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Japan's Economic Outlook No. 178

Has a Proper Environment Come Together for Raising the Consumption Tax?—Firm domestic demand vs. some uncertainty overseas

Japan to see real GDP growth of +3.0% in FY13 and +1.2% in FY14, nominal GDP growth of +2.8% and +2.7%

Economic Research Dept
Mitsumaru Kumagai
Masahiko Hashimoto
Tsutomu Saito
Shotaro Kugo
Go Tanaka

Main Points

- **Economic outlook revised:** In light of the first preliminary Apr-Jun GDP release (Cabinet Office), we have revised our economic growth outlook. We now forecast real GDP growth of +3.0% y/y for FY13 (previous forecast: +3.1%) and +1.2% for FY14 (+0.7%). We have assumed the formation of the FY13 supplementary budget of around Y3 trillion (new spending basis) and have accordingly revised our FY14 outlook upward.

- **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 policy measures in particular are yielding marked results. We anticipate that the economy will continue to expand, supported by (1) the expansion of the US economy, (2) the persistent reconstruction demand related to the 2011 Great East Japan Earthquake and the formation of a large-scale supplementary budget, and (3) the ongoing depreciation of the yen and the ascent in stock prices accompanying the BOJ's bold monetary easing. When we compare the current recovery with past recoveries, it is distinguished by a robust household sector that is being supported by a recovery in consumer confidence from a rising stock market. While the improvement in the income environment, exports, and capex was somewhat slow in relative terms, these categories are not faring all that poorly compared to past recoveries in Japan and the US. With regard to criticisms against Abenomics such as 1) it will have an adverse impact on the economy if long-term interest rates rise and (2) employee income will fail to increase as inflation progresses, and living standards will fall, we

believe these criticisms have little basis. Going forward, the Abe administration will need to actively engage in measures such as (1) the maintenance of fiscal discipline by making fundamental reforms to the social insurance system and (2) strengthening comprehensive growth strategies through deregulation and the reduction of the effective corporate tax rate.

- **Has a proper environment come together for raising the consumption tax?:** In this report, we provide a multifaceted examination of the pros and cons of raising the consumption tax. At the present moment, we believe that a proper environment has come together for raising the consumption tax as scheduled. Compared to 1997 when the consumption tax was last raised, domestic demand is expected to trend firmly. There will be a need, however, to carefully assess the risk of a downswing in China and other foreign economies.

- **Four risk factors—examination of the world economic cycle**: 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. In this report, we examine the world economic cycle. In the past, advanced economies led by the US drove emerging economies. 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 Federal Reserve Board will implement exit measures from a third round of 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.

- **BOJ monetary policy:** With the recovery of Japan's economy, we believe that the timing for the BOJ to implement further accommodative measures will be FY14 or later. The BOJ is likely to purchase additional risk assets (ETFs and other assets) in Apr-Jun 2014 or later in part to mitigate the adverse impact of a higher consumption tax rate.

Our assumptions

- Public works spending will grow +11.7% in FY13 and –0.9% in FY14; the consumption tax rate will be increased in April 2014

- Average exchange rate of Y99.7/$ in FY13 and Y100.0/$ in FY14

- US real GDP growth of +1.5% in CY13 and +2.6% in CY14

Main Economic Indicators and Real GDP Components

	FY12 (Actual)	FY13 (Estimate)	FY14 (Estimate)	CY12 (Actual)	CY13 (Estimate)	CY14 (Estimate)
Main economic indicators						
Nominal GDP (y/y %)	0.3	2.8	2.7	1.1	1.5	3.3
Real GDP (chained [2005]; y/y %)	1.2	3.0	1.2	2.0	2.0	2.2
Domestic demand (contribution, % pt)	2.0	2.4	0.4	2.9	1.7	1.6
Foreign demand (contribution, % pt)	-0.8	0.7	0.8	-0.9	0.2	0.6
GDP deflator (y/y %)	-0.9	-0.2	1.4	-0.9	-0.5	1.0
Index of All-industry Activity (y/y %)*	0.2	2.5	2.7	1.2	1.2	3.4
Index of Industrial Production (y/y %)	-3.0	3.3	6.1	0.6	-0.5	6.8
Index of Tertiary Industry Activity (y/y %)	0.8	2.5	1.9	1.4	1.7	2.5
Corporate Goods Price Index (y/y %)	-1.1	1.5	3.6	-0.9	1.0	3.0
Consumer Price Index (excl. fresh food; y/y %)	-0.2	0.4	2.9	-0.1	0.2	2.3
Unemployment rate (%)	4.3	4.0	3.9	4.4	4.1	3.9
Government bond yield (10 year; %)	0.76	0.83	1.00	0.80	0.77	0.96
Money stock; M2 (end-period; y/y %)	2.5	3.7	4.0	2.5	3.5	4.0
Balance of payments						
Trade balance (Y tril)	-6.9	-6.8	-3.7	-5.8	-7.6	-5.0
Current balance ($100 mil)	524	925	1,497	605	758	1,289
Current balance (Y tril)	4.4	9.2	15.0	4.8	7.5	12.9
(% of nominal GDP)	0.9	1.9	3.0	1.1	1.6	2.6
Real GDP components (Chained [2005]; y/y %; figures in parentheses: contribution, % pt)						
Private final consumption	1.6 (1.0)	2.6 (1.5)	-0.8 (-0.5)	2.3 (1.4)	2.0 (1.2)	0.5 (0.3)
Private housing investment	5.3 (0.2)	8.2 (0.2)	-3.0 (-0.1)	3.0 (0.1)	8.6 (0.2)	-0.0 (-0.0)
Private fixed investment	-1.4 (-0.2)	0.8 (0.1)	5.8 (0.7)	2.0 (0.3)	-2.1 (-0.3)	5.6 (0.7)
Government final consumption	2.1 (0.4)	1.9 (0.4)	1.1 (0.2)	2.4 (0.5)	1.7 (0.3)	1.4 (0.3)
Public fixed investment	15.0 (0.7)	10.5 (0.5)	-2.2 (-0.1)	12.5 (0.6)	11.2 (0.5)	2.9 (0.2)
Exports of goods and services	-1.2 (-0.2)	7.0 (1.1)	9.1 (1.5)	-0.1 (-0.0)	3.7 (0.5)	9.0 (1.5)
Imports of goods and services	3.8 (-0.6)	3.1 (-0.4)	4.5 (-0.6)	5.4 (-0.9)	1.8 (-0.3)	4.9 (-0.9)
Major assumptions:						
1. World economy						
Economic growth of major trading partners	3.1	3.0	3.8	3.3	2.8	3.7
Crude oil price (WTI futures; $/bbl)	92.0	98.5	100.0	94.1	97.1	100.0
2. US economy						
US real GDP (chained [2005]; y/y %)	2.3	1.8	2.8	2.8	1.5	2.6
US Consumer Price Index (y/y %)	1.8	1.2	1.9	2.1	1.3	1.7
3. Japanese economy						
Nominal public fixed investment (y/y %)	14.6	11.7	-0.9	12.2	12.2	4.1
Exchange rate (Y/$)	83.1	99.7	100.0	79.8	97.8	100.0
(Y/€)	107.4	129.9	130.0	103.5	127.9	130.0
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 178)		Previous outlook (Outlook 177 Update)		Difference between previous and current outlooks	
	FY13	FY14	FY13	FY14	FY13	FY14
Main economic indicators						
Nominal GDP (y/y %)	2.8	2.7	3.0	2.0	-0.2	0.7
Real GDP (chained [2005]; y/y %)	3.0	1.2	3.1	0.7	-0.2	0.6
Domestic demand (contribution, % pt)	2.4	0.4	2.7	-0.3	-0.3	0.7
Foreign demand (contribution, % pt)	0.7	0.8	0.4	0.9	0.2	-0.1
GDP deflator (y/y %)	-0.2	1.4	-0.1	1.3	-0.0	0.1
Index of All-industry Activity (y/y %)*	2.5	2.7	2.6	2.4	-0.1	0.3
Index of Industrial Production (y/y %)	3.3	6.1	4.3	5.8	-1.0	0.3
Index of Tertiary Industry Activity (y/y %)	2.5	1.9	1.9	1.6	0.6	0.3
Corporate Goods Price Index (y/y %)	1.5	3.6	1.7	3.3	-0.3	0.4
Consumer Price Index (excl. fresh food; y/y %)	0.4	2.9	0.3	2.9	0.1	-0.0
Unemployment rate (%)	4.0	3.9	4.1	3.9	-0.1	-0.0
Government bond yield (10 year; %)	0.83	1.00	0.88	1.05	-0.05	-0.05
Money stock; M2 (end-period; y/y %)	3.7	4.0	3.2	3.6	0.5	0.4
Balance of payments						
Trade balance (Y tril)	-6.8	-3.7	-7.2	-3.4	0.5	-0.3
Current balance ($100 mil)	925	1,497	574	1,245	352	252
Current balance (Y tril)	9.2	15.0	5.7	12.5	3.5	2.5
(% of nominal GDP)	1.9	3.0	1.2	2.5	0.7	0.5
Real GDP components (chained [2005]; y/y %)						
Private final consumption	2.6	-0.8	2.3	-0.6	0.3	-0.1
Private housing investment	8.2	-3.0	7.5	-4.5	0.7	1.5
Private fixed investment	0.8	5.8	2.1	6.5	-1.2	-0.8
Government final consumption	1.9	1.1	1.6	1.1	0.3	-0.0
Public fixed investment	10.5	-2.2	11.2	-16.9	-0.8	14.6
Exports of goods and services	7.0	9.1	5.4	9.8	1.6	-0.7
Imports of goods and services	3.1	4.5	3.1	4.5	0.0	0.0
Major assumptions:						
1. World economy						
Economic growth of major trading partners	3.0	3.8	3.1	3.8	-0.1	-0.0
Crude oil price (WTI futures; $/bbl)	98.5	100.0	95.0	95.0	3.5	5.0
2. US economy						
US real GDP (chained [2005]; y/y %)	1.8	2.8	1.9	2.5	-0.1	0.3
US Consumer Price Index (y/y %)	1.2	1.9	1.8	2.1	-0.5	-0.2
3. Japanese economy						
Nominal public fixed investment (y/y %)	11.7	-0.9	12.4	-15.8	-0.7	14.8
Exchange rate (Y/$)	99.7	100.0	100.0	100.0	-0.3	0.0
(Y/€)	129.9	130.0	130.0	130.0	-0.1	0.0
Call rate (end-period; %)	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.

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Summary

Economic outlook revised

In light of the first preliminary Apr-Jun GDP release (Cabinet Office), we have revised our economic growth outlook. We now forecast real GDP growth of +3.0% y/y for FY13 (previous forecast: +3.1%) and +1.2% for FY14 (+0.7%). We have assumed the formation of the FY13 supplementary budget of around Y3 trillion (new spending basis) and have accordingly revised our FY14 outlook upward.

Apr-Jun 2013 real GDP increased an annualized 2.6% q/q in the first preliminary estimate

In the first preliminary estimate for Apr-Jun 2013 (Cabinet Office), real GDP increased 0.6% q/q, annualized at 2.6%, the third quarterly positive growth in a row, although short of the market consensus (+0.9%; annualized at +3.6%). GDP growth fell below the market consensus mainly due to capex decreasing rather than turning positive as widely anticipated and from the negative contribution made by the sharp decline in inventory investment. Even so, domestic demand contributed positively to q/q GDP growth for the third consecutive quarter (+0.5 percentage points), and foreign demand made the second positive contribution in a row (+0.2 points). Overall, growth is continuing that is well-balanced between domestic and foreign demand. Also, given that the decline in inventory investment placed a substantial downward pressure on the GDP growth, the Apr-Jun result was not as bad as at first glance.

Personal consumption rose 0.8% q/q, the third quarterly gain in a row. Personal consumption was firm overall, with consumption growing for all goods and services. Personal consumption so far has increased mainly due to the improvement in consumer confidence from higher stock prices. However, higher income also supported the growth of personal consumption, with real employee compensation rising 0.4%, the second quarterly increase in a row.

Meanwhile, housing investment declined 0.2% q/q, the first slide in five quarters. Housing investment trended firmly thanks to reconstruction demand and the positive environment of low interest rates, but this improvement has taken a pause for now. However, housing start statistics, a leading indicator of housing investment, are continuing to trend firmly. Therefore there is no need to be overly worried about the housing investment figure.

Capex declined 0.1% q/q, the sixth quarterly decrease in a row. While the decline was small, it was still disappointing because the market expected that capex would increase for the first time in six quarters. Despite signs of improvement in the sentiment for capex in the BOJ Tankan survey of corporate sentiment and other surveys, such improvement was not reflected to the same degree in actual capex as of Apr-Jun 2013.

Public works spending increased 1.8% q/q, the sixth quarterly increase in a row. While remaining at a high level, public works spending slowed somewhat, but with the implementation of the FY12 supplementary budget, such spending has reaccelerated.

Exports grew 3.0% q/q, the second quarterly increase in a row. Exports rose at a rapid pace as the effect of the depreciation of the yen since end-2012 began to materialize with a lag. While exports to Europe continued to struggle, the improvement of exports to Asia and robust exports to the US helped to boost the overall growth of exports. With the improvement in exports and domestic demand, imports climbed 1.5% q/q, the second consecutive quarterly increase. Because imports grew by a smaller margin than exports, foreign demand (net exports) pushed up GDP growth by 0.2 percentage points, the second positive quarterly contribution in a row.

The GDP deflator rose 0.1% q/q, the first increase in five quarters, possibly signaling a bottoming out. On a y/y basis, it declined 0.3%, the 15th consecutive quarterly decline. Deflators for housing investment, capex, and public works spending increased from the previous quarter as companies passed through higher import prices from yen's depreciation and higher building material prices due to firm demand for construction investment. Nominal GDP increased 0.7% q/q, annualized at 2.9%, the third quarterly increase in a row.

Main scenario: Japan's economy to continue growing

After a 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 policy measures in particular are yielding marked results. We anticipate that the economy will continue to expand, supported by (1) the expansion of the US economy, (2) the persistent reconstruction demand related to the 2011 Great East Japan Earthquake and the formation of a large-scale supplementary budget, and (3) the ongoing depreciation of the yen and the ascent in stock prices accompanying the BOJ's bold monetary easing.

In terms of demand components, exports are expected to continue increasing. While the risk of a downswing in the Chinese economy will have to be kept in mind, exports will benefit from the expansion of overseas economies centering on the US and from the positive effects of yen's depreciation since end-2012 which has materialized with a lag. The improvement in corporate profits from the growth in exports is expected to increase personal consumption through higher household income. While capex remains sluggish, it is likely to improve reflecting the improvement in corporate profits and business confidence. Other factors will also come into play such as the reacceleration of public works spending from the implementation of the FY12 supplementary budget, and a surge in personal consumption and housing investment is highly likely in 2H FY13 in advance of the consumption tax hike scheduled for April 2014. Thus, we believe that the economy will gradually pick up speed in FY13.

Characteristics of the current recovery

When we compare the current recovery with past recoveries, the current recovery is distinguished by a robust household sector that is being supported by a recovery in consumer confidence from a rising stock market. While the improvement in the income environment, exports, and capex was somewhat slow in relative terms, these categories are actually not faring all that poorly compared to past recoveries in Japan and the US.

Two criticisms against Abenomics not well-founded

Two criticisms are currently being made against Abenomics: (1) it will have an adverse impact on the economy if long-term interest rates rise and (2) employee income will fail to increase as inflation progresses, and living standards will fall, we believe these criticisms have little basis. Going forward, the Abe administration will need to actively engage in measures such as (1) the maintenance of fiscal discipline by making fundamental reforms to the social insurance system and (2) strengthening comprehensive growth strategies through deregulation and the reduction of the effective corporate tax rate.

Has a proper environment come together for raising the consumption tax?

In this report, we provide a multifaceted examination of the pros and cons of raising the consumption tax. At the present moment, we believe that a proper environment has come together for raising the consumption tax as scheduled. Compared to 1997 when the consumption tax was last raised, domestic

demand is expected to trend firmly. There will be a need, however, to carefully assess the risk of a downswing in China and other foreign economies.

Four risk factors: Examination of the world economic cycle

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.

In this report, we examine the world economic cycle. In the past, advanced economies led by the US drove emerging economies. 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 Federal Reserve Board will implement exit measures from a third round of quantitative easing (QE3). 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.

BOJ monetary policy

With the recovery of Japan's economy, we believe that the timing for the BOJ to implement further accommodative measures will be FY14 or later. The BOJ is likely to purchase additional risk assets (ETFs and other assets) in Apr-Jun 2014 or later in part to mitigate the adverse impact of a higher consumption tax rate.

1. Main Scenario: Continued Expansion in Japan

1.1 Japan's economy on a steady path towards recovery supported by Abenomics

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

Supported in part by Abenomics, Japan's economy is on a path towards recovery. After hitting bottom in November 2012, the economy has entered a recovery phase and we believe the economy will continue to expand steadily. This expansion will be supported by (1) the expansion of the US economy, (2) the persistent reconstruction demand related to the 2011 Great East Japan earthquake and the formation of a large-scale supplementary budget, and (3) the ongoing depreciation of the yen and the ascent in stock prices accompanying the BOJ's bold monetary easing.

Abenomics consists of three "arrows" (three priority areas): (1) bold monetary policy (2) flexible fiscal policy and (3) growth strategies to stimulate private-sector investment. We have argued from the beginning that Abenomics has the potential of jump-starting the revival of the Japanese economy and that its basic direction is set on the right course.

Bold monetary policy, in particular, has made a smooth start

Of the three "arrows" of the Abe administration, the first arrow, bold monetary policy, has made a particularly smooth start.

Since mid-November 2012 when the dissolution of the House of Representatives became all but certain, cumulative market capitalization in Japan has increased by around Y160 trillion. It is amazing that wealth exceeding the national government budget for a single year (around Y90 tril on an initial budget basis) was generated with the change of power. During the period, the yen has depreciated around Y18 against the US dollar. According to the Daiwa short-term macroeconomic forecasting model, the yen depreciating by Y10 against the dollar would lift Japan's real GDP by around 0.3% to 0.5% (Y1.5 to 2.5 trillion). To put it simply, yen's depreciation accompanying the change in administration has had the effect of lifting real GDP by around Y3 to 5 trillion.

Going forward, the Abe administration will need to actively engage in measures such as (1) the maintenance of fiscal discipline by making fundamental reforms to the social insurance system and (2) strengthening comprehensive growth strategies through deregulation and the reduction of the effective corporate tax rate. However as of now, we rate Abenomics extremely high.

(1) Bold monetary policy: Already yielding results

(2) Flexible fiscal policy: Uncertainty remains

Issue: Maintaining fiscal discipline

—Strengthening resilience of nation's infrastructure: Risk of public spending bloating under the guise of protecting lives and assets of citizens

—Risk of expanding budget deficit leading to triple weakness in the form of plunge in JGBs (rise in long-term interest rate), weaker yen and lower stock prices

(3) Growth strategy: Uncertainty remains

Issue: Improving/restructuring economic structure over medium/long term

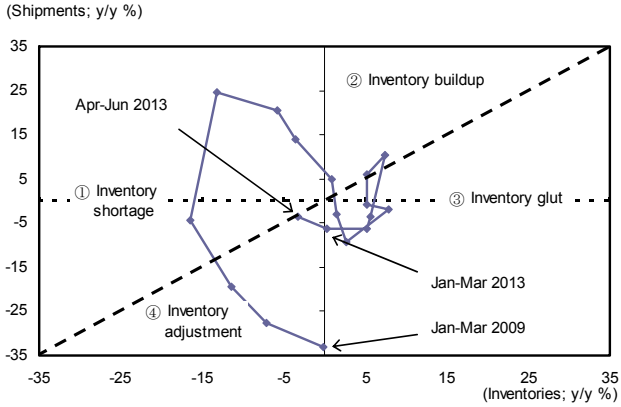
—Need to tackle issues like deregulation and lowering effective tax rate for corporations

Signs of a recovery in the corporate sector

Supported in part by Abenomics, Japan's economy is on a path toward recovery. In Chart 1, three economic indicators signal that the corporate sector is signaling a recovery. First, a graph of the inventory cycle, with the y/y change in shipments plotted along the vertical axis and that in inventories along the horizontal axis, shows that this cycle is currently approaching the 45-degree line. This suggests the possibility that the phase of inventory adjustment is coming to an end. Second, 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 steadily improving. Third, the revision rate for fixed investment projection in the Tankan, which leads capex by about one year, continues to improve. Thus, it is reasonable to conclude that the environment for Japan's corporate sector is steadily improving.

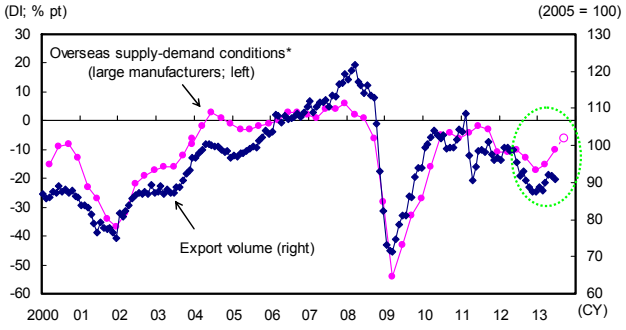
Corporate Sector Trends **Chart 1**

Inventory-shipment cycle



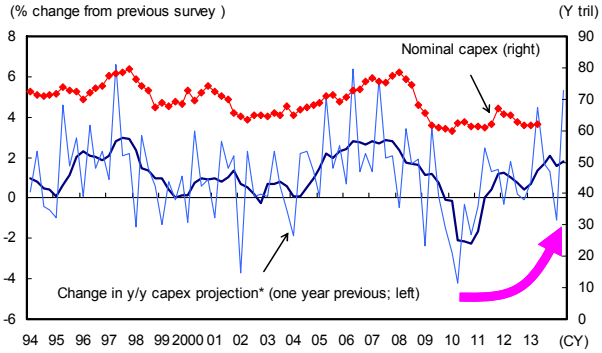
Source: Ministry of Economy, Trade and Industry; compiled by DIR.

Overseas supply-demand conditions vs. exports



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

Capex: Actual and projection



Source: Bank of Japan (BOJ), Cabinet Office; compiled by DIR.
*BOJ Tankan survey of corporate sentiment; bold line=4Q MA.

An improved income environment is expected to support personal consumption

There are also positive signs for the household sector. Chart 2 portrays the disposable income trend of workers' households. Disposable income has been increasing since the start of 2013 due to the growth of overtime pay mostly in the manufacturing sector and the increase in summer bonuses from improved corporate results.

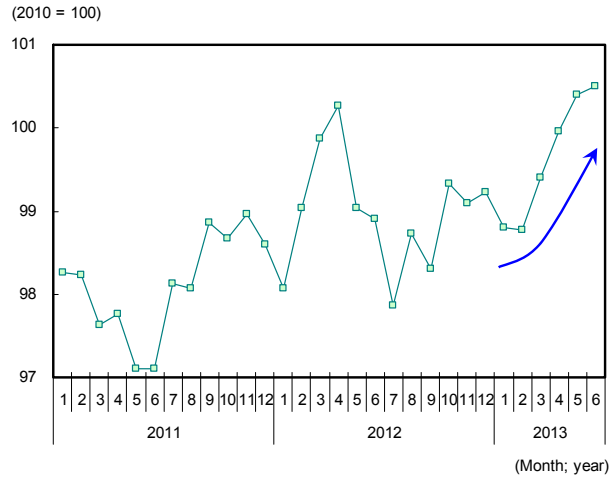
As consumers loosen their purse strings, the average purchase price rises

Chart 3 illustrates the trend of the percentage share of goods where the growth rate of the average purchase price paid by consumers is greater than the growth rate of consumer prices.* We can see that consumers tend to shift to lower-price goods during economic downturns and to higher-price goods during economic recoveries. We also learn from the chart that (1) during the so-called mini-recession from April to November 2012, consumers tended to shift to cheaper goods and that (2) since the start of 2013, they have gradually shifted to luxury goods. This development is consistent with households increasingly eating out and sales of high-end luxury goods increasing.

Will consumption lead the next cycle of recovery?

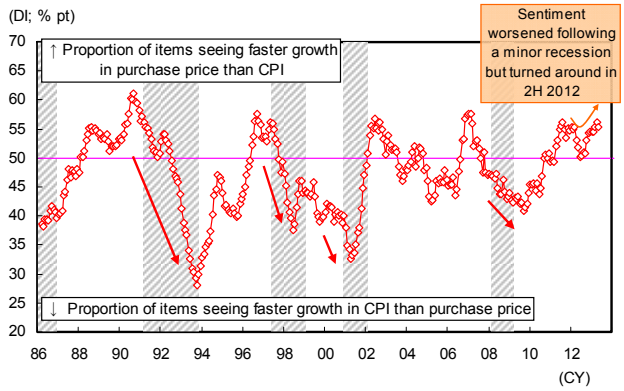
Thus, it is reasonable to think that the current strength of consumption is being supported by an improved income environment and by households loosening their purse strings. The strong growth in consumption supported by improvement in the labor market is expected to become the main engine of growth in the current economic recovery.

Household Disposable Income **Chart 2**



Source: Ministry of Internal Affairs and Communications: compiled by DIR.
Note: SA 3M MA.

Consumer Sentiment on Spending* **Chart 3**



Source: Ministry of Internal Affairs and Communications: compiled by DIR.
*DIR estimate by subtracting "proportion of items seeing faster growth in purchase price than CPI" from "proportion of items seeing faster growth in CPI than purchase price".
Note: Shaded areas denote economic downturns.

For CPI to rise steadily at 2%, higher inflation expectations will be indispensable

In the final analysis, will the BOJ be able to achieve an inflation target of 2%?

Chart 4 illustrates the Phillips curve factoring in inflation expectations, where the GDP gap is plotted along the horizontal axis and the year-on-year change in core CPI along the vertical axis. The standard Phillips curve is the approximate curve between these two variables. When inflation expectations are factored in, their changes will be expressed as a shift in the level of the Phillips curve (change in the

* Since consumer prices are determined by surveying the prices of certain goods at certain stores, they show changes in prices when quality is unchanged. In contrast, the average purchase price is calculated by dividing the amount of expenditures spent by the number of items purchased. Thus, it reflects changes in prices as well as changes in where they were bought and what was bought. In other words, growth rate of the average purchase price exceeding that of consumer prices can be interpreted as households loosening their purse strings and shifting their purchases to more expensive items (an increase in the quality of goods purchased).

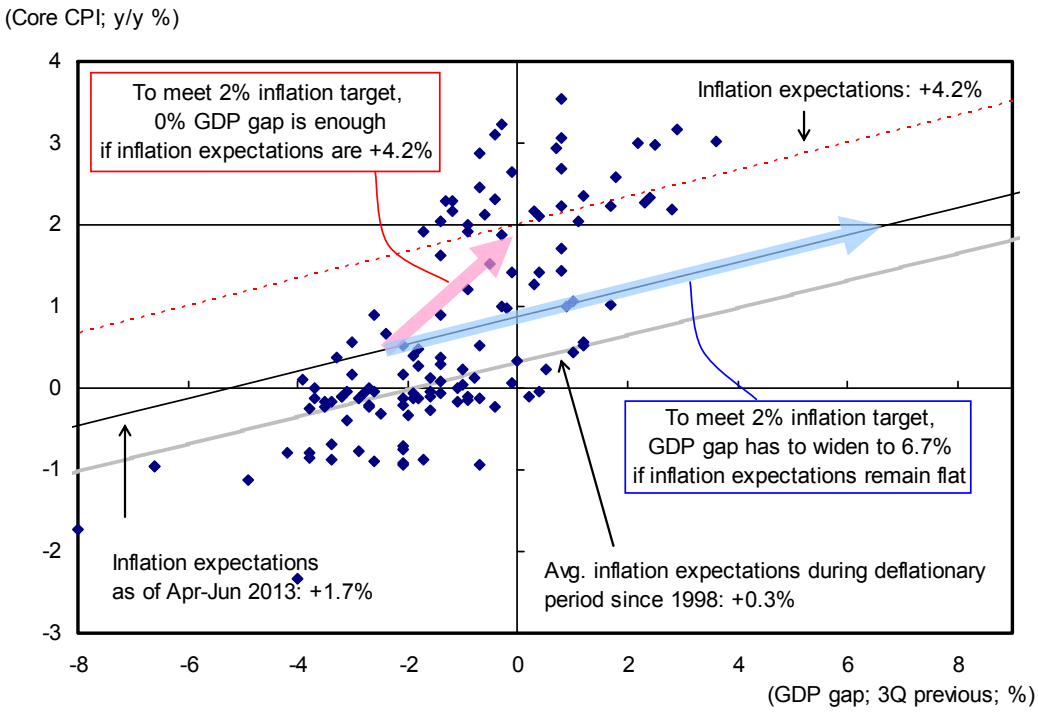
intercept). In other words, when inflation expectations increase (decrease), the Phillips curve will shift upward (downward).

The chart indicates that, should the currently observed inflation expectations (+1.7% in Apr-Jun 2013) remain flat, the GDP gap would have to rise to +6.7% for the CPI growth rate to meet the BOJ's inflation target of 2%. Since the GDP gap is currently around –2.3%, GDP would have to increase by around 9% to meet the inflation target, an extremely high hurdle to surmount in short order.

In a case where inflation expectations rise, should the rate increase to +4.2%, the GDP gap needed to meet the CPI growth rate of 2% would narrow to 0%.

The above analysis underscores that it will be essential as a practical matter not only to break out of the negative GDP gap but to see an increase in inflation expectations if CPI is to steadily grow at 2%.

Phillips Curve Adjusted for Inflation Expectations **Chart 4**



Source: Cabinet Office, Ministry of Internal Affairs and Communications; compiled by DIR.
Equation: CPI = 0.15 + 0.44 x INFEX + 0.17 x GDP gap (-3),
where CPI=y/y CPI excl. fresh food (adjusted for consumption tax hikes), INFEX= inflation expectations, and the figure in parentheses=quarterly lag; adjusted R2=0.84.
Estimation period: Oct-Dec 1980 to Jan-Mar 2013.
Inflation expectations through Jan-Mar 2004 based on Carlson-Parkin method; thereafter weighted average of inflation expectations (Cabinet Office survey) adjusted for discontinuity.

1.2 Characteristics of the current recovery

Characteristics of the recovery since November 2012

Japan's economy slipped into a recession after peaking in April 2012. It appears to have bottomed out after hitting bottom in November 2012. When we compare the current recovery with past recoveries in Japan and the US, what are the similarities and differences? We will examine this question in terms of (1) market trends, (2) household-sector trends, and (3) corporate-sector trends.

1) Market trends

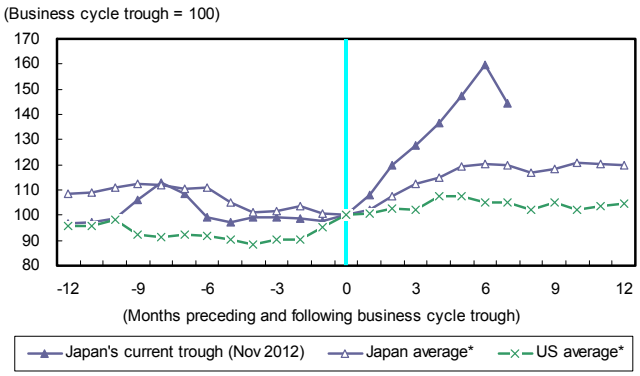
First, we will use Chart 5 to analyze market trends. Stock prices have surged since November 2012 based on market expectations toward Abenomics. Compared with past recoveries in the US, the current recovery in Japan is distinguished by stock prices rising at an extremely fast pace. While we will examine this development in greater detail later, the surge in stock prices has contributed to the improvement in the household sector by increasing consumer confidence.

Similar to the case for stock prices, foreign exchange rates are showing a distinct trend. The yen has depreciated sharply based in part on expectations toward bold monetary easing promoted by Prime Minister Abe. The depreciation of the yen combined with firm domestic demand has greatly improved corporate profits.

The long-term interest rate has been quite volatile since the introduction of the quantitative and qualitative monetary easing, but it is gradually stabilizing. While interest rates are currently rising at a pace that is slightly faster than previous recoveries, the pace remains moderate compared to past recoveries in the US.

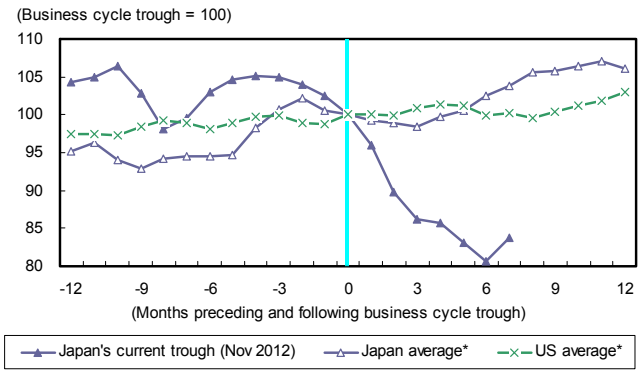
Market Trends during Economic Recovery **Chart 5**

Stock prices



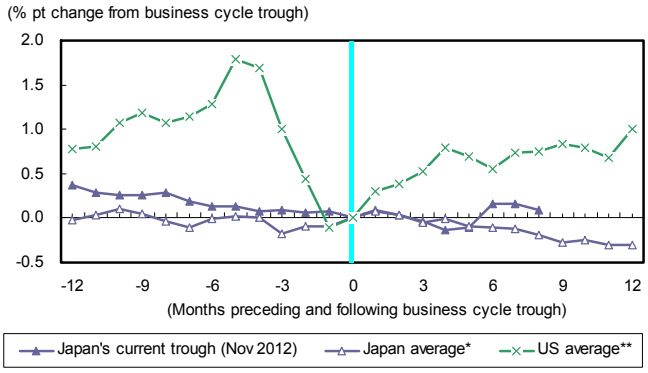
Source: Tokyo Stock Exchange, Haver Analytics; compiled by DIR.
*Average since 1980 excl. Lehman crisis.
Note: TOPIX for Japan; S&P500 for US.

Nominal effective exchange rates



Source: BIS; compiled by DIR.
*Average since 1980 excl. Lehman crisis.

Long-term interest rates



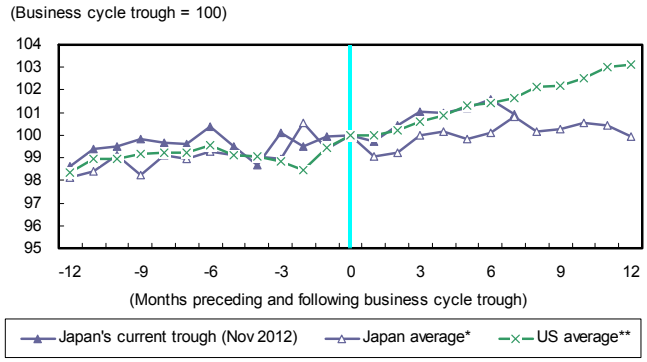
Source: Japan Bond Trading, Haver Analytics; compiled by DIR
*Average since 1999 excl. Lehman crisis.
**Average since 1980 excl. Lehman crisis.

2) Household sector trends

The improvement in the market environment contributed to the improvement of the household sector environment through strengthening consumer confidence (Chart 6). The household activity DI (*Economy Watchers Survey;* Cabinet Office [CAO]) and the Consumer Confidence Index (CAO) have both climbed sharply since end-2012. This suggests the possibility of a rebound in the stock market is contributing to the improvement of consumer sentiment. With the improvement of such sentiment, the Synthetic Consumption Index (CAO) is rising more rapidly than in past recoveries. Given such examples that the economy is improving in a similar manner to personal consumption-led recoveries in the US, it is reasonable to conclude that personal consumption is driving the current recovery in Japan. Housing starts, reflecting in part a surge in demand ahead of a likely consumption tax hike, are also improving more rapidly than in past recoveries in Japan.

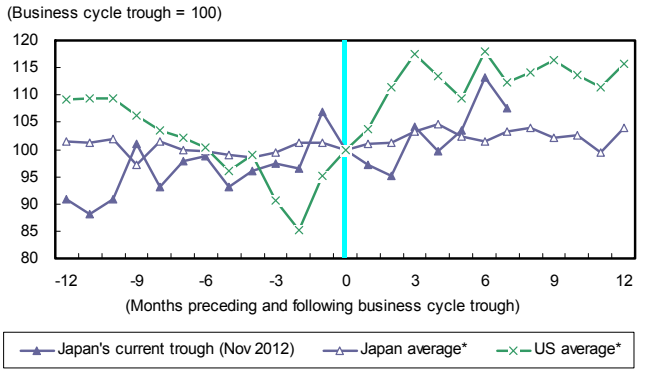
Household Sector Trends during Economic Recovery **Chart 6**

Synthetic Consumption Index



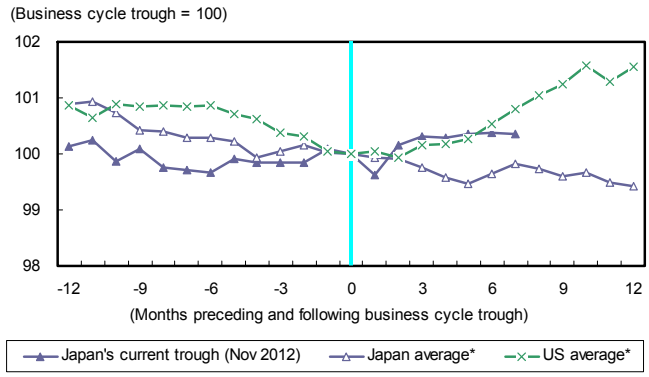
Source: Cabinet Office, Haver Analytics; compiled by DIR.
*Average since 1999 excl. Lehman crisis.
**Average since 1980 excl. Lehman crisis.
Note: Seasonally adjusted.

Number of housing starts



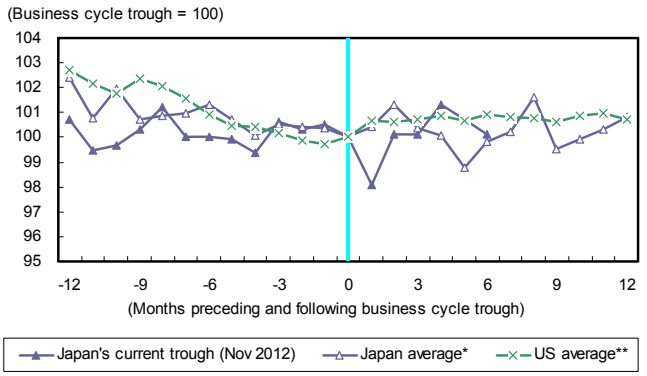
Source: Ministry of Land, Infrastructure, Transport and Tourism; Haver Analytics; compiled by DIR.
*Average since 1980 excl. Lehman crisis.
Note: Seasonally adjusted.

Number employed



Source: Ministry of Internal Affairs and Communications, Haver Analytics; compiled by DIR.
*Average since 1980 excl. Lehman crisis.
Note: Seasonally adjusted.

Real wages



Source: Ministry of Health, Labour, and Welfare; Haver Analytics; compiled by DIR.
*Average since 1990 excl. Lehman crisis.
**Average since 1980 excl. Lehman crisis.
Note: Seasonally adjusted.

The income environment is not as bad as popular opinion would suggest. While the number of employees is currently trending sideways, this is better than in past recoveries where the number continued to decline even after the economy bottomed out. Although the real wage index is following a similar path to past recoveries, it is undeniable that this statistics is lagging relative to other indicators. Real employee compensation (GDP basis) however, has risen 0.4% q/q, the second

quarterly increase in a row, and it is reasonable to conclude that the income environment is steadily improving.

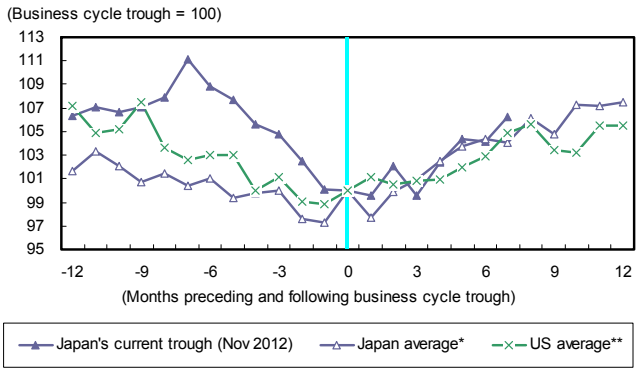
3) Corporate sector trends

Finally, we examine corporate-sector trends (Chart 7). Real exports are tracing a path similar to past recoveries in Japan and in the US. On a GDP basis, real exports grew 3.0% q/q in Apr-Jun 2013, the second quarterly gain in a row. Going forward, exports are expected to continue to rise, supported by positive developments such as the effect of yen's depreciation since end-2012 materializing with a lag, the firm growth of the US economy and signs that European economies are bottoming out.

It deserves emphasizing that capex is not faring all that poorly compared to past economic recoveries in Japan and in the US. While real private nonresidential investment declined 0.1% q/q in recent GDP statistics marking the sixth quarterly slide in a row, its future outlook is positive. In past recoveries, capital good shipments firmed up a few months after the economy bottomed. In the current recovery, however, such shipments firmed up at the same time when the economy bottomed. In addition, according to a survey on planned capital spending for FY12, FY13, and FY14 published by the Development Bank of Japan, the capex by manufacturers and non-manufacturers is foreseen to experience double-digit y/y growth in FY13. It is quite clear that the improvement in corporate profits is spurring companies' interest in increasing capital expenditures.

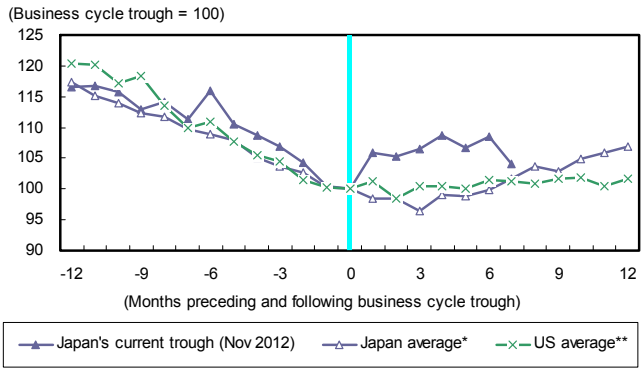
Corporate Sector Trends during Economic Recovery **Chart 7**

Real exports



Source: Bank of Japan, Haver Analytics; compiled by DIR.
*Average since 1980 excl. Lehman crisis.
**Average since 1990 excl. Lehman crisis.
Note: Seasonally adjusted.

Shipments of capital goods (excl. transportation equipment)



Source: Bank of Japan, Haver Analytics; compiled by DIR.
*Average since 1980 excl. Lehman crisis.
**2001 and 2009 trough average.
Note: Seasonally adjusted.

Summary

Summarizing the above, when we compare the current recovery with past economic recoveries in Japan and in the US, the current recovery is distinguished by a robust household sector that is being supported by the recovery of consumer confidence accompanying rising stock prices. While the improvement in the income environment, exports, and capex was seen to be somewhat lagging in relative terms, these categories are actually not faring all that poorly compared to past recoveries in Japan and in the US.

1.3 Two criticisms against Abenomics not well-founded

Two criticisms against Abenomics

As the final point of this section, we wish to reaffirm that Abenomics represents an appropriate set of economic policies in accordance with global standards. Two criticisms are frequently made against Abenomics. First, it is argued that Abenomics will have an adverse impact on the economy if long-term interest rates rise. Second, it is asserted that employee income will fail to increase as inflation progresses and living standards will fall. We believe, however, that neither of these criticisms is well-founded. Our reasons for thinking so are explained below.

Two Arguments against Abenomics **Chart 8**

Criticism 1: Higher long-term interest rate will have an adverse impact on the economy.

Counterargument 1: What is occurring now is not a “bad” increase in interest rates ensuing from the growth of the budget deficit but a “good” increase accompanying the ascent of stock prices and expectations for the economic recovery.

Counterargument 2: Real interest (nominal interest rate minus expected inflation rate) is negative.

Counterargument 3: The positive effect of higher stock prices and a weaker yen is far greater than the adverse effect of the increase in the long-term interest rate.

Criticism 2: Employee income will fail to increase as inflation progresses.

Counterargument 1: Cycle seen where increase in sales is followed by higher wages and higher prices.

Counterargument 2: Labor’s share has not declined in Japan.

Counterargument 3: A J-curve effect accompanying yen’s depreciation exists.

Source: Compiled by DIR.

Criticism 1: Higher long-term interest rate will have an adverse impact on the economy

The first criticism against Abenomics is that it will have a negative effect overall if the long-term interest rate rises. Three counterarguments can be made against this criticism.

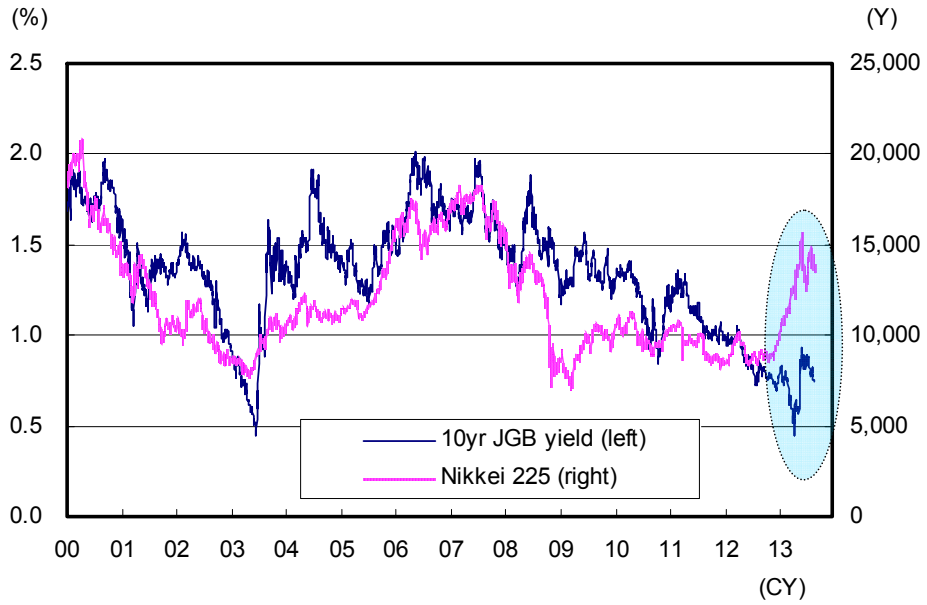
Counterargument 1: What is occurring is a "good" rather a "bad" increase in interest rates

According to the first counterargument, what is currently occurring is not a "bad" increase in interest rates ensuing from the growth of the budget deficit but a "good" increase accompanying the ascent of stock prices and expectations for the economy's recovery.

As indicated in Chart 9, a moderate correlation is found between the Nikkei stock average and the yield on 10-year JGBs. As a rule of thumb shared by many market participants, multiplying the yield (%) on 10-year JGBs by 10,000 is roughly the same as the Nikkei stock average. For example, a yield on 10-year JGBs that is consistent with the current level of stock prices at 14,000 would be around 1.4%.

Moreover, while there is a risk that Japan's long-term interest rate will rise sharply in the future, the BOJ will maintain its aggressive stance toward JGB purchases and we anticipate that the upside risk for the long-term interest rate is limited for the time being.

Long-term Interest Rate and Nikkei 225 **Chart 9**



Source: Ministry of Finance, *Nikkei*; compiled by DIR.

Counterargument 2: Real interest rate (nominal interest rate minus expected inflation rate) is negative

As our second counterargument, real interest rate is negative. Ultimately, it is the real interest rate (nominal interest rate minus expected inflation rate) that has an impact on the economy. Currently, the nominal interest rate (yield on 10-year JGBs) is around 0.8%. Since the expected inflation rate is around 1.7%, real interest rate is negative by about 1%, which can be viewed as an extremely accommodative monetary environment.

Counterargument 3: The positive effects of a weaker yen and higher stock prices are far greater than the adverse effects of an increase in the long-term interest rate

As our third counterargument, it is highly likely that the positive effect of a weaker yen and higher stock prices is far greater than the adverse effect of an increase in the long-term interest rate.

In quantitative terms, if the long-term interest rate were to rise sharply and adversely affect Japan's economy, to what degree would this offset the positive effects of a weaker yen and higher stock prices?

Chart 10 shows the impact of changes in the yen exchange rate, stock prices, and the long-term interest rate on Japan's economy as annual averages. Our estimation indicates that the impact of the yen depreciating by 10% and TOPIX rising by 200 points would nearly be offset by the impact of the long-term interest rate increasing by 2 percentage points.

In other words, in terms of its impact on the economy for at least the next year or so, the likelihood is strong that the adverse effect of a higher long-term interest rate will be less than the positive effect of higher stock prices and a weaker yen. Should the yen and stock prices remain at their current levels (roughly corresponding to the scenario of 20% depreciation of the yen against the dollar and 400-point rise in TOPIX from the base scenario in the chart), the impact on Japan's economy will continue to be positive as long as the long-term interest rate does not rise around 4 percentage points.

Impact of Further Depreciation of Yen and Rise in Long-term Interest Rate
(% pt deviation from base scenario of *Japan's Economic Outlook No. 178*) **Chart 10**

GDP	Base scenario	Long-term interest rate to rise by 1% pt	2% pt	3% pt	4% pt
Base scenario	0.00	-0.21	-0.42	-0.63	-0.84
10% depreciation of yen against dollar + 200pt rise in TOPIX	0.38	0.17	-0.04	-0.25	-0.46
20% depreciation of yen against dollar + 400pt rise in TOPIX	0.76	0.55	0.34	0.13	-0.08
30% depreciation of yen against dollar + 600pt rise in TOPIX	1.15	0.94	0.73	0.51	0.30

Capex	Base scenario	Long-term interest rate to rise by 1% pt	2% pt	3% pt	4% pt
Base scenario	0.00	-1.39	-2.79	-4.18	-5.57
10% depreciation of yen against dollar + 200pt rise in TOPIX	1.13	-0.26	-1.65	-3.04	-4.44
20% depreciation of yen against dollar + 400pt rise in TOPIX	2.27	0.87	-0.52	-1.91	-3.30
30% depreciation of yen against dollar + 600pt rise in TOPIX	3.40	2.01	0.61	-0.78	-2.17

Personal consumption	Base scenario	Long-term interest rate to rise by 1% pt	2% pt	3% pt	4% pt
Base scenario	0.00	-0.04	-0.09	-0.13	-0.18
10% depreciation of yen against dollar + 200pt rise in TOPIX	0.20	0.16	0.12	0.07	0.03
20% depreciation of yen against dollar + 400pt rise in TOPIX	0.41	0.36	0.32	0.28	0.23
30% depreciation of yen against dollar + 600pt rise in TOPIX	0.61	0.57	0.52	0.48	0.44

CPI (y/y)	Base scenario	Long-term interest rate to rise by 1% pt	2% pt	3% pt	4% pt
Base scenario	0.00	-0.00	-0.00	-0.01	-0.01
10% depreciation of yen against dollar + 200pt rise in TOPIX	0.21	0.21	0.21	0.21	0.20
20% depreciation of yen against dollar + 400pt rise in TOPIX	0.43	0.43	0.42	0.42	0.42
30% depreciation of yen against dollar + 600pt rise in TOPIX	0.64	0.64	0.64	0.64	0.63

Nominal employee compensation	Base scenario	Long-term interest rate to rise by 1% pt	2% pt	3% pt	4% pt
Base scenario	0.00	-0.08	-0.16	-0.25	-0.33
10% depreciation of yen against dollar + 200pt rise in TOPIX	0.36	0.28	0.20	0.12	0.03
20% depreciation of yen against dollar + 400pt rise in TOPIX	0.72	0.64	0.56	0.48	0.40
30% depreciation of yen against dollar + 600pt rise in TOPIX	1.09	1.00	0.92	0.84	0.76

Corporate earnings	Base scenario	Long-term interest rate to rise by 1% pt	2% pt	3% pt	4% pt
Base scenario	0.00	-2.05	-4.10	-6.14	-8.19
10% depreciation of yen against dollar + 200pt rise in TOPIX	6.45	4.41	2.36	0.31	-1.74
20% depreciation of yen against dollar + 400pt rise in TOPIX	12.91	10.86	8.81	6.76	4.71
30% depreciation of yen against dollar + 600pt rise in TOPIX	19.36	17.31	15.26	13.22	11.17

Source: Compiled by DIR.

Adverse impact of higher long-term interest rate over the medium-/long-term warrants attention

Our estimation above, however, indicates the average impact the economy would sustain in one year after the occurrence of the shock. Over the medium to long term, the contraction of capex accompanying a higher long-term interest rate would give way to the retrenchment of domestic production sites, raising concern that the hollowing out of Japan's economy would accelerate further. It is also worth recalling that, in the wake of the European sovereign debt crisis, financial markets and the real economy suffered adverse and discontinuous blows from plunging bond prices.

To conclude, while the adverse impact of a higher long-term interest rate on Japan's economy will be limited for the time being, the possibility should be entertained that, in the medium to long term, it will have a larger adverse impact than estimation results based on our short-term macroeconomic model.

Criticism 2: Employee income will fail to increase as inflation progresses

The second criticism against Abenomics is that employee income will fail to increase as inflation progresses, and living standards will fall. Three counterarguments can also be laid against this criticism.

Counterargument 1: Cycle seen where increase in sales is followed by higher wages and higher prices

However, as shown in Chart 11, an examination of the historical record discloses the existence in Japan of a cycle where an increase in sales is followed by higher wages and higher prices. In other words, about six to 12 months after sales increase, wages rise, followed by CPI after another six months. In its basic philosophy, Abenomics views the expansion of sales through monetary easing by the BOJ and through the pro-business policies of the government as the best approach for overcoming deflation. Bearing the above cycle in mind, it is safe to say that Abenomics has chosen precisely the right target to aim for.

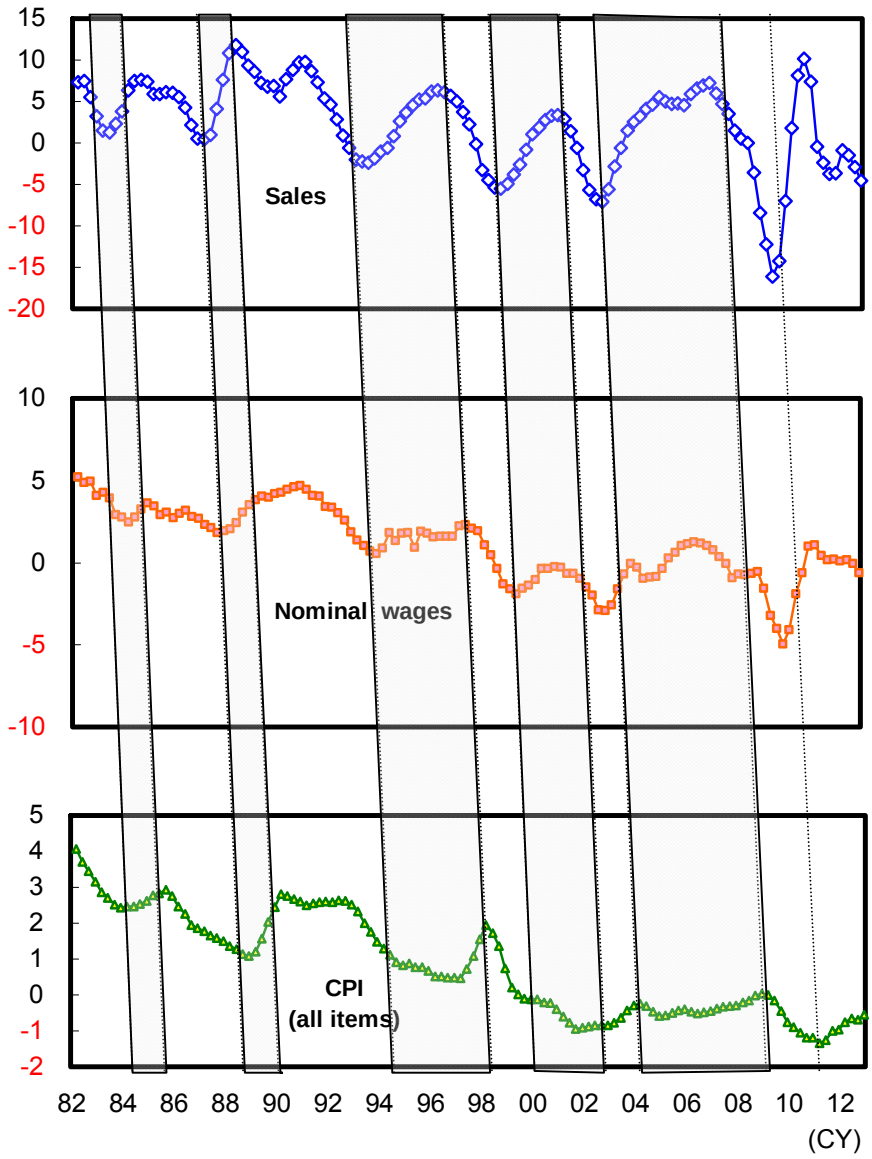
Policies sought that will support transfer of income from corporate to household sector

Nevertheless, with the progress of globalization since the 2000s there is some concern that sales have lost some of their leading character relative to wages. In other words, as global competition intensifies, there is a tendency among companies to accelerate the increase or decrease in employee wages. There is no doubting the need in policy terms to strengthen a transmission mechanism that will enable higher sales to propagate appropriately to wage increases.

The Abe administration is planning to provide tax breaks to companies that increase the allocation of income to workers. While this policy can be commended to a certain degree, what is needed to strengthen the transfer of income from the corporate to household sector is a broader approach where higher wages are achieved by sharing the pain among government, business, and labor.

Due to an excessive preoccupation with averting unemployment during recessions, wage cuts became prevalent in Japan, and deflation has persisted. What is needed in the future is to have workers accept a greater degree of labor flexibility and to have companies actively increase wages in exchange. To encourage such developments, the government should support vocational training and workers' efforts to get jobs, provide tax breaks like that mentioned above, and support the restructuring of companies even more than before.

Sales, Wages, and Prices (y/y %) **Chart 11**

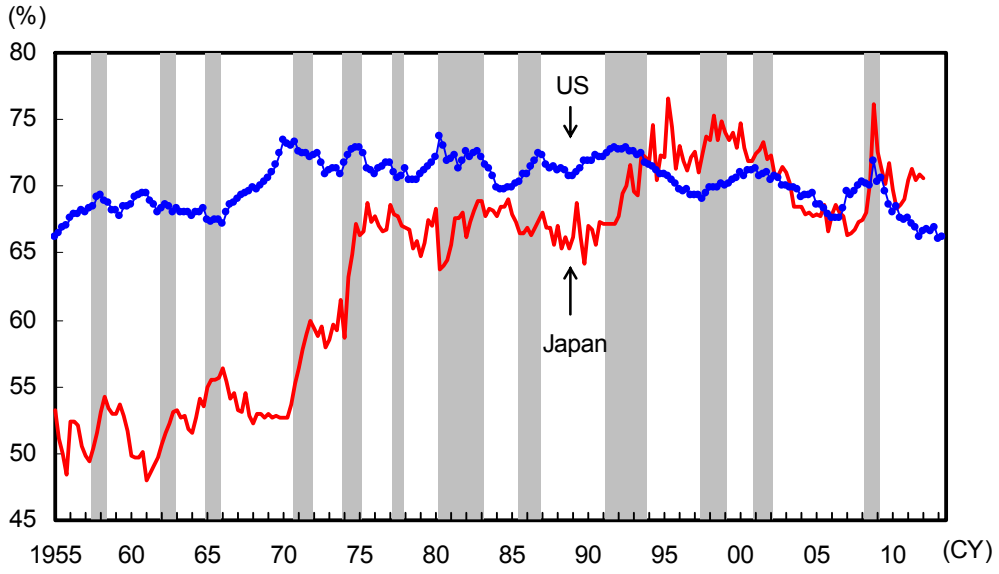


Source: Ministry of Finance, Ministry of Internal Affairs and Communications, Ministry of Health, Labour and Welfare; compiled by DIR.
Notes: 1) Y/y comparison of four-quarter moving average.
2) Shaded bars denote periods when sales were on uptrend. Bars tilted in order to show roughly 6-month lag from sales graph to nominal wages graph and from there to CPI graph, respectively.

Counterargument 2: Labor's share not trending downward in Japan

As the second counter argument, the view loudly proclaimed by some economists that labor's share is trending downward in Japan is a misinterpretation of the facts. Chart 12 portrays the long-term trend of labor's share in Japan and the US. The chart reveals that labor's share is trending upward in Japan in the medium to long term and that its current level exceeds that of the US. Because of the downward rigidity of wages, labor's share generally declines during economic expansion and advances during recession. In the years since 1990, labor's share in Japan surged temporarily when the economy worsened sharply following the collapse of an asset bubble and after the Lehman crisis but declined in subsequent economic expansion periods. It is not the case that it is on a downward trend. In other words, the sluggishness of employee income is not a problem related to the allocation of national income but is mainly the outcome of an economic pie that has not expanded.

Long-term Trend of Japan and US Labor's Share **Chart 12**

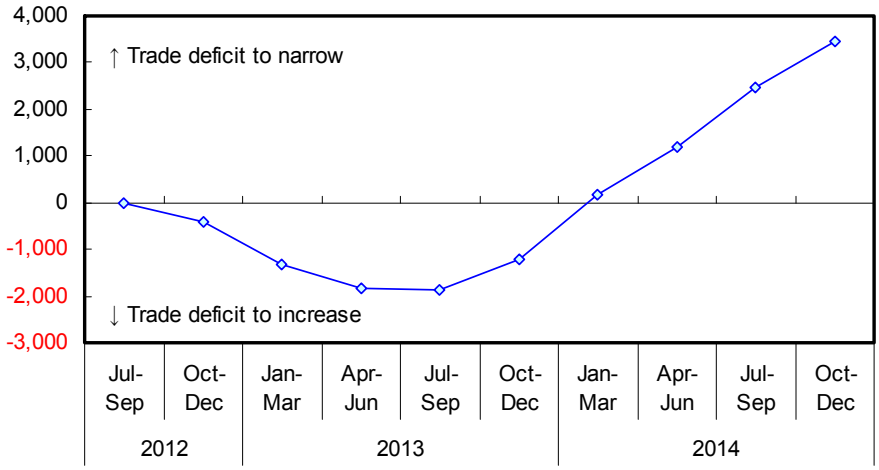


Source: US Bureau of Economic Analysis, Cabinet Office; compiled by DIR.
Notes: 1) Shaded areas denote economic downturns in Japan.
2) Japan's labor's share adjusted based on 1990 SNA for 1955-79, 2000 SNA for 1980-93, 2005 SNA from 1994, and seasonally adjusted by DIR for 1955-79.

Counterargument 3: J-curve effect accompanying the yen's depreciation

As our third counterargument, it is worth noting the existence of the J-curve effect that accompanies the depreciation of the yen. Chart 13 portrays the effect of a weaker yen on the trade balance based on Daiwa's short-term macroeconomic model. When the yen depreciates, the trade deficit will temporally widen due to higher import prices. Then, as export volume grows, export value will gradually increase, and the trade deficit will begin to narrow. This is the so-called J-curve effect. As shown in the chart, the depreciation of the yen since November 2012 is estimated to first widen the trade deficit (by Y200 billion at maximum). Beyond Jan-Mar 2014, however, the depreciation of the yen will work to narrow the trade deficit.

J-curve Effect of Weaker Yen on Trade Balance (Y100 mil) **Chart 13**



Source: Compiled by DIR.
Note: DIR estimate based on Daiwa short-term macroeconomic model for a case where forex moves toward a weaker yen than our assumption (Y80/$).

Economic observers who only draw attention to the drawbacks of a weak yen have become widespread in Japan in recent years. Such views, however, can hardly be called balanced. In the final analysis, what will be important is to compare and measure the benefits and drawbacks of a weak yen. Given Japan's export-led economic structure, it seems safe to say that the degree to which the yen has depreciated to date is having a greater positive than negative effect on the macroeconomy as a whole.

2. Has a Proper Environment Come Together for Raising the Consumption Tax?

A proper environment is in place for raising the consumption tax as scheduled

In this section, we provide a multifaceted examination of the pros and cons of raising the consumption tax. At the present moment, we believe that a proper environment has come together for raising the consumption tax as scheduled. Compared to 1997 when the consumption tax was last raised, domestic demand is expected to trend firmly. There will be a need, however, to carefully assess the risk of a downswing in China and other foreign economies.

2.1 Necessity for increasing the consumption tax

Japan risks forfeiting the sustainability of government finances

The biggest concern that Japanese are concerned about with respect to Abenomics is the risk that the government failing to maintain fiscal discipline will invite the triple blow of falling JGB prices, falling stock prices, and a falling yen.

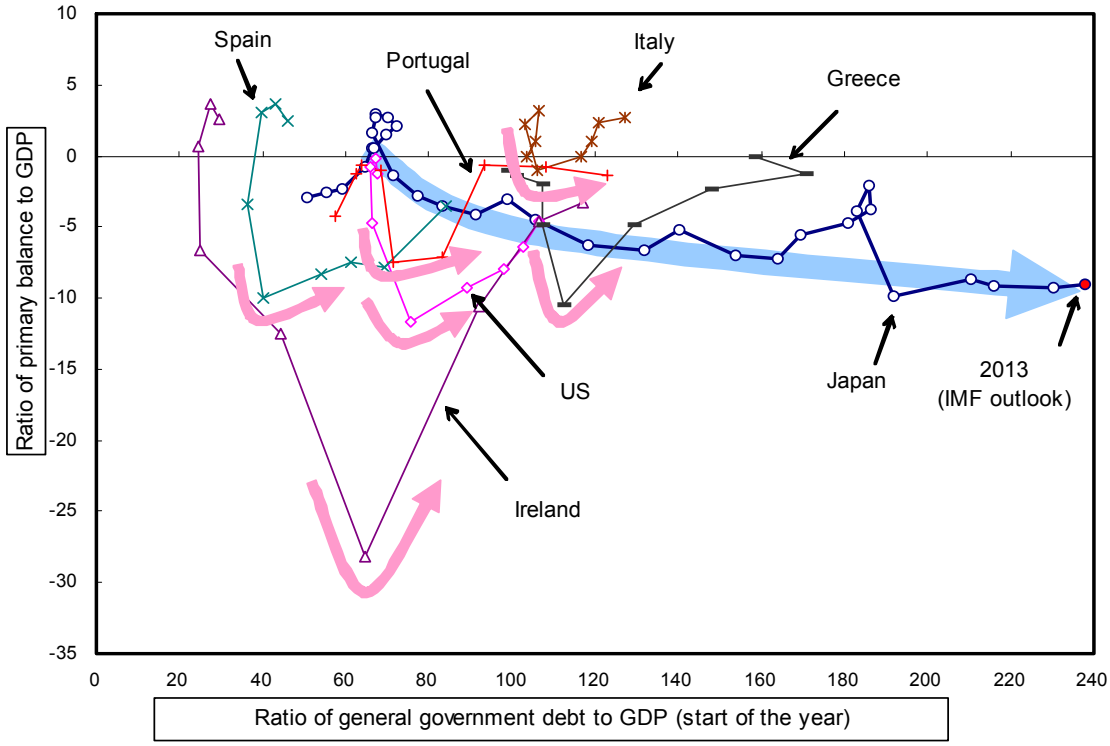
It hardly needs mentioning that government finances are facing a crisis in Japan. Chart 14 examines conditions for the sustainability of budget balances as formulated by Henning Bohn, professor of economics at the University of California.

Clearly, Japan's situation is far worse than that facing southern European nations. In the chart, the vertical axis shows the ratio of the primary balance to GDP and the horizontal axis the ratio of general government debt to GDP at the start of the year. In simple terms, a line graph rising to the right indicates that budget balances are sustainable, and a line graph falling to the right indicates that such balances are unsustainable. In other words, nations with line graphs rising to the right are those where the ratio of general government debt to GDP at the start of the year (budget balance on a stock basis; horizontal axis) is problematic, but, at the same time they are nations that are just about managing government finances in a way that promises improvement with respect to the ratio of the primary balance to GDP (budget balance on a flow basis; vertical axis). In contrast, nations with line graphs falling to the right are those where the ratio of general government debt to GDP is problematic, and, despite this situation, are also managing government finances in a reckless manner that will further worsen the ratio of the primary balance to GDP.

Southern European nations are positioned to the left of Japan in the chart, positioning clearly lower than Japan's place along the horizontal axis (ratio of general government debt to GDP at the start of the year). Also, the line graph for Japan is basically trending toward the lower right, which casts serious doubt on the sustainability of its budget balance. In contrast, European nations are generally trending to the upper right, and it is possible to say that their budget balances are sustainable, albeit only just.

The prospect of the European sovereign debt crisis spreading to Japan and giving way to a sharp decline in JGBs is not by any means remote. It will be important for the Japanese government to accept European sovereign risk as a valuable lesson and to work toward rebuilding government finances such as by raising the consumption tax.

Primary Balance and General Government Debt (% of GDP) **Chart 14**



Source: IMF; compiled by DIR.
Note: 1981-2013 for Japan and 2005-13 for others; IMF outlook for Japan and Portugal from 2011 and others from 2012.

Reducing social security costs will be key to achieving sound government finances in Japan

Increasing the consumption tax alone will be insufficient to achieve sound government finances in Japan and a substantial reduction in social security costs will be essential.

Chart 15 presents simulation results for the medium- to long-term fiscal balance. We developed seven scenarios comprising varying pairs of nominal and real GDP growth rates in Japan and then simulated the fiscal balance for different growth rates in social security costs under respective scenarios. The results are shown in terms of ratio of the primary balance to nominal GDP as of FY20. According to simulation results, even in Scenario 1 (optimistic one with nominal growth of 3.0% and real growth of 2.0%) for the medium- to long-term trend, social security costs will have to be reduced at an annual pace of 4% in the latter half of the 2010s if the primary balance is to turn positive in FY20. Considering social security costs have been on an uptrend in recent years, a very high hurdle stands in the way of achieving a balanced primary balance in FY20.

FY20 Primary Fiscal Balance (% of GDP) **Chart 15**

Scenario		1	2	3	4	5	6	7
Nominal GDP		+3.0%	+2.0%	+1.5%	+1.0%	+0.0%	-1.0%	-2.0%
Real GDP		+2.0%	+2.0%	+1.0%	+1.3%	+0.6%	-0.1%	-0.7%
Social security expenditure	+4%	-3.0	-3.4	-3.9	-4.1	-4.8	-5.6	-6.4
	+3%	-2.5	-3.0	-3.4	-3.6	-4.3	-5.0	-5.8
	+2%	-2.1	-2.5	-3.0	-3.1	-3.8	-4.5	-5.2
	+1%	-1.6	-2.1	-2.5	-2.7	-3.3	-4.0	-4.7
	+0%	-1.2	-1.6	-2.1	-2.2	-2.8	-3.5	-4.1
	-1%	-0.8	-1.2	-1.6	-1.8	-2.4	-3.0	-3.6
	-2%	-0.5	-0.8	-1.2	-1.4	-1.9	-2.5	-3.1
	-3%	-0.1	-0.4	-0.8	-1.0	-1.5	-2.1	-2.7
	-4%	0.3	-0.1	-0.5	-0.6	-1.1	-1.7	-2.2

Source: Compiled by DIR based on various materials.

Major assumptions

1) Consumption tax to rise by 3% pt in April 2014 and 2% pt in Oct 2015.
2) Figures in the table on central/local government basis; figures used for calculation are general government basis for employee compensation and central/local government basis for other.
3) Nominal and real GDP growth rates through FY15 estimated by DIR; thereafter as described in scenarios.
4) Elasticity of tax revenue vs. nominal GDP assumed to be 1.1.
5) Real revenues other than taxes extended based on nominal GDP growth rate.
6) Growth rate of social security expenditure through FY15 estimated by DIR based on "Estimation of Impact of FY13 Budget on Revenue and Expenditure in Following Years" (Ministry of Finance; in Japanese).
7) Public gross fixed capital formation through FY15 estimated by DIR and assumed to grow at the same rate as nominal GDP thereafter.
8) Interest payment = outstanding balance of public debt (previous FY) x effective interest rate (previous FY) + increased portion of public debt x long-term interest rate.
9) Other expenditure extended based on nominal GDP growth rate.

2.2 Conditions are met for raising the consumption tax

Here we provide a multifaceted examination of the pros and cons of raising the consumption tax by comparing the current situation with the last time the tax was raised in 1997.

The collapse of personal consumption in 1997 was triggered by Japan's financial crisis and the Asian currency crisis

Chart 16 compares trends of personal consumption before and after consumption tax hikes (actual figures for the 1997 case; estimates for the 2014 case). Our conclusion is that personal consumption would not collapse as it did in 1997 if the consumption tax is raised in April 2014.

In the case of the consumption tax hike in April 1997, personal consumption retreated in Apr-Jun 1997 in reaction to the surge in demand in the previous quarter, but it then returned to its level before the surge in demand in Jul-Sep 1997. Thus, the collapse of personal consumption that began in Oct-Dec 1997 is best explained by factors other than the increase in the consumption tax.

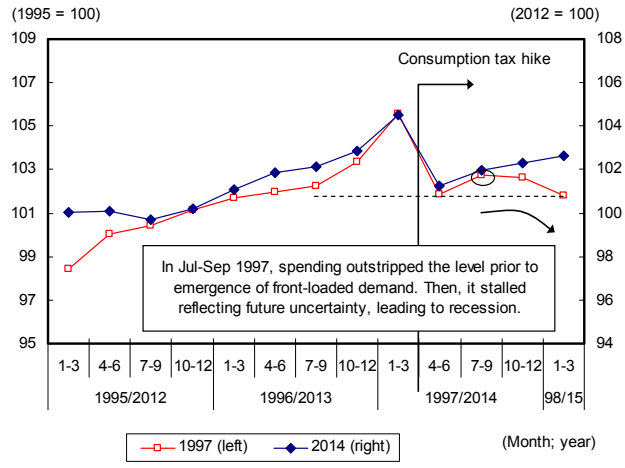
Main reasons for the collapse of personal consumption in 1997 were (1) escalation of Japan's financial crisis following the bankruptcy of Hokkaido Takushoku Bank in Autumn 1997 and by Yamaichi Securities, and (2) the Asian currency crisis.

Unlike the situation in 1997, Japan's financial system is currently exceedingly sound. While the risk that China and other foreign economies will rapidly slow down deserves some consideration, as will be noted below, the likelihood that personal consumption will collapse following the consumption tax hike is limited in view of such factors as (1) the adoption of measures to ease sudden changes in purchase prices such as for automobiles and (2) prospects that domestic demand other than personal consumption will trend firmly.

Flexible fiscal expenditures can be counted on this time

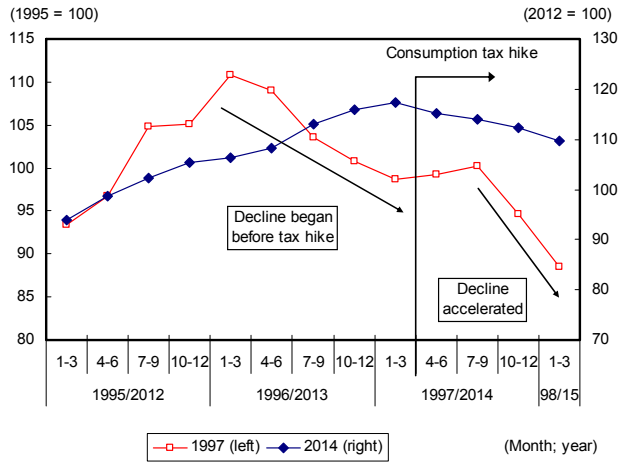
Chart 17 portrays the trend of public works spending before and after raising the consumption tax. Beginning in 1995, public works spending rose, such as for reconstruction projects in the aftermath of the Great Hanshin Awaji Earthquake. Spending then rapidly declined around the time of the consumption tax hike in 1997. In addition to the decrease in consumption and housing investment from higher consumption tax, the adverse impact of decrease in public works spending placed a significant downward pressure on the economy. Currently, however, it is likely that fiscal expenditures will be made more flexibly, such as through the FY13 supplementary budget and the accelerated implementation of the FY14 budget.

Consumer Spending and Consumption Tax Hike
Chart 16



Source: Cabinet Office; compiled by DIR.
Note: DIR estimate from Jul-Sep 2013.

Public Investment and Consumption Tax Hike
Chart 17



Source: Cabinet Office; compiled by DIR.
Note: DIR estimate from Jul-Sep 2013.

Volatility of housing investment will be less than that of 1997

Currently, measures to level fluctuations in demand will have a significant effect in moderating the impact of the consumption tax hike. When the consumption tax was increased in 1997, hardly any measures were taken to mitigate the adverse effect arising from fluctuations in demand. There is no denying that the surge in demand for automobiles and housing prior to the tax hike and the downward reaction that followed were excessive.

In particular, the acceleration of demand in 1997 and the downward reaction that followed were quite drastic for housing investment (Chart 18). This development did not just affect housing investment but did spread to the consumption of related construction materials and household durables, and domestic demand experienced a broad contraction.

In the current instance, however, measures are being taken to mitigate a similar surge in demand, such as expanding tax breaks for home loans and creating new subsidies for home purchases. The latest

statistics indicate that housing investment pre-tax hike has not risen as rapidly as it did in 1996. While front-loaded demand is likely to accelerate to some degree before the tax hike, it is reasonable to think that the magnitude of this acceleration will be weaker than it was in 1997. Thus, a scenario where housing investment triggers the sharp reactionary contraction of domestic demand should be viewed only as a remote possibility.

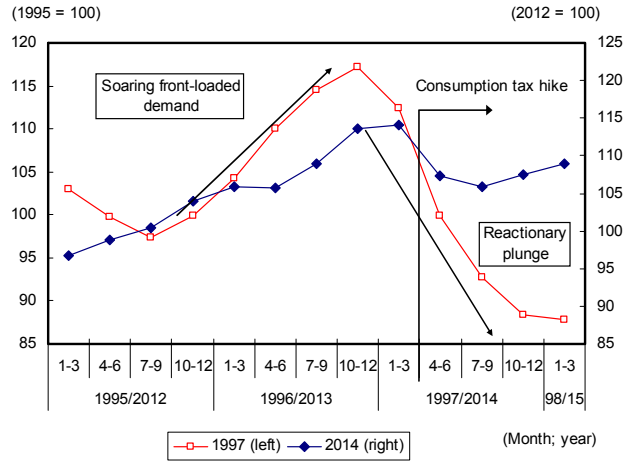
Capex to bottom out

Chart 19 portrays the trend of capex before and after raising the consumption tax. Although capex continued to grow after the tax hike, it declined in Jan-Mar 1998, affected by the Asian currency crisis and uncertainties in the financial system in Japan.

While it is true that the current capex trend is similar to that of 1997, does this mean that capex will collapse again after the increase in the consumption tax rate as it did before? Our answer to this question is No.

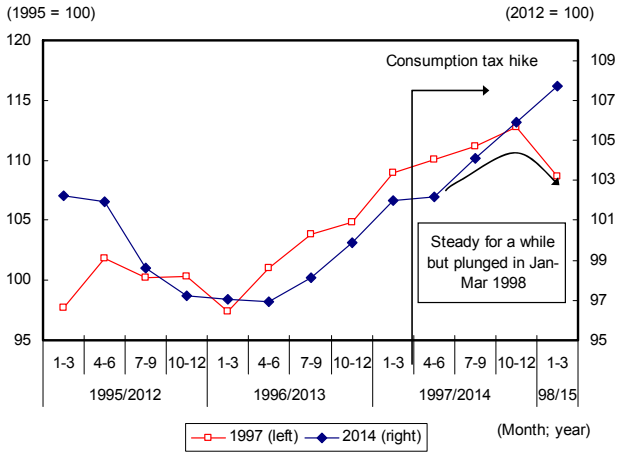
In 1997, Japanese companies devoted a large share of cash flow to capex, and the proportion of investments going into expanding production capacity was large. Hence, once the economy began slowing down, there was considerable scope for reducing capex. In contrast, as will be discussed below, current capex has fallen to its lower limit and there is hardly any space to further reduce capex. Also, in terms of the capital stock cycle, capex is moving towards an expansionary phase.

Housing Investment and Consumption Tax Hike **Chart 18**



Source: Cabinet Office; compiled by DIR.
Note: DIR estimate from Jul-Sep 2013.

Capex and Consumption Tax Hike **Chart 19**



Source: Cabinet Office; compiled by DIR.
Note: DIR estimate from Jul-Sep 2013.

Housing starts remain low compared to potential demand

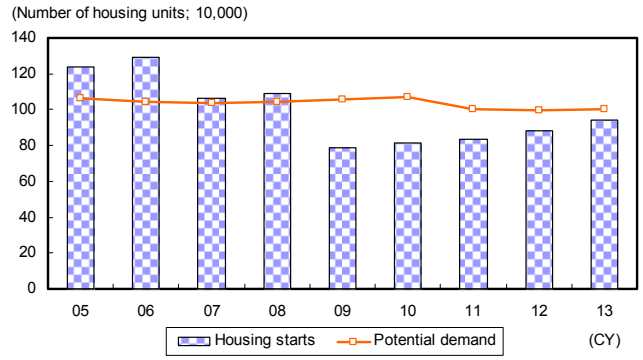
In the paragraphs to follow, we present a more detailed analysis on housing investment and capex.

Housing investment is continuing to trend at a level below its full potential. As indicated in Chart 20, compared to our estimate of potential demand, housing starts have been stuck at an excessively low level since the Lehman crisis. Thus, it is reasonable to think that pent-up demand will be a factor supporting housing investment following the consumption tax hike.

Housing reconstruction picks up in disaster-affected areas

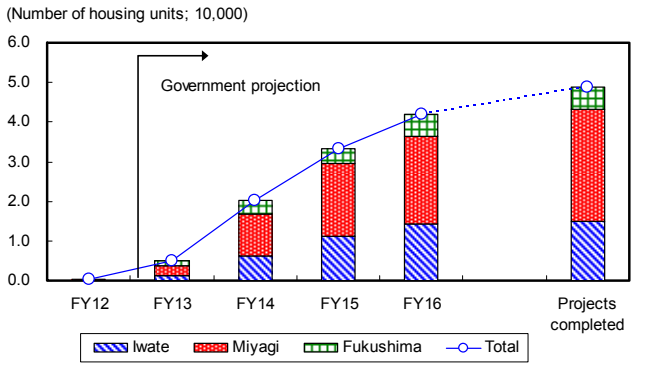
Housing reconstruction in disaster-affected areas will also be a factor supporting housing investment (Chart 21). According to the Reconstruction Agency, there are plans to build around 50,000 housing units in disaster-affected areas through reconstruction projects such as public housing. While this is a small figure compared to housing as a whole, it should still mitigate some of the decline in housing construction.

Housing Starts and Potential Demand for Housing **Chart 20**



Source: Ministry of Land, Infrastructure, Transport and Tourism; compiled by DIR.
Notes: 1) Jan-Jun figures annualized for 2013 housing starts.
2) For potential demand, we first estimated that for owner occupied housing by multiplying the prospective number of households by the housing acquisition rate by generation and aggregating results. Then we estimated that for housing for rent based on difference between number of households and that of owner occupied housing. And finally, we added the prospective number of scrap/build housing for both.

New Housing from Government Reconstruction Projects **Chart 21**



Source: Reconstruction Agency; compiled by DIR.
Note: Public housing for disaster affected households and private-sector housing relocated to newly-developed residential sites.

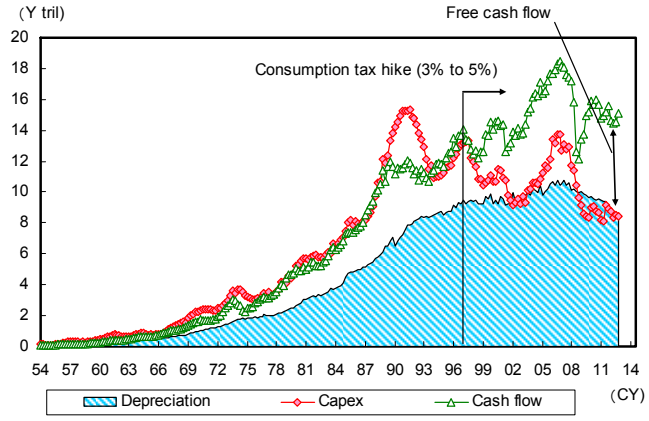
Capex has fallen to nearly its lower limit

Companies are currently devoting only about 60% of their cash flow to capex, and capex is trending at a level below depreciation (Chart 22). Looking back over the last 60 years, it is unusual to find a situation where capex is less than depreciation—in other words, where net investment is negative. With corporate profits improving from the effects of Abenomics, it is difficult to imagine capex contracting even further. Rather, should expectations strengthen for future economic growth, there is substantial room for capex to increase.

Capital stock cycle suggests capex is moving toward an expansionary phase

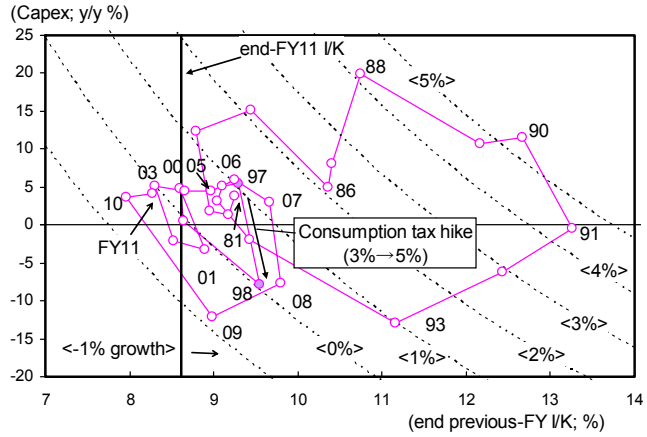
Chart 23 portrays Japan's capital stock cycle. In 1997 and 1998 around the time when the consumption tax was raised, the sharp decline in the expectation for economic growth led to the contraction of capex. Currently, however, the adjustment of capital stock has for the most part completed. Even if companies expect the economy to grow by around 0%, capex will still increase y/y. Should the expectation for economic growth rise further driven by Abenomics, capex has the potential of gaining further momentum.

Capex and Cash Flow **Chart 22**



Source: Ministry of Finance; compiled by DIR.
Note: Cash flow = Recurring profit / 2 + depreciation. Seasonally adjusted by DIR.

Capital Stock Cycle **Chart 23**



Source: Bank of Japan.

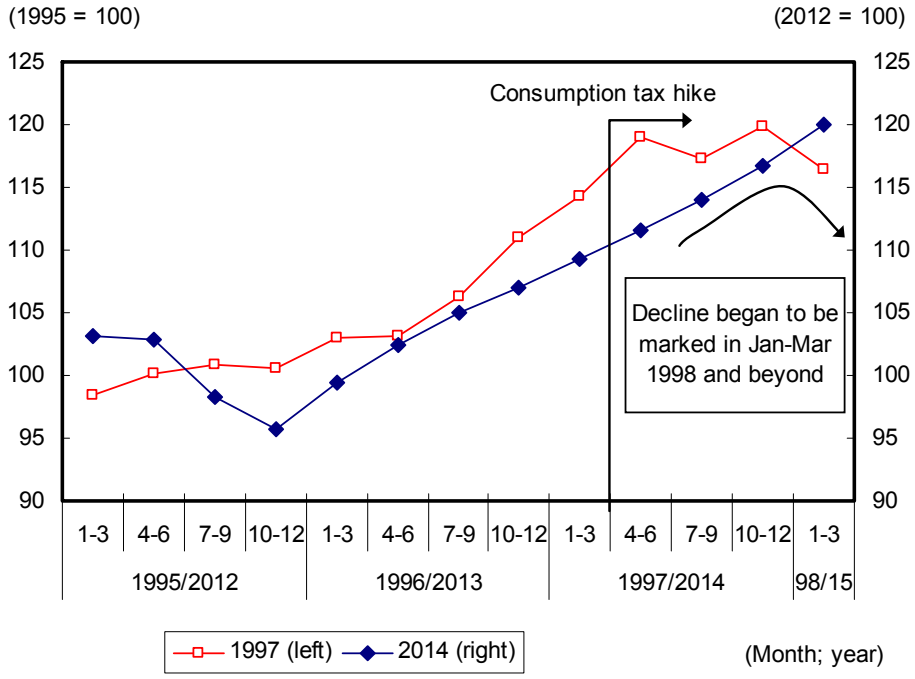
Domestic demand is anticipated to be firm overall

As discussed above, components of domestic demand such as personal consumption, public works spending, housing investment, and capex are expected to trend firmly going forward. Should robust domestic demand bolster corporate activity represented by industrial production, which in turn improve business results, employee income would also rise. A positive cycle where improving income environment provides further support to vigorous domestic demand is desirable.

Risk of a downswing by China and other foreign economies will need careful monitoring

There will be a need, however, to carefully monitor the risk of a downswing in China and other foreign economies. The Asian currency crisis of 1997 resulted in the sharp contraction of exports to Asia. Currently, there are concerns that the money flow to emerging economies will subside, which will in turn place downward pressure on such economies, as the Federal Reserve Board considers an exit from QE3. It is not an overstatement to say that China represents the greatest risk to Japan's economy. Concerns about the collapse of a credit bubble continue to cast a shadow on China, as seen in the attention being paid to the shadow banking problem. Should these risk factors actually materialize, the impact on the Japanese economy will be enormous. In conclusion, it is unquestionable that the state of China and other foreign economies will need to be carefully looked at on an ongoing basis. These external risk factors will be analyzed in detail in the next section.

Exports and Consumption Tax Hike **Chart 24**



Source: Cabinet Office; compiled by DIR.
Note: DIR estimate from Jul-Sep 2013.

The economic impact of raising the consumption tax will differ by how it is raised

Summarizing the above, while there will be a need to carefully monitor the risk of a downswing in China and other foreign economies, given the firmness of domestic demand, we believe that a proper environment has come for raising the consumption tax as scheduled.

The Abe administration is examining how to go about raising the consumption tax in the process of deciding whether to do so. Chart 25 shows the results of using our short-term macroeconomic forecasting model to analyze how different cases of consumption tax hikes would affect GDP. In each of the cases, the economy will contract sharply the year the positive effect on the economy of increased demand pre-hike wears out. However, in FY19, when the successive increase in the consumption tax rate ends, GDP will be about 0.7% less in all cases compared to the case where the consumption tax is not raised. Thus, whatever approach is taken to increasing the consumption tax, there will be little difference on its impact to the economy in flow terms.

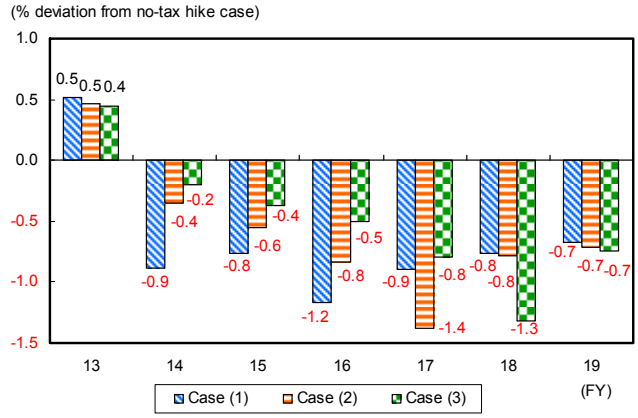
A trade-off between adverse impacts on the economy and higher tax revenues

While it does appear that raising the consumption tax in steps of 1% will have a smaller impact on the economy, such a case will be accompanied by a corresponding decrease in tax revenues (Chart 26). Comparing all the cases in FY19 when the consumption tax reaches 10%, cumulative tax revenues would be larger by around Y10 trillion in Case 1 than in Case 3. However, the cumulative adverse impact on real GDP would be larger by about Y6 trillion in Case 1 than in Case 3. In other words, a trade-off relationship exists between higher tax revenues and an adverse impact on GDP. Given a situation where economic growth and improving government finances must occur together, there will be a need to determine the right approach to increasing the consumption tax through careful cost-benefit analysis.

Existence of administrative costs makes increasing the consumption tax in small steps unrealistic

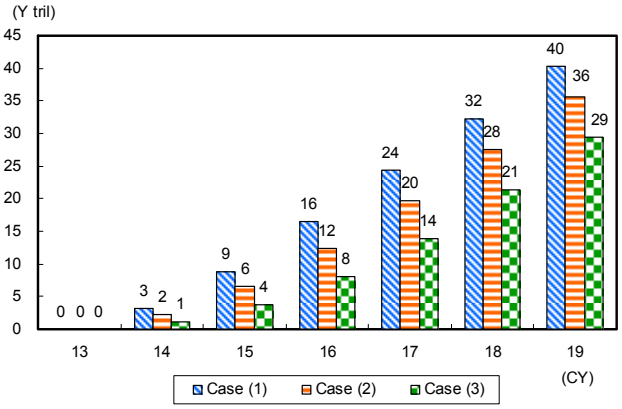
The above estimation does not factor in the administrative costs associated with increasing the consumption tax. There are in fact many problems with raising the consumption tax in small increments, such as higher costs for retailers, companies that must reprogram computer systems, and the increased volatility of the capacity utilization rate from the boost and decline of demand before and after each tax hike. Moreover, problem of tax-related profiteering—in other words, large companies forcing their suppliers to take on the difference in price—is an issue that cannot be ignored. To conclude, in practical terms, raising the consumption tax by small increments each year will prove to be an extremely difficult task.

Impact on Real GDP by Consumption Tax Hike Pattern **Chart 25**



Source: Compiled by DIR.
Note: Estimates based on Daiwa short-term macroeconomic model:
Case 1: Consumption tax to rise from 5% to 8% in Apr 2014 and to 10% in Oct 2015.
Case 2: Consumption tax to rise from 5% to 7% in Apr 2014 and to 10% by 1% pt every April from 2015.
Case 3: Consumption tax to rise to 10% by 1% pt every April from 2014.

Cumulative Tax Revenue by Consumption Tax Hike Pattern **Chart 26**



Source: Compiled by DIR.
Notes: 1) Central government general account basis.
2) Estimates based on Daiwa short-term macroeconomic model:
Case 1: Consumption tax to rise from 5% to 8% in Apr 2014 and to 10% in Oct 2015.
Case 2: Consumption tax to rise from 5% to 7% in Apr 2014 and to 10% by 1% pt every April from 2015.
Case 3: Consumption tax to rise to 10% by 1% pt every April from 2014.

3. Four Risks: Examination of the World Economic Cycle

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 rekindling 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 (turbulence in emerging economies) and the second (China's shadow banking problem) are of crucial importance, and we will analyze them more closely in the paragraphs below.

Risk 1: Turbulence in emerging economies

First, to examine turbulence in emerging economies, we refer to the world economic cycle. The results of our analysis are as follows: In past cycles of the world economy, advanced economies led by the US served as the driving force of emerging economies. In the current instance, however, a decoupling has occurred. In other words, 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 Federal Reserve Board will implement exit measures from QE3. 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.

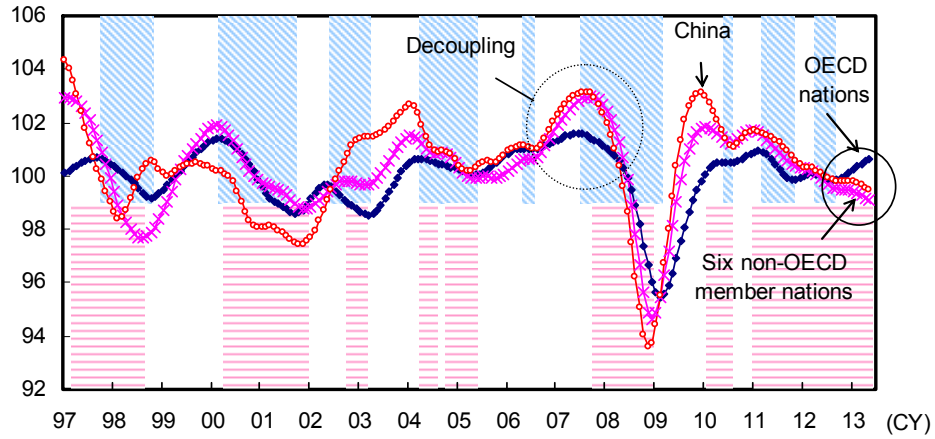
Current situation of the world economy: Is a new decoupling occurring?

Chart 27 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.

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.

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.

Composite Leading Indicator (CLI): OECD vs. Non-OECD Member Economies **Chart 27**



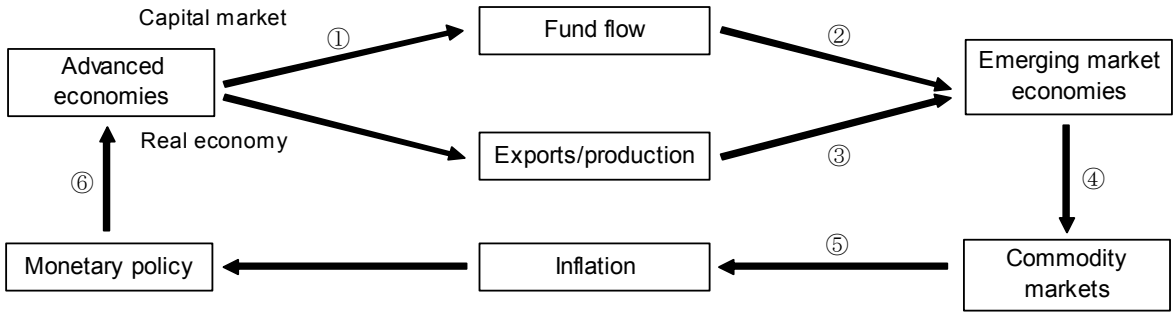
Source: OECD; compiled by DIR.
Notes: 1) Non-OECD member economies: Brazil, China, India, Indonesia, Russia, and South Africa.
2) Blue shaded areas in upper half of graph denote periods when CLI declined m/m for OECD nations; pink shaded areas in lower half denote periods when CLI declined m/m for six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

World economic cycle

When we divide the world economy into advanced and emerging economies to simplify its structure, we find the existence of a cycle as illustrated in Chart 28. First, advanced economies influence

emerging economies through financial markets and through real economy. Emerging economies then influence commodity markets, which in turn affects the inflation rate all over the world. Since central banks are responsible for maintaining price stability, changes in the inflation rate influence the monetary policies globally. Monetary policy affects the growth rates of countries through various channels and impact advanced economies, bringing us back to our starting point.

World Economic Cycle **Chart 28**



Source: Compiled by DIR.

Based on the above framework, we will now analyze what factors are contributing to the decoupling of advanced and emerging economies as shown in Chart 27. Obviously, the world economy is more complex and each factor influences each other through many other routes than those shown above. Hence, it should be kept in mind that our discussion here examines only one aspect of the world economy.

Flow of funds from advanced economies into emerging economies

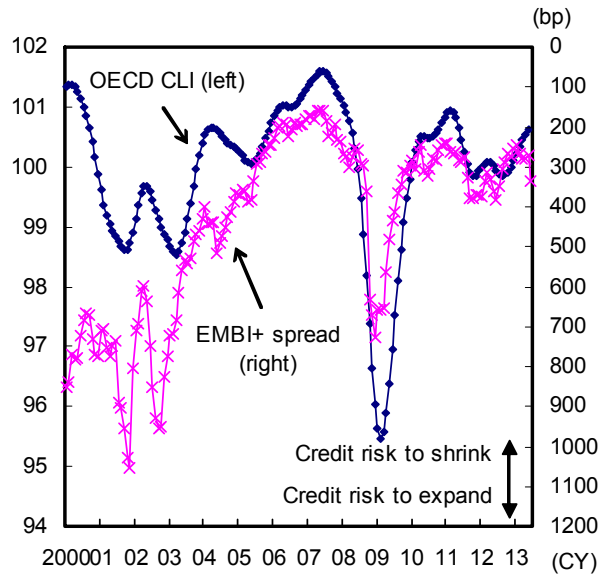
First, we examine how advanced economies influence emerging economies through financial markets (Arrow 1 of Chart 28).

The left graph of Chart 29 compares the OECD CLI, representing advanced economies, and the yield on the government bonds of emerging economies (EMBI+; JP Morgan's Emerging Markets Bond Index). EMBI+ is presented as a spread with the yield on US Treasuries and expresses the credit risk of emerging economies. We can see in Chart 29 that OECD CLI and EMBI+ spread generally move in step with each other. While the credit risk of emerging economies is basically determined by domestic economic conditions, it is also determined by the economic conditions and risk tolerance of advanced economies which are the lenders of funds. Although this spread has increased slightly (credit risk has risen) in recent months, it tends to decline mostly in line with improvements in advanced economies.

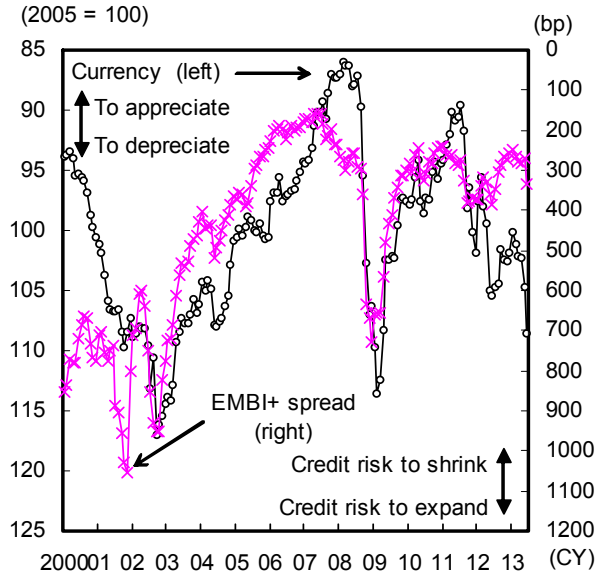
Should the credit risk of emerging economies lessen and the inflow of funds grow, their currencies will appreciate. A comparison of the EMBI+ and foreign exchange rates of emerging economies reveals that emerging market currencies tend to appreciate in periods when the EMBI+ spread narrows. From around 2011, however, currencies of emerging economies continued to weaken even as their credit risk declined. This suggests the possibility that, even as risk tolerance increased globally, the inflow of funds to emerging economies had faltered.

Fund Flows: Advanced Economies to Emerging Market Economies — Chart 29

Credit risk: advanced vs. emerging market economies



Emerging market economies: credit risk vs. currency

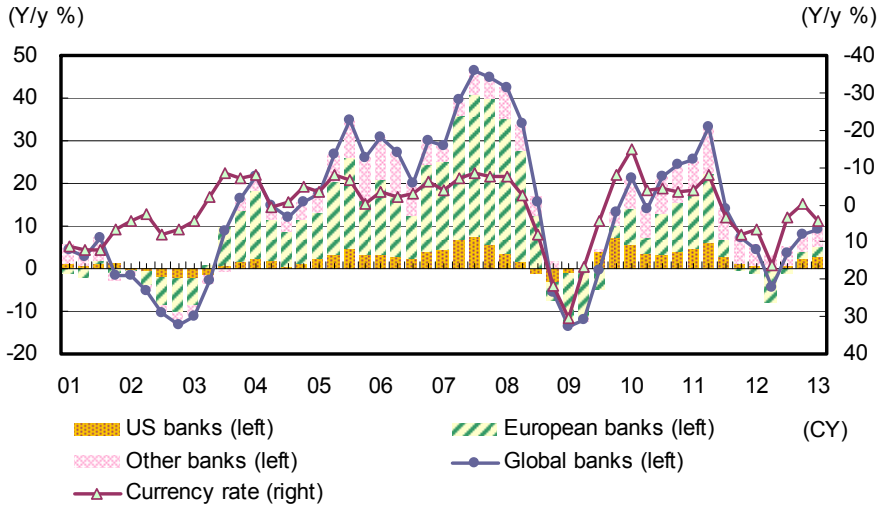


Source: OECD, IMF, JPMorgan, Haver Analytics; compiled by DIR.
Notes 1): Emerging market currency=average exchange rate against US$ of currencies of Brazil, India, Indonesia, Hong Kong, South Korea, Malaysia, Philippines, Russia, Singapore, Taiwan, and Thailand weighted by GDP.
2) EMBI+=JP Morgan's Emerging Markets Bond Index.

European sovereign debt crisis is behind the stagnation in the flow of funds into emerging economies

The depreciation of emerging market currencies—in other words, the stagnation in the flow of funds into such economies—is thought to be behind the lackluster credit growth in emerging economies. Chart 30 illustrates the trend of credit extended to emerging economies. Here we see that, after peaking in 2011, the growth rate of credit has gradually decelerated and momentarily turned negative y/y in 2012. Largely in line with the shrinkage of credit to emerging economies, their currencies have also weakened.

Credit to and Currency Rate of Emerging Market Economies — Chart 30



Source: BIS; compiled by DIR.
Note: Credit to Brazil, India, Indonesia, Malaysia, Russia, Thailand, and Vietnam.

Moreover, when we examine lenders of credit to emerging economies, the majority of such credit is extended by European banks. The decline in credit from Europe is therefore the main reason why credit to emerging economies has shrunk. Financial system turbulence has continued for several years in Europe due to the fiscal problems in Greece and other peripheral nations. Such problems in Europe appear to be behind the stagnant flow of funds in the form of credit extended to emerging economies. To conclude, it is reasonable to think that the deviation between the credit risk of emerging economies and their currency values that has continued for the last few years originates to a considerable degree in the stagnant inflow of funds from Europe prompted by the European sovereign debt crisis.

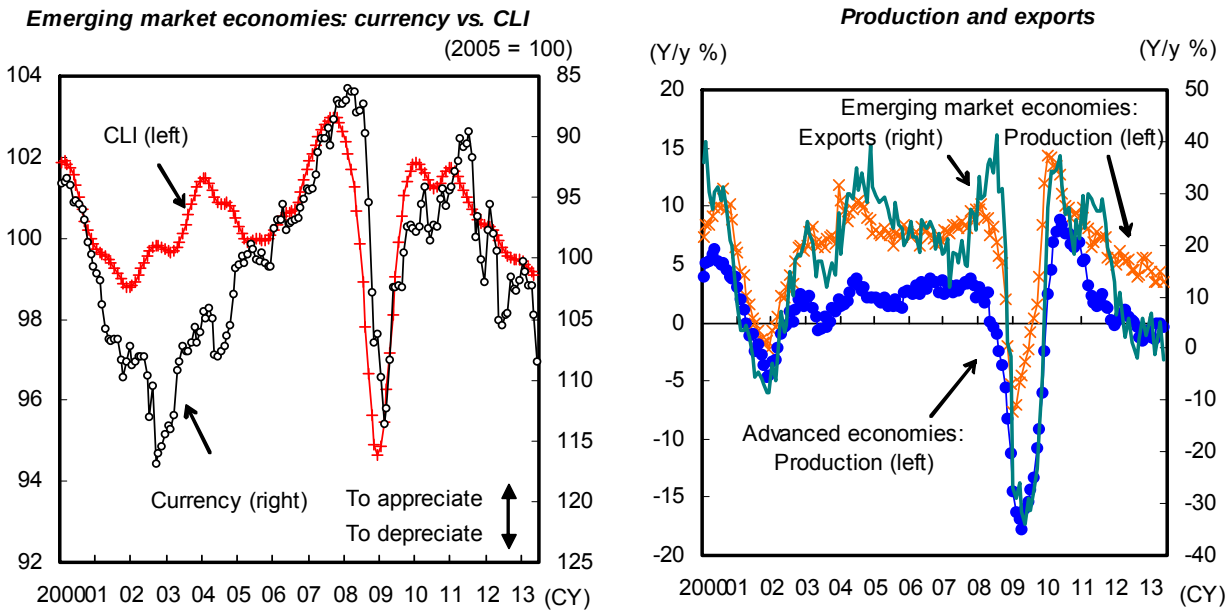
Emerging economies influenced by the inflow of funds and by exports and production

The source of growth for emerging economies is the inflow of funds from advanced economies, and the stagnation of such flows will worsen their economies (Arrow 2 of Chart 28). The left graph in Chart 31 examines the exchange rate and CLI of emerging economies, the former serving as a proxy for the inflow of funds and the latter representing the business cycle of emerging economies. According to this chart, the economies of emerging market nations tend to move in tandem with their foreign exchange rates. While advanced economies trend firmly, emerging economies are continuing to shrink as noted above. This suggests the possibility that a major reason for this downturn is the decline in the inflow of funds to emerging economies.

Should currencies of emerging economies weaken, import prices will rise and lead to inflation. As a result, pressures will mount to raise policy interest rates. Moreover, for many emerging economies with external debt, the weakening of currency will mean an increase of real debt as well as added pressure to raise policy interest rates to defend their currency. Thus, the depreciation is associated with the potential of adversely affecting the economies of emerging market nations. On the other hand, when emerging economies are performing well, investments in such economies will be more attractive, which will strengthen their currencies. Thus, the relationship between the foreign exchange rates of emerging market nations (inflow of funds) and the direction of their economies is not a one-way relationship where the former determines the latter. The fact that economies of emerging market nations show a strong correlation with the value of their home currencies, however, is undeniable.

We have examined the relationship between advanced and emerging economies through financial markets. The way these economies are linked through the real economy of goods and services is also important (Arrow 3 of Chart 28). The graph on the right in Chart 31 portrays the industrial production trend of advanced economies and trends of exports and industrial production of emerging economies. We can see in the graph that exports and production of emerging economies move largely in step with the industrial production of advanced economies. As globalization progresses, emerging economies have taken hold an important role in the global supply chain, so their production activity is closely related to the world economy. In addition, the US and Europe are the final destination for a considerable part of the goods produced in emerging economies, centering on East Asia. Thus, even in terms of the real economy, emerging economies depend to a considerable degree on advanced economies.

Factors Affecting Emerging Market Economies: Fund Flow and Exports/production **Chart 31**



Source: OECD, IMF, Netherlands Bureau for Economic Policy Analysis, Haver Analytics; compiled by DIR.
Note: Emerging market currency=average exchange rate against US$ of currencies of Brazil, India, Indonesia, Hong Kong, South Korea, Malaysia, Philippines, Russia, Singapore, Taiwan, and Thailand weighted by GDP.

Emerging economies influence commodity prices and the rate of inflation

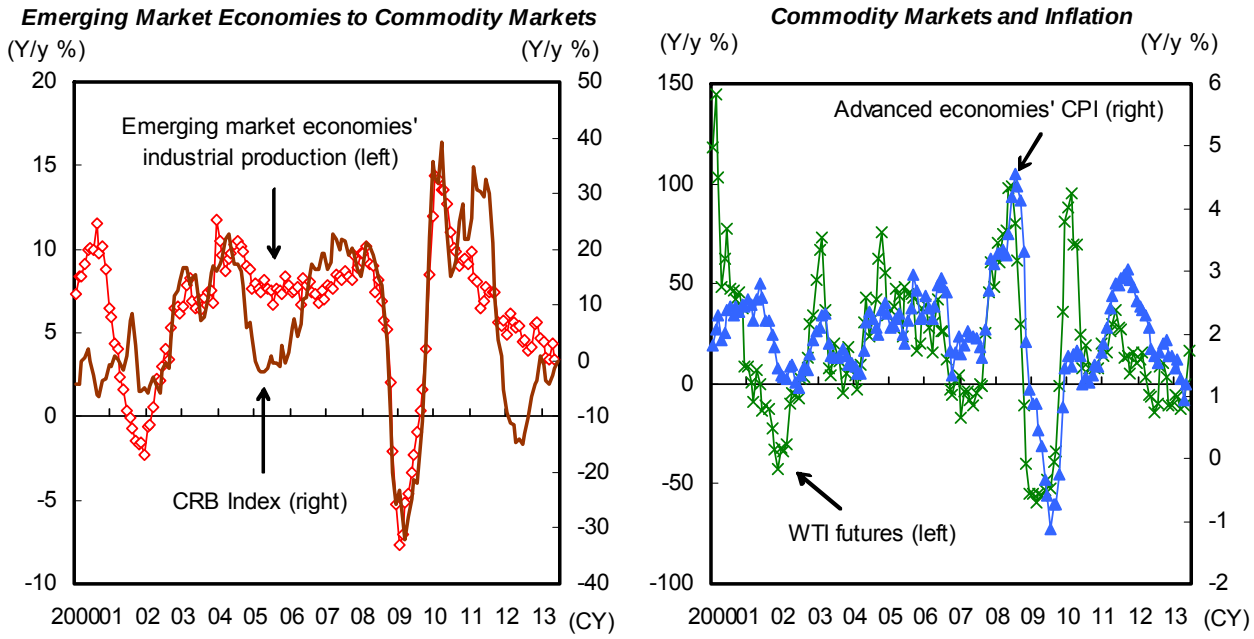
The basic direction of emerging economies is determined by the economic conditions of advanced nations as described above. That being the case, how does emerging economies influence the world economy?

The greatest influence is through commodity prices (Arrow 4 of Chart 28). Emerging economies not only grow at a relatively faster pace than advanced economies, but with their enormous demand for infrastructure investment, demand for raw materials in such economies rapidly increases. For this reason, the movement of international commodity prices is closely correlated to the economies of emerging market nations, and their rapid growth can readily place upward pressure on commodity prices (left graph in Chart 32).

Recently, as economies of emerging market nations have slowed after reaching a peak in 2010, commodity markets have cooled down. Meanwhile, commodity prices are not necessarily determined by real demand alone because commodities can be targeted for speculation. However, when global risk tolerance is diminishing, the flow of funds to emerging market nations will wane, meaning that their economies will rapidly slow, and commodity prices will quickly decline.

It goes without saying that commodity prices influence price trends in each nation (Arrow 5 in Chart 28). The graph on the right in Chart 32 confirms that commodity markets have remained calm, leading to steady consumer prices.

From Emerging Market Economies to Commodity Markets and Inflation **Chart 32**



Source: CRB, Netherlands Bureau for Economic Policy Analysis, NYMEX, IMF, Haver Analytics; compiled by DIR.

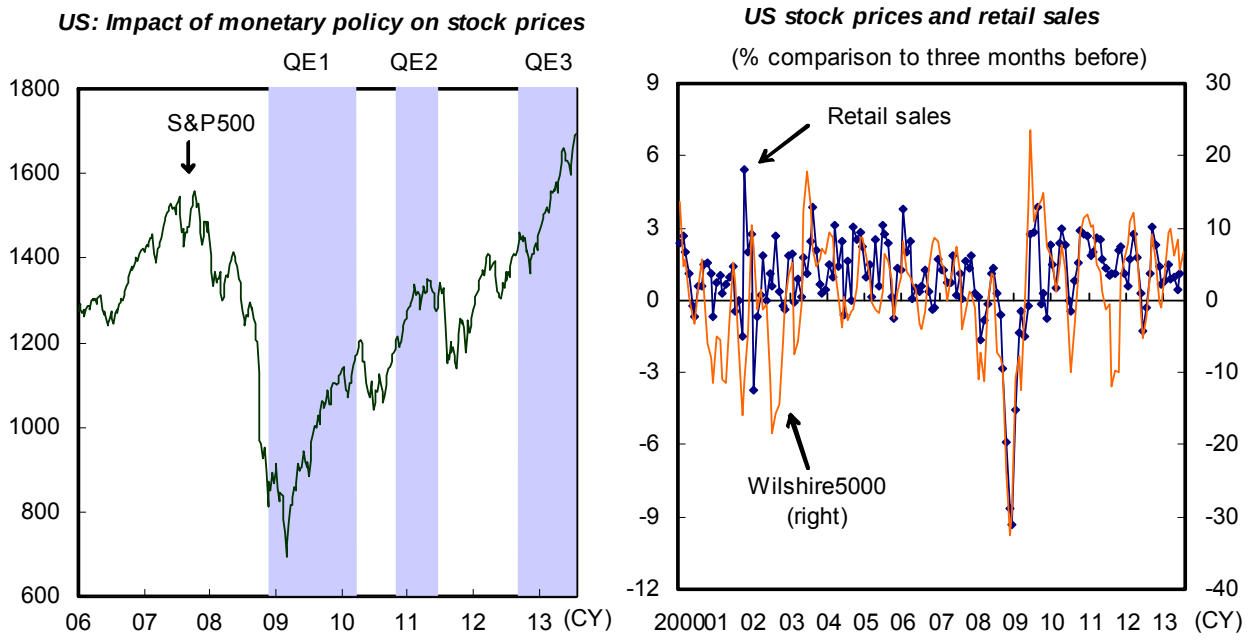
Monetary policy influences advanced economies

Since central banks are responsible for maintaining price stability, pressure to tighten monetary policy will grow when inflationary pressure materializes. Given that the purpose of monetary policy is price stability and economic stability, when the inflation rate rises and monetary policy is tightened, downward pressure will be exerted on the economy (Arrow 6 in Chart 28).

When we look at inflation, prices have been stable. Economic conditions do not warrant tighter monetary policy and accommodative monetary environment continues globally. In advanced economies, with less leeway to lower the policy interest rate further, central banks have further loosened monetary policy through quantitative easing. In the US, stock prices have tended to rise with each round of quantitative easing (left graph in Chart 33). This increase in stock prices influenced personal consumption through the wealth effect (right graph in Chart 33) and boosted the overall economy.

As its economy expands steadily, debate is growing over the exit strategy of the Federal Reserve Board. Since what is expected is not a sudden tightening but a gradual tapering of monetary easing, the exit strategy is unlikely to have an immediate effect on the economy. However, should the US economy slow down from a hasty implementation of an exit strategy, it risks worsening the world economy through both financial markets and through the real economy.

Effects of Monetary Policy in Advanced Economies **Chart 33**



Source: US Census Bureau, Haver Analytics, Standard & Poor's, Dow Jones, Wilshire Associates; compiled by DIR.

Risk of turbulence in emerging economies through a hasty exit from QE3 in the US

While it is currently unlikely, should the Federal Reserve Board implement a hasty exit from QE3, it has the potential of reversing the global money flow and dragging down stock prices in emerging economies. The experience of the Lehman crisis in 2008 suggests that global money flow has the tendency to abruptly reverse course when international financial markets experience a major crisis.

Risks to watch: (1) Decline in US Treasury prices, (2) decline in JGB prices, (3) decline in stock prices in emerging markets, and (4) depreciation of the Euro

Chart 34 portrays the latest global money flow (Jan-Mar 2013). Given the tendency for global money flows to abruptly reverse course when international financial markets experience a major crisis, four risks to watch out for going forward are (1) a decline in US Treasury prices, (2) a decline in JGB prices, (3) a decline in stock prices in emerging economies, and (4) the depreciation of the euro.

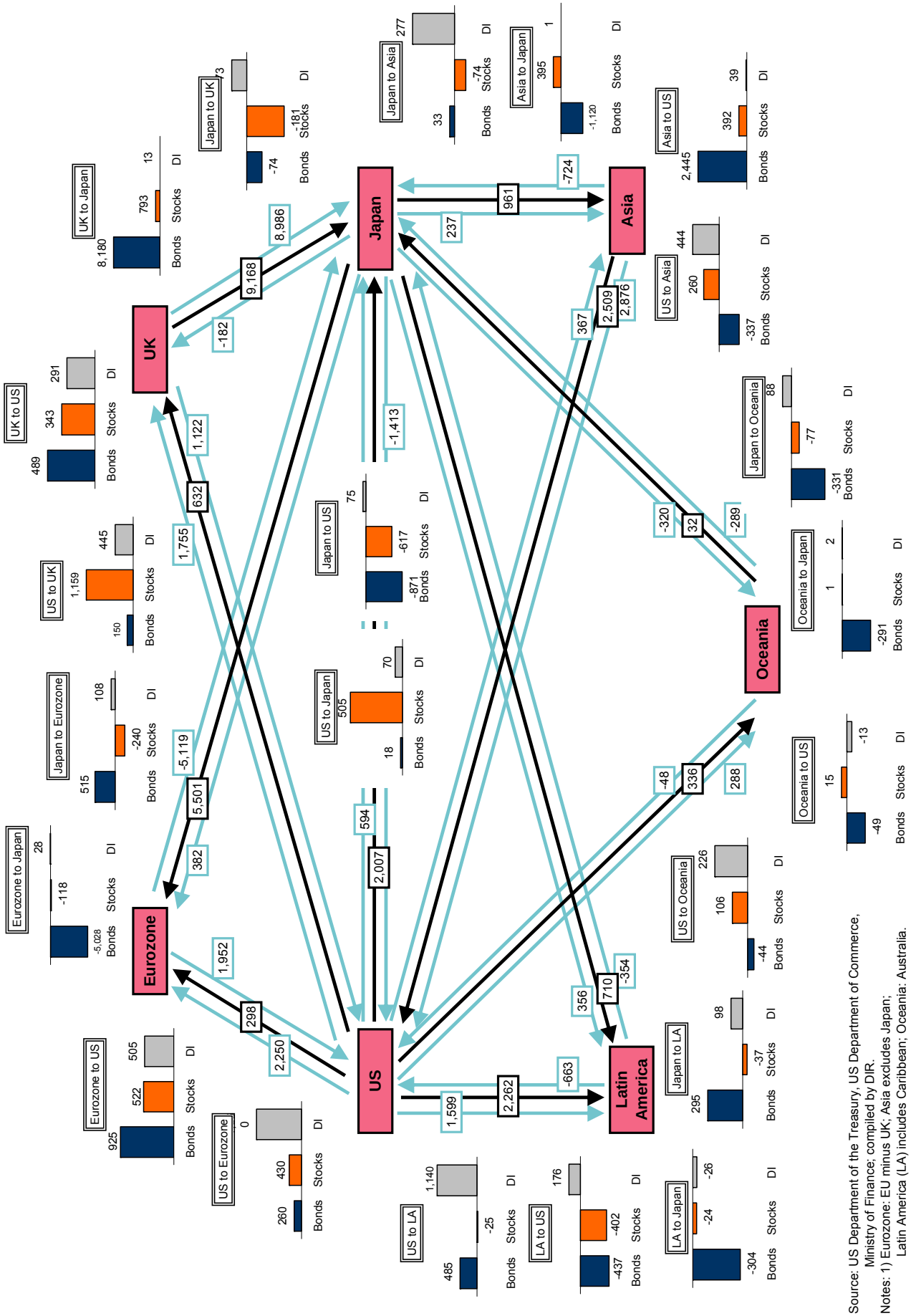
First, diminishing flow of money into the US from foreign nations would give rise to the risk that US Treasury prices will fall.

Second, should the massive flow of funds from the UK to Japan reverse course, there is concern that JGB prices would fall.

Third, declining investments in US Treasuries have the potential of igniting a rapid withdrawal of US investments in foreign equities. Specifically, should the flow of risk money from the US to Latin America and Asia begin to contract, there is concern that stock prices will decline throughout emerging markets.

Fourth, should the flow of money between the US and Eurozone economies reverse course, the euro may depreciate rapidly.

Global Money Flows (Jan-Mar 2013; $100 mil; annualized) — Chart 34



Source: US Department of the Treasury, US Department of Commerce, Ministry of Finance; compiled by DIR.
Notes: 1) Eurozone: EU minus UK; Asia excludes Japan; Latin America (LA) includes Caribbean; Oceania: Australia.
2) DI: Direct investment.

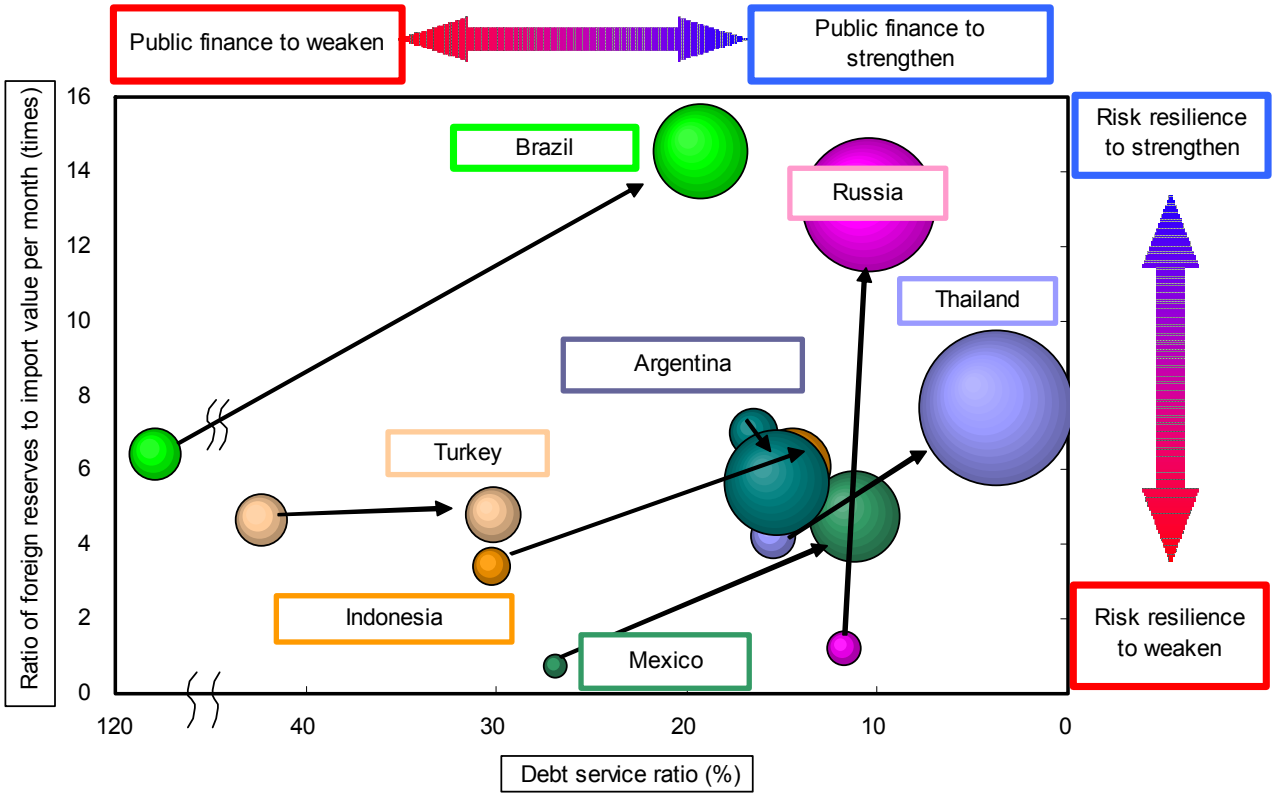
Summary: Three reasons behind the new decoupling

Summarizing the discussion above, we believe that a new decoupling is taking place 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 slowdown of the Chinese economy, and (3) concerns that money will be taken out of emerging economies based on worries that the Federal Reserve Board will implement exit measures from QE3. 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.

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 35 depicts changes in risk resilience of emerging market nations from the year each nation experienced a financial crisis. Learning from past financial crises, 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 good and service 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.

Risk Resilience of Emerging Market Economies **Chart 35**



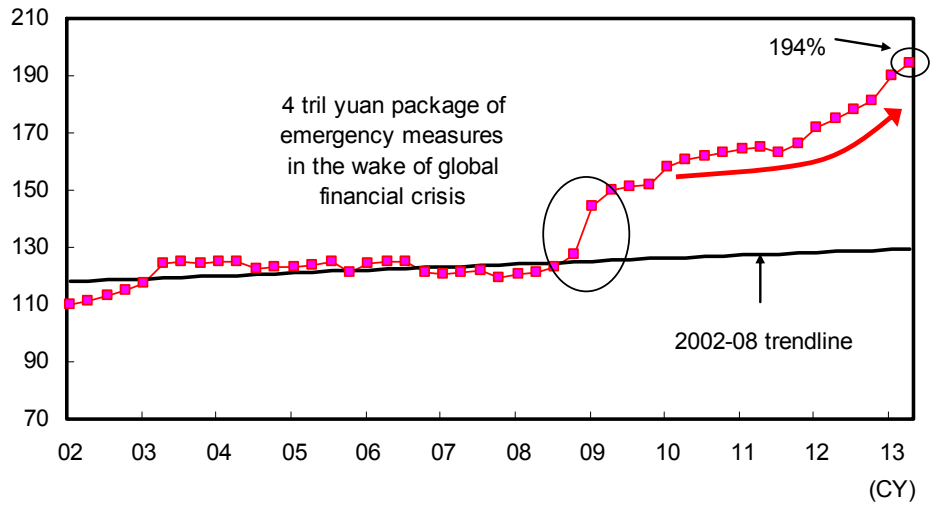
Source: Haver Analytics; compiled by DIR.
Notes: 1) Arrows denote shift of positions at critical moments to 2012.
2) Year of crisis defined as 1994 for Mexico, 1997 for Thailand and Indonesia, 1998 for Russia, 1999 for Brazil, 2001 for Turkey, and 2002 for Argentina.
3) Size of circles shows ratio of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

Risk 2: China's shadow banking problem

Risk 2: (a) 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 36 provides an estimation of the stock of total social financing in China. Such financing jumped from its long-term trend in 2009 and has continued to expand, reaching 194% of nominal GDP at end-June 2013. Comparing current levels to the long-term trend, we can estimate excessive lending in China to be around Y580 trillion. Should a percentage of this debt default, it has the potential of causing major turbulence in China and throughout the world. Risk scenarios that should be kept in mind include (1) China drawing down its foreign currency reserves (around $3.5 trillion) 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 36**



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.

Risk 2: (b) 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?

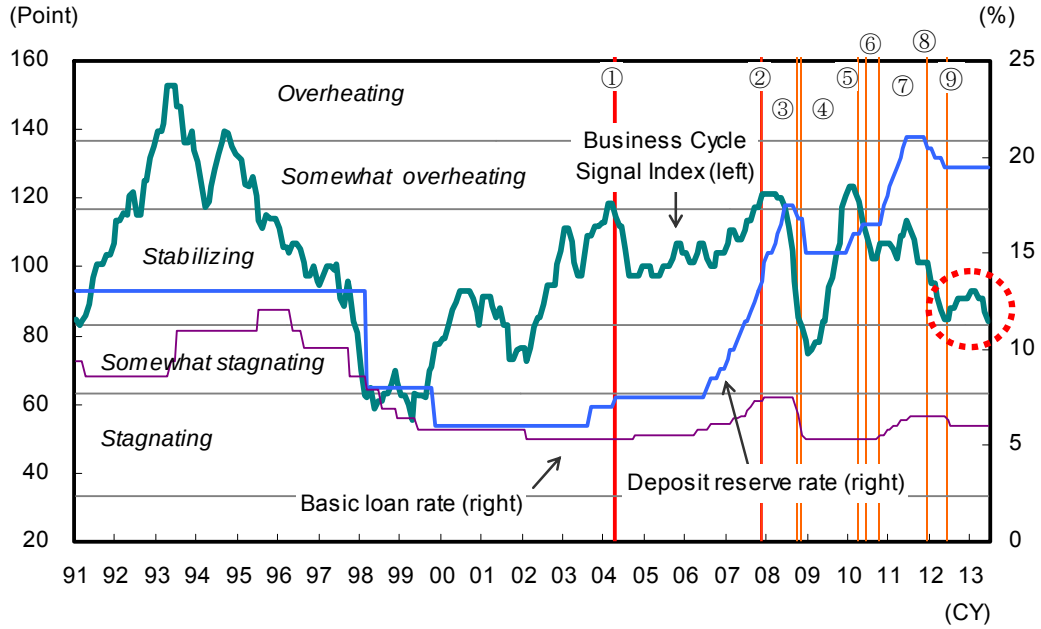
We believe that the impact on the world economy of the collapse of China's debt bubble should not be excessively overstated. Chart 37 presents the Business Cycle Signal Index for China. According to this index, we can confirm that China's economy has slowed significantly. After peaking at 123.3 in February 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 become a factor offering economic support for the time being. During the change in political leadership that occurs once every 10 years, it is natural for desires to come into play to circumvent as much as possible the rapid deceleration of the economy. Politically speaking, collective leadership and a policy of gradualism should also be factors that will preclude a short-term relapse of the Chinese economy. In

fact, there is growing views that the lower limit for the growth rate of real GDP in China is currently around 7% based on comments such as the recent remarks of Premier Li Keqiang.

China: Business Cycle Signal Index **Chart 37**



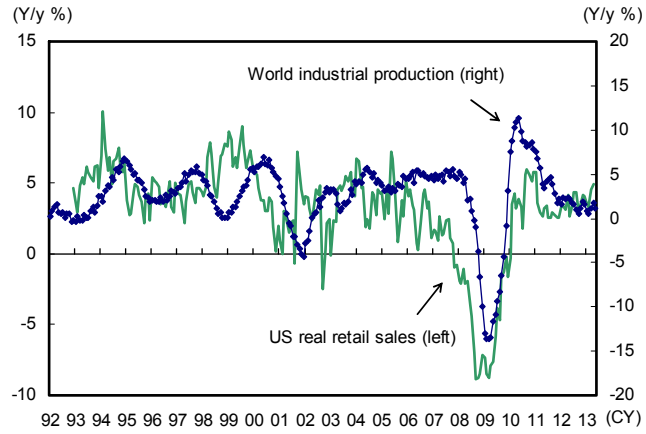
Source: National Bureau of Statistics of China, People's Bank of China, CEIC Data; compiled by DIR.

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

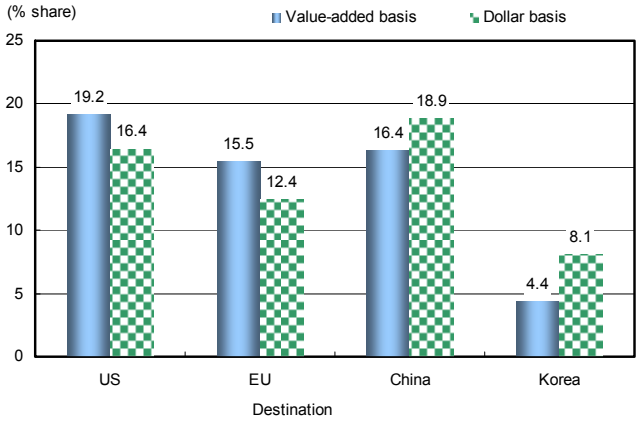
We believe that the US will remain the main engine of the world economy, a point that is worth mentioning. As indicated in Chart 38, US retail sales slightly lead global industrial production. In other words, of the sources for final demand, the US still plays the largest role. Chart 39 compares the 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 on a value-added basis, exports to the US is larger. This is an extremely interesting observation since it suggests that there exists a trade structure where Japan exports intermediate goods to China and other Asian trading partners where these goods are assembled into finished goods and re-exported to European nations and the US, the source of final demand.

World Industrial Production and US Retail Sales
Chart 38



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

Export of Goods from Japan by Destination
Chart 39



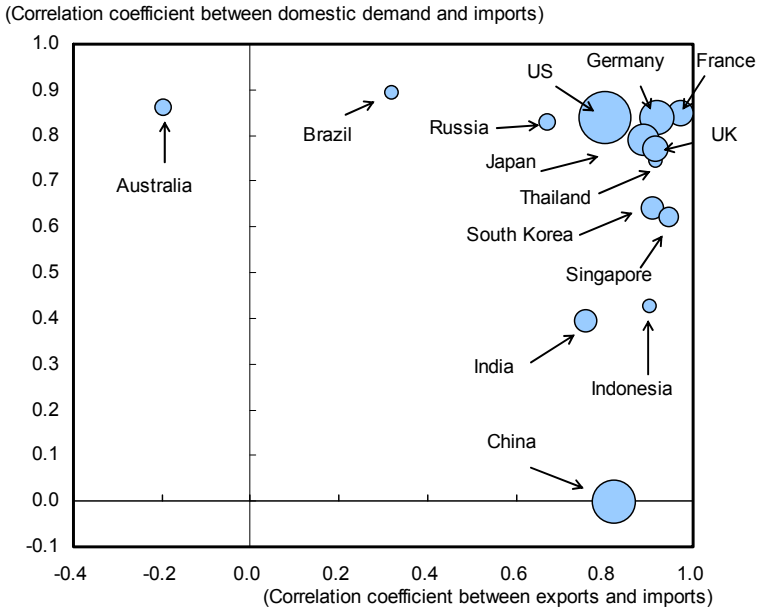
Source: OECD, Haver Analytics; compiled by DIR.
Note: Export of goods in 2009.

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 grasp. If one nation's imports increase, this will mean there is an equal amount of increase in the exports of other nations. 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 should be determined by domestic demand and exports.

Given the argument above, Chart 40 illustrates the relationship between imports, domestic demand and the relationship 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 top-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. Should the Chinese economy rapidly deteriorate, as long as the deterioration comes from the contraction of domestic demand such as personal consumption and investments, its impact on Chinese imports—in other words, its impact on the world economy—is expected to be minimal.

Domestic Demand vs. Exports and Imports — Chart 40



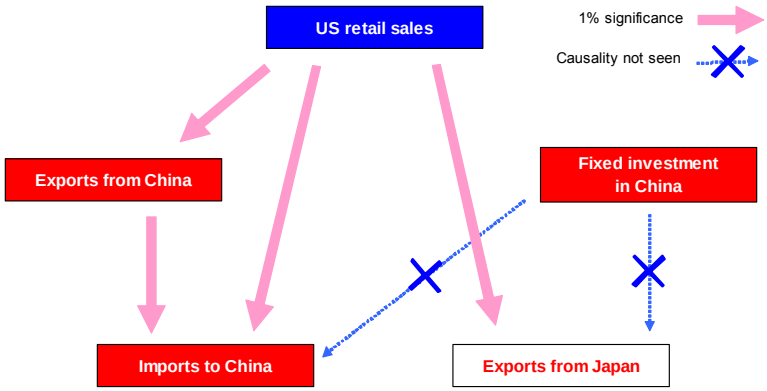
Source: UN, IMF; compiled by DIR.
Notes: 1) Size of circles denotes world import share.
2) Correlation coefficients and import shares are for 2000-11 and 2012, respectively.

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

To supplement the above discussion, Chart 41 illustrates the results of 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, to perform a Granger causality test. To define Granger causality, variable X is viewed as Granger-causing Y when past information about variable X is useful in improving the prediction of variable Y.

As indicated in Chart 41, 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 41



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

Summary

In conclusion, risks that will need to be kept in mind regarding Japan's economy are: (1) turbulence in emerging economies, (2) China's shadow banking problem, (3) a rekindling of the European sovereign debt crisis, and (4) a surge in crude oil prices stemming from geopolitical risk. Of these risks, it is worth underscoring that the first is closely related to the second and third. In the final analysis, as the US economy continues to expand, we anticipate that the collapse of emerging economies will be avoided. Nevertheless, the state and the future direction of the Chinese economy will continue to require close monitoring.

4. Supplement: Alternative scenarios

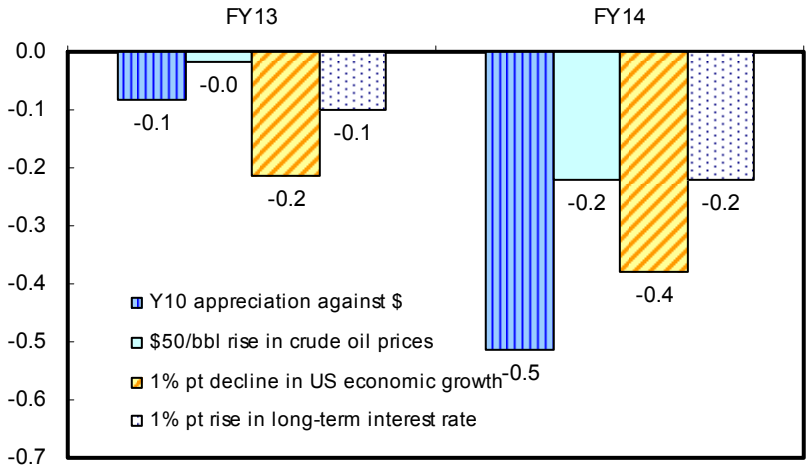
Here, we estimate likely economic effects from changes in our assumptions. The assumptions and effects of alternative scenarios are shown in the two charts below. We assumed alternative scenarios might emerge from Jul-Sep 2013.

Standard and Alternative Scenario Assumptions **Chart 42**

	Standard		Alternative
Case 1: Forex rate	Y99.7/$ in FY13 and Y100.0/$ in FY14	→	Y10 appreciation against $
Case 2: Crude oil prices (WTI futures)	$98.5/bbl in FY13 and $100.0/bbl in FY14		$50/bbl rise
Case 3: World GDP	+2.8% in CY13 and +3.7% in CY14		1% pt decline
Case 4: Long-term interest rate	0.83% in FY13 and 1.00% in FY14		1% pt rise

Source: Compiled by DIR.

Effects on Real GDP
(percentage-point change from base scenario) **Chart 43**



Source: Compiled by DIR.

Case 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 is forecast to shrink 0.1 and 0.5 points in FY13 and FY14, respectively, compared to our standard scenario.

Case 2: Surge in crude oil prices

If crude oil prices rise by $50/bbl above our standard scenario, real GDP is forecast to shrink 0.02 and 0.2 points in FY13 and FY14, 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.

Case 3: Contraction of world GDP

If world demand (GDP) contracts 1 point from our standard scenario, Japan's real GDP would shrink 0.2 and 0.4 points in FY13 and FY14, 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.

Case 4: Higher interest rates

If long-term interest rates rise 1 point above our standard scenario, real GDP would contract 0.1 and 0.2 points in FY13 and FY14, 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. Consequently, higher interest rates would likely mean an increase in household income, which in turn would increase household consumption, assuming the propensity to consume remains unchanged.

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 44

	Standard Scenario		Case 1 Y10 appreciation against $				Case 2 $50/bbl rise in crude oil prices			
	FY13	FY14	FY13		FY14		FY13		FY14	
Nominal GDP (Y/y %)	2.8	2.7	2.5	(-0.3)	2.1	(-0.8)	2.6	(-0.1)	2.5	(-0.3)
Real GDP (Chained [2005]; y/y %)	**3.0**	**1.2**	**2.9**	**(-0.1)**	**0.8**	**(-0.5)**	**2.9**	**(-0.0)**	**1.0**	**(-0.2)**
GDP deflator (Y/y %)	-0.2	1.4	-0.4	(-0.2)	1.3	(-0.3)	-0.3	(-0.1)	1.5	(-0.1)
All-industry Activity Index (Y/y %)	2.5	2.7	2.3	(-0.3)	2.3	(-0.6)	2.6	(0.0)	2.7	(0.0)
Industrial Production Index (Y/y %)	3.3	6.1	2.4	(-0.9)	4.9	(-2.0)	3.3	(0.0)	5.7	(-0.4)
Tertiary Industry Activity Index (Y/y %)	2.5	1.9	2.3	(-0.2)	1.6	(-0.4)	2.6	(0.1)	1.9	(0.1)
Corporate Goods Price Index (Y/y %)	1.5	3.6	0.8	(-0.7)	3.0	(-1.3)	2.0	(0.5)	4.0	(0.9)
Consumer Price Index (Y/y %)	0.4	2.9	0.3	(-0.1)	2.7	(-0.2)	0.5	(0.1)	2.9	(0.1)
Unemployment rate (%)	4.0	3.9	4.0	(-0.0)	3.9	(0.0)	4.0	(-0.0)	3.9	(0.1)
Trade balance (Y tril)	-6.8	-3.7	-6.5	(0.3)	-3.5	(0.2)	-8.3	(-1.5)	-5.3	(-1.6)
Current balance (US$100 mil)	925	1,497	1,161	(236)	1,499	(2)	861	(-64)	1,425	(-72)
Current balance (Y tril)	9.2	15.0	10.4	(1.2)	13.5	(-1.5)	8.6	(-0.6)	14.3	(-0.7)
Real GDP components (Chained [2005]; y/y %)										
Private consumption	2.6	-0.8	2.6	(-0.0)	-0.9	(-0.1)	2.5	(-0.0)	-0.8	(-0.0)
Private housing investment	8.2	-3.0	8.1	(-0.1)	-3.3	(-0.4)	8.2	(0.0)	-3.3	(-0.3)
Private non-housing investment	0.8	5.8	0.5	(-0.3)	4.5	(-1.6)	1.0	(0.1)	4.4	(-1.1)
Government final consumption	1.9	1.1	1.9	(0.0)	1.3	(0.2)	1.9	(-0.0)	1.1	(-0.1)
Public fixed investment	10.5	-2.2	10.8	(0.3)	-1.9	(0.6)	10.2	(-0.2)	-2.4	(-0.4)
Exports of goods and services	7.0	9.1	6.7	(-0.2)	8.4	(-0.9)	6.9	(-0.0)	8.6	(-0.4)
Imports of goods and services	3.1	4.5	2.9	(-0.2)	4.8	(0.1)	3.0	(-0.1)	3.8	(-0.8)

	Case 3 1% pt decline in World GDP				Case 4 1% pt rise in 10-yr JGB yield				(Reference) Y5 depreciation and $50/bbl rise in crude oil prices			
	FY13		FY14		FY13		FY14		FY13		FY14	
Nominal GDP (Y/y %)	2.6	(-0.2)	2.5	(-0.4)	2.7	(-0.1)	2.6	(-0.2)	2.8	(0.0)	2.8	(0.1)
Real GDP (Chained [2005]; y/y %)	**2.7**	**(-0.2)**	**1.1**	**(-0.4)**	**2.8**	**(-0.1)**	**1.1**	**(-0.2)**	**3.0**	**(0.0)**	**1.3**	**(0.0)**
GDP deflator (Y/y %)	-0.2	(-0.0)	1.4	(-0.0)	-0.2	(0.0)	1.4	(0.0)	-0.2	(-0.0)	1.5	(0.1)
All-industry Activity Index (Y/y %)	2.4	(-0.1)	2.6	(-0.2)	2.5	(-0.1)	2.6	(-0.1)	2.7	(0.2)	2.9	(0.3)
Industrial Production Index (Y/y %)	2.6	(-0.6)	5.8	(-0.9)	3.1	(-0.2)	5.8	(-0.4)	3.8	(0.4)	6.3	(0.6)
Tertiary Industry Activity Index (Y/y %)	2.5	(-0.0)	1.8	(-0.1)	2.5	(-0.0)	1.8	(-0.1)	2.6	(0.1)	2.1	(0.3)
Corporate Goods Price Index (Y/y %)	1.4	(-0.0)	3.6	(-0.1)	1.5	(0.0)	3.6	(-0.0)	2.3	(0.8)	4.4	(1.5)
Consumer Price Index (Y/y %)	0.4	(-0.0)	2.9	(-0.0)	0.4	(0.0)	2.9	(-0.0)	0.6	(0.1)	3.0	(0.3)
Unemployment rate (%)	4.0	(-0.0)	3.9	(0.0)	4.0	(0.0)	3.9	(0.0)	4.0	(-0.0)	3.9	(0.0)
Trade balance (Y tril)	-7.2	(-0.5)	-4.1	(-0.4)	-6.6	(0.2)	-3.1	(0.6)	-8.4	(-1.6)	-5.4	(-1.7)
Current balance (US$100 mil)	942	(17)	1,482	(-16)	1,015	(90)	1,249	(-249)	743	(-183)	1,424	(-73)
Current balance (Y tril)	9.4	(0.2)	14.8	(-0.2)	10.1	(0.9)	12.5	(-2.5)	8.0	(-1.2)	15.0	(0.0)
Real GDP components (Chained [2005]; y/y %)												
Private consumption	2.6	(-0.0)	-0.8	(-0.1)	2.6	(-0.0)	-0.8	(-0.0)	2.5	(-0.0)	-0.7	(0.0)
Private housing investment	8.2	(-0.0)	-3.3	(-0.3)	7.9	(-0.3)	-3.4	(-0.7)	8.3	(0.1)	-3.2	(-0.1)
Private non-housing investment	0.8	(-0.1)	5.3	(-0.5)	0.2	(-0.6)	4.7	(-1.6)	1.2	(0.3)	5.1	(-0.4)
Government final consumption	1.9	(0.0)	1.1	(0.0)	1.9	(0.0)	1.1	(0.0)	1.9	(-0.0)	1.0	(-0.2)
Public fixed investment	10.5	(0.0)	-2.2	(0.0)	10.5	(-0.0)	-2.2	(0.0)	10.0	(-0.4)	-2.6	(-0.7)
Exports of goods and services	5.7	(-1.2)	8.7	(-1.6)	7.0	(-0.0)	9.1	(-0.0)	7.1	(0.1)	9.0	(0.0)
Imports of goods and services	2.8	(-0.2)	4.5	(-0.3)	2.9	(-0.2)	4.1	(-0.6)	3.0	(-0.0)	3.6	(-0.9)

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

	2011			2012				2013	FY		CY	
	4-6	7-9	10-12	1-3	4-6	7-9	10-12	1-3	2011	2012	2011	2012
Nominal GDP (SAAR; Y tril)	463.2	474.2	474.8	480.7	476.6	472.5	473.0	476.0	473.3	474.6	470.6	475.6
Q/q %	-1.6	2.4	0.1	1.2	-0.8	-0.9	0.1	0.6				
Q/q %, SAAR	-6.3	9.8	0.5	5.0	-3.3	-3.4	0.4	2.5				
Y/y %	-3.7	-2.5	-1.7	2.3	2.8	-0.5	-0.3	-0.8	-1.4	0.3	-2.5	1.1
Real GDP (chained [2005]; SAAR; Y tril)	501.6	514.4	516.2	522.3	521.1	516.4	517.7	522.6	513.7	519.7	509.4	519.3
Q/q %	-0.8	2.6	0.3	1.2	-0.2	-0.9	0.3	0.9				
Q/q %, SAAR	-3.1	10.6	1.4	4.8	-0.9	-3.6	1.0	3.8				
Y/y %	-1.5	-0.6	-0.2	3.4	3.8	0.3	0.4	0.3	0.3	1.2	-0.6	2.0
Contribution to GDP growth (% pt)												
Domestic demand	0.2	1.7	1.1	1.1	0.0	-0.2	0.3	0.5	1.3	2.0	0.3	2.9
Foreign demand	-1.0	0.8	-0.7	0.1	-0.2	-0.7	-0.1	0.4	-1.0	-0.8	-0.9	-0.9
GDP deflator (y/y %)	-2.1	-1.9	-1.5	-1.0	-1.0	-0.8	-0.7	-1.1	-1.7	-0.9	-1.9	-0.9
Index of All-Industry Activity (2005=100)	94.2	96.2	96.7	96.8	96.6	96.2	96.1	96.1	96.1	96.2	95.4	96.5
Q/q %; y/y %	-1.0	2.2	0.6	0.1	-0.2	-0.4	-0.0	-0.0	0.2	0.2	-0.5	1.2
Index of Industrial Production (2010=100)	92.9	99.5	100.5	101.3	99.1	95.9	94.1	94.7	98.7	95.8	97.2	97.8
Q/q %; y/y %	-4.1	7.1	1.0	0.8	-2.1	-3.3	-1.8	0.6	-0.7	-3.0	-2.8	0.6
Index of Tertiary Industry Activity (2005=100)	97.0	98.5	99.0	99.0	99.0	99.0	99.3	99.5	98.5	99.2	97.9	99.3
Q/q %; y/y %	-0.5	1.5	0.5	0.0	0.0	0.0	0.3	0.2	0.7	0.8	0.0	1.4
Corporate Goods Price Index components (2010=100)												
Domestic Company Goods Price Index	102.0	102.1	101.0	101.2	100.9	100.1	100.1	100.9	101.6	100.5	101.5	100.6
Y/y %	1.8	2.1	1.1	0.3	-1.0	-1.9	-1.0	-0.3	1.3	-1.1	1.5	-0.9
CPI (excl. fresh food; 2010=100)	100.0	99.9	99.7	99.6	99.9	99.6	99.6	99.3	99.8	99.6	99.8	99.7
Y/y %	-0.3	0.2	-0.2	0.1	-0.0	-0.2	-0.1	-0.3	-0.0	-0.2	-0.3	-0.1
Unemployment rate (%)	4.7	4.5	4.5	4.5	4.4	4.3	4.2	4.2	4.5	4.3	4.6	4.4
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; %)	1.16	1.04	1.03	0.97	0.85	0.78	0.76	0.66	1.05	0.76	0.98	0.80
Money stock; M2 (y/y %)	2.8	2.8	3.0	3.0	2.4	2.4	2.3	2.9	2.9	2.5	2.7	2.5
Trade balance (SAAR; Y tril)	-5.0	-1.3	-3.9	-4.3	-4.4	-6.6	-6.4	-10.1	-3.5	-6.9	-1.6	-5.8
Current balance (SAAR; $100 mil)	864	1,240	938	825	767	497	532	339	964	524	1,197	605
Current balance (SAAR; Y tril)	7.1	9.6	7.3	6.5	6.1	3.9	4.3	3.1	7.6	4.4	9.6	4.8
(% of nominal GDP)	1.5	2.0	1.5	1.4	1.3	0.8	0.9	0.7	1.6	0.9	2.0	1.1
Exchange rate (Y/$)	81.7	77.8	77.3	79.3	80.1	78.6	81.2	92.3	79.0	83.1	79.8	79.8
(Y/Euro)	118.3	108.7	104.9	106.3	101.2	98.2	108.2	122.0	109.6	107.4	111.4	103.5

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

	2013			2014				2015	FY		CY	
	4-6	7-9 (E)	10-12 (E)	1-3 (E)	4-6 (E)	7-9 (E)	10-12 (E)	1-3 (E)	2013 (E)	2014 (E)	2013 (E)	2014 (E)
Nominal GDP (SAAR; Y tril)	479.4	484.1	490.1	497.9	493.6	498.7	503.0	508.1	487.8	500.9	482.5	498.3
Q/q %	0.7	1.0	1.2	1.6	-0.9	1.0	0.9	1.0				
Q/q %, SAAR	2.9	4.0	5.0	6.5	-3.4	4.2	3.6	4.1				
Y/y %	0.5	2.5	3.6	4.5	3.0	3.0	2.7	2.1	2.8	2.7	1.5	3.3
Real GDP (chained [2005]; SAAR; Y tril)	525.9	531.2	537.4	545.2	535.7	540.0	543.4	547.0	535.0	541.7	529.5	541.2
Q/q %	0.6	1.0	1.2	1.4	-1.7	0.8	0.6	0.6				
Q/q %, SAAR	2.6	4.1	4.7	5.9	-6.8	3.3	2.6	2.6				
Y/y %	0.9	2.9	3.8	4.2	1.9	1.6	1.1	0.4	3.0	1.2	2.0	2.2
Contribution to GDP growth (% pt)												
Domestic demand	0.5	0.8	1.1	1.4	-2.0	0.6	0.4	0.4	2.4	0.4	1.7	1.6
Foreign demand	0.2	0.2	0.1	-0.0	0.2	0.2	0.2	0.2	0.7	0.8	0.2	0.6
GDP deflator (y/y %)	-0.3	-0.4	-0.2	0.3	1.1	1.3	1.5	1.7	-0.2	1.4	-0.5	1.0
Index of All-Industry Activity (2005=100)	97.0	97.9	99.1	100.6	100.1	100.8	101.7	102.7	98.7	101.3	97.7	100.9
Q/q %; y/y %	1.0	0.9	1.2	1.5	-0.5	0.8	0.8	1.0	2.5	2.7	1.2	3.4
Index of Industrial Production (2010=100)	96.1	97.8	99.9	102.7	102.1	103.9	106.0	108.7	99.0	105.0	97.3	103.9
Q/q %; y/y %	1.5	1.8	2.1	2.8	-0.6	1.8	2.0	2.5	3.3	6.1	-0.5	6.8
Index of Tertiary Industry Activity (2005=100)	100.4	101.1	102.1	103.3	102.8	103.3	103.9	104.5	101.7	103.6	100.9	103.5
Q/q %; y/y %	0.8	0.7	1.0	1.2	-0.5	0.5	0.5	0.6	2.5	1.9	1.7	2.5
Corporate Goods Price Index components (2010=100)												
Domestic Company Goods Price Index	101.5	101.9	102.1	102.2	105.3	105.5	105.8	106.1	102.0	105.7	101.6	104.7
Y/y %	0.6	1.8	2.1	1.4	3.7	3.5	3.6	3.8	1.5	3.6	1.0	3.0
CPI (excl. fresh food; 2010=100)	99.9	100.1	100.1	100.0	102.7	102.8	103.1	103.1	100.0	102.9	99.8	102.1
Y/y %	0.0	0.4	0.6	0.7	2.7	2.7	2.9	3.1	0.4	2.9	0.2	2.3
Unemployment rate (%)	4.0	4.0	4.0	3.9	3.9	3.9	3.8	3.8	4.0	3.9	4.1	3.9
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; %)	0.77	0.81	0.84	0.89	0.94	0.99	1.02	1.06	0.83	1.00	0.77	0.96
Money stock; M2 (y/y %)	3.5	3.7	3.8	3.8	3.9	4.0	4.1	4.1	3.7	4.0	3.5	4.0
Trade balance (SAAR; Y tril)	-7.0	-6.7	-6.6	-6.8	-5.8	-4.5	-3.1	-1.5	-6.8	-3.7	-7.6	-5.0
Current balance (SAAR; $100 mil)	860	874	959	1,007	1,176	1,373	1,599	1,842	925	1,497	758	1,289
Current balance (SAAR; Y tril)	8.5	8.7	9.6	10.1	11.8	13.7	16.0	18.4	9.2	15.0	7.5	12.9
(% of nominal GDP)	1.8	1.8	2.0	2.0	2.4	2.8	3.2	3.6	1.9	3.0	1.6	2.6
Exchange rate (Y/$)	98.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.7	100.0	97.8	100.0
(Y/Euro)	129.6	130.0	130.0	130.0	130.0	130.0	130.0	130.0	129.9	130.0	127.9	130.0

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)

	2011	2012						2013	FY		CY	
	4-6	7-9	10-12	1-3	4-6	7-9	10-12	1-3	2011	2012	2011	2012
Gross domestic expenditure	501.6	514.4	516.2	522.3	521.1	516.4	517.7	522.6	513.7	519.7	509.4	519.3
Q/q %, SAAR	-3.1	10.6	1.4	4.8	-0.9	-3.6	1.0	3.8				
Y/y %	-1.5	-0.6	-0.2	3.4	3.8	0.3	0.4	0.3	0.3	1.2	-0.6	2.0
Domestic demand	491.6	500.0	505.5	510.8	510.9	509.6	511.2	513.9	502.1	511.5	496.8	510.6
Q/q %, SAAR	1.1	7.0	4.5	4.3	0.1	-1.0	1.2	2.2				
Y/y %	-0.2	0.1	1.1	4.3	3.8	1.9	1.2	0.7	1.3	1.9	0.3	2.8
Private demand	372.9	381.0	386.8	389.0	388.1	385.5	385.8	388.2	382.5	386.9	378.1	387.1
Q/q %, SAAR	1.0	9.1	6.1	2.3	-0.9	-2.6	0.3	2.5				
Y/y %	-0.5	-0.0	1.6	4.8	4.0	1.2	-0.2	-0.2	1.5	1.1	0.5	2.4
Final consumption	299.7	304.1	306.1	308.9	309.1	308.0	309.5	312.2	304.7	309.7	301.8	308.8
Q/q %, SAAR	3.6	6.0	2.6	3.7	0.3	-1.5	2.1	3.4				
Y/y %	0.5	0.5	1.2	4.0	3.1	1.3	1.0	1.1	1.6	1.6	0.4	2.3
Residential investment	12.6	13.3	13.1	12.9	13.2	13.4	13.9	14.2	13.0	13.7	13.0	13.4
Q/q %, SAAR	-9.3	21.2	-3.4	-5.9	8.8	6.7	15.1	7.7				
Y/y %	3.5	8.2	3.3	-0.1	4.7	1.5	5.8	9.3	3.7	5.3	5.5	3.0
Non-residential investment	64.4	65.4	70.8	69.0	68.8	66.5	65.6	65.5	67.4	66.5	66.2	67.5
Q/q %, SAAR	-1.3	6.8	36.9	-9.6	-1.3	-12.3	-5.5	-0.7				
Y/y %	-0.4	-0.2	9.9	6.8	7.0	1.5	-7.2	-5.1	4.1	-1.4	3.3	2.0
Change in inventories	-3.8	-1.8	-3.2	-1.9	-3.0	-2.4	-3.2	-3.6	-2.6	-3.0	-2.9	-2.7
Public demand	118.7	118.9	118.7	121.8	122.9	124.1	125.4	125.7	119.6	124.6	118.7	123.5
Q/q %, SAAR	1.4	0.8	-0.8	10.9	3.6	4.1	4.1	1.0				
Y/y %	0.9	0.4	-0.6	2.9	3.4	4.3	5.7	3.4	0.9	4.2	-0.1	4.1
Government final consumption	98.5	98.8	99.0	100.6	100.7	101.1	101.7	101.8	99.3	101.3	98.7	101.0
Q/q %, SAAR	1.0	1.0	1.1	6.5	0.2	1.6	2.5	0.2				
Y/y %	1.3	1.1	0.9	2.3	2.2	2.3	2.7	1.1	1.4	2.1	1.4	2.4
Fixed investment	20.1	20.1	19.7	21.1	22.2	23.0	23.7	24.0	20.3	23.3	20.0	22.5
Q/q %, SAAR	0.9	-0.8	-8.6	33.6	22.1	14.9	12.7	4.5				
Y/y %	-2.2	-4.7	-7.5	5.0	11.3	15.1	19.6	13.1	-2.2	15.0	-7.5	12.5
Change in inventories	0.0	0.1	-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	10.0	14.8	11.2	12.0	10.8	7.1	6.4	8.8	12.0	8.3	12.9	9.0
Exports of goods and services	77.6	84.7	82.4	84.6	84.4	80.7	78.5	81.6	82.3	81.3	82.1	82.0
Q/q %, SAAR	-26.1	41.9	-10.5	11.2	-0.7	-16.8	-10.2	16.8				
Y/y %	-5.5	0.8	-2.6	0.9	9.2	-4.8	-5.0	-3.3	-1.6	-1.2	-0.4	-0.1
Imports of goods and services	67.6	69.9	71.2	72.6	73.6	73.6	72.1	72.9	70.3	73.0	69.2	73.0
Q/q %, SAAR	-2.8	14.4	7.7	8.3	5.4	-0.0	-7.8	4.1				
Y/y %	3.6	5.1	5.7	6.7	9.1	5.2	1.1	0.4	5.3	3.8	5.9	5.4
Residual	-0.0	-0.4	-0.4	-0.4	-0.6	-0.3	0.2	-0.1	-0.4	-0.1	-0.3	-0.3

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)

	2013	2014						2015	FY		CY	
	4-6	7-9 (E)	10-12 (E)	1-3 (E)	4-6 (E)	7-9 (E)	10-12 (E)	1-3 (E)	2013 (E)	2014 (E)	2013 (E)	2014 (E)
Gross domestic expenditure	525.9	531.2	537.4	545.2	535.7	540.0	543.4	547.0	535.0	541.7	529.5	541.2
Q/q %, SAAR	2.6	4.1	4.7	5.9	-6.8	3.3	2.6	2.6				
Y/y %	0.9	2.9	3.8	4.2	1.9	1.6	1.1	0.4	3.0	1.2	2.0	2.2
Domestic demand	516.3	520.1	525.5	532.8	522.1	525.0	527.0	529.0	524.0	525.9	519.1	526.8
Q/q %, SAAR	1.8	3.0	4.2	5.7	-7.8	2.3	1.5	1.6				
Y/y %	1.0	2.0	2.9	3.8	1.0	1.0	0.2	-0.6	2.4	0.4	1.7	1.5
Private demand	389.3	391.7	395.9	402.7	392.1	395.3	397.5	399.9	395.0	396.4	391.4	396.9
Q/q %, SAAR	1.1	2.5	4.4	7.0	-10.1	3.3	2.3	2.3				
Y/y %	0.3	1.6	2.6	3.8	0.7	0.9	0.3	-0.5	2.1	0.3	1.1	1.4
Final consumption	314.6	315.5	317.7	322.8	312.8	315.0	315.9	316.9	317.7	315.2	315.1	316.7
Q/q %, SAAR	3.1	1.2	2.8	6.6	-11.8	2.8	1.2	1.3				
Y/y %	1.8	2.4	2.7	3.4	-0.6	-0.2	-0.6	-1.8	2.6	-0.8	2.0	0.5
Residential investment	14.1	14.6	15.2	15.3	14.3	14.2	14.4	14.6	14.8	14.4	14.5	14.5
Q/q %, SAAR	-1.0	13.0	18.3	1.6	-21.9	-5.1	6.6	4.9				
Y/y %	7.1	8.4	9.3	7.8	1.4	-2.8	-5.4	-4.6	8.2	-3.0	8.6	-0.0
Non-residential investment	65.4	66.2	67.4	68.8	68.9	70.3	71.5	72.7	67.1	70.9	66.1	69.8
Q/q %, SAAR	-0.4	4.9	7.4	8.7	0.8	7.8	7.0	7.1				
Y/y %	-4.7	-0.4	2.7	5.1	5.3	6.1	6.1	5.6	0.8	5.8	-2.1	5.6
Change in inventories	-4.9	-4.6	-4.4	-4.2	-4.0	-4.1	-4.2	-4.3	-4.6	-4.2	-4.4	-4.2
Public demand	127.0	128.4	129.5	130.1	130.0	129.7	129.5	129.2	129.0	129.5	127.7	129.9
Q/q %, SAAR	4.2	4.7	3.5	1.9	-0.5	-0.8	-0.8	-0.9				
Y/y %	3.2	3.3	3.5	3.8	2.1	1.0	-0.2	-1.0	3.5	0.5	3.4	1.7
Government final consumption	102.6	103.0	103.4	103.7	104.0	104.3	104.5	104.7	103.2	104.4	102.7	104.2
Q/q %, SAAR	3.4	1.6	1.6	1.2	1.2	0.8	0.8	0.8				
Y/y %	1.9	1.9	1.7	2.0	1.4	1.2	1.0	0.9	1.9	1.1	1.7	1.4
Fixed investment	24.4	25.4	26.1	26.4	26.0	25.5	25.0	24.5	25.7	25.2	25.0	25.7
Q/q %, SAAR	7.3	18.3	11.3	4.7	-6.9	-7.1	-7.3	-7.6				
Y/y %	10.7	10.2	10.6	10.4	6.0	0.4	-4.4	-7.3	10.5	-2.2	11.2	2.9
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	10.1	11.5	12.4	12.8	14.1	15.4	16.9	18.4	11.7	16.2	10.7	14.8
Exports of goods and services	84.0	86.1	87.8	89.7	91.6	93.6	95.7	98.4	87.0	94.8	85.0	92.7
Q/q %, SAAR	12.5	10.2	8.2	8.7	8.7	9.1	9.5	11.7				
Y/y %	-0.3	6.8	12.0	9.7	8.9	8.7	8.9	9.8	7.0	9.1	3.7	9.0
Imports of goods and services	74.0	74.6	75.5	76.9	77.5	78.2	78.9	80.0	75.3	78.7	74.3	77.9
Q/q %, SAAR	6.2	3.2	4.9	7.8	3.2	3.4	3.6	6.1				
Y/y %	0.8	1.3	4.7	5.5	4.6	4.8	4.5	4.1	3.1	4.5	1.8	4.9
Residual	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4	-0.7	-0.4	-0.3	-0.4

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)

	2011			2012				2013	FY		CY	
	4-6	7-9	10-12	1-3	4-6	7-9	10-12	1-3	2011	2012	2011	2012
Gross domestic expenditure	463.2	474.2	474.8	480.7	476.6	472.5	473.0	476.0	473.3	474.6	470.6	475.6
Q/q %, SAAR	-6.3	9.8	0.5	5.0	-3.3	-3.4	0.4	2.5				
Y/y %	-3.7	-2.5	-1.7	2.3	2.8	-0.5	-0.3	-0.8	-1.4	0.3	-2.5	1.1
Domestic demand	469.8	477.9	482.2	488.3	485.1	482.7	484.4	487.6	479.6	485.0	474.8	485.0
Q/q %, SAAR	-0.4	7.0	3.6	5.2	-2.6	-1.9	1.4	2.7				
Y/y %	-1.0	-0.5	0.7	4.1	3.1	1.0	0.5	-0.0	0.8	1.1	-0.4	2.1
Private demand	352.8	360.4	365.5	368.2	365.4	361.8	362.5	364.8	361.8	363.6	357.9	364.4
Q/q %, SAAR	-0.8	9.0	5.7	2.9	-2.9	-3.9	0.7	2.7				
Y/y %	-1.6	-0.7	1.2	4.5	3.5	0.3	-0.8	-0.9	0.8	0.5	-0.4	1.8
Final consumption	282.9	286.9	288.3	291.3	290.2	287.9	289.7	291.7	287.3	289.9	284.8	289.7
Q/q %, SAAR	2.4	5.8	2.0	4.2	-1.4	-3.1	2.5	2.8				
Y/y %	-0.7	-0.0	0.8	3.7	2.6	0.3	0.4	0.2	0.9	0.9	-0.4	1.7
Residential investment	13.1	13.8	13.6	13.4	13.6	13.8	14.4	14.7	13.5	14.1	13.5	13.8
Q/q %, SAAR	-8.3	21.4	-4.7	-6.6	7.2	5.0	18.0	10.6				
Y/y %	4.4	9.0	3.6	-0.3	3.8	0.2	5.4	9.9	4.2	4.7	6.2	2.3
Non-residential investment	60.8	62.0	66.9	65.2	64.9	62.6	61.8	61.8	63.8	62.7	62.7	63.7
Q/q %, SAAR	-3.0	8.0	35.4	-9.7	-2.0	-13.2	-5.4	0.2				
Y/y %	-2.0	-1.3	9.1	6.4	6.9	0.7	-7.6	-5.2	3.1	-1.7	1.9	1.5
Change in inventories	-4.0	-2.2	-3.3	-1.7	-3.3	-2.5	-3.4	-3.4	-2.8	-3.1	-3.0	-2.7
Public demand	117.1	117.4	116.7	120.1	119.6	120.9	121.9	122.7	117.8	121.4	116.9	120.6
Q/q %, SAAR	0.9	1.2	-2.6	12.4	-1.6	4.3	3.4	2.7				
Y/y %	0.5	0.3	-0.6	3.1	2.0	3.1	4.3	2.7	0.8	3.0	-0.3	3.1
Government final consumption	96.1	96.4	96.2	98.1	96.7	97.1	97.5	97.9	96.7	97.3	96.2	97.3
Q/q %, SAAR	0.3	1.2	-0.6	8.1	-5.7	1.8	1.4	1.8				
Y/y %	0.7	1.0	0.8	2.4	0.6	0.8	1.1	-0.1	1.2	0.6	1.1	1.2
Fixed investment	20.9	20.9	20.4	21.9	22.9	23.7	24.5	24.9	21.0	24.1	20.7	23.2
Q/q %, SAAR	2.1	0.5	-9.9	33.9	19.8	14.7	12.9	7.4				
Y/y %	-1.5	-3.8	-6.7	5.3	10.9	14.0	19.3	13.3	-1.5	14.6	-6.9	12.2
Change in inventories	0.1	0.1	0.0	0.1	0.0	0.0	-0.0	-0.1	0.1	-0.0	0.0	0.0
Net exports of goods and services	-6.6	-3.7	-7.3	-7.6	-8.4	-10.2	-11.3	-11.6	-6.4	-10.4	-4.3	-9.4
Exports of goods and services	68.0	73.6	70.6	71.8	71.4	68.1	67.8	74.1	70.9	70.4	71.3	69.7
Q/q %, SAAR	-26.0	37.6	-15.5	6.9	-2.3	-17.0	-1.6	42.5				
Y/y %	-8.0	-0.4	-5.1	-2.0	5.6	-7.6	-4.2	3.7	-3.9	-0.8	-2.6	-2.2
Imports of goods and services	74.6	77.3	77.9	79.4	79.8	78.3	79.2	85.7	77.3	80.8	75.6	79.2
Q/q %, SAAR	10.4	15.4	3.5	7.6	2.1	-7.1	4.4	37.3				
Y/y %	9.7	13.6	12.1	9.5	7.2	1.2	1.5	8.2	11.2	4.5	12.1	4.7

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.

3.2 Nominal Gross Domestic Expenditure (Y tril)

	2013			2014				2015	FY		CY	
	4-6	7-9 (E)	10-12 (E)	1-3 (E)	4-6 (E)	7-9 (E)	10-12 (E)	1-3 (E)	2013 (E)	2014 (E)	2013 (E)	2014 (E)
Gross domestic expenditure	479.4	484.1	490.1	497.9	493.6	498.7	503.0	508.1	487.8	500.9	482.5	498.3
Q/q %, SAAR	2.9	4.0	5.0	6.5	-3.4	4.2	3.6	4.1				
Y/y %	0.5	2.5	3.6	4.5	3.0	3.0	2.7	2.1	2.8	2.7	1.5	3.3
Domestic demand	489.7	493.4	499.1	507.1	501.7	505.4	508.2	511.5	497.6	506.8	492.7	505.6
Q/q %, SAAR	1.8	3.0	4.7	6.5	-4.2	3.0	2.2	2.7				
Y/y %	1.0	2.2	3.1	4.2	2.3	2.4	1.7	1.0	2.6	1.8	1.6	2.6
Private demand	365.9	368.3	372.7	379.8	374.2	378.1	380.9	384.4	371.8	379.5	368.1	378.2
Q/q %, SAAR	1.2	2.7	4.8	7.8	-5.8	4.2	3.1	3.7				
Y/y %	0.1	1.8	2.8	4.2	2.2	2.6	2.1	1.4	2.3	2.1	1.0	2.8
Final consumption	293.5	294.3	296.5	301.9	296.6	299.3	300.6	302.5	296.6	299.8	294.1	299.6
Q/q %, SAAR	2.5	1.1	3.1	7.4	-6.8	3.7	1.8	2.5				
Y/y %	1.2	2.2	2.4	3.5	1.0	1.7	1.4	0.2	2.3	1.1	1.5	1.9
Residential investment	14.9	15.4	16.1	16.2	15.4	15.3	15.6	15.8	15.7	15.5	15.3	15.6
Q/q %, SAAR	3.8	15.7	20.2	2.0	-18.1	-4.0	7.6	6.2				
Y/y %	9.4	11.8	12.5	10.3	3.7	-0.9	-3.6	-2.7	11.1	-1.0	11.0	2.0
Non-residential investment	61.9	62.8	64.0	65.5	65.8	67.2	68.5	70.0	63.7	68.0	62.6	66.7
Q/q %, SAAR	0.9	5.5	8.1	9.5	1.7	8.9	8.3	8.6				
Y/y %	-4.4	0.4	3.6	6.0	6.1	7.0	7.1	6.8	1.6	6.8	-1.6	6.5
Change in inventories	-4.4	-4.2	-4.0	-3.8	-3.6	-3.7	-3.8	-3.9	-4.2	-3.8	-4.0	-3.8
Public demand	123.8	125.1	126.4	127.3	127.5	127.4	127.3	127.2	125.8	127.3	124.6	127.4
Q/q %, SAAR	3.6	4.1	4.4	2.7	0.6	-0.3	-0.3	-0.3				
Y/y %	3.3	3.4	3.9	4.0	2.6	1.9	0.6	-0.3	3.7	1.1	3.3	2.2
Government final consumption	98.5	98.6	99.1	99.6	100.1	100.5	100.8	101.1	98.9	100.6	98.6	100.2
Q/q %, SAAR	2.3	0.4	2.2	1.8	2.4	1.2	1.2	1.2				
Y/y %	1.9	1.5	1.8	1.6	1.7	1.9	1.6	1.6	1.7	1.7	1.3	1.7
Fixed investment	25.4	26.5	27.3	27.7	27.3	26.9	26.5	26.1	26.9	26.7	26.1	27.1
Q/q %, SAAR	7.6	19.7	12.6	6.0	-5.6	-5.7	-5.8	-5.9				
Y/y %	11.7	11.5	12.1	11.5	7.2	1.6	-3.1	-5.8	11.7	-0.9	12.2	4.1
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	-10.4	-9.4	-9.1	-9.2	-8.1	-6.8	-5.2	-3.4	-9.5	-5.9	-10.1	-7.3
Exports of goods and services	77.6	80.0	81.9	84.0	86.2	88.6	91.3	94.6	80.9	90.2	78.4	87.5
Q/q %, SAAR	20.0	12.8	10.0	10.6	10.9	11.7	12.6	15.3				
Y/y %	8.6	17.5	20.9	13.1	11.1	10.7	11.4	12.7	14.9	11.5	12.5	11.5
Imports of goods and services	88.0	89.3	91.0	93.2	94.3	95.4	96.4	98.0	90.4	96.0	88.5	94.8
Q/q %, SAAR	10.9	6.3	7.6	10.0	4.9	4.7	4.5	6.6				
Y/y %	10.3	14.1	14.9	8.6	7.2	6.7	6.0	5.2	11.9	6.3	11.8	7.1

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.

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

	2011			2012				2013	FY		CY	
	4-6	7-9	10-12	1-3	4-6	7-9	10-12	1-3	2011	2012	2011	2012
Gross domestic expenditure	92.4	92.2	92.0	92.0	91.5	91.5	91.4	91.1	92.1	91.3	92.4	91.6
Q/q %, SAAR	-0.8	-0.2	-0.2	0.1	-0.6	0.0	-0.1	-0.3				
Y/y %	-2.1	-1.9	-1.5	-1.0	-1.0	-0.8	-0.7	-1.1	-1.7	-0.9	-1.9	-0.9
Private final consumption	94.4	94.3	94.2	94.3	93.9	93.5	93.6	93.4	94.3	93.6	94.4	93.8
Q/q %, SAAR	-0.3	-0.1	-0.2	0.1	-0.4	-0.4	0.1	-0.2				
Y/y %	-1.1	-0.5	-0.5	-0.3	-0.5	-1.0	-0.6	-0.9	-0.6	-0.7	-0.8	-0.6
Private residential investment	103.9	103.9	103.6	103.3	103.0	102.5	103.2	103.9	103.7	103.1	103.7	103.0
Q/q %, SAAR	0.3	0.0	-0.3	-0.2	-0.4	-0.4	0.6	0.7				
Y/y %	0.9	0.7	0.3	-0.2	-0.8	-1.3	-0.4	0.5	0.4	-0.5	0.6	-0.7
Private non-residential investment	94.5	94.8	94.5	94.5	94.3	94.1	94.1	94.4	94.6	94.3	94.7	94.3
Q/q %, SAAR	-0.4	0.3	-0.3	-0.0	-0.2	-0.2	0.0	0.2				
Y/y %	-1.6	-1.1	-0.7	-0.4	-0.1	-0.7	-0.4	-0.1	-0.9	-0.4	-1.3	-0.4
Government final consumption	97.6	97.6	97.2	97.5	96.1	96.1	95.8	96.2	97.4	96.0	97.4	96.3
Q/q %, SAAR	-0.2	0.0	-0.4	0.4	-1.5	0.0	-0.3	0.4				
Y/y %	-0.5	-0.1	-0.1	0.1	-1.6	-1.5	-1.6	-1.2	-0.2	-1.4	-0.3	-1.1
Public fixed investment	103.7	104.0	103.7	103.7	103.2	103.2	103.2	104.0	103.7	103.4	103.7	103.4
Q/q %, SAAR	0.3	0.3	-0.3	0.1	-0.5	-0.0	0.0	0.7				
Y/y %	0.7	1.0	0.8	0.3	-0.3	-1.0	-0.3	0.2	0.7	-0.3	0.6	-0.3
Exports of goods and services	87.6	86.9	85.7	84.8	84.5	84.5	86.4	90.8	86.2	86.6	86.8	85.1
Q/q %, SAAR	0.0	-0.8	-1.4	-1.0	-0.4	-0.1	2.3	5.1				
Y/y %	-2.7	-1.2	-2.5	-2.9	-3.3	-3.0	0.8	7.3	-2.3	0.4	-2.2	-2.1
Imports of goods and services	110.3	110.5	109.4	109.3	108.4	106.5	109.8	117.6	109.9	110.6	109.2	108.5
Q/q %, SAAR	3.2	0.2	-1.0	-0.2	-0.8	-1.8	3.1	7.1				
Y/y %	5.9	8.0	6.1	2.6	-1.8	-3.8	0.4	7.8	5.6	0.6	5.8	-0.7

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.

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

	2013	2014						2015	FY		CY	
	4-6	7-9 (E)	10-12 (E)	1-3 (E)	4-6 (E)	7-9 (E)	10-12 (E)	1-3 (E)	2013 (E)	2014 (E)	2013 (E)	2014 (E)
Gross domestic expenditure	91.2	91.1	91.2	91.3	92.1	92.3	92.6	92.9	91.2	92.5	91.1	92.1
Q/q %, SAAR	0.1	-0.0	0.1	0.1	0.9	0.2	0.2	0.4				
Y/y %	-0.3	-0.4	-0.2	0.3	1.1	1.3	1.5	1.7	-0.2	1.4	-0.5	1.0
Private final consumption	93.3	93.3	93.3	93.5	94.8	95.0	95.2	95.4	93.4	95.1	93.3	94.6
Q/q %, SAAR	-0.2	-0.0	0.1	0.2	1.4	0.2	0.1	0.3				
Y/y %	-0.6	-0.2	-0.3	0.1	1.6	1.8	2.0	2.1	-0.3	1.9	-0.5	1.4
Private residential investment	105.1	105.8	106.2	106.3	107.6	107.9	108.2	108.5	105.9	108.0	105.3	107.5
Q/q %, SAAR	1.2	0.6	0.4	0.1	1.2	0.3	0.2	0.3				
Y/y %	2.2	3.1	2.9	2.3	2.3	2.0	1.9	2.1	2.6	2.0	2.2	2.1
Private non-residential investment	94.7	94.8	95.0	95.2	95.4	95.6	95.9	96.3	94.9	95.8	94.7	95.5
Q/q %, SAAR	0.3	0.1	0.2	0.2	0.2	0.3	0.3	0.4				
Y/y %	0.4	0.8	0.9	0.8	0.7	0.9	1.0	1.1	0.7	0.9	0.4	0.9
Government final consumption	96.0	95.7	95.8	96.0	96.3	96.4	96.4	96.5	95.8	96.4	95.9	96.2
Q/q %, SAAR	-0.2	-0.3	0.2	0.2	0.3	0.1	0.1	0.1				
Y/y %	-0.1	-0.5	0.1	-0.3	0.3	0.7	0.6	0.6	-0.2	0.6	-0.4	0.3
Public fixed investment	104.0	104.3	104.7	105.0	105.3	105.7	106.1	106.6	104.6	106.0	104.3	105.5
Q/q %, SAAR	0.1	0.3	0.3	0.3	0.3	0.4	0.4	0.4				
Y/y %	0.9	1.2	1.3	1.0	1.2	1.3	1.4	1.5	1.1	1.3	0.9	1.2
Exports of goods and services	92.3	92.9	93.2	93.6	94.1	94.7	95.3	96.1	93.0	95.1	92.3	94.4
Q/q %, SAAR	1.6	0.6	0.4	0.4	0.5	0.6	0.7	0.8				
Y/y %	8.9	10.0	7.9	3.0	2.1	1.9	2.3	2.7	7.4	2.2	8.5	2.3
Imports of goods and services	118.9	119.8	120.6	121.2	121.6	122.0	122.3	122.4	120.1	122.1	119.2	121.8
Q/q %, SAAR	1.1	0.7	0.7	0.5	0.4	0.3	0.2	0.1				
Y/y %	9.4	12.6	9.8	2.9	2.4	1.8	1.4	1.0	8.6	1.7	9.9	2.1

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.

5.1 Contribution to Real GDP Growth by Component

	2011			2012				2013	FY		CY	
	4-6	7-9	10-12	1-3	4-6	7-9	10-12	1-3	2011	2012	2011	2012
1) Q/q %												
GDP growth rate	-0.8	2.6	0.3	1.2	-0.2	-0.9	0.3	0.9	0.3	1.2	-0.6	2.0
Domestic demand	0.2	1.7	1.1	1.1	0.0	-0.2	0.3	0.5	1.3	2.0	0.3	2.9
Private demand	0.2	1.7	1.1	0.5	-0.2	-0.5	0.0	0.5	1.1	0.9	0.3	1.8
Private consumption	0.5	0.9	0.4	0.5	0.0	-0.2	0.3	0.5	0.9	1.0	0.3	1.4
Residential investment	-0.1	0.1	-0.0	-0.0	0.1	0.0	0.1	0.1	0.1	0.2	0.1	0.1
Private fixed investment	-0.0	0.2	1.1	-0.4	-0.0	-0.4	-0.2	-0.0	0.5	-0.2	0.4	0.3
Change in private inventories	-0.3	0.4	-0.3	0.3	-0.2	0.1	-0.2	-0.1	-0.5	-0.1	-0.5	0.0
Public demand	0.1	0.0	-0.1	0.7	0.2	0.3	0.3	0.1	0.2	1.1	-0.1	1.0
Government final consumption	0.1	0.0	0.1	0.3	0.0	0.1	0.1	0.0	0.3	0.4	0.3	0.5
Public fixed investment	0.0	-0.0	-0.1	0.3	0.2	0.2	0.2	0.1	-0.1	0.7	-0.3	0.6
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	0.8	-0.7	0.1	-0.2	-0.7	-0.1	0.4	-1.0	-0.8	-0.9	-0.9
Exports of goods and services	-1.1	1.3	-0.4	0.4	-0.0	-0.7	-0.4	0.6	-0.2	-0.2	-0.1	-0.0
Imports of goods and services	0.1	-0.5	-0.3	-0.3	-0.2	0.0	0.3	-0.2	-0.8	-0.6	-0.8	-0.9
2) Y/y %												
GDP growth rate	-1.5	-0.6	-0.2	3.4	3.8	0.3	0.4	0.3	0.3	1.2	-0.6	2.0
Domestic demand	-0.2	0.0	1.0	4.3	3.9	2.0	1.3	0.8	1.3	2.0	0.3	2.9
Private demand	-0.4	-0.0	1.2	3.5	3.1	0.9	-0.1	-0.1	1.1	0.9	0.3	1.8
Private consumption	0.3	0.3	0.7	2.4	1.9	0.8	0.6	0.7	0.9	1.0	0.3	1.4
Residential investment	0.1	0.2	0.1	-0.0	0.1	0.0	0.2	0.3	0.1	0.2	0.1	0.1
Private fixed investment	-0.1	-0.0	1.2	1.0	0.9	0.2	-0.9	-0.8	0.5	-0.2	0.4	0.3
Change in private inventories	-0.7	-0.6	-0.8	0.2	0.2	-0.1	-0.0	-0.3	-0.5	-0.1	-0.5	0.0
Public demand	0.2	0.1	-0.2	0.8	0.9	1.1	1.4	0.9	0.2	1.1	-0.1	1.0
Government final consumption	0.3	0.2	0.2	0.5	0.5	0.5	0.5	0.2	0.3	0.4	0.3	0.5
Public fixed investment	-0.1	-0.2	-0.4	0.3	0.4	0.6	0.9	0.7	-0.1	0.7	-0.3	0.6
Change in public inventories	0.0	0.1	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	-1.4	-0.6	-1.2	-0.9	-0.1	-1.6	-0.9	-0.5	-1.0	-0.8	-0.9	-0.9
Exports of goods and services	-0.8	0.1	-0.4	0.1	1.3	-0.8	-0.7	-0.5	-0.2	-0.2	-0.1	-0.0
Imports of goods and services	-0.5	-0.7	-0.8	-1.1	-1.5	-0.9	-0.2	-0.1	-0.8	-0.6	-0.8	-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.

5.2 Contribution to Real GDP Growth by Component

	2013			2014				2015	FY		CY	
	4-6	7-9 (E)	10-12 (E)	1-3 (E)	4-6 (E)	7-9 (E)	10-12 (E)	1-3 (E)	2013 (E)	2014 (E)	2013 (E)	2014 (E)
1) Q/q %												
GDP growth rate	0.6	1.0	1.2	1.4	-1.7	0.8	0.6	0.6	3.0	1.2	2.0	2.2
Domestic demand	0.5	0.8	1.1	1.4	-2.0	0.6	0.4	0.4	2.4	0.4	1.7	1.6
Private demand	0.2	0.5	0.8	1.3	-2.0	0.6	0.4	0.4	1.6	0.2	0.8	1.2
Private consumption	0.5	0.2	0.4	1.0	-1.9	0.4	0.2	0.2	1.5	-0.5	1.2	0.3
Residential investment	-0.0	0.1	0.1	0.0	-0.2	-0.0	0.0	0.0	0.2	-0.1	0.2	-0.0
Private fixed investment	-0.0	0.2	0.2	0.3	0.0	0.3	0.2	0.2	0.1	0.7	-0.3	0.7
Change in private inventories	-0.3	0.0	0.0	0.0	0.0	-0.0	-0.0	-0.0	-0.3	0.1	-0.3	0.0
Public demand	0.3	0.3	0.2	0.1	-0.0	-0.1	-0.1	-0.1	0.8	0.1	0.9	0.4
Government final consumption	0.2	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.4	0.2	0.3	0.3
Public fixed investment	0.1	0.2	0.1	0.1	-0.1	-0.1	-0.1	-0.1	0.5	-0.1	0.5	0.2
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	0.2	0.2	0.1	-0.0	0.2	0.2	0.2	0.2	0.7	0.8	0.2	0.6
Exports of goods and services	0.4	0.4	0.3	0.3	0.3	0.4	0.4	0.5	1.1	1.5	0.5	1.5
Imports of goods and services	-0.3	-0.1	-0.2	-0.3	-0.1	-0.2	-0.2	-0.3	-0.4	-0.6	-0.3	-0.9
2) Y/y %												
GDP growth rate	0.9	2.9	3.8	4.2	1.9	1.6	1.1	0.4	3.0	1.2	2.0	2.2
Domestic demand	1.1	2.1	3.0	3.9	1.1	1.0	0.1	-0.7	2.4	0.4	1.7	1.6
Private demand	0.2	1.3	2.0	2.9	0.5	0.7	0.2	-0.4	1.6	0.2	0.8	1.2
Private consumption	1.1	1.5	1.6	2.0	-0.4	-0.1	-0.4	-1.1	1.5	-0.5	1.2	0.3
Residential investment	0.2	0.3	0.3	0.2	0.0	-0.1	-0.2	-0.1	0.2	-0.1	0.2	-0.0
Private fixed investment	-0.6	-0.1	0.3	0.8	0.6	0.8	0.7	0.8	0.1	0.7	-0.3	0.7
Change in private inventories	-0.5	-0.4	-0.2	-0.2	0.2	0.1	0.0	-0.0	-0.3	0.1	-0.3	0.0
Public demand	0.8	0.8	0.9	1.1	0.6	0.3	-0.1	-0.3	0.8	0.1	0.9	0.4
Government final consumption	0.4	0.4	0.3	0.4	0.3	0.2	0.2	0.2	0.4	0.2	0.3	0.3
Public fixed investment	0.4	0.5	0.6	0.6	0.3	0.0	-0.3	-0.5	0.5	-0.1	0.5	0.2
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	-0.2	0.8	0.9	0.5	0.6	0.5	0.6	0.9	0.7	0.8	0.2	0.6
Exports of goods and services	-0.1	1.0	1.7	1.5	1.5	1.4	1.5	1.6	1.1	1.5	0.5	1.5
Imports of goods and services	-0.1	-0.2	-0.8	-1.0	-0.9	-0.9	-0.8	-0.8	-0.4	-0.6	-0.3	-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

	2011			2012				2013	FY		CY	
	4-6	7-9	10-12	1-3	4-6	7-9	10-12	1-3	2011	2012	2011	2012
1) World economy												
Economic growth of major trading partners												
Y/y %	3.9	3.8	2.8	3.1	2.9	2.8	3.6	2.4	3.5	3.1	3.9	3.3
Crude oil price (WTI futures; $/bbl)	102.3	89.5	94.1	103.0	93.4	92.2	88.2	94.4	97.2	92.0	95.1	94.1
Y/y %	31.1	17.5	10.3	8.9	-8.8	3.0	-6.2	-8.4	16.4	-5.4	19.5	-1.0
2) US economy												
Real GDP (chained [2009]; $ bil; SAAR)	15,011	15,062	15,242	15,382	15,428	15,534	15,540	15,584	15,174	15,521	15,052	15,471
Q/q %, SAAR	3.2	1.4	4.9	3.7	1.2	2.8	0.1	1.1				
Y/y %	1.9	1.5	2.0	3.3	2.8	3.1	2.0	1.3	2.2	2.3	1.8	2.8
Consumer Price Index												
(1982-84 avg=100)	224.6	226.2	227.0	228.3	228.8	230.0	231.3	232.1	226.5	230.6	224.9	229.6
Q/q %, SAAR	4.7	2.9	1.4	2.3	1.0	2.1	2.2	1.4				
Y/y %	3.4	3.8	3.3	2.8	1.9	1.7	1.9	1.7	3.3	1.8	3.2	2.1
Producer Price Index												
(Finished goods; 1982=100)	190.7	192.2	193.0	193.7	192.8	195.2	196.2	196.6	192.1	194.9	190.5	194.2
Q/q %, SAAR	7.3	3.1	1.7	1.6	-1.8	5.0	2.1	0.7				
Y/y %	6.9	6.9	5.4	3.4	1.1	1.5	1.7	1.5	5.6	1.4	6.0	1.9
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; %)	3.21	2.43	2.05	2.04	1.82	1.64	1.71	1.95	2.43	1.78	2.79	1.80
3) Japanese economy												
Nominal government final consumption												
Y tril; SAAR	96.1	96.4	96.2	98.1	96.7	97.1	97.5	97.9	96.7	97.3	96.2	97.3
Q/q %, SAAR	0.3	1.2	-0.6	8.1	-5.7	1.8	1.4	1.8				
Y/y %	0.7	1.0	0.8	2.4	0.6	0.8	1.1	-0.1	1.2	0.6	1.1	1.2
Nominal public fixed investment												
Y tril; SAAR	20.9	20.9	20.4	21.9	22.9	23.7	24.5	24.9	21.0	24.1	20.7	23.2
Q/q %, SAAR	2.1	0.5	-9.9	33.9	19.8	14.7	12.9	7.4				
Y/y %	-1.5	-3.8	-6.7	5.3	10.9	14.0	19.3	13.3	-1.5	14.6	-6.9	12.2
Exchange rate (Y/$)	81.7	77.8	77.3	79.3	80.1	78.6	81.2	92.3	79.0	83.1	79.8	79.8
(Y/€)	118.3	108.7	104.9	106.3	101.2	98.2	108.2	122.0	109.6	107.4	111.4	103.5
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) Consumption tax hike in April 2014 assumed for Japan.
2) Due to rounding, figures may differ from those released by the government.

E: DIR estimate.

6.2 Major Assumptions

	2013			2014				2015	FY		CY	
	4-6	7-9 (E)	10-12 (E)	1-3 (E)	4-6 (E)	7-9 (E)	10-12 (E)	1-3 (E)	2013 (E)	2014 (E)	2013 (E)	2014 (E)
1) World economy												
Economic growth of major trading partners												
Y/y %	2.8	2.8	2.8	3.4	3.5	3.7	3.9	4.0	3.0	3.8	2.8	3.7
Crude oil price (WTI futures; $/bbl)	94.2	100.0	100.0	100.0	100.0	100.0	100.0	100.0	98.5	100.0	97.1	100.0
Y/y %	0.9	8.5	13.3	6.0	6.2	0.0	0.0	0.0	7.1	1.5	3.2	3.0
2) US economy												
Real GDP (chained [2009]; $ bil; SAAR)	15,649	15,744	15,852	15,953	16,062	16,175	16,297	16,425	15,799	16,240	15,707	16,121
Q/q %, SAAR	1.7	2.5	2.8	2.6	2.8	2.8	3.1	3.2				
Y/y %	1.4	1.4	2.0	2.4	2.6	2.7	2.8	3.0	1.8	2.8	1.5	2.6
Consumer Price Index												
(1982-84 avg=100)	232.1	232.8	233.8	234.8	236.0	237.1	238.3	239.7	233.3	237.7	232.7	236.5
Q/q %, SAAR	-0.0	1.3	1.6	1.8	2.0	1.9	2.1	2.3				
Y/y %	1.4	1.2	1.1	1.2	1.7	1.8	1.9	2.1	1.2	1.9	1.3	1.7
Producer Price Index												
(Finished goods; 1982=100)	196.0	197.0	198.4	199.5	200.6	201.8	203.2	204.7	197.4	202.2	196.7	200.9
Q/q %, SAAR	-1.1	2.1	2.8	2.2	2.3	2.5	2.7	2.9				
Y/y %	1.6	0.9	1.1	1.5	2.3	2.4	2.4	2.6	1.3	2.5	1.3	2.2
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; %)	2.00	2.62	2.73	2.82	2.95	3.06	3.18	3.23	2.54	3.11	2.32	3.00
3) Japanese economy												
Nominal government final consumption												
Y tril; SAAR	98.5	98.6	99.1	99.6	100.1	100.5	100.8	101.1	98.9	100.6	98.6	100.2
Q/q %, SAAR	2.3	0.4	2.2	1.8	2.4	1.2	1.2	1.2				
Y/y %	1.9	1.5	1.8	1.6	1.7	1.9	1.6	1.6	1.7	1.7	1.3	1.7
Nominal public fixed investment												
Y tril; SAAR	25.4	26.5	27.3	27.7	27.3	26.9	26.5	26.1	26.9	26.7	26.1	27.1
Q/q %, SAAR	7.6	19.7	12.6	6.0	-5.6	-5.7	-5.8	-5.9				
Y/y %	11.7	11.5	12.1	11.5	7.2	1.6	-3.1	-5.8	11.7	-0.9	12.2	4.1
Exchange rate (Y/$)	98.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.7	100.0	97.8	100.0
(Y/€)	129.6	130.0	130.0	130.0	130.0	130.0	130.0	130.0	129.9	130.0	127.9	130.0
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) Consumption tax hike in April 2014 assumed for Japan.
2) Due to rounding, figures may differ from those released by the government.
E: DIR estimate.