	1.6	1.8	1.8	1.9	2.1	2.1	2.2	1.8	2.1	1.7	2.0
Producer Price Index												
(Finished goods; 1982=100)	199.6	200.8	202.1	203.5	205.1	206.8	208.5	210.1	201.5	207.6	200.2	206.0
Q/q %, SAAR	2.3	2.4	2.6	2.9	3.1	3.4	3.3	3.2				
Y/y %	1.9	2.0	2.4	2.5	2.7	3.0	3.2	3.2	2.2	3.0	1.9	2.9
FF rate (%)	0.25	0.25	0.25	0.25	0.25	0.25	0.50	0.75	0.25	0.75	0.25	0.50
(Target rate for the forecast period, end-period)												
Government bond yield (10 year; %)	3.09	3.25	3.42	3.62	3.82	4.06	4.27	4.30	3.35	4.11	3.14	3.94
3) Japanese economy												
Nominal government final consumption												
Y tril; SAAR	100.6	101.0	101.5	101.9	102.2	102.5	102.8	103.1	101.2	102.6	100.6	102.3
Q/q %, SAAR	5.7	1.8	1.7	1.6	1.2	1.2	1.2	1.2				
Y/y %	2.2	2.4	2.9	2.8	1.6	1.4	1.3	1.2	2.6	1.4	2.1	1.8
Nominal public fixed investment												
Y tril; SAAR	24.5	24.4	24.1	23.5	22.5	21.7	21.3	21.1	24.1	21.6	24.6	22.3
Q/q %, SAAR	-10.4	-1.3	-3.9	-9.6	-15.9	-13.5	-7.2	-3.7				
Y/y %	6.2	-2.1	-5.8	-6.4	-7.9	-10.8	-11.6	-10.2	-3.0	-10.3	3.4	-9.1
Exchange rate (Y/$)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.5	100.0
(Y/€)	140.0	140.0	140.0	140.0	140.0	140.0	140.0	140.0	140.0	140.0	140.0	140.0
Call rate (end-period; %)	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10

Source: Compiled by DIR.
Notes: 1) Japanese consumption tax hike in April 2014 and a second one expected in October 2015.
2) Due to rounding, figures may differ from those released by the government.
E: DIR estimate.