Japan’s Economic Prospects 2015

Real GDP Growth Revised Down to Negative Territory for Fiscal 2014

- A crash to be averted; gradual recovery expected

January 2015

Atsushi Takeuchi
Chief Forecaster
Japan Center for Economic Research
JCER’s short-term forecast (as of December 2014, SA160R)

-3.0  -2.0  -1.0  0.0  1.0  2.0  3.0

Forecast

(Real GDP growth rate y/y % chg.)

<table>
<thead>
<tr>
<th></th>
<th>F.Y.13</th>
<th>F.Y.14</th>
<th>F.Y.15</th>
<th>F.Y.16</th>
</tr>
</thead>
<tbody>
<tr>
<td>SA160R</td>
<td>2.1</td>
<td>-0.5</td>
<td>1.3</td>
<td>1.0</td>
</tr>
<tr>
<td>ESP (Jan.)</td>
<td>2.1</td>
<td>-0.6</td>
<td>1.7</td>
<td>1.6</td>
</tr>
</tbody>
</table>

Source: Cabinet Office “Quarterly Estimates of GDP” (Quarterly)
July–September 2014 saw real GDP decline by 0.5% from previous quarter (by 1.9% in annual terms), the second straight quarter of negative growth after historic dip in April–June, due to reduction in inventories and lackluster consumer spending. Forecast for real GDP growth in fiscal 2014 revised downward to –0.5% (was 0.4% in SA159).

Monthly indices since September show signs that the bottom has been reached. In October–December, there should be gradual recovery in consumer spending, capital investments, and exports. A crash will likely be avoided. Real GDP is forecast to grow by 1.3% in fiscal 2015 and 1.0% in fiscal 2016.

Downside risks include prolongation of production adjustments (pushing down consumer spending and capital investments), Ebola fever and other geopolitical threats, onset of deflation and long-term economic stagnation in Europe, and disruption of global financial markets from uncertainty over higher US interest rates. Improved market conditions (esp. lower crude oil prices) and friendlier Japan-China ties could bolster economic activity.
**Summary**

Assumption: Continuation of trends in currency, stock, and crude oil markets; stable, low long-term interest rates.

**Exchange rate:** Weakening of yen, projected to continue going forward

**Stock prices:** Nikkei average revised upward; prices to continue rising gradually

**Crude oil:** Significant drop from SA159; prices to rebound slowly

**Public investment:** Consumption tax hike (8%→10%) in Apr. 2017; only disaster countermeasures in fiscal 2014 supplementary budget considered (economic stimulus not included); lower corporate tax rate not reflected at this point

<table>
<thead>
<tr>
<th>&lt;Precondition&gt;</th>
<th>U.S.dollar/Yen</th>
<th>Nikkei Stock Average</th>
<th>Crude Oil (U.S.dollar/Barrel)</th>
<th>Bank Rate (%)</th>
<th>Long-term Interest Rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Last time</td>
<td>This time</td>
<td>Last time</td>
<td>This time</td>
<td>Last time</td>
</tr>
<tr>
<td>F.Y. 2013</td>
<td>100.1</td>
<td>14,407</td>
<td>99.1</td>
<td>0.0~0.1</td>
<td>0.7</td>
</tr>
<tr>
<td>F.Y. 2014</td>
<td>108.6</td>
<td>109.8</td>
<td>16,072</td>
<td>91.1</td>
<td>0.0~0.1</td>
</tr>
<tr>
<td>F.Y. 2015</td>
<td>117.0</td>
<td>120.1</td>
<td>18,248</td>
<td>83.2</td>
<td>0.0~0.1</td>
</tr>
<tr>
<td>F.Y. 2016</td>
<td>118.9</td>
<td>121.9</td>
<td>19,387</td>
<td>84.1</td>
<td>0.0~0.1</td>
</tr>
</tbody>
</table>

Note: Last time is SA160. The value is average during the period.

**<Calculation by JCER Macroeconometric model (Value is deviation from standard scenario)>**

<table>
<thead>
<tr>
<th>Growth rate</th>
<th>Yen to US Dollar Exchange rate (weaker by 10 yen)</th>
<th>Crude Oil Price (decline by 10%)</th>
<th>Public Work (added by Trillion yen)</th>
<th>Corporate tax (cut by 1 Trillion yen)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1st year</td>
<td>2nd year</td>
<td>3rd year</td>
<td>1st year</td>
</tr>
<tr>
<td>Real GDP</td>
<td>0.49</td>
<td>0.71</td>
<td>0.91</td>
<td>0.08</td>
</tr>
<tr>
<td>Real private consumption</td>
<td>0.04</td>
<td>0.15</td>
<td>0.16</td>
<td>0.12</td>
</tr>
<tr>
<td>CPI</td>
<td>0.13</td>
<td>0.24</td>
<td>0.38</td>
<td>-0.07</td>
</tr>
</tbody>
</table>

Note: Reducing corporate tax by trillion yen is equivalent to lowering tax rates by a little less than 2%
Assumption: Consumption tax hike postponed

- Framework for medium-term fiscal consolidation is essential to maintain investor confidence.
- Irrefutably higher risk of a rise in long-term interest rates; sudden jumps seen in the past.
- Appraisal losses of government bonds held by financial institutions alone to reach ¥7.6 trillion if yields rise by 1 point, ¥13.4 trillion if yields rise by 2 points (BOJ estimate).

### Fiscal Consolidation Frameworks of Other Countries

<table>
<thead>
<tr>
<th>Country</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU</td>
<td>(EU Treaty) Government deficit within 3% of GDP and debt within 60% of GDP; (Fiscal Compact) structural deficit not exceeding 0.5% of GDP</td>
</tr>
<tr>
<td>Britain</td>
<td>(Legal framework) Government required to draft budget responsibility charter outlining aims and methods of fiscal management; flow/stock targets in the general account established under multiyear fiscal planning law</td>
</tr>
<tr>
<td>France</td>
<td>(Constitution) Provisions for the drafting of multiyear fiscal management policies; flow/stock targets in the general account established under multiyear fiscal planning law</td>
</tr>
<tr>
<td>Germany</td>
<td>(Constitution) Federal government to maintain structural deficit within 0.35% of GDP, and state governments to maintain balanced budgets (effective 2016 for federal government and 2020 for state governments)</td>
</tr>
<tr>
<td>US</td>
<td>(Legal framework) Provisions setting a ceiling on federal debt</td>
</tr>
</tbody>
</table>

### Shares of government bonds holdings (Jun. 2014)

Financial intermediaries
- General government
- Central bank
- Overseas
- Households
- Others

### The effects of a rise in interest rates (parallel shift scenario) on capital losses on bondholdings estimated by BOJ

<table>
<thead>
<tr>
<th>Rise width</th>
<th>1%</th>
<th>2%</th>
<th>3%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial institutions</td>
<td>-7.6</td>
<td>-13.4</td>
<td>-19.3</td>
</tr>
<tr>
<td>Banks</td>
<td>-5.6</td>
<td>-10.0</td>
<td>-14.5</td>
</tr>
<tr>
<td>Major banks</td>
<td>-2.6</td>
<td>-4.6</td>
<td>-6.7</td>
</tr>
<tr>
<td>Regional banks</td>
<td>-3.0</td>
<td>-5.4</td>
<td>-7.8</td>
</tr>
<tr>
<td>Shinkin banks</td>
<td>-2.0</td>
<td>-3.4</td>
<td>-4.9</td>
</tr>
</tbody>
</table>

Notes: The data exclude foreign currency-denominated bondholdings. Datas at the end of June 2014.
Source: BOJ, Financial System Report (October 2014)
Assumption: Clear differences in direction of monetary policy among Japan, US, and Europe

- FRB ended QE3 in October 2014, as scheduled; first interest rate hike expected in July–September 2015 and will likely continue at a moderate pace
- ECB will launch purchases of asset-backed securities soon, but the goal of increasing ECB’s balance sheet to early 2012 levels will not be reached easily; QE not anticipated without substantial appreciation of euro
- BOJ decided in late October to intensify quantitative and qualitative easing (QQE) and is expected to monitor its impact, without major adjustments, during the forecast period

**Summary**

<Central Bank Assets (BOJ, FRB, ECB)>

(The ratio to GDP, %)

<Policy Interest Rate (BOJ, FRB, ECB)>

%(Quarterly)

<Central Bank Assets (BOJ, FRB, ECB)>

<Policy Interest Rate (BOJ, FRB, ECB)>

<Japan>

<US>

<OIS Forward Curve>

Europe>

Sources: BOJ, Cabinet Office, FRB, BLS, ECB, Eurostat

Source: Bloomberg

2014/8/29

2014/5/30

2014/11/28

2015/1/9

(Contract month)
Assumption: Global economy to continue slow upswing

Future Scenario

- Balanced growth of close to 3% to continue in US, driven by both domestic demand and exports; this will have positive repercussions on NIEs and ASEAN

- Major euro zone countries like Germany, France, and Italy will lag, as business sentiment weakens over the Ukrainian crisis; growth will be slow despite repeated monetary easing due to negative legacy of ballooning private-sector debt, high unemployment, and growing bad debt

- China will maintain soft-landing scenario toward its potential growth rate (around 7%); developments in real-estate market bear continued close watching

### Summary

<table>
<thead>
<tr>
<th>Year</th>
<th>Overseas</th>
<th>United States</th>
<th>Euro Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>SA160</td>
<td>SA160R</td>
<td></td>
</tr>
<tr>
<td>2014</td>
<td>3.7</td>
<td>2.2</td>
<td>-0.5</td>
</tr>
<tr>
<td>2015</td>
<td>4.1</td>
<td>3.0</td>
<td>1.0</td>
</tr>
<tr>
<td>2016</td>
<td>4.1</td>
<td>3.0</td>
<td>1.3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year</th>
<th>China</th>
<th>NIEs</th>
<th>ASEAN</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>7.7</td>
<td>2.9</td>
<td>5.2</td>
</tr>
<tr>
<td>2014</td>
<td>7.3</td>
<td>3.3</td>
<td>4.5</td>
</tr>
<tr>
<td>2015</td>
<td>7.0</td>
<td>3.4</td>
<td>5.6</td>
</tr>
<tr>
<td>2016</td>
<td>6.8</td>
<td>3.7</td>
<td>5.2</td>
</tr>
</tbody>
</table>

Source: Bloomberg (Monthly)
Summary

Demand-side scenarios:
Gradual expansion, despite stop-and-go conditions

Exports: Slow upward trend, though still weak, bolstered by an upswing in the global economy and weaker yen

Imports: Slow, gradual expansion due to rising personal consumption; net exports will continue contributing to GDP growth

Consumption: Aftereffects of tax hike still linger, dampening consumer sentiment; employment and income levels are holding steady, though, so spending is forecast to slowly grow

Housing investment: Slump continues due to last-minute, pre-tax-hike buying, but effects should play out during fiscal 2014; trends in fiscal 2015 and 2016 will be weak

Capital investment: Moderate growth will return owing to favorable corporate earnings and business conditions, as well as growing shortages in production capacity; gradual improvements are expected through fiscal 2014, 2015, and 2016
Major risk factors:
Chances of downside risks appearing still high

Major domestic risks
- Prolonged production adjustment, leading to low operation rate and peaking of job improvements, pushing down capital and consumer spending
- Destabilization of long-term interest rates
- Growing imbalances in asset markets resulting from monetary easing
- Lull in structural reform

Major global risks
- Onset of deflation in Europe, resulting in long-term economic stagnation
- Ebola fever and other causes of geopolitical instability
- Disruption of financial markets from uncertainty over US monetary tightening, adversely affecting emerging market economies (EMEs)
- Slowdown of Chinese economy due to instability in real-estate market
BOJ’s unexpected monetary easing has driven down yen’s value and bolstered share prices; commodities are cheaper due to weak demand from EMEs, with crude oil prices falling 60% from year’s peak to a six-year low.

**Financial Environment**

**Weak yen, bullish stocks, low fuel prices:**
Too good to be true?

**Commodities**

- CRB Index (1967=100)
- Copper Index (U.S. dollar/pound)
- FOOD Index (1967=100)
- WTI (RHS)

**Government Bonds Yields**

- Japan
- U.S.
- Germany

**Nominal Effective Exchange Rate**

- Yen
- U.S. dollar
- Euro

**Stock Prices**

- Nikkei Stock Average
- S&P500 (RHS)
- Eurostoxx (RHS)

**Charts and Graphs**

- Dissolution of the House of Representatives
- Adapt an inflation target
- QQE
- QQE2

Note: Last updated: Jan 14, 2015.
Source: Bloomberg

**Source:** Bloomberg (Daily)
Since autumn, pessimism about prospects for global economy has spread, resulting in greater market volatility; monetary policy has become the chief market focus since October.

**Financial Environment**

Growing monetary policy uncertainties

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**<Surprise Index>**

(Daily)

Notes: Positive indices indicate that actual data have been better than market expectations. Last updated: Jan 13, 2015.

Source: Bloomberg

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**<Volatility Index>**

(Daily)

Notes: VIX represents the implied volatility of S&P500. CVIX represents that of major currencies. MOVE represents that of U.S. government bond. Last updated: Jan 14, 2015.

Source: Bloomberg

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**<Government Bond's Yield>**

Notes: The yield of 4y U.S. government bond is interpolated by 3y and 5y, that of 6y is by 5y and 7y, 8y and 9y is by 7y and 10y.

Source: Bloomberg
### Differences in direction of monetary policy among Japan, US, and Europe

- **BOJ** makes surprise announcement of additional monetary easing; FRB ends QE3 as scheduled and ponders timing of a hike in interest rates
- **ECB** is under stronger pressure to undertake QE in a form of government bond purchase

#### Monetary Policies by BOJ, FRB and ECB

<table>
<thead>
<tr>
<th>Japan</th>
<th>United States</th>
<th>Europe</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>April 4, 2013</strong>&lt;br&gt;QQE announced with an aim of achieving an inflation rate of 2% by doubling the monetary base in two years; BOJ to increase purchases of not only government bonds but also risk-carrying assets, including ETFs</td>
<td><strong>Dec. 11-12, 2012</strong>&lt;br&gt;Announcement of QE3 to purchase $45 billion of long-term treasuries per month; zero-interest-rate policy to continue as long as unemployment rate exceeds 6.5% and inflation is projected to be under 2.5% over the next year or two</td>
<td><strong>June 5, 2014</strong>&lt;br&gt;Announcement of policy package for additional monetary easing: (1) Main operation rate cut by 0.1 point to 0.15% and deposit rate for commercial banks lowered below zero, to −0.1%; (2) Targeted Longer-term Refinancing Operations announced to encourage bank lending; (3) readiness enhanced for program to buy asset-backed securities; and (4) stopping of the sterilization of securities market program launched in 2010</td>
</tr>
<tr>
<td><strong>Oct. 31, 2014</strong>&lt;br&gt;Decision to intensify QQE, expanding the monetary base to ¥80 trillion per year (from ¥50 trillion), purchasing additional ¥80 trillion in long-term government bonds per year (from ¥50 trillion), and tripling purchase of ETFs and J-REITs.</td>
<td><strong>Dec. 17-18, 2013</strong>&lt;br&gt;Tapering of asset purchasing program, reducing purchases in increments of around $10 billion; monthly asset purchases reduced to $75 billion from $85 billion in January 2014</td>
<td><strong>Sept. 4, 2014</strong>&lt;br&gt;Main Refinancing Rate lowered to 0.05% and announcement of start of ABS and covered bond purchases</td>
</tr>
<tr>
<td><strong>Nov. 5, 2014</strong>&lt;br&gt;BOJ Governor Haruhiko Kuroda in a speech reiterates that the central bank is ready to do everything possible to achieve its 2% target.</td>
<td><strong>Oct. 28-29, 2014</strong>&lt;br&gt;Announcement of the end of QE3 by the end of October</td>
<td><strong>Nov. 6, 2014</strong>&lt;br&gt;No policy decision made</td>
</tr>
<tr>
<td><strong>Oct. 2014</strong>&lt;br&gt;“To support continued progress toward maximum employment and price stability, the Committee today reaffirmed its view that the current 0 to 1/4 percent target range for the federal funds rate remains appropriate” (FOMC press release)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Weaker yen and bullish stocks to continue; domestic and foreign portfolio investments need to be monitored closely.

**Outward portfolio investment from (Accumulated total)**

- **Capital Outflow**
- Notes: Total amount from the start of each year: Netted buying and selling amount
- Source: Ministry of Finance

**Inward Portfolio investment to Japan (Accumulated total)**

- **Capital Inflow**
- Notes: Total amount from the start of each year: Netted buying and selling amount
- Source: Ministry of Finance

**Long-term interest rate and Nikkei Stock Average**

- **Forecast**
- **Source:** Nikkei Inc. (Monthly)

**Long-term interest rate spread and Exchange rate**

- **Forecast**
- **Sources:** Bank of Japan, Nikkei Inc. (Quarterly)
While inventory levels are low compared to the post-tax-hike period in 1997, the pace of accumulation is high, drawing out the production adjustment process; shipments are finally beginning to increase, though, easing inventory pressures.

Note: Indices of Industrial Production in December, 2014 and January, 2015 (× mark) are calculated by the Survey of Production Forecast. Source: Ministry of Economy, Trade and Industry, “Indices of Industrial Production”
With the progress in inventory adjustment, production is likely to recover, although the pace will be gradual.
Takeuchi Ryota (CHUBU Electric Power Co.)

Consumer spending and home sales remained strong in July–September, with external and public-sector demand also contributing to robust growth.

Factors behind high corporate production include strong domestic demand and improved competitiveness of US exports.

**Real GDP growth rate**

- Personal cons.
- Priv. non-res. fixed inv.
- Priv. res. fixed inv.
- Priv. inventories
- Net exports
- Government
- Real GDP

**ISM Composite Index**

- Manufacturing
- Non-manufacturing

**Industrial Production**

- Automobile
- Machinery
- Computer & Electronics
- Chemical
- Foods & Tobacco
- Electric & Gas
- Mining
- Others
- Total

**Real Exports and Real Effective Exchange Rate**

- Real exports of goods & services
- Real effective exchange rate (RHS, reversed)

Sources: JP Morgan, BEA
Conditions in place for a rise in personal spending

- Consumption likely to expand from wealth effect of higher stock and real-estate prices and improved employment situation
- Another positive factor is lower energy prices

**<Retail Sales and Food Services>**

- (m/m % chg., Contribution %pt)
- Sources: Census Bureau, Haver Analytics

**<Total Assets of Households>**

- (Tril. dollars)
- Source: FRB

**<Consumer Confidence and Stock Price>**

- (Seasonally Adjusted, CY 1985 = 100)
- (CY 1941-43 = 10)
- (Monthly)
- Note: The shaded area marks the beginning and end of a recession.
- Sources: The Conference Board, Standard & Poor's

**<Lending Standards for Credit Card Loans and Real PCE>**

- (y/y % chg.)
- (net % balance(tightened minus eased))
- (Quarterly)
- Note: The shaded areas mark the beginning and end of recessions.
- Sources: BEA, FRB
Takinguchi Ryota (CHUBU Electric Power Co.)

- Capacity utilization ratio remains high from strong domestic and external demand
- Banks’ aggressive lending posture also encouraging corporate spending

**Increasingly robust capital investment**

- **Capacity utilization ratio remains high from strong domestic and external demand**
- **Banks’ aggressive lending posture also encouraging corporate spending**

**<Durable Goods Orders and Capital Goods Shipments>**

- New orders for manufactured durable goods
- Shipments for non-defence capital goods (RHS)

**<Business Outlook and Capital Expenditures>**

- Manufacturing:
  - General Activity DI (6-month forecast)
  - Capital Expenditures DI (as above)

- Non-Manufacturing:
  - General Activity DI (6-month forecast)
  - Capital Expenditures DI (current)

**<Lending Standards for C&I Loans and Total Value of Loans>**

- Commercial & Industrial (C&I) loans
- Approving standards for C&I loans for small firms (RHS, reversed)

**<Capacity Utilization and Real Private Capital Investment>**

- Real private non-residential capital investment
- Capacity utilization (RHS)

**Sources:**
- FRB, BEA

**Note:** The shaded areas mark the beginning and end of recessions.
U. S.

Jobs expanding, but inflation pressures remain moderate

- Labor market improving, as unemployment continues to decline
- Impact on wages has been limited, however, and CPI is likely to rise by less than 2%

**<Employment Situation>**

(monthly change, thousand persons) (Seasonally Adjusted, %)

Note: The shaded area marks the beginning and end of a recession.
Source: BLS

**<Consumer Price Index (CPI)>**

(∀/∀ % chg.)

Source: Bureau of Labor Statistics, Haver Analytics

**<Unemployment Gap and Average Hourly Earnings>**

(%)

Sources: Bureau of Labor Statistics, CBO

**<Inflation Expectation>**

(%)
Euro area

Stagnant conditions to persist, with euro zone leader Germany posting a slowdown

Real GDP growth in July–September was flat, with Germany, France, and Italy posting near-zero growth.

<GDP growth rate> (q/q% chg., Contribution %pt)

<PMI (manufacturing sector)>

<PMI (non-manufacturing sector)>

Source: Eurostat

Source: Markit, Bloomberg
ECB announces further monetary easing measures and results of comprehensive assessment

- Inflation prospects decline as HICP continues to fall; additional monetary easing measures have limited impact
- Announcement of comprehensive assessment results leads to greater market confidence in soundness of euro zone financial system

**<Harmonised Index of Consumer Prices>**

<table>
<thead>
<tr>
<th>Month</th>
<th>Energy</th>
<th>Food including alcohol and tobacco</th>
<th>excluding energy, food, alcohol and tobacco</th>
<th>All-items HICP</th>
</tr>
</thead>
<tbody>
<tr>
<td>12/01</td>
<td>0.0%</td>
<td>0.0%</td>
<td>2.0%</td>
<td>1.8%</td>
</tr>
<tr>
<td>13/01</td>
<td>0.0%</td>
<td>0.0%</td>
<td>1.8%</td>
<td>1.6%</td>
</tr>
<tr>
<td>14/01</td>
<td>0.0%</td>
<td>0.0%</td>
<td>1.6%</td>
<td>1.4%</td>
</tr>
<tr>
<td>14/12</td>
<td>0.0%</td>
<td>0.0%</td>
<td>1.4%</td>
<td>1.2%</td>
</tr>
</tbody>
</table>

Source: Eurostat

**<Expected inflation rate>**

<table>
<thead>
<tr>
<th>Month</th>
<th>5y5y inflation swap rate</th>
<th>ECB survey of professional forecasters</th>
</tr>
</thead>
<tbody>
<tr>
<td>12/01</td>
<td>2.0%</td>
<td>1.9%</td>
</tr>
<tr>
<td>13/01</td>
<td>1.5%</td>
<td>1.4%</td>
</tr>
<tr>
<td>14/01</td>
<td>1.0%</td>
<td>0.9%</td>
</tr>
<tr>
<td>15/01</td>
<td>0.5%</td>
<td>0.4%</td>
</tr>
</tbody>
</table>

Note: Last updated: Jan 15, 2015.
Sources: ECB, Bloomberg

**<ECB's additional monetary easing>**

- 1. Additional lowering of key interest rates
  - Marginal lending facility: 0.4% → 0.3%
  - Main refinancing operations: 0.15% → 0.05%
  - Deposit facility: -0.1% → -0.2%

- 2. Decision on starting ABS and covered bond purchases
  - Purchase program to unfold over at least two years
  - Start of covered bond purchases on Oct. 20
  - 1.7 billion euros purchased in first week, annual target is 90 billion euros

Source: ECB
Normalisation of financial market still half complete

- Lingering differences among member states in interest rates on new loans; no growth in loans outstanding to businesses

**Bank Lending Survey**
- Source: ECB

**Loans Outstanding**
- Source: ECB

**Interest Rate for New Business**
- Source: ECB

**Bank Nonperforming Loans to Total Gross Loans**
- Source: World Bank

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KIKUCHI Kohei (SUMITOMO MITSUI BANKING CORPORATION)
Massive private-sector debt and continued high unemployment are financial crisis legacies that could hinder a recovery.
Recent slowdown in momentum, despite underlying strength

Although real GDP has grown for seven consecutive quarters, business confidence is beginning to lag.
GDP in July–September grew by 7.3% over the same period the previous year, the lowest rate in five-and-a-half years; investment and consumption were particularly sluggish.

Continued easing of growth
Can the housing market make a soft landing?

- Prices of new homes are falling, exposing weaknesses in demand; the People’s Bank of China is taking steps to bolster the market, but effectiveness is questionable.

**Price of Newly Constructed Residential Buildings**
- (CY 2010 = 100)
- (y/y % chg.)

**Real Estate Investment**
- (YTD, y/y % chg.)
- Source: CEIC

**Real Estate**
- Newly Started Construction
- Buildings Sold
- Land Area Purchased
- (YTD, y/y % chg.)
- Source: Haver Analytics, CEIC

**Easing Mortgage Restrictions by PBOC**

<table>
<thead>
<tr>
<th>(before)</th>
<th>(after the end of Sep. 2014)</th>
</tr>
</thead>
<tbody>
<tr>
<td>down payments: minimum 60%</td>
<td>minimum 30%</td>
</tr>
<tr>
<td>loan rate: 110% of the benchmark</td>
<td>70% of the benchmark</td>
</tr>
</tbody>
</table>

Urged banks to shorten approval process in mortgage lending

Source: news
On Nov. 21, PBC lowered benchmark interest rates for the first time in 28 months, with lending rates being lowered from 6.0% to 5.6% and deposit rates from 3.0% to 2.75%; it also indicated it would maintain its “sound monetary policy”.
Structural reforms to move forward, albeit slowly

Steps are being taken to promote further liberalization and reduce inequalities, with the goal of restructuring the economy to reduce dependence on infrastructure projects and direct investment from abroad; further efforts are needed, though, to liberalize interest rates, establish the rule of law, and implement environmental conservation measures.

### Structural reform initiatives in recent months

<table>
<thead>
<tr>
<th>Date</th>
<th>Initiative</th>
</tr>
</thead>
<tbody>
<tr>
<td>May. 6</td>
<td>State-owned enterprises to increase payments to the national treasury (equivalent to corporate dividends) by 5 percentage points in 2014; decision aimed at sharing profits with society, to be used on social welfare, etc.</td>
</tr>
<tr>
<td>May. 21</td>
<td>Ban on issuance of municipal bonds lifted for 10 local governments, including Shanghai</td>
</tr>
<tr>
<td>Jul. 30</td>
<td>Reforms to household registration system to phase out discrepancies between urban and rural households and encourage migration of 100 million rural residents to urban areas by 2020</td>
</tr>
<tr>
<td>Jul. 1</td>
<td>Value-added tax for such utilities as small hydroelectric facilities and water treatment plants lowered to 3%</td>
</tr>
<tr>
<td>Jul. 15</td>
<td>State-owned Assets Supervision and Administration Commission announces experimental reforms at six SOEs, including China National Building Material Co. and COFCO Group, introducing larger private stakes and greater independence for directors</td>
</tr>
<tr>
<td>Oct. 2</td>
<td>Local governments allowed to issue municipal bonds under certain conditions; borrowing will require central government approval, and quotas will be set</td>
</tr>
<tr>
<td>Oct. 20–23</td>
<td>CPC plenum confirms that the “rule of law” will be reinforced and advanced; no action is taken, though, on Zhou Yongkang, an ex-Politburo member under investigation/prosecution on corruption charges</td>
</tr>
<tr>
<td>Oct. 29</td>
<td>Announcement made that the market for clearing credit card transactions will be opened to foreign firms</td>
</tr>
<tr>
<td>Nov. 6</td>
<td>Major banks notified that international transactions of RMB, which had been limited to the Shanghai Pilot Free-Trade Zone, will be expanded nationwide</td>
</tr>
<tr>
<td>Nov. 17</td>
<td>Shanghai-Hong Kong Stock Connect established for mutual stock market access</td>
</tr>
</tbody>
</table>
Emerging Countries

Capital flows begin moving outward

Note: The ratio indicates the difference in 1-year interest rates between U.S. and target countries divided by the implied volatility of the exchange rate of the two countries. Last updated: Nov 14, 2014.
Source: Bloomberg

Source: Bloomberg

Note: Last updated: Nov 14, 2014.
Source: Bloomberg
IMF World Economic Outlook repeatedly revised downward

【Revisions to GDP growth forecasts】

World

Emerging market and developing economies

Emerging and Developing Asia

Sources: IMF, “World Economic Outlook”; IIF

【Bank Lending Conditions Index】
Emerging Countries

Asian EMEs to maintain moderate recovery

- NIEs and ASEAN expect to see export-driven recovery, but there are risks of a downturn from a slump in consumption.

---

**NIEs : GDP growth rate**

<table>
<thead>
<tr>
<th>Year</th>
<th>Forecast</th>
<th>Last (Sep)</th>
<th>Last (Dec)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>2.12</td>
<td>2.2</td>
<td>2.2</td>
</tr>
<tr>
<td>2013</td>
<td>2.92</td>
<td>2.9</td>
<td>2.2</td>
</tr>
<tr>
<td>2014</td>
<td>3.4</td>
<td>3.3</td>
<td>3.3</td>
</tr>
<tr>
<td>2015</td>
<td>3.6</td>
<td>3.5</td>
<td>3.6</td>
</tr>
<tr>
<td>2016</td>
<td>3.7</td>
<td></td>
<td>3.7</td>
</tr>
</tbody>
</table>

**NIEs : Retail Sales**

- Taiwan POC, Singapore, Hong Kong SAR, Korea

**ASEAN4 : GDP growth rate**

<table>
<thead>
<tr>
<th>Year</th>
<th>Forecast</th>
<th>Last (Sep)</th>
<th>Last (Dec)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>6.3</td>
<td>5.2</td>
<td>5.2</td>
</tr>
<tr>
<td>2013</td>
<td>6.3</td>
<td>5.2</td>
<td>5.2</td>
</tr>
<tr>
<td>2014</td>
<td>4.7</td>
<td>4.7</td>
<td>4.7</td>
</tr>
<tr>
<td>2015</td>
<td>5.4</td>
<td>5.4</td>
<td>5.4</td>
</tr>
<tr>
<td>2016</td>
<td>5.2</td>
<td>5.2</td>
<td>5.2</td>
</tr>
</tbody>
</table>

**ASEAN4 : Retail Sales**

- Indonesia, Philippines, Malaysia, Thailand

**ASEAN4 : Export**

- Indonesia

Source: CEIC Data Company Ltd.
**Emerging Countries**

Trends in US and China pose risks for Asian economies

- Capital outflow could be accelerated by direction of US monetary policy, dampening growth.
- Slower growth in China could have negative impact on Asia as a whole.

### Impact of U.S. Monetary Policy Normalization on Asia

<table>
<thead>
<tr>
<th>Year</th>
<th>Bond Funds</th>
<th>Equity Funds</th>
<th>VIX</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td></td>
<td></td>
<td></td>
<td>Last Updated: Jan 14, 2015. Asia included Australia, New Zealand, China, Taiwan, Korea, Hong Kong, India, Indonesia, Malaysia, Philippines, Vietnam, Thailand, and Singapore. Sources: EPFR Global, Bloomberg.</td>
</tr>
</tbody>
</table>

### Estimated Impact of 1 Percent Decline in China on Partner Country Growth

<table>
<thead>
<tr>
<th>Region</th>
<th>ASIA</th>
<th>ASEAN5</th>
<th>Non-Asia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impact</td>
<td>Median country pair</td>
<td>Median country pair</td>
<td>Median country pair</td>
</tr>
<tr>
<td>Change Points</td>
<td>-0.32</td>
<td>-0.35</td>
<td>-0.15</td>
</tr>
</tbody>
</table>

Source: IMF, “Regional Economic Outlook”
Conditions deteriorating in Russia and Brazil, improving in India

- With their currencies plummeting, Russia and Brazil are being forced to raise the bank rate to stem inflation.
- Consumer prices are declining in India, and exchange rates are stable.

**Emerging Countries**

Note: Last updated: Jan. 15, 2014.
Sources: Bloomberg, CEIC Data Company Ltd., Haver Analytics.
Exports fluctuating but could pick up with stronger demand in Asian markets

Signs of a recovery in Japan’s real exports

- Exports fluctuating but could pick up with stronger demand in Asian markets

【Breakdown by Region】

(s.a.; q/q % chg.)

- United States
- EU
- China
- ASEAN4
- NIEs
- Others
- Real exports

【Breakdown by Goods】

(s.a.; q/q % chg.)

- Intermediate goods
- Motor vehicles and their related goods
- Consumer goods
- IT-related goods
- Capital goods and parts
- Others
- Real exports

Note: Seasonally adjusted by JCER
Recovery from the post-consumption-tax-hike dip has been weak, although foods, capital goods and parts, raw materials, and consumer goods are rising; new smartphone models in September caused a sharp upturn in IT-related goods.

Slow growth in real imports

- **Breakdown by Region**

- **Breakdown by Goods**

Note: Seasonally adjusted by JCER

Simultaneous rise in import penetration and decline in the trade specialization coefficient are seen in IT equipment and electrical machinery.

**Classification by Industry**

- Textiles
- Information and communication electronics equipment
- Non-ferrous metals
- Chemicals
- Petroleum and coal products
- Fabrics
- Iron and steel
- Electrical machinery
- General-purpose, production and business oriented machinery
- Electronic parts and devices
- Ceramics, stone and clay products
- Plastic products
- Transport equipment

**Classification by Use of Goods**

- Non-durable consumer goods
- Producer goods
- Mining and manufacturing
- Durable consumer goods
- Construction goods
- Capital goods

Notes:
1. Import penetration rate = (Import index*Import weight)/(Total supply index*Total supply weight)*100
2. Trade specialization coefficient = (Export index*Export weight-Import index*Import weight)/(Export index*Export weight+Import index*Import weight)

Sources: Ministry of Economy, Trade and Industry, “Indices of Industrial Domestic Shipments and Exports,” “Indices of Industrial Domestic Shipments and Imports”
Japan’s terms of trade have fallen to pre-2008 levels, while Germany’s have leveled off. Export and import prices on a contract currency basis have been holding steady, so the falling terms of trade are primarily due to a weaker yen.

**Continuing decline in terms of trade**

**[Terms of trade]**

- Japan: The terms of trade have declined steadily since 2005, with a sharp drop in 2007. The yen has weakened significantly since then, contributing to the decline.

- Germany: The terms of trade have remained relatively stable, with a slight increase in 2011. The contract currency basis has remained consistent, indicating that the weaker yen is the main driver of the decline in Japan.

**[Price Indexes (Japan)]**

- Export Price Index: The yen basis has remained fairly stable, while the contract currency basis has fluctuated more significantly. The yen basis has shown a slight decline, while the contract currency basis has fluctuated significantly.

- Import Price Index: The yen basis has remained stable, while the contract currency basis has fluctuated more significantly. The yen basis has shown a slight decline, while the contract currency basis has fluctuated significantly.

**Sources:**
- Cabinet Office, “Quarterly Estimates of GDP”; OECD. The figures are adjusted (2010 average=100) for comparison.
- Bank of Japan, “Corporate Goods Price Index”
Trading gains

Deteriorating terms of trade mean that national income is flowing abroad

Households and businesses will have to bear the burden of higher import prices

Source: Cabinet Office, “Quarterly Estimates of GDP”

Note: Real GDI = Real GDP + Trading gains

1. Profit = GDP - Compensation of Employees (Wages)
2. Price per unit of final demand = Nominal (domestic demand + exports) / Real (domestic demand + exports)
3. According to Cabinet Office’s “Annual Report on the Japanese Economy and Public Finance 2008”, increasing the price per unit of final demand can divide into contribution of wage, profit, and import price. Declining wage's share and profit's as shown in the above table show households and companies share the cost of the terms of the outflow of income due to the rise in the import price.

Source: Cabinet Office, “National Accounts”
The effects of the fiscal 2013 supplementary budget and the decision to move up public works spending in fiscal 2014 were felt in July–September; contract payments, which are leading indicators, have begun to decline, though, so public investment is likely to fall off going forward.

**The relationship between Public Investment, Contract amount and Value of works done**

(Seasonally Adjusted, 1994Q1 = 100)

<table>
<thead>
<tr>
<th>Nominal Public Investment</th>
<th>Value of public works contracted</th>
<th>Amount of public construction completed</th>
</tr>
</thead>
<tbody>
<tr>
<td>70</td>
<td>65</td>
<td>60</td>
</tr>
<tr>
<td>60</td>
<td>55</td>
<td>50</td>
</tr>
<tr>
<td>50</td>
<td>45</td>
<td>40</td>
</tr>
<tr>
<td>40</td>
<td>35</td>
<td>30</td>
</tr>
<tr>
<td>30</td>
<td>25</td>
<td>20</td>
</tr>
</tbody>
</table>

**Progress of the FY2013 supplementary budget business**

- Business that the central government to practice:
  - Contract preliminary stage
  - Contract start stage
  - Start stage

- Business that the local government to practice:

**Progress of business pertaining to benefits associated with the consumption tax hike**

- Temporary Welfare Benefits:
  - Application number
  - Grant decision number
  - Adding object number

- Special Interim Allowance for Families with Children:
  - (Ten thousand persons)

**Public Investment and Growth**

- Growth contribution of public investment (RHS)
- Public investment (percent of GDP)
- Real GDP growth

Source: Cabinet Office, “Survey results of Economic Measures for Realization of Virtuous Cycles (December 5th 2013, Cabinet decision)”
The forecast is premised on the consumption tax being raised from 8% to 10% in April 2017 (with no reduced rate for necessities), while the plan for a lower corporate tax rate is not reflected at this time; the fiscal 2014 supplementary budget is assumed to be around ¥600 billion in public works for disaster countermeasures; there may be room to rethink the drafting of supplementary budgets year after year.

**<Economic effects of corporate tax cuts>**

According to macro econometric models, a tax cut 1 trillion yen in the year, boosts GDP by 0.1%.

<table>
<thead>
<tr>
<th></th>
<th>First year</th>
<th>Second year</th>
<th>Third year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Real GDP(%)</td>
<td>0.09</td>
<td>0.14</td>
<td>0.12</td>
</tr>
<tr>
<td>Real private capital investment(%)</td>
<td>0.76</td>
<td>1.25</td>
<td>1.28</td>
</tr>
</tbody>
</table>

**<Budget and Implementation of Public Investment>**

**<Scale of supplementary budget>**

**<The ratio of job offers (construction)>**

Note: Budgeted amounts include carryover from previous years. Source: Ministry of Finance

The aim of raising the consumption tax was to stabilize and bolster the social security system, whose expenditures have been steadily increasing; postponing the hike only delays efforts to reduce the fiscal deficit and will lead to the accumulation of more public debt; the only alternative would be to slash social security benefits—an equally tough task.

**Outlook of Primary Balance (PB)**

<table>
<thead>
<tr>
<th>Year</th>
<th>PB (F.Y.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>-8.0</td>
</tr>
<tr>
<td>2014</td>
<td>-6.0</td>
</tr>
<tr>
<td>2015</td>
<td>-4.0</td>
</tr>
<tr>
<td>2016</td>
<td>-2.0</td>
</tr>
<tr>
<td>2017</td>
<td>0.0</td>
</tr>
<tr>
<td>2018</td>
<td>2.0</td>
</tr>
<tr>
<td>2019</td>
<td>4.0</td>
</tr>
<tr>
<td>2020</td>
<td>6.0</td>
</tr>
</tbody>
</table>

Note: PB is based on the government and the local government. IMF’s forecast is based on the general government, it is intended to match forecast of FY 2014 14/07 Cabinet Office’s PB.

**Fiscal consolidation targets for PB**

- Halving primary budget deficit to a GDP ratio by FY 2015, compared with the FY 2010 level.
- Turning this deficit into a surplus by FY 2020.

**Changes in the revenue and expenditure**

- **Tax revenue, 58.0**
- **Article 4 bonds, 5.6**
- **Special bond, 35.2**
- **Other income, 2.6**
- **Social security, -11.6**
- **Debt servicing costs, -14.3**
- **Public works, defense, educational and science promotion, etc., -25.1**
- **Distribution of local allocation tax, -16.1**

Note: The figures consider the situation in FY2017.

Sources: Created on the basis on Public Relation Office and Mitsubishi UFJ Research and Consulting “Survey and Prospects NO.22”(September 24, 2014).
JER’s policy proposal on the consumption tax (issued Oct. 31, 2014)

- Hike the rate 1 point at a time to minimize the impact on business conditions
- Implement a ¥3 trillion supplementary budget to promote energy and IT investment and support low-income households
- Remove barriers to women’s employment, reduce the corporate tax rate, and provide tax incentives for corporate investments in innovative startups

**<Economic effect of 2% tax increase at a time and by 1%>**

<table>
<thead>
<tr>
<th>Real private consumption</th>
<th>2% at a time</th>
<th>By 1%</th>
</tr>
</thead>
<tbody>
<tr>
<td>101.5</td>
<td>101.0</td>
<td>100.5</td>
</tr>
<tr>
<td>101.0</td>
<td>100.5</td>
<td>100.0</td>
</tr>
<tr>
<td>100.5</td>
<td>100.0</td>
<td>99.5</td>
</tr>
<tr>
<td>100.0</td>
<td>99.5</td>
<td>99.0</td>
</tr>
<tr>
<td>99.5</td>
<td>99.0</td>
<td>98.5</td>
</tr>
</tbody>
</table>

**<Breakdown of supplementary budget 3 trillion yen>**

<table>
<thead>
<tr>
<th>Item</th>
<th>Content</th>
<th>Scale (approximate)</th>
</tr>
</thead>
<tbody>
<tr>
<td>① Expansion of the power grid</td>
<td>1.8 trillion yen</td>
<td></td>
</tr>
<tr>
<td>② Auxiliary to the hydrogen energy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>③ Start in frequency unification that is divided in East and West</td>
<td></td>
<td></td>
</tr>
<tr>
<td>④ Auxiliary to the research funds of the next generation mobile and multi-language translation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>⑤ Underground wire</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>3 trillion yen</td>
</tr>
</tbody>
</table>

**<The feature of the group to which 5% income tax applies and Tax cut bill>**

<table>
<thead>
<tr>
<th>Status quo</th>
<th>Tax cut bill</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salary income (ten thousand yen)</td>
<td>Scale (one hundred million yen)</td>
</tr>
<tr>
<td>261-554</td>
<td>6,240</td>
</tr>
<tr>
<td>Taxable income (ten thousand yen)</td>
<td>Per person (ten thousand yen)</td>
</tr>
<tr>
<td>0-195</td>
<td>2</td>
</tr>
<tr>
<td>Tax revenue (one hundred million yen)</td>
<td></td>
</tr>
<tr>
<td>21,000</td>
<td></td>
</tr>
<tr>
<td>Number of subjects (ten thousand persons)</td>
<td></td>
</tr>
<tr>
<td>3,120</td>
<td></td>
</tr>
<tr>
<td>Amount of tax (yen / person)</td>
<td></td>
</tr>
<tr>
<td>68,041</td>
<td></td>
</tr>
</tbody>
</table>
Growth strategy: Improving the business environment

- The government has announced the goal of becoming one of the top three OECD countries in the World Bank’s Ease of Doing Business ranking by 2020 (Japan Revitalization Strategy)
- Japan, though, has been unable to narrow the gap with its rivals (ranked 29th overall and 19th among OECD countries)
- Improvements are needed in Japan’s problem areas, namely, “starting a business” and “paying taxes”

<Changes in “Doing Business” ranking>

<Rank of each topic in Japan> (Rank)

<table>
<thead>
<tr>
<th>Topic</th>
<th>2009</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Starting a Business</td>
<td>91</td>
<td>83</td>
</tr>
<tr>
<td>Dealing with construction permits</td>
<td>45</td>
<td>83</td>
</tr>
<tr>
<td>Getting electricity</td>
<td>n.a.</td>
<td>28</td>
</tr>
<tr>
<td>Registering property</td>
<td>54</td>
<td>73</td>
</tr>
<tr>
<td>Getting credit</td>
<td>15</td>
<td>71</td>
</tr>
<tr>
<td>Protecting minority investors</td>
<td>16</td>
<td>35</td>
</tr>
<tr>
<td>Paying taxes</td>
<td>123</td>
<td>122</td>
</tr>
<tr>
<td>Trading across borders</td>
<td>17</td>
<td>20</td>
</tr>
<tr>
<td>Enforcing contracts</td>
<td>20</td>
<td>26</td>
</tr>
<tr>
<td>Resolving insolvency</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

<The influence of the dissolution of the lower house of parliament>

<table>
<thead>
<tr>
<th>Policy</th>
<th>Originally planned</th>
<th>In the year snap election</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY2015 draft budget</td>
<td>Compilation of the budget in the year ⇒ To biennial</td>
<td></td>
</tr>
<tr>
<td>Health-care reform</td>
<td>The announcement of a draft in November 13 ⇒ Suspension</td>
<td></td>
</tr>
<tr>
<td>Tax reform outline by the ruling parties</td>
<td>Compilation by end of the year ⇒ Postpone to early next year</td>
<td></td>
</tr>
<tr>
<td>Advancement of Women bill</td>
<td>Establish schedule in the current Diet session ⇒ The abandonment of establishment</td>
<td></td>
</tr>
<tr>
<td>Worker Dispatch Law amendment</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Nihon Keizai Shim bun
Tight labor market to continue

- Unemployment and jobs-to-applicants ratios improving, but mismatches in labor demand and supply still persist
- Labor inputs are rising, and qualitative improvements are being seen, such as reductions in workers reluctantly employed under nonregular formats

Note: Labour input = The number of Employees × Total hours worked
Wages should continue rising

- Margins of nominal wages hikes expanding, with July–September seeing the biggest jump since 2008
- Winter bonuses also expected to be quite high, with another increase in basic salary expected in 2015

**Nominal wage indices**

- Special wages
- Non-scheduled wages
- Scheduled wages
- Total

**Scheduled wages**

- Part-time employees ratio
- Part-time employees wages
- Full-time employees wages
- Scheduled wages

**Pay-scale raise**

- Ratio of pay-scale raise to the increase in total wages (RHS)
- The implementation rate for pay-scale raise

**Bonuses**

- Summer
- Winter

Note: Raise of wages consists of regular pay hike and pay-scale raise.

Employee compensation outlook

- Moderate upswing expected, thanks to improving income environment; prolonged production adjustment, though, could pose risks

---

**Income environment**

**[Compensation of Employees]**

- The number of Employed persons
- Wages indices
- Nominal Compensation of Employees

**Corporate Earnings and Labour's Share**

- Labour's share (based on SNA)
- Labour's share (2004-2007 average)
- Current Profits (RHS)

**Production Activities and Labour Market**

- The number of employed persons
- Wages indices

**Compensation of Employees**

- Nominal Compensation of Employees
- Real Compensation of Employees

**Corporate Earnings and Labour's Share**

- Corporate Earnings are seasonally adjusted by JCEC.

**Notes:**
- Labour's Share = Nominal Compensation of Employees / Nominal GDP.
- This deflator is the Private Consumption (less imputed rent, FISIM) deflator.

---

Source:
- Ministry of Internal Affairs and Communications, "Labour Force Survey";
- Cabinet Office, "Quarterly Estimates of GDP";
- Ministry of Finance, "Financial Statements Statistics of Corporations by Industry, Quarterly"
Recovery from post-tax-hike slump has been slow

- Indicators of consumption levels are down near figures seen after the March 2011 disaster; the recovery has been particularly slow for durable goods.
- Nominal wage hikes are lagging behind rises in consumer prices, dampening consumer confidence.

**Graphs and Charts:**
- Index of Consumption Expenditure Level and Real Consumption Expenditure.
- Domestic Consumption of Households of by goods.
- Economy Watchers Survey and Consumer Confidence Survey.
- Consumer Price Index and Nominal Wages Per Capita.
Consumption

(Supply-side) sales figures moving toward recovery

- Recovery trend in retail and service sales becoming clearer following post-tax slump
- Auto and electric appliance sales are still stagnant but may have bottomed out

<Car Sales>
(Seasonally Adjusted, Ten thousand units)

Source: Japan Automobile Dealers Association, The National Mini Vehicles Association

<Retail Sales>
(Seasonally Adjusted, CY2010=100)

Source: Ministry of Economy, Trade and Industry, "Commercial Survey"

<Consumer Electronics Sales>
(Seasonally Adjusted, CY2010=100)

Source: Ministry of Economy, Trade and Industry, "Commercial Survey"

<Activity Index of Tertiary Industry>
(CY2005=100)

Source: Ministry of Economy, Trade and Industry, "Activity Index of Tertiary Industry"
Post-tax-hike discrepancies exist between households, generations, and regions

- Consumption sluggish among young people and low-income households, compared to senior citizens and high-income households
- Gaps in pace of recovery between urban and nonurban department store sales, perhaps the result of different rates at which consumer prices are rising

<Expenditure and Income by age group (May-September 2014)>
(y/y % chg.)

20s or less 30s 40s 50s 60s 70s over
Real Income
Consumption Expenditure

<Regional Department Store Sales>

Japan Ten Cities Ten Other Cities Tokyo Osaka
April-June '14
July-September '14

<Expenditure and Income by each income level (May-September 2014)>
(y/y % chg.)

I II III IV V
Real Income
Consumption Expenditure

<Changes in Consumer Prices (Japan and Tokyo)>
(y/y % chg)

Japan Tokyo

Note: Consumer price index Overall except for homeownership of imputed rent.
Source: Ministry of Internal Affairs and Communications, "Consumer Price Index"
Rise in nominal employee compensation should result in higher-paced recovery in October–December 2014

**<Scenario of Consumption Tax Increase>**

<table>
<thead>
<tr>
<th>Consumption Tax Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Consumption Tax Rate</strong>: 8% to 10%</td>
</tr>
<tr>
<td><em>Introduction time</em>: Assumed to be introduced in April 2017.</td>
</tr>
<tr>
<td><em>Reduced tax rate</em>: Not applicable</td>
</tr>
</tbody>
</table>

**Influence of when compared to 1997**

<table>
<thead>
<tr>
<th>Form</th>
<th>2014</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) DurableGoods</td>
<td>1.8 times</td>
<td>0.3 times</td>
</tr>
<tr>
<td>(2) Semi-DurableGoods</td>
<td>1.4 times</td>
<td>0.8 times</td>
</tr>
<tr>
<td>(3) Non-DurableGoods</td>
<td>1.4 times</td>
<td>1.2 times (0.5 times)</td>
</tr>
<tr>
<td>(4) Services</td>
<td>0.1 times</td>
<td>0.1 times</td>
</tr>
</tbody>
</table>

Note: The figures of the brackets include the reduced tax rate on grocery products.

**<Income Effect and Substitution Effect>**

<table>
<thead>
<tr>
<th>Contribution to GDP by the consumption tax hike</th>
<th>Income Effect</th>
<th>Substitution Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY2013</td>
<td>0.5</td>
<td>0.0</td>
</tr>
<tr>
<td>FY2014</td>
<td>-1.2</td>
<td>-0.7</td>
</tr>
<tr>
<td>FY2015</td>
<td>-0.2</td>
<td>-0.2</td>
</tr>
<tr>
<td>FY2016</td>
<td>0.2</td>
<td>0.0</td>
</tr>
</tbody>
</table>

Note: Contribution to real GDP growth rate, %pt.

**<Outlook of Last-minute Demand and Downturn>**

Source: Cabinet Office, "Quarterly Estimates of GDP" (Quarterly)
New housing starts in Oct. exceeded 900,000 units/year since May for the first time in six months

---

**Number of Housing Starts (Contribution)**

(q/q % chg., Contribution %pt)

- Extend tax deduction on home loan
- Flat35S advantageous interest rate with 1.0% Housing eco points (Oct 2012 end)
- Flat35S advantageous interest rate with 0.7% (Oct 2012 end)

Source: Ministry of Land Infrastructure Transport and Tourism, “Statistics of Housing Starts”

---

**Number of Housing Starts (s.a., ann)**

(s.a., ann, 10,000 units)

- Built For Sale
- Issued
- Rented
- Owned
- Total

08:1 09:1 10:1 11:1 12:1 13:1 14:3

Note: 70% = neutral.

Source: Ministry of Land Infrastructure Transport and Tourism, “Statistics of Housing Starts”

---

**Condominium Sales and Stocks (Tokyo metro area)**

(Units)

- New Condominium Sales
- Condominium Stocks

00/01 02/01 04/01 06/01 08/01 10/01 12/01 14/11

Note: Original Seasonally Adjusted.

Source: Real Estate Economic Institute Co., LTD, “National Condominium Market Report”

---

**Initial Month Sales Contract Rate (Condominium)**

(%) 

- Tokyo metro area
- Kinki region

05/01 06/01 07/01 08/01 09/01 10/01 11/01 12/01 13/1 14/1

Note: 70% = neutral.

Source: Real Estate Economic Institute Co., LTD, “National Condominium Market Report”

---

MIYAJIMA Hiroomi (JAPAN POST INSURANCE Co.)

Signs of bottoming out
There were expectations that new orders would pick up in anticipation of another last-minute buying spree prior to a second hike in the consumption tax, but the outlook is now opaque following the postponement decision; low interest rates should buttress housing investment in the interim.

**<Consumer Sentiment>**
- Real estate purchasing attitude index
- DI for future conditions (Housing)

**<Trends in Housing Market in the Second half of 2014>**
- Bad time to buy 27.7%
- Best time to buy 72.3%

**<Survey for Consumer>**
- Purchase of housing in the second half and the factors
  - 1st: The low level of mortgage interest rates
  - 2nd: The last-minute demand before the next consumption tax hike
  - 3rd: Anticipation of higher interest rates
  - 4th: Enhancement of measures for the consumption tax hike like the tax deduction on home loan
  - 5th: Anticipation of higher housing prices

**<Survey for Homebuilders>**
- Expected sales and ordered received in the second half and the factors
  - 1st: The last-minute demand before the next consumption tax hike
  - 2nd: The low level of mortgage interest rates
  - 3rd: Recovery from the economic downturn after the consumption tax hike
  - 4th: Anticipation of higher housing prices
  - 5th: Expectation of economic recovery
Real private housing investment should begin growing in January–March 2015, peaking in July–September (the path being somewhat smoother if tax hike is postponed).

Possibility exists that rising construction costs and, over the medium term, increased housing stock could dampen new housing starts (limits in supply, particularly in sales of lots, are an additional factor).
Industry research team

Basic tenor will be for growth in earnings, as weak yen bolsters processing industries

- Machinery sectors will see further boost in earnings; construction and real estate sectors turn bullish
- Anxieties voiced about rising electricity costs and future labor shortages; mixed signals from consumer-related industries

<Profit Outlook of Listed Companies>

<table>
<thead>
<tr>
<th>Industry</th>
<th>Pre-term projection</th>
<th>Pre-term =&gt; Aug.</th>
<th>As of August</th>
<th>Aug. =&gt; Nov.</th>
<th>As of November</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fishery, Agriculture &amp; Forestry</td>
<td>14.3</td>
<td>14.3</td>
<td>↑</td>
<td>28.7</td>
<td></td>
</tr>
<tr>
<td>Mining</td>
<td>▲ 8.9</td>
<td>↑</td>
<td>▲ 8.1</td>
<td>▲ 12.8</td>
<td></td>
</tr>
<tr>
<td>Construction</td>
<td>▲ 5.8</td>
<td>▲ 6.0</td>
<td>↑</td>
<td>2.1</td>
<td></td>
</tr>
<tr>
<td>Foods</td>
<td>2.6</td>
<td>2.6</td>
<td>↑</td>
<td>1.7</td>
<td></td>
</tr>
<tr>
<td>Textiles &amp; Apparels</td>
<td>10.5</td>
<td>10.5</td>
<td>↑</td>
<td>11.7</td>
<td></td>
</tr>
<tr>
<td>Pulp &amp; Paper</td>
<td>0.9</td>
<td>0.9</td>
<td>↑</td>
<td>▲ 17.7</td>
<td></td>
</tr>
<tr>
<td>Chemicals</td>
<td>4.1</td>
<td>4.6</td>
<td>↑</td>
<td>5.8</td>
<td></td>
</tr>
<tr>
<td>Pharmaceutical</td>
<td>▲ 10.6</td>
<td>↑</td>
<td>▲ 10.5</td>
<td>▲ 14.2</td>
<td></td>
</tr>
<tr>
<td>Oil &amp; Coal Products</td>
<td>▲ 16.6</td>
<td>↑</td>
<td>▲ 8.5</td>
<td>▲ 25.1</td>
<td></td>
</tr>
<tr>
<td>Rubber Products</td>
<td>4.8</td>
<td>4.8</td>
<td>↑</td>
<td>▲ 0.3</td>
<td></td>
</tr>
<tr>
<td>Glass &amp; Ceramics Products</td>
<td>6.2</td>
<td>8.3</td>
<td>↑</td>
<td>12.6</td>
<td></td>
</tr>
<tr>
<td>Iron &amp; Steel</td>
<td>7.3</td>
<td>7.8</td>
<td>↑</td>
<td>11.7</td>
<td></td>
</tr>
<tr>
<td>Nonferrous Metals</td>
<td>6.5</td>
<td>6.7</td>
<td>↑</td>
<td>16.4</td>
<td></td>
</tr>
<tr>
<td>Metal Products</td>
<td>▲ 3.0</td>
<td>↑</td>
<td>▲ 3.8</td>
<td>▲ 8.7</td>
<td></td>
</tr>
<tr>
<td>Machinery</td>
<td>6.9</td>
<td>6.4</td>
<td>↑</td>
<td>10.0</td>
<td></td>
</tr>
<tr>
<td>Electric Appliances</td>
<td>10.5</td>
<td>11.4</td>
<td>↑</td>
<td>14.2</td>
<td></td>
</tr>
<tr>
<td>Transportation Equipment</td>
<td>0.6</td>
<td>1.0</td>
<td>↑</td>
<td>6.7</td>
<td></td>
</tr>
<tr>
<td>Precision Instruments</td>
<td>11.7</td>
<td>8.4</td>
<td>↑</td>
<td>9.7</td>
<td></td>
</tr>
<tr>
<td>Other Products</td>
<td>12.0</td>
<td>12.0</td>
<td>↑</td>
<td>12.1</td>
<td></td>
</tr>
<tr>
<td>Land Transportation</td>
<td>▲ 2.8</td>
<td>↑</td>
<td>▲ 2.6</td>
<td>▲ 0.9</td>
<td></td>
</tr>
<tr>
<td>Marine Transportation</td>
<td>20.0</td>
<td>0.8</td>
<td>↑</td>
<td>0.7</td>
<td></td>
</tr>
<tr>
<td>Air Transportation</td>
<td>▲ 4.9</td>
<td>↑</td>
<td>▲ 4.9</td>
<td>↑</td>
<td></td>
</tr>
<tr>
<td>Warehousing &amp; Harbor Transportation</td>
<td>5.8</td>
<td>6.4</td>
<td>↑</td>
<td>8.6</td>
<td></td>
</tr>
<tr>
<td>Information &amp; Communication</td>
<td>▲ 2.6</td>
<td>↑</td>
<td>▲ 2.5</td>
<td>▲ 9.5</td>
<td></td>
</tr>
<tr>
<td>Wholesale Trade</td>
<td>12.2</td>
<td>12.0</td>
<td>↑</td>
<td>▲ 5.1</td>
<td></td>
</tr>
<tr>
<td>Retail Trade</td>
<td>6.5</td>
<td>5.7</td>
<td>↑</td>
<td>1.2</td>
<td></td>
</tr>
<tr>
<td>Real Estate</td>
<td>▲ 7.0</td>
<td>↑</td>
<td>▲ 7.0</td>
<td>▲ 3.4</td>
<td></td>
</tr>
<tr>
<td>Services</td>
<td>0.1</td>
<td>▲ 6.0</td>
<td>↑</td>
<td>▲ 0.1</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>2.3</td>
<td>2.3</td>
<td>↑</td>
<td>2.4</td>
<td></td>
</tr>
</tbody>
</table>

Notes: Companies listed on the First Section of the TSE (excluding financing and electric power & gas) whose fiscal year end in March. Retail trade includes companies whose fiscal year end in February. Updated on Nov. 19, 2014.

Source: QUICK

<Corporate Sentiment>

Views expressed at hearings and IR briefings, by sector

Autos - Further upturn in profitability of exports, buoyed by strong US demand; compact cars struggling in domestic market

Auto parts - Orders from automakers uneven; some second-tier subcontractors being forced to adjust production

Nonelectric machinery - Orders are increasing from industries enjoying buoyant global sales, such as autos and smart phones

Transport - Domestic market is sluggish after consumption tax hike, but moves to shift production overseas are resulting in robust international sales

Construction - Contracts are plentiful, but there is concern about a labor shortage; profits are likely in spite of higher personnel costs

Real estate - Office vacancies are steadily declining, as foreign investors are being lured by the weak yen

Retail - Rising electricity costs are taking a toll on supermarkets and other retailing chains
No big cutbacks in investment or business expenses

- Investments by manufacturers are up overall; plans by nonmanufacturing sector are markedly higher compared to post-1997 hike
- No major decrease in travel (Shinkansen, taxis), advertising, and other expenses

**Note:** The graphs indicate the revision pattern of projected fixed investment in the fiscal year. The first survey for each year (March survey) is on the left, and the last survey (June survey of the following year; actual result) is on the right.

Source: Bank of Japan, "Tankan, Short-term Economic Survey of Enterprises in Japan"
Benefits of weaker yen appear mixed, with many companies burdened with higher costs

- No major gains in export volume, although the value of exports has increased in such industries as steel, chemicals, machinery, transport, and precision instruments
- A weaker yen means bigger burdens, compared to 1995 levels, owing to higher commodity prices

![Graph showing export value and quantities by industry](image)

Note: Seasonally adjusted data from Jan. 2013 through Nov. 2014.
Source: Ministry of Finance, "Trade Statistics"
Big businesses are bullish about capital investment, while SMEs have yet to benefit from a devalued yen

- Large companies are maintaining their robust spending plans, while investments by SMEs are below average
- Many SMEs are seeing procurement costs rise, eating into their profits

【Tankan Investment Projections (Software and Fixed Investment excluding Land Purchasing Expenses /All Industries)】

〈Large Enterprises〉

Source: Bank of Japan, "Tankan, Short-term Economic Survey of Enterprises in Japan"

【Change in Output Prices (Manufacturing)】

〈Large Enterprises〉

Source: Bank of Japan, "Tankan, Short-term Economic Survey of Enterprises in Japan"
Macroeconomic conditions in place for a steady recovery

- Machinery orders have rebounded; construction starts have been sluggish, though, perhaps owing to issues at construction firms.
- The anticipated growth rate has been rising gradually; financing poses no obstacles in the light of continued higher profits.

**<Leading indicator of the Capital Investment>**

(Seasonally Adjusted, CY 2010 = 100)

Orders Received for Machinery Private sector (exc. volatile orders)

Statistics on Building Construction Starts (Non-dwelling : RHS)

Note: Jul-Sep.2014 of Orders Received for Machinery is a prospect by Cabinet Office

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

**<Capital Investment/CF Expected Growth Rate>**

(Times)

(%) 1.6 1.4 1.2 1.0 0.8 0.6 0.4 0.2 0.0

80 82 84 86 88 90 92 94 96 98 00 02 04 06 08 10 12 13 (FY)

Notes: 1. Expected Growth Rate is outlook for the next 5 years (FY) 2. CF = Ordinary profits × 0.5 + Depreciation


**<Capital goods Shipment Private Non-Resi. Investment>**

(Seasonally Adjusted, CY2010 = 100)

Private Non-Resi. Investment (nominal)

Capital goods shipment(RHS)

(Quarterly)

Sources: Ministry of Economy, Trade and Industry; Cabinet Office

**<Forecast of the Operation Ratio>**

Private Non-Resi. Investment (real)

Operation Ratio (manufacturing)

Forecast

Sources: Cabinet Office, Quarterly Estimates of GDP”, Ministry of Economy Trade and Industry, “Indices of Industrial Production”
Investments driven by the nonmanufacturing sector, though hampered by labor shortages and rising construction costs

- Domestic investments by manufacturers are mainly to replace existing equipment or are R&D-related; lull expected in overseas investment
- Investment enthusiasm high in transport and real estate; retail-related industries, though, are confronting labor shortages, rising construction costs

【Investment Trends】
Views expressed at hearings and in public documents, by sector

<table>
<thead>
<tr>
<th>Industry</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Autos</td>
<td>Centered on North American market; domestic investment focused on development of new models and next-generation vehicles</td>
</tr>
<tr>
<td>Auto parts</td>
<td>Domestic spending to maintain production levels or to replace equipment; companies increasingly moving offshore to support local procurement activities of automakers</td>
</tr>
<tr>
<td>Nonelectric machinery</td>
<td>Most domestic spending is to maintain production levels, replace equipment, or boost productivity, but many companies are investing aggressively in growth areas</td>
</tr>
<tr>
<td>Transport</td>
<td>Investments being actively made to build distribution centers near large cities</td>
</tr>
<tr>
<td>Real estate</td>
<td>Shortages of hotels and distribution facilities being felt, while plans for some shopping malls are being postponed due to lack of workers</td>
</tr>
<tr>
<td>Retail</td>
<td>Sluggish consumer spending and rising construction costs have prompted supermarkets and convenience store chains to curb new store openings</td>
</tr>
</tbody>
</table>

【Software and fixed investment excluding land】
(y/y % change)

Source: Ministry of Finance, "Financial Statements Statistics of Corporations by Industry, Quarterly"

【Investment overseas / domestic investment】
(%)
Pace of inflation slowing, with CPI to dip below 1%

The steady rise in the prices of domestic corporate goods and imports is slowing

The rise in CPI (excluding perishable foods) has also slowed, reflecting the drop in energy prices.
Prices of services and durable goods, which continued rising, are reducing the positive contribution.

Due to falling crude oil prices, the growth rate of fuel, light & water charges weaken; that of public transportation and telecommunication changed negative.

Comparison between the Current fiscal year and the Past

Core CPI was 2%
Inflation expectations fall short of BOJ target

**Inflation Expectations of Households**

- **(y/y % chg.)**

- **Today**
- **Over the next year**
- **Over the next 5 years**

Note: Figures are estimated using the modified Carlson-Parkin method.
Sources: Bank of Japan,"Results of the 59th Opinion Survey on the General Public's Views and Behavior (September 2014 Survey)"; Ministry of Internal Affairs and Communications,"Consumer Price Index".

**Inflation Swap Rate & BEI**

- **Inflation Swap Rate (5Y5Y)**
- **BEI (10 years)**

Notes: From the January 2012 to the September 2013, BEI (10 years) is calculated using yield date for issue No.16 of the inflation-indexed JGBs. From the October 2013 to the March 2014, using yield date for issue No.17 of the inflation-indexed JGBs. From the April 2014 to the September 2014, using yield date for issue No.18 of the inflation-indexed JGBs. From the October 2014, using yield date for issue No.19 of the inflation-indexed JGBs. Last updated: January 13, 2015.
Sources: QUICK, Bloomberg

**Inflation Expectations of Economists**

- **(%)**

Notes: Figures of ESP indicate the total average of CPI (all items less fresh food). Figures of BOJ indicate the median of the Policy Board members' forecasts. Exclude the consumption tax.
Sources: JCER,"ESP Forecast"; Bank of Japan,"Outlook for Economic Activity and Prices".

**Inflation Expectations of Enterprises**

- **(%)**

Notes: All Industries and Enterprises, Average of Outlook of General Prices. Figures exclude the effects of the consumption tax hikes.
Source: Bank of Japan,"Tankan, Short-term Economic Survey of Enterprises in Japan".

---

OTSUKA Takahito (Central Japan Railway Company)
2% core CPI inflation will be difficult to achieve

【Output Gap and Inflation Rate: Phillips Curve】
(CPI (all items less fresh food), y/y % chg.)

<table>
<thead>
<tr>
<th>Period</th>
<th>Intercept</th>
<th>Slope</th>
<th>R-squared</th>
<th>Output gap for inflation rates 2% (º)</th>
</tr>
</thead>
<tbody>
<tr>
<td>83:1~14:3</td>
<td>0.70</td>
<td>0.39</td>
<td>0.69</td>
<td>3.6</td>
</tr>
<tr>
<td>83:1~95:4</td>
<td>1.03</td>
<td>0.32</td>
<td>0.60</td>
<td>3.1</td>
</tr>
<tr>
<td>96:1~14:3</td>
<td>0.36</td>
<td>0.27</td>
<td>0.50</td>
<td>6.0</td>
</tr>
</tbody>
</table>

Notes: Figures for the CPI are adjusted to exclude the estimated effect of changes in the consumption tax rate. The Output Gap is estimated by Bank of Japan. The number of lags is chosen so that the cross-correlation between the Output Gap and the CPI is maximized.

Sources: Ministry of Internal Affairs and Communications, "Consumer Price Index"; Cabinet Office, Bank of Japan

【Expectations of Output Gap】

<table>
<thead>
<tr>
<th>Year</th>
<th>JCR</th>
<th>ESP</th>
<th>BOJ</th>
</tr>
</thead>
<tbody>
<tr>
<td>13 F.Y.</td>
<td>SA160R</td>
<td>SA159R</td>
<td>January</td>
</tr>
<tr>
<td>14 F.Y.</td>
<td>1.0</td>
<td>1.0</td>
<td>1.0</td>
</tr>
<tr>
<td>(Include the consumption tax)</td>
<td>3.0</td>
<td>3.0</td>
<td>3.0</td>
</tr>
<tr>
<td>15 F.Y.</td>
<td>0.9</td>
<td>0.9</td>
<td>0.8</td>
</tr>
<tr>
<td>(Include the consumption tax)</td>
<td></td>
<td></td>
<td>1.3</td>
</tr>
<tr>
<td>16 F.Y.</td>
<td>1.1</td>
<td>1.3</td>
<td>2.1</td>
</tr>
<tr>
<td>(Include the consumption tax)</td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>

Notes: Figures for BOJ indicate the median of the Policy Board members' forecasts. Figures of ESP indicate the total average of CPI(all items less fresh food). Figures of JCR at SA159R was estimated on the assumption the reduced tax rate would be applied to food from October 2015.

Sources: Ministry of Internal Affairs and Communications; Bank of Japan; JCR