Mizuho Economic Outlook & Analysis

March 2016

Note the risk of the EM slowdown setting off a global contagion

- Even though the Japanese economy avoided a recession, its pace of recovery will be slow -

◆ In 2016, the global economy is forecast to slow down for the second year in a row as the emerging market (EM) slowdown spills over to the developed market (DM) economies through the escalation of financial market turmoil. Even though a recovery is projected in 2017, keep a close eye upon downside risks to the global economy in both 2016 and 2017. The Japanese economy is still stalling, as revealed by its contraction for the first time in two quarters. While the Japanese economy should gradually pick up, the overseas economic slowdown and financial market volatility are expected to weigh down upon growth.

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1. The global economy is slowing down, with a recovery only expected from 2017

The global economy slowed down in the Oct-Dec quarter of 2015, dragged down by the major countries of the world. Especially, a slowdown of the DM economies was significant as negative impacts stemming from weather conditions and the spillover of EM economic slowdown (mainly China) put downward pressures on the DM economies. The pace of US economic growth dipped below +1% quarter-on-quarter (q-o-q) on an annualized basis, and Japanese economic growth dipped into negative territory for the first time in two quarters. The Chinese economy also moderated for the second quarter in a row despite expectations toward its economic stimulus measures. In contrast, the Asia economies (excluding China) were propped up in part by policy measures such as fiscal spending. Having said so, they still fell short of a self-sustainable recovery due to the slow pace of export recovery.

For the full year 2015, the global economy most likely slowed down to +3.2% year-on-year (y-o-y) (2014: +3.5% y-o-y) due mainly to the EM slowdown and deterioration of commodity-producing economies stemming from the fall of commodity prices (**Chart 1**). Even though our *Economic Outlook* as of December expected an upturn, we have made a sharp downward revision of our outlook for FY2016 to

[Chart 1: Outlook on the global economy]

(Y-o-y % change)

Calendar year	2013 (Actual)	2014 (Actual)	2015 (Estimate)	2016 (Forecast)	2017 (Forecast)
Total of forecast area	3.3	3.5	3.2	3.1	3.6
Japan, US. Eurozone	0.8	1.5	1.8	1.4	1.7
US	1.5	2.4	2.4	1.8	2.3
Eurozone	-0.3	0.9	1.5	1.2	1.4
Japan	1.4	-0.0	0.4	0.5	0.6
Asia	6.4	6.3	6.1	6.0	6.0
China	7.7	7.3	6.9	6.6	6.5
NIEs	2.9	3.4	2.0	1.9	2.1
ASEAN5	5.1	4.6	4.7	4.4	4.5
India	6.3	7.0	7.3	7.6	7.5
Australia	2.0	2.6	2.3	2.5	2.5
Brazil	3.0	0.1	-3.8	-3.5	0.0
Russia	1.3	0.7	-3.7	-3.3	0.5
Crude oil price (WTI, USD/bbl)	98	93	49	29	30

Note: The total of the forecast areas is calculated based on the 2013 GDP share (PPP) by the IMF.
Source: Made by MHRI based on the International Monetary Fund (IMF) and statistics of relevant countries and regions.

+3.1% y-o-y (previous outlook +3.6% y-o-y) for the second year in a row. In 2017, as the DM economies pick up and the deterioration of commodity-producing countries come to a pause, the pace of overall global economic growth is expected to rise to +3.6% y-o-y. Despite our previous view that the global economy will pick up from 2016, we have shifted our view that the recovery will be delayed to 2017.

The major reason for the downward revision for 2016 stems from the negative pressures spilling over from the EM slowdown and financial turmoil toward the DM economies. The financial market turmoil leads to restraints upon personal consumption through the negative wealth effect and fall of capital investment through the deterioration of corporate sentiment, resulting in downward pressures upon the DM economies. In particular, we have slashed our forecast on US economic growth to +1.8% y-o-y from our previous forecast (+2.5% y-o-y) because of reasons such as the stagnation of exports due to the EM slowdown which we had expected, as well as the deterioration of sentiment mentioned above. The slowdown of the US economy which generates the largest demand in the world will have ripple effects upon the overall global economy. Thus, in view of such circumstances, we have also decided to make a sharp downward revision with respect to global economic growth.

2. The crude oil slump and China's economic slowdown will persist for some time

Since the turn of the New Year, risk-aversion has been intensifying as shown by the global stock market fall and decline in long-term interest rates. The triggers of such movements were the fall of crude oil prices and the rise of concerns regarding the future course of the Chinese economy. Crude oil prices fell further stemming from speculation on the prolongation of a global crude oil glut due to the fall of expectations toward the OPEC's (Organization of Petroleum Exporting Countries) agreement to cut output reflecting tensions between Saudi Arabia and Iran. While the fall of crude oil prices are a boon for DM economies as most of them are net oil importers, it may have a negative impact such as the fall of asset prices due to the contraction of petrodollars reflecting credit uncertainties because of the deterioration of earnings among energy firms and deterioration of fiscal conditions among oil-producing countries. At present, concerns regarding these negative impacts appear to be overwhelming the positive aspects. Turning to the Chinese economy, the depreciation of the yuan and stock market plunge have served to escalate concerns. In addition to the intensification of forecasts on China's further slowdown due to speculation that the yuan depreciation stems from the Chinese government's intention to shore up the economy, the outflow of funds from China are also raising concerns regarding the Chinese economy. MHRI's

latest *Economic Outlook* stands upon the premise that the financial market instability should persist for some time despite temporary rallies and stabilization. The background of our view is that the crude oil slump and Chinese economic slowdown will persist for a while.

The primary factor for the fall of crude oil prices may be attributed to the fall of expectations toward the rise of future demand due to the end of the EM boom along with the moderation of the Chinese economy and the global crude oil glut stemming from the surge of US oil production. Even though price levels fell sharply due to the former factor, prices should gradually rise along with the alleviation of the supply glut (the latter factor). US crude oil production has already peaked out reflecting the sharp fall of oil prices. Looking forward, US oil production should gradually decline due mainly to restraints upon new investment. However, we are inclined to believe that the price of crude oil will continue to trend around USD30 in 2016, since the rise of Iran's oil production reflecting the lifting of sanctions will likely offset a large part of the production cuts by the US. In addition, note that current developments, such as the provisional agreement to freeze oil production between Saudi Arabia and non-OPEC countries suggest a strategic move toward coordinated production cuts. In the event such coordinated production cuts are realized, the upturn of crude oil prices may be accelerated. It is necessary to keep a close eye upon developments among oil-producing countries.

Turning to China, the economy should continue to slow down during the period from 2016 to 2017. The adjustment pressures stemming from China's increasingly serious overhangs in capacity and debt are expected to remain a drag upon economic growth. Furthermore, considering that the pace of nominal GDP growth is falling below GDP growth in real terms, it is necessary to keep a close eye upon the rise of deflationary pressures. Even though the Chinese government will most likely step up its economic stimulus measures such as fiscal spending in order to avoid a loss of momentum, the market should continue to be swayed by downside risks for some time amid the sub-par recovery.

3. What are the desirable policy measures to be taken by the countries of the world?

Let us look at the risk scenario. In this scenario, the global economy will not only slow down but the EM economies and crude oil prices will fall further and lead to the escalation of financial market turmoil. This, together with its negative impact upon the financial system, will tip the world into a global recession.

In order to avoid such a risk scenario, the major countries must take a coordinated

stance to support the global economy through fiscal and monetary policy. In terms of monetary policy, Japan, the US and the EU are expected to follow suit in the direction of monetary easing. Even though the Bank of Japan (BOJ) launched a negative interest rate policy (NIRP) in January 2016, inflation is expected to dip again into negative territory. As such, the BOJ may implement further monetary easing steps as early as the first half of 2016 while monitoring the impact of the EM slowdown upon the Japanese economy and the decision on the next consumption tax hike in 2017. The European Central Bank (ECB) is also forecast to take further monetary easing measures including another interest rate cut in March 2016 and increase the size of asset purchases. Turning to the US, the Federal Reserve Board (FRB) took a step to raise interest rates and ended its zero interest rate policy (ZIRP) which it had continued since December 2008. According to the outlook on federal funds rate by the participants of the Federal Open Market Committee (FOMC) in December, four interest rate hikes were expected in 2016. However, based upon assumptions that the crude oil price slump and financial market destabilization will persist over a prolonged period, the employment and price outlook - which will affect the timing of the next interest rate hike - is expected to take a downturn. Given the deterioration of the environment enabling the FRB to implement another interest rate hike, the odds are high that it will forgo a further interest rate hike in 2016.

In addition to the foregoing steps to avoid a global economic downturn, we look forward to the major countries of the world to set forth their stance to take coordinated steps including fiscal measures at the G7 and G20 meetings.

4. Outlook on the Japanese economy: FY2015 (+0.7%), virtually zero during the year

In the Oct-Dec quarter of 2015, Japan's real GDP growth (*1st Preliminary Quarterly Estimates of GDP*) contracted for the first time in two quarters (-0.4% q-o-q, or -1.4% in annualized terms). Personal consumption was dealt a further blow due to the unseasonable warm winter weather, serving as the major cause of negative economic growth. Public demand also continued to decrease due to the fading impact of policy measures such as the FY2014 supplementary budget. Even though the contribution by external demand remained in positive territory, it fell short of compensating for the weakness of domestic demand. GDP growth in the Oct-Dec quarter revealed that the Japanese economy is still stalling in a soft patch.

The Jan-Mar quarter of 2016 is also expected to remain in a soft patch, based upon forecasts of the decline of global IT (information technology)-related demand. Accordingly, real GDP growth for the full year in FY2015 is forecast to growth +0.7%

(**Chart 2**). Excluding the impact of the strong growth in the second half of FY2014 (the so-called "carry-over of growth"), the rate of GDP growth during FY2015 would be virtually zero at -0.1%.

[Chart 2: Outlook on the Japanese economy]

(%)

	FY2014	FY2015	FY2016	FY2017	FY2015		FY2016		FY2017	
					1H	2H	1H	2H	1H	2H
	(Actual)	(Forecast)	(Forecast)	(Forecast)	(Actual)	(Forecast)	(Forecast)	(Forecast)	(Forecast)	(Forecast)
Real GDP	-1.0	0.7	0.9	0.3	0.7	-0.1	1.2	1.5	-0.8	1.0
Domestic demand	-1.5	0.6	1.1	0.1	1.1	-0.5	1.4	2.2	-1.2	0.8
Private sector demand	-1.9	0.5	1.1	-0.3	1.0	-0.7	1.3	2.7	-2.4	1.0
Personal consumption	-2.9	-0.4	1.2	-0.6	-1.1	-0.8	1.3	3.1	-3.3	1.4
Housing investment	-11.7	1.4	-1.1	-2.3	8.6	-4.9	-4.4	9.9	-8.4	-0.9
Capital investment	0.1	2.1	2.4	0.7	1.2	4.3	2.0	1.5	-0.4	1.9
Public sector demand	-0.3	0.8	1.1	1.4	1.3	0.0	1.7	0.7	2.4	0.2
Government consumption	0.1	1.3	1.2	1.1	1.4	1.5	1.0	1.2	1.1	1.1
Public investment	-2.6	-1.3	0.4	2.7	1.5	-6.8	4.6	-1.4	8.3	-3.5
Net exports (contribution)	0.6	0.1	-0.2	0.1	-0.4	0.4	-0.2	-0.8	0.0	0.0
Exports	7.8	0.3	1.7	2.6	-4.7	1.3	2.0	1.5	2.6	3.8
Imports	3.3	-0.2	2.5	2.1	-2.0	-0.9	2.8	5.5	0.2	2.7
GDP (nominal)	1.5	2.2	2.7	1.2	2.5	0.9	3.9	2.1	1.2	0.4
GDP deflator	2.5	1.5	1.8	1.0	1.6	1.4	1.9	1.6	1.2	0.7
Industrial production	-0.4	-0.7	2.3	0.9	-1.3	0.3	1.2	2.0	-0.7	1.1
Unemployment rate	3.5	3.3	3.2	3.1	3.4	3.2	3.2	3.2	3.1	3.1
Current account balance (JPY trillion)	7.9	17.6	24.8	25.1	15.7	18.6	25.8	22.9	26.6	22.7
Domestic corporate goods prices	2.8	-3.2	-3.1	3.1	-2.9	-3.4	-3.8	-2.5	2.2	4.0
Consumer prices (ex fresh food)	2.8	0.0	-0.2	1.8	0.0	0.0	-0.5	0.1	1.7	1.9
Consumer prices (ex fresh food, ex consumption tax)	0.8	0.0	-0.2	0.7	-0.0	0.0	-0.5	0.1	0.6	0.8
Consumer prices (ex food (ex alcohol))	0.6	0.7	0.2	0.6	0.6	0.7	0.3	0.2	0.5	0.7
Long-term interest rate (%)	0.48	0.30	0.10	0.25	0.40	0.19	0.00	0.15	0.23	0.28
Nikkei stock average (JPY)	16,273	18,700	16,500	17,600	19,730	17,700	16,300	16,600	17,150	18,050
Exchange rate (JPY/USD)	110	120	110	116	122	118	111	110	114	119
Crude oil price (WTI, USD/bbl)	81	44	29	31	53	37	30	28	30	33

Notes: 1. Data on fiscal years (FY) are set forth as the % change over the previous year (y-o-y). Half year GDP data are set forth as the change over the previous term p.a. (the GDP deflator is set forth as the % change y-o-y).
2. Half year data on industrial production are set forth as the change over the previous term. Half year data on the unemployment rate are seasonally-adjusted. Half year data on the current account balance are adjusted for seasonal factors and converted into annualized rates (p.a.).
3. Half year data on domestic corporate goods prices and consumer prices are set forth as the % change y-o-y.
4. The price of crude oil refers to the nearest term contract for WTI. The long-term interest rate refers to the yield on newly-issued 10-yr JGBs.

Sources: Made by MHRI based upon Cabinet Office*, National Accounts of Japan*, Ministry of Economy, Trade and Industry, *Indices of Industrial Production*, Ministry of Internal Affairs and Communications, *Labour Force Survey, Consumer Price Index*, Bank of Japan, *Balance of Payments*, *Corporate Goods Price Index*, and others.

5. FY2016 growth will be dragged down by the overseas economic slowdown. However, we expect the growth rate to be +0.9% as the last-minute rush of demand prior to the consumption tax hike pushes up the second half growth rate

Even though the Japanese economy should gradually pick up in FY2016, the overseas economic slowdown and financial market turmoil are expected to serve as drags upon growth.

Given the gradual progress of inventory adjustment in the manufacturing sector, the bottoming of final demand would make it easier for manufacturers to step up output. In the Apr-Jun quarter, the Japanese economy should return to a gradual recovery path, due to plans among major Japanese carmakers to boost output of transport equipment toward the US and EU. Even so, the deterioration of the external environment such as the follows should continue to serve as a drag upon Japan's economic recovery: China's plans to step up its reduction of excessive production capacity, and the US economy's inevitable slowdown reflecting the slumping Latin American economies.

Furthermore, in the second half of FY2016, the emergence of a last-minute rush of demand prior to the consumption tax hike in April 2017 should contribute to push up personal consumption. At the time of the previous consumption tax hike (in April 2014), MHRI estimated that the last-minute rush of demand would push up FY2013 by 0.4 to 0.5% pt. Considering that the breadth of the consumption tax hike will be limited to 2%, as well as the impact of restraints due to the introduction of some tax reduction measures, MHRI forecasts that the rate of real GDP will grow at a gradual pace of +0.9% in FY2016 upon the assumption that the impact of the last-minute demand would be 0.2 to 0.3% pt.

On the other hand, with respect to FY2017, the backlash from the last-minute rush of demand prior to the consumption tax hike and the rise of household burdens should push down the rate of real GDP growth by approximately 0.7 to 0.8% pt. Even so, in the second half of FY2017, the economy should avert a recession due to the alleviation of the negative pressure stemming from the tax hike. MHRI forecasts that real GDP during the full year in FY2017 will grow +0.3%.

Given the high volatility of the global financial markets since the turn of the New Year in 2016, the appreciation of the yen and fall of stock prices are intensifying the risks of downward pressures upon personal consumption and postponement of capital investment. If such risks are actualized, the consumption tax hike may be put off again and there will be a greater likelihood of taking policy steps such as additional economic policy measures. Looking forward at key political events, if the Japanese and US GDP

data released around the end of April to mid-May turn out to underwhelm, Japan may decide to put off its next consumption tax hike on the condition that it gains global understanding to do so at the G7 2016 Summit in Ise-Shima (Japan) scheduled at the end of May. Furthermore, considering that the Summit members might seek global coordination to take fiscal measures, it is necessary to keep a close eye upon political developments.

6. The fall of crude oil prices and the appreciation of the yen will drive down the y-o-y change of the core CPI into negative territory in FY2016

According to estimations by MHRI, the output gap (the difference between actual and potential GDP) stood at -1.7% of potential GDP as of the Oct-Dec quarter of 2015 (which means an excess of supply by approximately JPY9 trillion) (**Chart 3**). Based upon MHRI's latest *Economic Outlook*, the output gap is projected to improve again as the Japanese economy returns to a gradual recovery track. In the second half of FY2016, the excess supply in the output gap is expected to improve and touch around zero again as the level of economic activity rises due to factors such as the last minute rush of demand prior to the consumption tax hike. Even though the output gap should widen slightly larger than 1% of potential GDP from FY2017, it should gradually improve in the second half of the fiscal year as the economy avoids a loss of momentum.

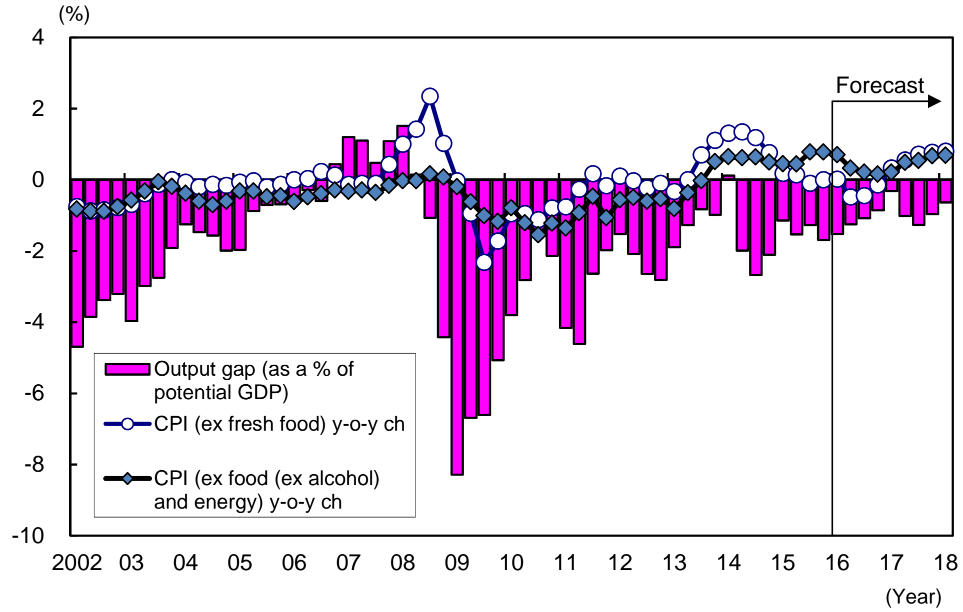
The y-o-y change of the core CPI (general, excluding fresh food) has been trending around 0% since the summer of 2015, reflecting the fall of crude oil prices, and stood at +0.1% as of December 2015. Given the further fall of crude oil prices since the start of 2016, the core CPI should stay around 0.0% y-o-y in the Jan-Mar quarter of 2016. As a result, the core CPI for the full year 2015 is projected to be 0.0% y-o-y (in FY2014, the core CPI excluding the impact of the consumption tax hike was +0.8% y-o-y).

In addition to the prolonged stagnation of crude oil prices, the fall of import costs due to the appreciation of the yen reflecting the postponement of the US interest rate hike, the core CPI is forecast to dip into negative territory during FY2016. Even though the core CPI should turn positive around the end of FY2016, the CPI is forecast to fall into negative territory for the first time in four years to -0.2% for the full year FY2016.

In the year FY2017, despite negative pressures upon the deterioration of the output gap after the consumption tax hike, (1) the gradual upturn of crude oil prices, and (2) expectations of another depreciation of the yen should lead to the rise of gradual upward pressures upon the core CPI. The y-o-y % change of the core CPI in FY2017 is forecast to reach +0.7 (excluding the impact of the consumption tax hike, approximately +1.8%). Even so, it should fall short of the BOJ's target to reach around 2% "around the first half

of FY2017).

[Chart 3: The output gap and inflation rate]



Notes: 1. The CPI excludes the impact of the consumption tax hike.
2. The output gap is estimated by MHRI.

Sources: Made by MHRI based upon Cabinet Office, *National Accounts of Japan,* Ministry of Internal Affairs and Communications, *Consumer Price Index.*