
FY2012 and FY2013 Economic Outlook

August 2012

Key points of Mizuho Research Institute's (MHRI) outlook on the economy in FY2012 and FY2013 reflecting *The First Preliminary Quarterly Estimates of GDP (1st QE)* of Japan for the Apr-Jun quarter of 2012

<The US Economy >

- ◆ **The “fiscal cliff” will serve as a drag upon growth. Household and corporate spending behavior will also turning bearish**
 - 2012: +2.0% (previous forecast +2.0%)
 - 2013: +1.3% (previous forecast +1.3%)

<The Eurozone Economy >

- ◆ **Lingering uncertainties regarding the sovereign debt crisis among south European countries. Fiscal austerity will drag down growth**
 - 2012: -0.4% (previous forecast -0.2%)
 - 2013: +0.3% (previous forecast +0.7%)

<The Asian Economy >

- ◆ **Weak growth due to stagnant exports. Mild recovery of Chinese economy on the back of stimulus measures**
 - 2012: +6.4% (previous forecast +6.5%)
 - 2013: +6.4% (previous forecast +6.3%)

<The Japanese Economy >

- ◆ **Domestic demand-led recovery due to reconstruction-related demand. Growth will slow down in the second half of fiscal year given the end of the eco-car subsidies**
 - FY2012: +2.1% (previous forecast +2.1%)
- ◆ **Peak-out of reconstruction-related demand. In the second half of fiscal year, last-minute demand prior to tax hike will boost demand**
 - FY2013: +1.3% (previous forecast +1.3%)

This English-language translation is based upon the outlook in Japanese released on August 15, 2012. This publication is compiled solely for the purpose of providing readers with information and is in no way meant to encourage readers to buy or sell financial instruments. Although this publication is compiled on the basis of sources which MHRI believes to be reliable and correct, MHRI does not warrant its accuracy and certainty. Readers are requested to exercise their own judgment in the use of this publication. Please also note that the contents of this publication may be subject to change without prior notice.

I. The global economy

Worldwide economic stagnation in the Apr-Jun quarter of 2012

The Apr-Jun quarter of 2012 saw a broad stagnation of the global economy such as the economic slowdown in the US and China.

US economic growth slowed down to +1.5 q-o-q p.a. in the Apr-Jun quarter (Jan-Mar quarter: +2.0% q-o-q p.a.) (**Chart 1**). The moderation of domestic demand such as personal consumption and capital investment served to drag down growth.

Eurozone real GDP growth stood at -0.7% q-o-q p.a. in the Apr-Jun quarter (Jan-Mar quarter: +0.1% q-o-q p.a.) Even though the German economy continued to grow, economic growth in countries such as Italy and Spain remained in negative territory due to stringent fiscal austerity measures.

In Asia, many of the countries saw their economies slow down due to the stagnation of exports. In addition to the moderation of South Korea's economic growth, the pace of Singapore's economic growth dipped into negative territory. Even though the pace of economic growth of Taiwan and Vietnam picked up slightly, both economies lacked momentum.

[Chart 1: Real GDP growth of major countries and areas]

| | 2010 | | 2011 | | | | 2012 | |
|-------------|---------|---------|---------|---------|---------|---------|---------|---------|
| | Jul-Sep | Oct-Sep | Jan-Mar | Apr-Jun | Jul-Sep | Oct-Dec | Jan-Mar | Apr-Jun |
| US | 2.6 | 2.4 | 0.1 | 2.5 | 1.3 | 4.1 | 2.0 | 1.5 |
| Eurozone | 1.7 | 1.4 | 2.9 | 0.7 | 0.4 | -1.3 | 0.1 | -0.7 |
| Germany | 2.8 | 2.4 | 5.0 | 1.8 | 1.5 | -0.6 | 2.0 | 1.1 |
| France | 1.7 | 1.5 | 3.5 | 0.2 | 1.1 | 0.0 | 0.1 | -0.2 |
| Italy | 1.5 | 0.6 | 0.4 | 1.4 | -0.9 | -2.9 | -3.3 | -2.9 |
| Japan | 3.1 | 0.0 | -7.7 | -1.9 | 7.4 | 0.3 | 5.5 | 1.4 |
| South Korea | 2.7 | 2.5 | 5.3 | 3.4 | 3.4 | 1.3 | 3.5 | 1.5 |
| Taiwan | 3.7 | 2.3 | 10.4 | 2.1 | -1.9 | -2.1 | 1.3 | 3.2 |
| Hong Kong | 3.7 | 7.1 | 12.2 | -1.5 | 0.3 | 1.6 | 2.6 | -0.2 |
| Singapore | -15.9 | 6.9 | 19.7 | -3.0 | 2.0 | -2.5 | 9.5 | -0.7 |
| Thailand | 1.0 | 6.8 | 4.6 | -0.8 | 4.6 | -36.7 | 52.1 | |
| Philippines | 2.5 | 2.5 | 3.8 | 5.1 | 2.1 | 6.9 | 10.2 | |

(Q-o-q % change, p.a.)

| | (Y-o-y % change) | | | | | | | |
|-----------|------------------|-----|-----|-----|-----|-----|-----|-----|
| China | 9.6 | 9.8 | 9.7 | 9.5 | 9.1 | 8.9 | 8.1 | 7.6 |
| Malaysia | 5.2 | 4.8 | 5.0 | 4.3 | 5.7 | 5.2 | 4.7 | |
| Indonesia | 5.8 | 6.8 | 6.4 | 6.5 | 6.5 | 6.5 | 6.3 | 6.4 |
| Vietnam | 7.2 | 7.3 | 5.6 | 5.7 | 6.1 | 6.1 | 4.0 | 4.7 |
| India | 7.6 | 8.2 | 9.2 | 8.0 | 6.7 | 6.1 | 5.3 | |

Sources: Datastream, CEIC, statistics of the relevant countries and areas

The Chinese economy continued to slow down, recording growth of +7.6% y-o-y in the Apr-Jun quarter (Jan-Mar quarter: +8.1% y-o-y). Manufacturers are adjusting production and inventories amid rising uncertainties regarding exports and real estate investment.

Meanwhile, the Japanese economy continued to record growth in positive territory at +1.4% q-o-q p.a. in the Apr-Jun quarter (Jan-Mar quarter: +5.5% q-o-q p.a.). Even though external demand turned out to be slightly stagnant, public investment continued to grow on the back of reconstruction demand and capital investment grew due in part to a rebound from the drop in the previous quarter. All in all, Japan's growth was driven mainly by domestic demand.

The rate of global economic growth (the weighted average of all the countries and areas within the scope of MHRI's economic forecast) is predicted to slow down to +3.3% in 2012 from +3.8% in 2011 (**Chart 2**). Growth in 2013 is also expected to moderate further to +3.2%. The eurozone and US economies are forecast to remain on weak footing due to the impact of fiscal tightening. Many of the emerging economies are also expected to slow down, mainly among countries with a high degree of dependence upon exports to the developed economies and countries which are susceptible to the decline of capital inflows from the US and Europe.

The global economy will continue to slow down in 2013

[Chart 2: Outlook on the global economy]

| Calendar year | (Y-o-y % change) | | | | (Y-o-y % change) | |
|-------------------------------|------------------|------------------|--------------------|--------------------|-----------------------------------|------|
| | 2010 (Actual) | 2011 (Actual) | 2012 (Forecast) | 2013 (Forecast) | 2012 (Previous: June forecast) | 2013 |
| Total of forecast area | 5.3 | 3.8 | 3.3 | 3.2 | 3.3 | 3.1 |
| Japan, US, Eurozone | 2.5 | 1.3 | 1.2 | 0.9 | 1.3 | 1.0 |
| US | 2.4 | 1.8 | 2.0 | 1.3 | 2.0 | 1.3 |
| Eurozone | 1.8 | 1.5 | -0.4 | 0.3 | -0.2 | 0.7 |
| Japan | 4.5 | -0.8 | 2.6 | 1.0 | 2.6 | 1.1 |
| Asia | 9.2 | 7.5 | 6.4 | 6.4 | 6.5 | 6.3 |
| NIEs | 8.4 | 4.0 | 2.2 | 1.9 | 2.4 | 1.9 |
| ASEAN5 | 7.0 | 4.4 | 5.2 | 4.3 | 5.1 | 4.3 |
| China | 10.4 | 9.2 | 8.1 | 8.4 | 8.3 | 8.2 |
| India | 8.2 | 7.5 | 5.9 | 5.7 | 5.9 | 5.7 |
| Brazil | 7.5 | 2.7 | 1.5 | 3.5 | — | — |
| Russia | 4.3 | 4.3 | 3.2 | 3.2 | — | — |
| Japan (FY) | 3.3 | -0.0 | 2.1 | 1.3 | 2.1 | 1.3 |
| Crude oil price (WTI,USD/bbl) | 80 | 95 | 95 | 84 | 94 | 84 |

Notes: The total of the forecast area is calculated upon the 2011 GDP share (PPP) by the IMF.
Sources: International Monetary Fund, MHRI.

Turning to the US economy, we forecast growth of +2.0% in 2012 and a subsequent slowdown to +1.3% in 2013. The intensification of downward pressures from fiscal austerity in 2013 should serve as a drag upon economic growth. In addition to the stagnation of personal consumption amid lingering household balance sheet adjustment pressures, corporate behavior is turning bearish due to the rise of future uncertainties, providing reasons to believe that capital investment will also remain weak.

Given the impact of fiscal austerity measures and the negative impact of uncertainties regarding the sovereign debt crisis upon household and corporate spending behavior, eurozone economic growth is forecast to fall into negative territory (-0.4%) in 2012. Growth in 2013 is also predicted to remain weak at +0.3% amid downward pressures stemming from fiscal tightening.

Turning to Asia, sluggish growth is expected primarily among export-driven economies. Real GDP growth among the NIEs (South Korea, Hong Kong, Taiwan, Singapore) should remain weak in 2012 (+2.2%) and 2013 (+1.9%). In contrast, the ASEAN5 countries (Thailand, Malaysia, Indonesia, the Philippines, Vietnam) possessing solid domestic demand should enjoy relatively strong growth in 2012 (+5.2%) and 2013 (+4.3%).

The Chinese economy is forecast to slow down to +8.1% in 2012 and pick up slightly to +8.4% in 2013. Given the recent monetary easing and frontloading of investment in infrastructure, the pace of growth is forecast to pick up from the second half of 2012 to the first half of 2013. Even so, in view of a cautious policy stance in view of concerns regarding inflation and the resurgence of property prices, we do not expect the rate of economic growth to rise sharply above the 8%-level.

In India, domestic demand has been slowing down due to factors such as the monetary tightening from the spring of 2010 to the fall of 2011, leading to our forecast that the rate of real GDP growth will only grow around +5.9% in 2012. Even though monetary policy has turned accommodative, fiscal policy should remain tight, providing reason to believe that the pace of growth will continue to slow down in FY2013 and stand at +5.7%.

The economy of Brazil is slowing down due to the impact of monetary tightening from the spring of 2010 to the summer of 2011 and appreciation of the Brazilian real, leading to our forecast that real GDP will stand at +1.5%. In 2013, the rate of real GDP growth should rise to +3.5% as the economy picks up from the second half of 2012 due to aggressive monetary easing by Banco Central do Brasil and fiscal policy measures.

The Russian economy is forecast to moderate, reflecting the decline in price of crude oil. The pace of real GDP growth is expected to stand at +3.2% in both 2012 and 2013, slowing down from the 4%-level growth in 2010 and 2011.

Turning to Japan, the pace of real GDP growth should pick up to +2.6% in

Concerns regarding the eurozone sovereign debt crisis will linger

2012 (on a calendar year basis), driven mainly by domestic demand due to the increase of public investment accompanying reconstruction works for recovery after the Great East Japan Earthquake and the gradual rise of personal consumption and capital investment. However, in 2013, the pace of real GDP growth is expected to moderate to +1.0% due to the ongoing stagnation of exports and the peak-out of reconstruction-related demand.

The greatest risk to the future course of the global economy is the escalation of the eurozone sovereign debt crisis. Currently, attention is focused upon developments in Spain. In June, the eurozone decided upon a plan to provide EUR100 billion for capital injections into Spanish banking institutions. However, given the subsequent rise of concerns regarding the deterioration of fiscal conditions triggered by local governments' request for support by the central government, it has only become a matter of time that the Spanish government makes a request for financial support. Even though measures such as the European Central Bank's (ECB) resumption of the purchase of Spanish government bonds and the purchase of government bonds using the European Stability Mechanism (ESM) are conceivable in order to improve Spain's government finances, progress in both these options has been slow. Even though the ESM was initially scheduled to go into operation in July, it now appears that this will be postponed until sometime in mid-September onward. The ECB stated that it would resume purchases of government bonds in the event Spain accepts a bailout by the ESM by agreeing to conditionalities regarding its fiscal rehabilitation targets. While the odds are high that the ECB will resume purchases of government bonds upon the ESM's bailout decision on Spain, developments appear to be falling behind the curve. While there is a large possibility that Greece's additional support and Italy's liquidity concerns will arise once again when we extend our forecast horizon to 2013, the implementation of preventive measures appear remote. Most likely, we shall see a recurrence of stop-gap measures in the event uncertainties intensify in the financial and capital markets.

Although the possibility of extreme scenarios such as a Greek exit from the eurozone is small, uncertainties regarding the eurozone sovereign debt crisis will continue to linger and serve as a drag upon global stock markets and keep the euro weak.

Focus of attention upon US economic policy following the presidential election

Apart from the eurozone sovereign debt crisis, the future course of US fiscal and monetary policy is gathering attention. MHRI forecasts that the Federal Reserve Board (FRB) will take an even more accommodative monetary easing stance in the second half of 2012. Depending upon the easing measures, it may lead to shifts in the capital and currency markets, such as the rise of money flows into emerging markets and commodity markets.

Turning to the US government's economic policy, we expect US economic

growth to remain low at the 1%-level in 2013 due to the impact of fiscal tightening (the so-called “fiscal cliff”). Given the recent rise of concerns regarding the fiscal cliff, the odds are high that the across-the-board reductions in discretionary spending under the *Budget Control Act of 2011* (a procedure known as “sequestration”) will be averted (although our previous *Economic Outlook* was based upon the premise of sequestration, we have changed our premise that sequestration will be avoided). Even so, the expiration of the payroll-tax holiday as well as other factors will lead to the reduction of the fiscal deficit by approximately USD300 billion (1.8% of GDP) in 2013 and serve as a drag upon US economic growth. With the US presidential election scheduled in November 2012 (**Chart 3**), a shift in economic policy after the election could lead to a change in our scenario on the US economy in 2013.

[Chart 3: Major political events]

| | Key events | Key points |
|------|-----------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|
| 2012 | Russian presidential election (4th) | Vladimir Putin regains presidency by a large margin of votes |
| Mar | Slovak parliamentary election | Pro-eurozone opposition party (center left SMER-SD) wins |
| | Japan: Cabinet approval of consumption tax bill | Deliberations started in May |
| Apr | South Korean general election (11th) | The ruling Saenuri (or New Frontier Party) maintained the majority in the National Assembly |
| May | French presidential election (2nd round run-off, 6th) | Francois Hollande of the Socialist Party wins |
| | Greek legislative election (6th) | The leading coalition suffered a debilitating defeat. The failure to form a government led to a re-election |
| Jun | Greek re-election (17th) | Former leading coalition secures the majority. Temporary abatement of concerns regarding an exit from the eurozone |
| | Spain's request for financial assistance (25th) | Funds for capital injection to Spanish banking institutions (EUR100 billion) |
| | Japan: bill on <i>Comprehensive Reform of Social Security and Tax</i> passed by House of Representatives (26th) | Political turmoil due to a large number of rebellious members in the Democratic Party of Japan |
| | EU Summit (28th, 29th) | Decision on matters such as the policy enabling direct capital injections to banking institutions by the European Stability Mechanism (ESM) |
| | Eurozone banks enhance capital adequacy ratios (end of month) | Despite ongoing asset compression by banking institutions, major turmoil appears remote for the time being |
| Jul | Spain: Valencia requests financial assistance toward central government (20th) | Rise of risks regarding the need for financial assistance toward the government of Spain |
| Aug | Japan: bill on <i>Comprehensive Reform of Social Security and Tax</i> passed by House of Councilors (10th) | Prime Minister Yoshihiko Noda stated that an election would be called "soon" |
| Sep | Japan: end of ordinary session of Diet (8th) | Focus of attention on a snap election |
| | Establishment of European Stability Mechanism (ESM) (around mid-September?) | Pending a decision by the Federal Constitutional Court of Germany |
| | Leadership elections of the Democratic Party of Japan and the Liberal Democratic Party of Japan | Risk of policy paralysis due to change of prime minister |
| Oct | 18th National Congress of the Communist Party of China | Risk of a more hardline stance by China toward Japan due to the rise of conservatives |
| Nov | US presidential election (6th) | Risk of rising future uncertainties due to President Obama's election defeat Possible continuation of a hung Congress |
| Dec | South Korean presidential election (19th) | |
| 2013 | Italian general election (spring) | |
| | Japanese general elections (end of term of the House of Representatives on August 29th) | |
| | German general election (fall) | |

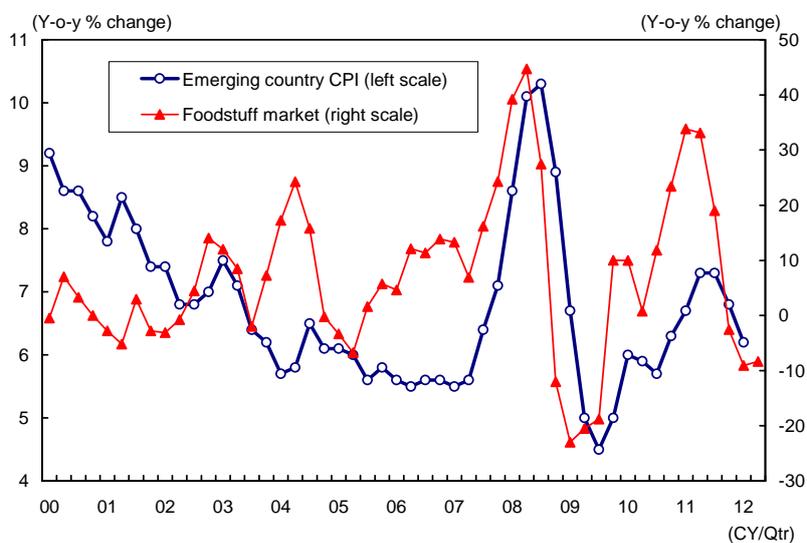
Source: Mizuho Research Institute

The surge of grain prices is also a risk factor

Furthermore, the surge of the grain markets is rising as a risk which may have an adverse impact upon the emerging economies. The wheat, soybean and corn markets surged over the summer months, reflecting the tightening of supply-demand conditions stemming from the droughts in the US. In view of the harvest season, the chances are high that grain prices will remain high in 2012.

The rise of the grain markets will have a significant impact upon inflation in emerging countries due to the relatively high percentage of foodstuffs in their consumer price indexes. Many of the emerging countries are taking monetary easing measures such as tax cuts given the current stabilization of their inflation rates. However, in the event the inflation rate should rise mainly with respect to food prices, it could serve as an impediment for monetary easing. Past trends indicate that the rise of food prices is followed by the rise of inflation in emerging countries one to two quarters thereafter (**Chart 4**). Even though the future depends also on developments in other markets such as crude oil and metals, the surge of the grain markets over the summer months is expected to serve as upward pressures upon inflation rates in emerging countries from the end of 2012 to early 2013. Although grain prices should stabilize if harvests normalize from 2013 onward, its impact upon inflation in emerging countries may intensify in the event bad weather continues to produce poor harvests. In many of the emerging countries, the rise of food prices serves as a drag upon consumer spending through the decline of real incomes and also acts as an impediment toward monetary easing. Considering the possibility that some emerging countries may have no choice but to tighten monetary policy due to inflation concerns, grain market trends must be watched closely as one of the risk factors regarding the emerging economies.

[Chart 4: Food market and CPI trends (emerging countries)]



Source, International Monetary Fund, *International Financial Statistics*.

II. The Japanese economy

(1) The current state of the economy

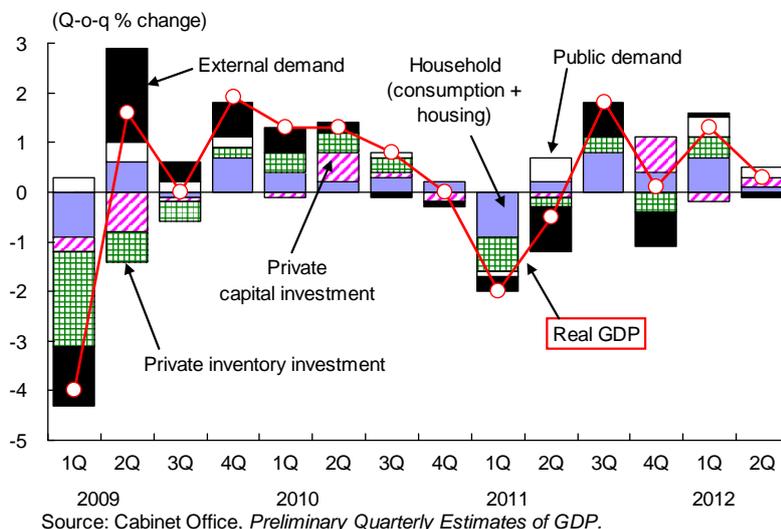
Growth remained in positive territory in the Apr-Jun quarter due to mild growth of domestic demand

Japan's real GDP grew +0.3% q-o-q (+1.4% in annualized terms) in the Apr-Jun quarter of 2012. Even though the results revealed a slowdown from the Jan-Mar quarter (+1.3% q-o-q, +5.5% p.a.), the pace of Japan's economic growth still remained in positive territory (**Chart 5**).

Domestic private demand grew +0.4% q-o-q, (contribution to quarterly real GDP growth: +0.3% pt). Although personal consumption grew a strong +1.2% q-o-q in the Jan-Mar quarter due to the impact of government subsidies for purchases of fuel-efficient cars (the "eco-car subsidies"), the high level of personal consumption was maintained by a mild increase (+0.1% q-o-q) also in the Apr-Jun quarter. Housing investment increased for the first time in two quarters (+0.8% q-o-q), boosted by construction starts in areas damaged by the earthquake-tsunami disasters. Capital investment picked up (+1.5% q-o-q), due in part to a rebound from the slump in the Jan-Mar quarter (-1.6% q-o-q). The contribution by private inventory investment to the rate of quarterly real GDP growth dipped slightly (-0.0% pt) as firms continued to work down inventories at a pace comparable to the Jan-Mar quarter.

Even though public demand managed to remain on an uptrend, growing +0.6% q-o-q (contribution: +0.2% pt), the pace of growth moderated from the Jan-Mar quarter of 2012 (+1.5% q-o-q, contribution: +0.4% pt). Anecdotal evidence points to a slow progress of the public works in connection with reconstruction from the Great East Japan Earthquake due to the compounded factors of (1) difficulties in drafting plans in the local government level, (2) delays in rubble disposal, and (3) the shortage of materials and manpower. In the Apr-Jun quarter, public investment slowed to +1.7% q-o-q from the Jan-Mar quarter (+3.6% q-o-q).

[Chart 5: Japan's quarterly real GDP growth]



Domestic demand – combining both private and public demand – grew +0.4% q-o-q (contribution: +0.4% pt). Even though the pace of growth slowed down from the Jan-Mar quarter (+1.2% q-o-q, contribution: +1.2% pt), the results may be commended for growth being driven mainly by domestic demand.

Meanwhile, export growth turned out a weak +1.2% q-o-q in the Apr-Jun quarter (Jan-Mar quarter: +3.4% q-o-q). Even though US-bound exports driven mainly by cars were relatively strong, exports to Europe and China turned out to be weak. Meanwhile, given the increase in imports of liquid natural gas (LNG), Japan's imports continued to rise in the Apr-Jun quarter (+1.6% q-o-q) (Jan-Mar quarter: +2.2% q-o-q). As a result, the contribution by external demand to quarterly real GDP growth turned out to be -0.1% pt.

(2) Outlook on the Japanese economy in FY2012 and FY2013

Even though growth will rise to +2.1% in FY2012, a slowdown is expected from the summer

In first half of FY2012 (the Jan-Mar and Apr-Jun quarters of 2012), the Japanese economy continued to follow a domestic demand-led recovery amid the stagnation of exports. The main drivers of domestic demand during this period were personal consumption and public investment. Policy measures are serving as positive effects such as the resumption of eco-car subsidies with respect to personal consumption and the implementation of public works for recovery from the Great East Japan Earthquake in terms of public investment.

However, from the Jul-Sep quarter of 2012, the pace of growth is expected to slow down over the end of the fiscal year (March 2013). Exports are predicted to remain stagnant amid the weak growth of the US and eurozone economies. While the Chinese economy should pick up slightly in the second half of 2012 on the back of economic stimulus measures, it will not have much of a positive effect upon Japan's exports and production, considering China's domestic inventory glut of materials and construction machinery. In the second half of 2012 (the Jul-Sep and Oct-Dec quarters of 2012), exports are expected to grow only at a slow pace below 1% q-o-q. In the Jan-Mar quarter of 2013, exports will fall into a temporary soft patch, reflecting a further slowdown of US economic growth due to the impact of the "fiscal cliff".

Personal consumption – the driver of domestic demand – is also forecast to stagnate from the Jul-Sep quarter of 2012. The eco-car subsidy program will likely be ended around the end of August to September as it depletes its budget earmarked for the program. From September onward, automotive sales should fall due to a backlash to the front-loading of demand thus far. On a quarterly basis, automotive sales are forecast to fall approximately 30% q-o-q in the Oct-Dec quarter of 2012 and push overall personal consumption into negative territory. Consumption expenditures other than automobiles are also expected to stall, considering that winter bonus payments are expected to fall below the year-ago

level as it did in the summer.

Meanwhile, the rise of public investment accompanying the implementation of reconstruction works should continue throughout FY2012. Since the passage of the FY2011 third supplementary budget, orders for public works have been surging mainly in the three prefectures hit by the earthquake-tsunami disasters. However, it should also be noted that delays in preparation of recovery plans among some local governments, difficulties in rubble disposal and the shortage of material and manpower are serving as a drag upon the progress of reconstruction works. Even though a sharp rise is unlikely, public investment on a fiscal year basis is expected to grow +5.8% y-o-y (FY2011: +2.9% y-o-y).

Private-sector capital investment should also remain on a gradual uptrend. Many firms – mainly in export-oriented sectors - are taking a cautious stance toward domestic investment. However, note that ever since the collapse of Lehman Brothers, capital investment has been extremely weak, falling even below the level of depreciation costs. Judging from these conditions, capital investment should continue to pick up mainly for the renewal of existing equipment. Even though the Japanese economy will slow down in the second half of FY2012 due to the stagnation of personal consumption, the economy should continue to follow a recovery track on the back of the aforementioned growth in public investment and capital investment. On a fiscal year basis, the pace of real GDP growth is forecast to rise to +2.1% (June forecast: +2.1%) in FY2012, driven by the increase of public demand accompanying reconstruction from the earthquake disaster and the recovery of domestic private demand.

Reconstruction-related demand will peak out. FY2013 growth to slow down to +1.3%

The odds are high that the demand related to reconstruction after the Great East Japan Earthquake - serving as the driver of economic recovery in FY2012 – will peak out by the end of FY2012. Since most of the public works to restore infrastructure are scheduled to be completed in FY2012, public investment is predicted to take a downturn in FY2013. That said, since public works such as those for relocations of communities to higher grounds should shift into high gear in FY2013, the pace of decline of public investment is expected to be moderate.

On the other hand, in the first half of FY2013 (the Apr-Jun and Jul-Sep quarters of 2013), personal consumption should gradually pick up from the decline stemming from the end of the eco-car subsidies. Furthermore, private capital investment is also expected to remain on a mild expansion. However, exports will likely continue to slump, resulting in the pace of growth to remain at a level of +1% p.a. or so.

In the second half of FY2013 (the Oct-Dec quarter of 2013 and Jan-Mar quarter of 2014), the last-minute rush of demand prior to the consumption tax hike should serve to push up domestic demand. The bill on *Comprehensive Reform of Social Security and Tax* – passed by the House of Representatives in June and the House of Councilors in August - sets forth a roadmap to raise the consumption tax

to 8% in April 2014 and to 10% in October 2015. In the run-up to the tax hike, last-minute demand mainly in personal consumption and housing investment should push up the rate of economic growth in the second half of FY2013. MHRI estimates that a rush of demand of approximately JPY2.9 trillion (JPY2.0 trillion in personal consumption and JPY0.9 trillion in housing investment) will arise in the second half of FY2013 prior to the tax hike from FY2014. As a result, FY2013 real GDP is forecast to be pushed up by 0.63% pt (**Chart 6**).

Thus, even though growth will remain weak in the first half of FY2013 stemming from the peak-out of public investment, the last-minute rush of demand is forecast to push up the rate of growth in the second half of the fiscal year. On a fiscal year basis, the pace of real GDP growth is forecast to slow down from FY2012 to +1.3% in FY2013 (June forecast: +1.3%).

A source of concern in the first half of FY2014 is a sharp fall of economic activity stemming from the backlash to the surge of demand and rise of prices accompanying the tax hike. FY2014 real GDP is estimated to be pushed down by 1.25% from the baseline due to the impact of the consumption tax hike, and by 1.88% from FY2013 when there was a last-minute rush of demand. At the current juncture, we believe that there is a strong possibility that the growth rate will fall into negative territory in FY2014. However, in view of the possibility that measures to alleviate the impact of the consumption tax hike will be taken – such as the adoption of reduced tax rates or some sort of tax refund – discussions on this matter must be watched closely.

[**Chart 6: Impact of the consumption tax hike (estimate)**]

| | Divergence from baseline (cumulative effect) | | | | Impact on a y-o-y basis | | |
|----------------------|----------------------------------------------|-------|-------|-------|-------------------------|------|-------|
| | 2013 | 2014 | 2015 | 2016 | 2014 | 2015 | 2016 |
| | FY | | | | FY | | |
| Real GDP | 0.63 | -1.25 | -1.18 | -1.58 | -1.88 | 0.07 | -0.40 |
| Personal consumption | 0.47 | -1.11 | -1.10 | -1.40 | -1.57 | 0.00 | -0.30 |
| Housing investment | 0.17 | -0.14 | -0.08 | -0.18 | -0.31 | 0.06 | -0.10 |

Notes: 1. The figures on real GDP represent the divergence from the baseline.

2. The figures on personal consumption and housing investment represent the contributions to the change in real GDP.

Sources: Made by MHRI based upon Cabinet Office, *National Accounts*, and others.

[Chart 7: Outlook on the Japanese economy]

| | | 2010 | 2011 | 2012 | 2013 | 2012 | | | | 2013 | | | | 2014 |
|--------------------------|--------------------------|------|------|------|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| | | FY | | | | Jan-Mar | Apr-Jun | Jul-Sep | Oct-Dec | Jan-Mar | Apr-Jun | Jul-Sep | Oct-Dec | Jan-Mar |
| GDP (real) | Q-o-q % ch | 3.3 | -0.0 | 2.1 | 1.3 | 1.3 | 0.3 | 0.3 | 0.2 | 0.1 | 0.3 | 0.4 | 0.5 | 1.1 |
| | Q-o-q % ch p.a. | -- | -- | -- | -- | 5.5 | 1.4 | 1.0 | 0.7 | 0.5 | 1.1 | 1.4 | 2.2 | 4.5 |
| Domestic demand | Q-o-q % ch | 2.6 | 1.0 | 2.2 | 1.2 | 1.2 | 0.4 | 0.3 | 0.0 | 0.2 | 0.2 | 0.3 | 0.5 | 1.1 |
| Private sector demand | Q-o-q % ch | 3.2 | 0.6 | 2.1 | 1.2 | 1.1 | 0.4 | 0.1 | -0.1 | 0.2 | 0.2 | 0.3 | 0.6 | 1.5 |
| Personal consumption | Q-o-q % ch | 1.6 | 1.2 | 1.6 | 1.3 | 1.2 | 0.1 | 0.0 | -0.4 | 0.1 | 0.2 | 0.3 | 0.8 | 2.0 |
| Housing investment | Q-o-q % ch | 2.6 | 3.8 | 1.3 | 5.6 | -1.6 | 0.8 | 0.9 | -0.1 | -0.5 | 1.7 | 2.1 | 4.0 | 1.9 |
| Capital investment | Q-o-q % ch | 3.9 | 1.1 | 3.6 | 1.7 | -1.6 | 1.5 | 0.2 | 0.5 | 0.4 | 0.4 | 0.5 | 0.4 | 0.5 |
| Inventory investment | Q-o-q contribution, % pt | 0.9 | -0.5 | 0.2 | -0.2 | 0.4 | -0.0 | 0.0 | 0.1 | 0.1 | -0.1 | -0.0 | -0.2 | -0.3 |
| Public sector demand | Q-o-q % ch | 0.7 | 2.2 | 2.5 | 1.1 | 1.5 | 0.6 | 0.6 | 0.4 | 0.2 | 0.3 | 0.2 | 0.3 | 0.1 |
| Government consumption | Q-o-q % ch | 2.5 | 1.9 | 1.8 | 1.5 | 1.0 | 0.3 | 0.5 | 0.2 | 0.1 | 0.5 | 0.5 | 0.5 | 0.2 |
| Public investment | Q-o-q % ch | -6.0 | 2.9 | 5.8 | -0.7 | 3.6 | 1.7 | 1.3 | 1.2 | 0.7 | -0.7 | -1.0 | -0.4 | -0.4 |
| External demand | Q-o-q contribution, % pt | 0.8 | -1.0 | -0.1 | 0.1 | 0.1 | -0.1 | -0.0 | 0.2 | -0.0 | 0.0 | 0.0 | -0.0 | -0.0 |
| Exports | Q-o-q % ch | 17.4 | -1.4 | 4.5 | 2.3 | 3.4 | 1.2 | 0.5 | 0.7 | -0.1 | 0.6 | 0.8 | 0.9 | 0.9 |
| Imports | Q-o-q % ch | 12.2 | 5.6 | 4.8 | 1.5 | 2.2 | 1.6 | 0.5 | -0.4 | 0.2 | 0.3 | 0.5 | 0.9 | 1.0 |
| GDP (nominal) | Q-o-q % ch | 1.2 | -2.0 | 1.6 | 1.4 | 1.4 | -0.1 | 0.5 | -0.1 | 0.4 | 0.0 | 0.7 | 0.3 | 1.3 |
| GDP deflator | Y-o-y % ch | -2.1 | -1.9 | -0.6 | 0.0 | -1.3 | -1.1 | -0.6 | -0.5 | -0.1 | 0.0 | 0.1 | 0.0 | 0.0 |
| Domestic demand deflator | Y-o-y % ch | -1.3 | -0.7 | -0.7 | -0.6 | -0.4 | -0.7 | -0.7 | -0.7 | -0.6 | -0.6 | -0.6 | -0.5 | -0.5 |

Source: Made by MHRI based upon Cabinet Office, *Preliminary Quarterly Estimates of GDP*.

| | | 2010 | 2011 | 2012 | 2013 | 2012 | | | | 2013 | | | | 2014 |
|---------------------------------------------|--------------------|-------|-------|--------|--------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| | | FY | | | | Jan-Mar | Apr-Jun | Jul-Sep | Oct-Dec | Jan-Mar | Apr-Jun | Jul-Sep | Oct-Dec | Jan-Mar |
| Industrial production | Q-o-q % ch | 9.3 | -1.0 | 2.2 | 2.0 | 1.3 | -2.0 | 1.9 | 0.7 | -0.1 | 0.0 | 0.8 | 0.8 | 0.7 |
| Ordinary profits | Y-o-y % ch | 39.0 | -2.0 | 8.6 | 5.2 | 14.1 | 20.2 | 11.6 | 4.9 | 0.6 | 1.7 | 4.3 | 6.7 | 7.8 |
| Nominal labor compensation | Y-o-y % ch | 0.5 | 0.1 | 0.0 | 0.5 | -0.0 | -0.5 | 0.1 | 0.2 | 0.3 | 0.5 | 0.6 | 0.6 | 0.5 |
| Unemployment rate | % | 5.0 | 4.5 | 4.3 | 4.2 | 4.5 | 4.4 | 4.3 | 4.3 | 4.3 | 4.2 | 4.2 | 4.1 | 4.1 |
| New housing starts | P.a., 10,000 units | 81.9 | 84.1 | 86.2 | 93.0 | 86.2 | 87.8 | 87.9 | 83.8 | 85.2 | 87.4 | 94.0 | 98.2 | 91.7 |
| Current account balance | P.a., JPY tril | 16.7 | 7.6 | 8.6 | 12.7 | 5.9 | 5.4 | 9.2 | 9.8 | 10.1 | 9.6 | 13.9 | 13.7 | 14.3 |
| Domestic corporate goods prices | Y-o-y % ch | 0.4 | 1.3 | -1.6 | -0.7 | 0.3 | -0.8 | -2.3 | -1.6 | -1.8 | -1.8 | -0.5 | -0.4 | -0.2 |
| Consumer prices | Y-o-y % ch | -0.8 | 0.0 | -0.2 | -0.1 | 0.1 | 0.0 | -0.3 | -0.2 | -0.2 | -0.3 | -0.2 | -0.1 | 0.0 |
| Uncollateralized overnight call rate | % | 0.06 | 0.08 | 0~0.10 | 0~0.10 | 0.08 | 0.08 | 0~0.10 | 0~0.10 | 0~0.10 | 0~0.10 | 0~0.10 | 0~0.10 | 0~0.10 |
| Yield on newly-issued 10-yr JGBs | % | 1.13 | 1.05 | 0.81 | 0.83 | 0.98 | 0.88 | 0.77 | 0.80 | 0.80 | 0.75 | 0.80 | 0.85 | 0.90 |
| Nikkei average | JPY | 9,961 | 9,181 | 9,200 | 9,300 | 9,300 | 9,000 | 8,900 | 9,400 | 9,100 | 8,900 | 9,100 | 9,400 | 9,600 |
| Exchange rate | JPY/USD | 86.0 | 79.0 | 79.0 | 80.0 | 79.3 | 80.2 | 78.0 | 80.0 | 79.0 | 79.0 | 79.0 | 81.0 | 82.0 |
| Crude oil price (WTI nearest term contract) | USD/bbl | 84.0 | 97.0 | 91.0 | 82.0 | 103.0 | 93.0 | 90.0 | 92.0 | 88.0 | 84.0 | 82.0 | 81.0 | 81.0 |

Notes: 1. The readings above may differ from public releases because the rates of change are calculated based upon actual results.

2. Ordinary profits are based upon the *Financial Statements Statistics of Corporations by Industry* (all industries) (ex finance & insurance, and production, transmission and distribution of electricity services).

3. Consumer prices exclude fresh food (2010 base).

4. Quarterly data on the unemployment rate, new housing starts and current account balance are seasonally-adjusted.

5. Of the finance-relate indices, the uncollateralized overnight call rate refers to the rate at the end of term and all others are averages during the relevant terms.

Sources: Made by MHRI based upon Cabinet Office, *Preliminary Quarterly Estimates of GDP*, Ministry of Economy, Trade and Industry, *Indices of Industrial Production*, Ministry of Finance, *Financial Statements, Statistics of Corporations by Industry, Quarterly*, Ministry of Internal Affairs and Communications, *Labor Force Survey*, *Consumer Price Index*, Ministry of Land, Infrastructure, Transport and Tourism, *Current Survey on Construction Statistics*, Bank of Japan, *Balance of Payments, Corporate Goods Price Index*, *Financial and Economic Statistics Monthly*, *Foreign Exchange Rates*, Japan Bond Trading Co., Ltd., *Latest Daily JGB Rates*, Nikkei Inc. and Bloomberg.

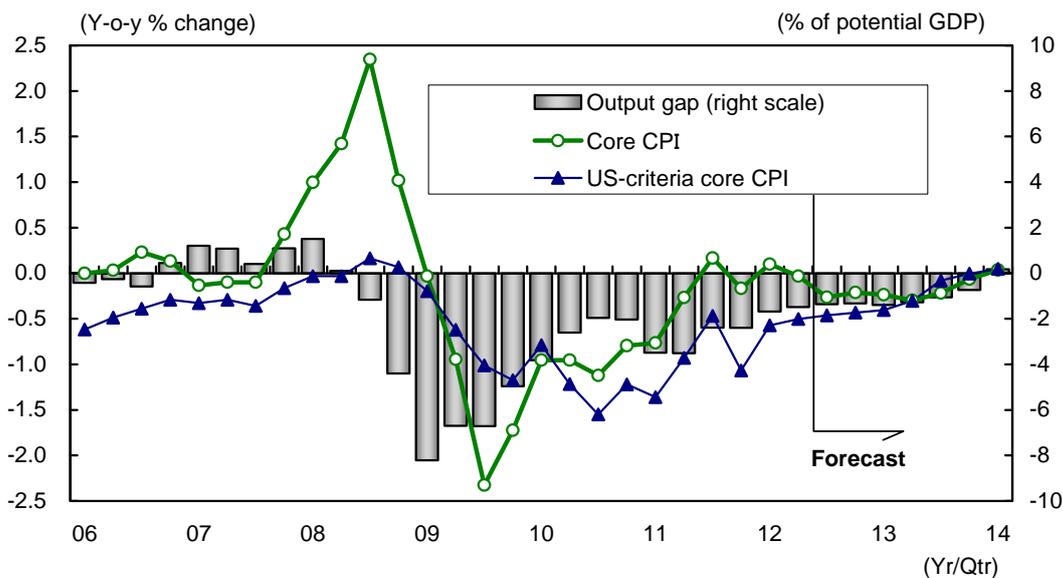
Excess supply will linger even at the end of FY2013

An exit from deflation is not yet visible

The output gap (the gap between actual GDP and potential GDP) estimated by MHRI stood at -1.5% of potential GDP (meaning an excess of supply of JPY7.9 trillion) as of the Apr-Jun quarter of 2012 (**Chart 8**). In the event the Japanese economy grows according to our latest *Economic Outlook*, the output gap should reach +0.2% (an excess of demand of JPY0.9 trillion) as of the end of FY2013, resulting in a closure of the deflationary gap. However, note that the level of economic activity in the Jan-Mar quarter of 2014 – which is the final quarter of the forecast period – is boosted by a last-minute rush of demand prior to the consumption tax hike. In the absence of the impact of such surge of demand, the output gap would be approximately -1% as of the end of FY2013.

The consumer price index excluding fresh food (“core CPI”) and the consumer price index excluding food (ex alcoholic beverages) and energy (the “US-criteria core CPI”) stood at -0.2% y-o-y and -0.6% y-o-y respectively as of June 2012. During the forecast horizon, we expect that the output gap in negative territory (the deflationary gap) will gradually contract and that the US-criteria core CPI will decline at a slower pace. Meanwhile, energy prices – thus far serving to push up the core CPI – are expected to gradually decline going forward. As a result, the core CPI which stood at 0.0% y-o-y in FY2011 is expected to follow a gradual decline in FY2012 (-0.2% y-o-y) and FY2013 (-0.1% y-o-y). While the future outlook depends largely upon commodity market trends, it is unlikely that consumer prices will continue to follow a sustained uptrend with the output gap lingering in negative territory. Thus, an exit out of deflation is unlikely during the forecast horizon.

[Chart 8: The output gap and the core CPI and US-criteria core CPI]



Notes: 1. The "core CPI" refers to the consumer price index excluding fresh foods.
 2. The "US-criteria core CPI" refers to consumer price index excluding food (ex alcoholic beverages) and energy.
 3. The "output gap" is estimated by MHRI.
 Sources: Made by MHRI based upon Ministry of Internal Affairs and Communications, *Consumer Price Index*, Cabinet Office, *National Accounts* and others.

The largest risk is an export downturn and further strengthening of the yen

Notwithstanding our main scenario outlook above, there are significant uncertainties going forward.

The greatest risk is an export downturn and further strengthening of the yen. In particular, it will be necessary to watch closely the developments surrounding an overseas economic downturn and the appreciation of the yen to the euro accompanying the escalation of the eurozone sovereign debt crisis, and the risks of a further strengthening of the yen along with monetary easing in the US.

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