FY2014, FY2015 Economic Outlook

- While the sharp fall of crude oil prices will serve as underpinnings of the global economy, watch closely for its impact upon finance -

December 18, 2014

Mizuho Research Institute

Overview – although the global economy will continue to follow a recovery scenario, downside risks will linger

- Even though our forecast on global growth (the weighted average of countries and regions included in MHRI's forecast) of +3.2% in 2014 is not much different from 2013, growth in 2015 should accelerate to +3.5% as the developed economies gather momentum.

- The US economy will grow at a pace around the upper half of the +2% to +3% level p.a. on a quarterly basis, and the Japanese economy will also start to pick up as the impact of the consumption tax hike wears off. On the other hand, while the eurozone economy is forecast to return to a gradual recovery, the overall pace of recovery is expected to be weak. Turning to the emerging economies , the Chinese and Russian economies are expected to slow down, and therefore will not serve as a major driver of the global economy.

- Although our main forecast scenario is a gradual global economic recovery, downside risks still linger in the eurozone economy as well as the emerging countries including China. Keep a close eye upon the possibility of a global economic slowdown including simmering geopolitical risks.

- Reflecting the sharp fall of crude oil prices, we have made a sharp downward revision of our forecast on crude oil in 2015. Lower crude oil prices are fundamentally a boon for global economic growth. However, it would be necessary to keep a close eye upon the impact of the financial market turmoil and rise of credit risks upon finance.

Outlook on the global economy: gradual expansion driven primarily by developed economies

○ We hold on to our view that the global economy will follow a mild recovery in 2015, driven mainly by the developed economies.

- Our forecast on the global economy (total of the forecast area) in 2014 and 2015 remains unchanged.
- Looking closer, in addition to the downward revision regarding Japan, the revision of our crude oil forecast has led to upward revisions of certain crude oil-importing countries and downward revisions of commodity-exporting countries.

[Outlook on the global economy]

(Y-o-y % change) (Y-o-y % change) (% pt)

Calender year	2012 (Actual)	2013 (Actual)	2014 (Forecast)	2015 (Forecast)	2014 (November forecast)	2015 (November forecast)	2014 (breadth of revision from November forecast)	2015 (breadth of revision from November forecast)
Total of forecast area	3.2	3.1	3.2	3.5	3.2	3.5	—	—
Japan, US, Eurozone	1.2	1.2	1.4	2.1	1.5	2.1	-0.1	—
US	2.3	2.2	2.2	2.9	2.2	2.9	—	—
Eurozone	-0.7	-0.5	0.8	1.2	0.8	1.0	—	0.2
Japan	1.8	1.6	0.2	1.7	0.4	2.0	-0.2	-0.3
Asia	6.1	6.1	6.0	6.0	6.0	5.9	—	0.1
China	7.7	7.7	7.4	7.2	7.4	7.1	—	0.1
NIEs	2.2	2.9	3.2	3.2	3.3	3.1	-0.1	0.1
ASEAN5	6.2	5.2	4.6	5.1	4.6	5.2	—	-0.1
India	4.8	4.7	5.2	5.4	5.0	5.1	0.2	0.3
Australia	3.7	2.0	2.7	2.3	3.1	2.6	-0.4	-0.3
Brazil	1.0	2.5	0.1	0.8	0.2	1.0	-0.1	-0.2
Russia	3.4	1.3	0.3	0.1	0.3	0.5	—	-0.4
Japan (FY)	1.0	2.1	-0.6	2.4	-0.4	2.5	-0.2	-0.1
Crude oil price (WTI,USD/bbl)	94	98	93	61	95	79	-2	-18

Note: The total of the forecast area is calculated upon the 2012 GDP share (PPP) by the IMF.
Sources: Made by Mizuho Research Institute (MHRI) based upon releases by the IMF and relevant countries and regions.

Sharp fall of crude oil prices: similarities with the “reversed oil shock” in 1985

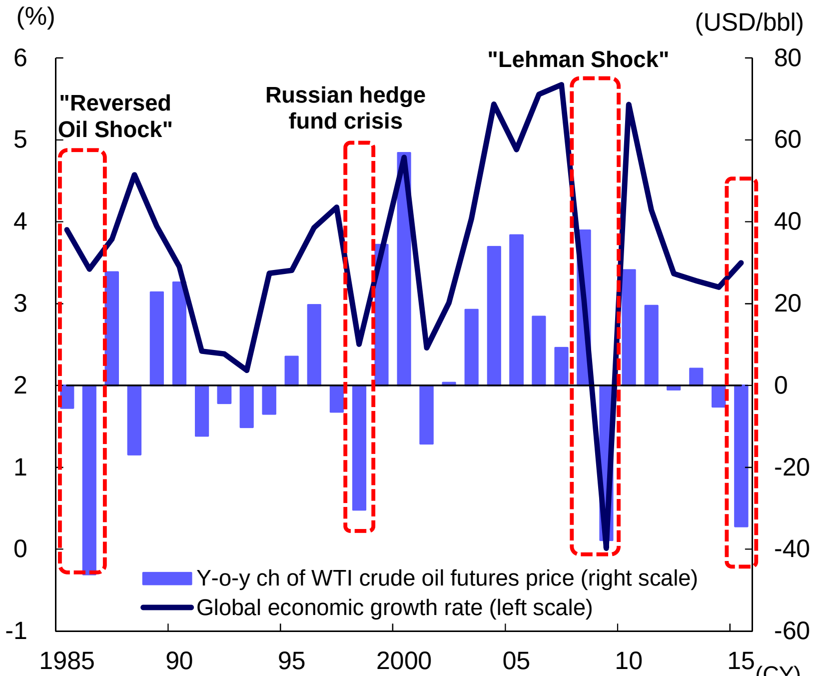
○ Crude oil prices toppled just as the world moved closer to the start of 2015, to nearly half of the highest level in 2014.

- The plunge of oil prices has a significant impact comparable to the “reversed oil shock” in 1985-1986.

  ----- In addition to the weak demand in the global economy, there are supply-side factors stemming from the impact of shale oil.

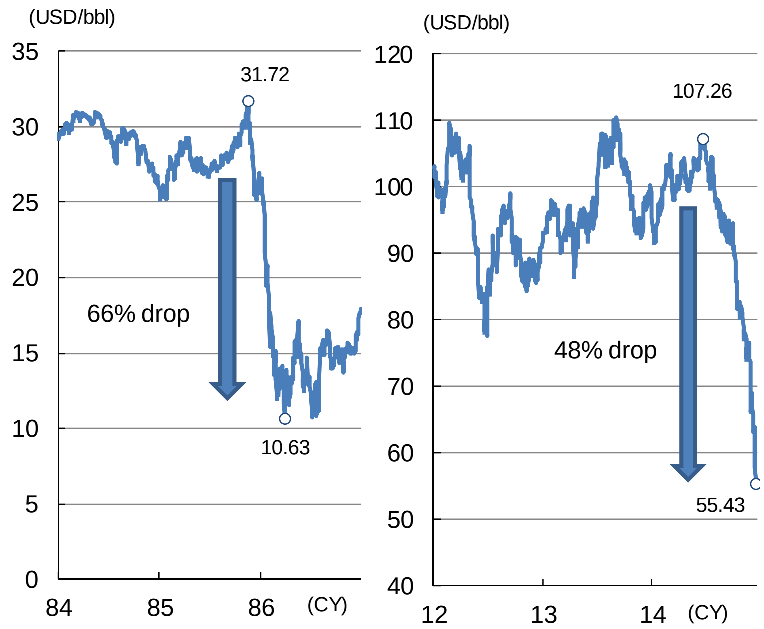
- While the fall of crude oil prices will contribute to a bubble from the perspective of further monetary easing among the countries, the fall of investment by oil-producing countries will serve as a drag upon the global economy.

[Global economic growth and the rise/fall of crude oil price (WTI)]



Sources: Made by MHRI based upon IMF, Bloomberg.

[Comparison of the price of crude oil (current trends and the “reversed oil shock”)]



Sources: Made by MHRI based upon Bloomberg.

The fall of crude oil prices will serve as underpinnings of the global economy in 2015

○ The fall of crude oil prices will serve as a supporting factor for the global economy mainly among the developed economies.

- For oil-importing countries, the fall of crude oil prices should serve as a driver to some extent by pushing up personal consumption and capital investment through the improvement of terms of trade.
- For oil-exporting countries, the fall of crude oil prices will serve as a drag on growth, pushing more oil-exporting countries into deficits in their current accounts and fiscal balance.
- Note also the impact upon financial institutions stemming from the blow to the US shale oil industries and the spread of risks to finance such as concerns regarding a default by Venezuela.

[The impact of the fall of crude oil prices and forex fluctuations upon countries and regions of the world]

	Major impact of the fall of crude oil prices	Impact of the fall of crude oil prices upon the trade balance (as a % of nominal GDP)	Impact of the fall of crude oil prices upon 2015 GDP	Impact of forex fluctuation	Impact of forex fluctuation upon 2015 GDP
US	It will stimulate domestic demand such as the increase of personal consumption	＋0.5%	＋0.1%pt	Downward pressure upon external demand due to the fall of exports etc.	- 0.1%pt
Eurozone	It will increase eurozone personal consumption due to the rise of disposable income. Capital investment will increase due to an accommodative monetary policy, increase of consumption and improvement of trade terms	＋1.2%	＋0.2%pt	No impact due to benign forex fluctuation	＋0.0%pt
Japan	Capital investment will increase via the rise of corporate earnings because of the improvement of trade terms	＋1.5%	＋0.4%pt	Economic stimulus due to a weaker yen	＋0.1%pt
China	It will increase of personal consumption due to the rise of disposable income. Even though the improvement of trade terms may push up corporate earnings, the rise of investment will be limited because of China's capacity glut	＋1.0%			
NIEs	The NIEs' trade terms will improve since the NIEs are net importers of crude oil. However, it is unlikely that the trading gains will ripple through to investment and consumption any time soon.	＋3.1%			
ASEAN5	It is a boon for Thailand and the Philippines which are importers of crude oil, but a bane for Malaysia which is an oil-producing country. Although Indonesia and Vietnam are oil-producing countries,there will be no trade gains because of their imports of refined petroleum products. All together, the impact upon the ASEAN5 as a whole will only be benign	＋0.4%			
India	India's current account will improve since India is a net importer of crude oil. Even though corporate earnings are improving, there is not much incentive to invest due to its low capacity utilization rate. Since the weight of fuel in CPI is less than 10%, it will only have a limited impact upon the improvement of household real purchasig power	＋2.1%			
Brazil	Brazil's trade balance will improve over the short term. However, the fall of crude oil prices will have an negative impact upon oil field development over the medium term. It will only have a limited impact upon prices due to energy price controls	＋0.3%			
Russia	The fall of crude oil prices will push down corporate earnings and fiscal revenue. However, its impace will be limited due to the fall of the ruble	- 0.9%			
World	Income transfers from oil producing countries to crude oil importing countries will total approximately USD660 billion (1.1% of nominal GDP)		＋0.1%pt		

Notes: Fluctuations of crude oil prices and foreign exchange rates are calculated on the basis of the changes between the MHRI *Economic Outlook* in September and December.
In the impact of the fall of crude oil prices upon global GDP, the impacts upon the US, Japan and the eurozone are based upon estimates by MHRI. The rest are based upon IMF, *World Economic Outlook, October 2013.*

Sources: Made by MHRI based upon releases by the UN, IMF and relevant countries and regions..

Crude oil prices are falling to levels prompting output adjustments: concerns regarding overshoot of price falls

○ Crude oil prices are falling to levels prompting output adjustments.

- The price of crude oil (WTI) fell to the USD50-level, leading to the expansion of areas where the price of crude oil neared the break-even point.

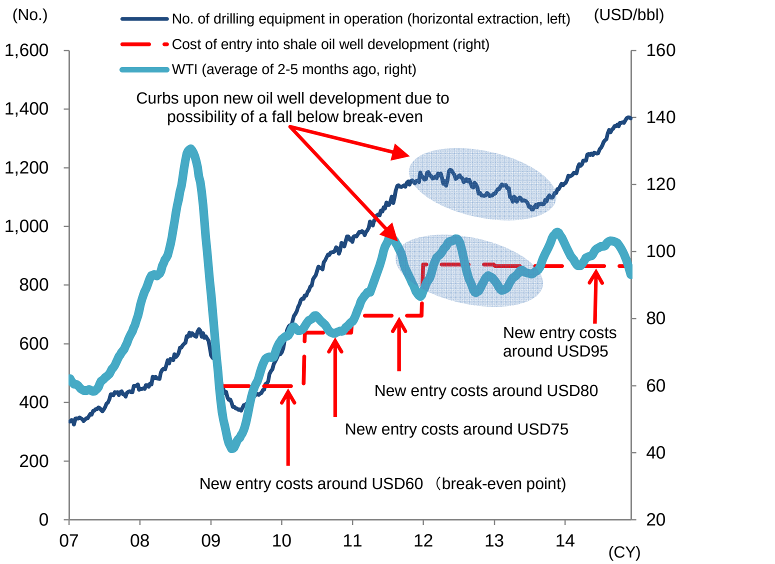
  ----- In the US, the development of new fields is expected to stall in the majority of areas including low-cost regions.

- However, output adjustments are expected to persist since the suspension of new developments alone would not solve the supply glut.

  ----- Production may go on in existing oil fields even with the price of crude oil at or below USD60/bbl (break-even>shutdown point).

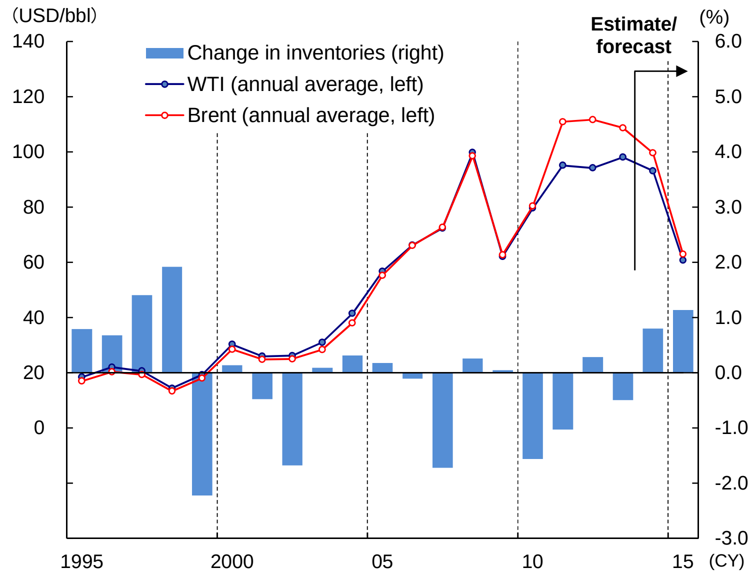
  ----- Output adjustments will only subside when the reduction of excess crude oil inventories accumulated since 2012 start to progress, which will be a time-consuming process.

[Crude oil price and production cost of US shale oil]



Note: The cost of entry into shale oil well development is based upon simple linear regression analysis of the number of drilling equipment in operation and WTI price.
Source: Bloomberg.

[Forecast on crude oil prices]

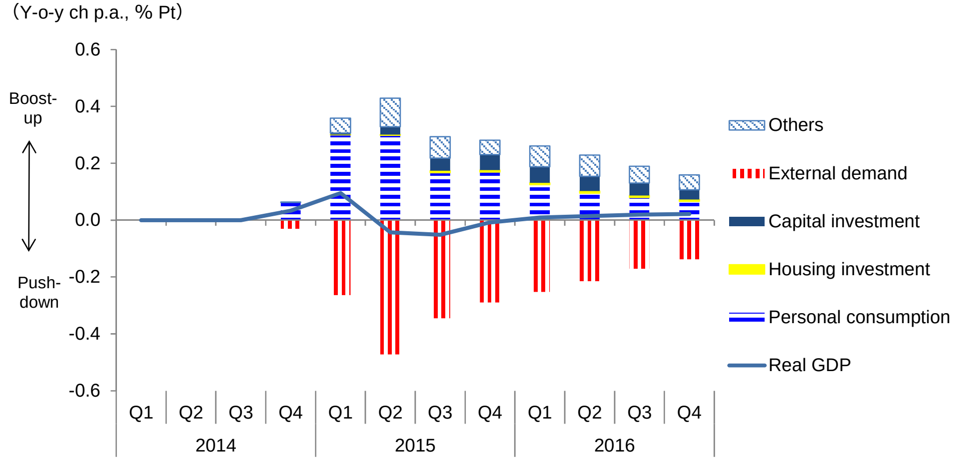


Note: Estimates and forecasts by MHRI.
Sources: IEA, Bloomberg.

The US: the rise of domestic demand due to the fall of crude oil prices and the deterioration of external demand caused by a stronger dollar will offset each other

- ○ The impact upon US economic growth stemming from the plunge of crude oil prices and the strengthening of the US dollar more or less countervail each other.
  - ▪ The price fall of crude oil will lift domestic demand mainly in personal consumption. The contribution to real GDP growth is a maximum of +0.4% pt or so.
  - ▪ On the other hand, the appreciation of the US dollar progressing simultaneously with the fall of crude oil prices, will drag down external demand in the US. The impact will offset the contribution by domestic demand.
- ○ Watch closely the impact upon bank lending and local bond markets through the ripple effect of crude oil price falls to certain regional economies.
  - ▪ In highly oil-dependent areas, there has been a surge of land developments and commercial real estate (CRE) loans over the past few years.
  - ▪ Looking forward, note the risks of repercussions to these developments. Note also the risks of its spread to the local government bond market through the deterioration of state tax revenues.

[Impacts of the fall of crude oil prices and the stronger dollar upon the US economy]



Note: The bars represent the contributions to the components of demand.
Source: Made by MHRI.

[Eight states of the US with high dependence upon the energy sector and bank lending]

	Oil drilling sector GSP share (%)	C&L loans growth rate (%)	CRE loans growth rate (%)
Alaska	24.0	31.3	6.4
Louisiana	8.4	6.5	-2.9
New Mexico	5.4	10.1	11.6
North Dakota	4.2	36.3	15.7
Oklahoma	9.5	18.6	2.7
Texas	10.6	32.7	9.5
West Virginia	1.2	23.2	9.1
Wyoming	13.8	13.8	2.9
Other states	—	16.8	7.3

Note: "GSP" gross state production, "C&L" construction and land development, "CRE" commercial real estate. GSP share (2013), lending (end of 2012 – Sep 2014), Shading indicates a higher dependence than the average of other states)
Source: Made by MHRI based upon FDIC.

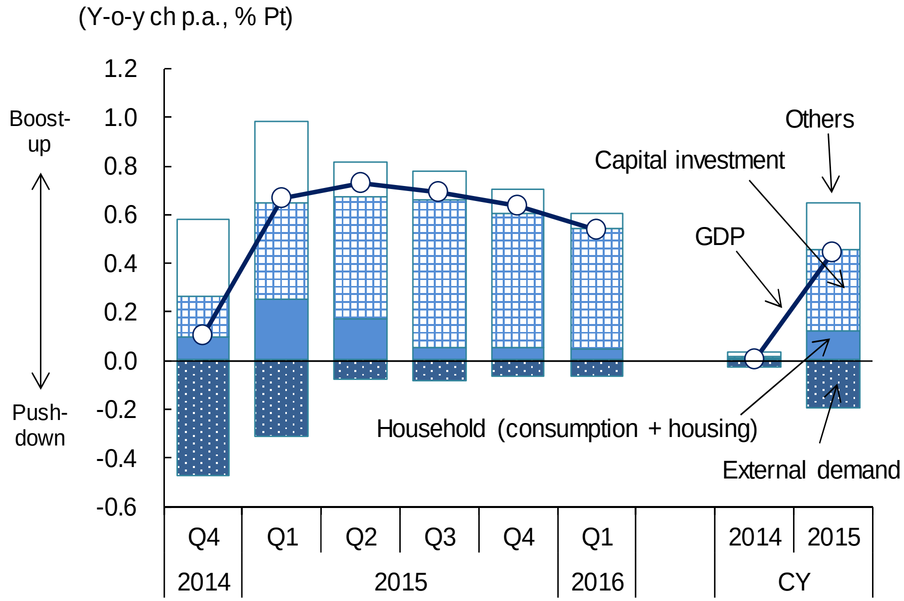
Japan: the fall of crude oil prices will push up growth mainly in personal consumption and capital investment

○ The fall of crude oil prices will push up personal consumption and capital investment. On the other hand, it will contribute negatively to external demand since imports will rise along with the increase of domestic demand.

----- External demand will serve as a negative contribution because imports on a real basis will increase (the trade balance will improve on a nominal basis).

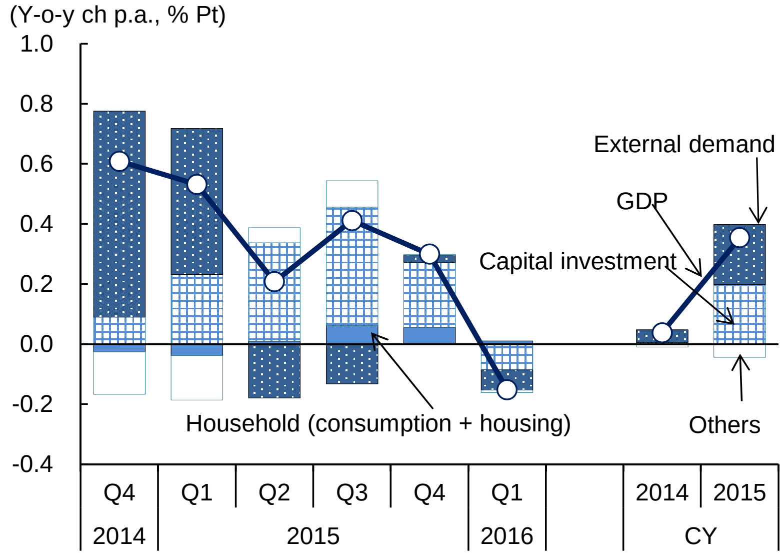
・The depreciation of the yen will contribute to push up capital investment.

[Impact of the sharp fall of crude oil price upon real GDP growth (Japan)]



Note: Impact upon real GDP growth of the change of the crude oil price (Dubai) assumptions (approximately 40% fall) between MHRI's Economic Outlook in September and December, based upon simulations using MHRI Macroeconomic Model.
Sources: Made by MHRI based upon Cabinet Office, *National Accounts* and others.

[Impact of the depreciation of the yen upon real GDP growth (Japan)]

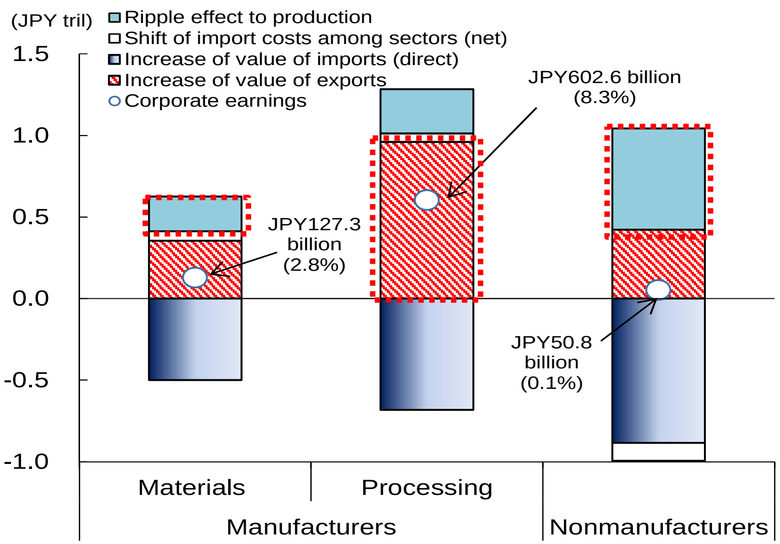


Note: Impact upon real GDP growth of the change of the USD/JPY exchange rate assumptions (5% - 10% yen depreciation) between MHRI's Economic Outlook in September and December, based upon simulations using MHRI Macroeconomic Model. Note that adjustments are made to the overall impact in consideration of shifts to overseas production sites.
Sources: Made by MHRI based upon Cabinet Office, *National Accounts* and others.

Japan: the fall of crude oil prices as well as the weaker yen will lead to the improvement of earnings among SMEs

- Even though the merit of a weaker yen will be concentrated in the processing industries, it will also be a positive factor for the materials and nonmanufacturing industries if the ripple effect upon production is included.
- Approximately 40% of the price fall of crude oil will push up ordinary profits by approximately JPY4 trillion over the short term (according to simulations by the MHRI Macroeconomic Model). The fall of crude oil prices is also a great merit for small and medium-sized enterprises (SMEs), leading to prospects of the rise of wages.

[Impact of a 5% depreciation of the yen to the dollar upon corporate earnings (by industrial sector)]

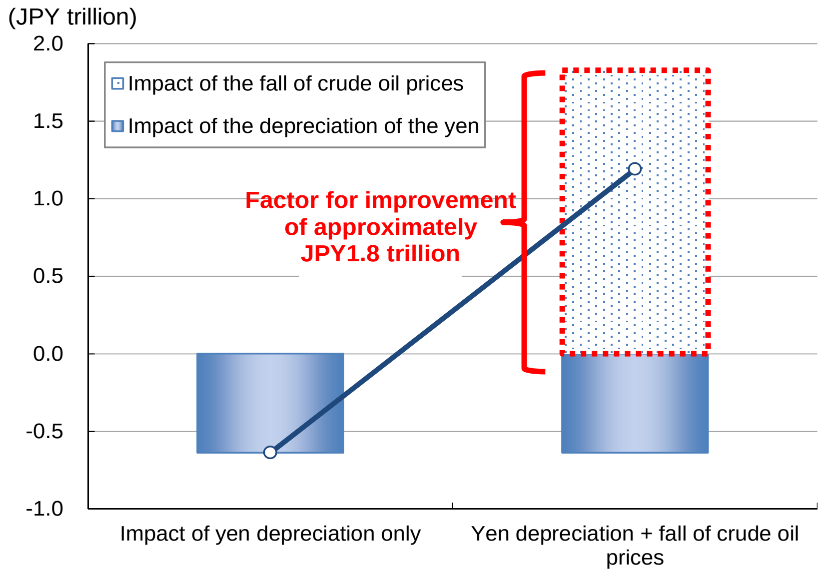


Notes: 1. Impact upon corporate earnings of a 5% fall of the JPY to the USD. The figures in parentheses in the graph represents the percentage change of corporate earnings to operating surplus in 2010.
2. The change of the value of exports and imports are calculated based upon the MHRI Macroeconomic Model. The shift of costs among sectors is based upon the assumption of a shift of 50% of the increase of input costs. The ripple effect upon production is the value added upon deduction of the increase of imports and intermediate input of domestic goods from the value of production induced by the increase of the value of exports.

Sources: Made by MHRI based upon Ministry of Finance, *Trade Statistics,* Ministry of Economy, Trade and Industry, *2010 Updated Input-Output Table.*

[Impact of the yen depreciation and fall of crude oil prices upon SME earnings]

(Impact of the change of input costs: 5% yen depreciation, 40% fall of crude oil price)



Note: The change in input costs accompanying the depreciation of the yen and fall of crude oil prices is calculated on the basis of Input-Output Tables (by size of enterprises).

Sources: Made by MHRI based upon releases by the Small and Medium Enterprise Agency.

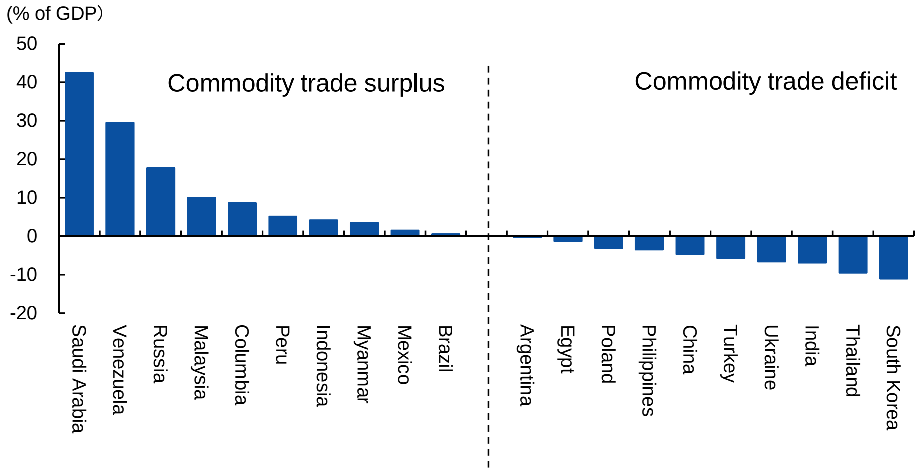
The fall of commodity prices is a boon for commodity-importing countries and a bane for commodity-exporting countries

○ Impact upon commodity-exporting countries

- Saudi Arabia: the fall will have a significant impact upon its fiscal balance, and may drag down the fiscal balance into a deficit if the price of crude oil remains at the USD80/bbl-level.
- Russia: in addition to its impact upon fiscal conditions, the price fall will have a significant impact upon corporate earnings, and may serve as a drag upon related investment.
- Venezuela: approximately 50% of revenues and more than 90% of exports are dependent upon crude oil. Price falls may raise concerns regarding a default.

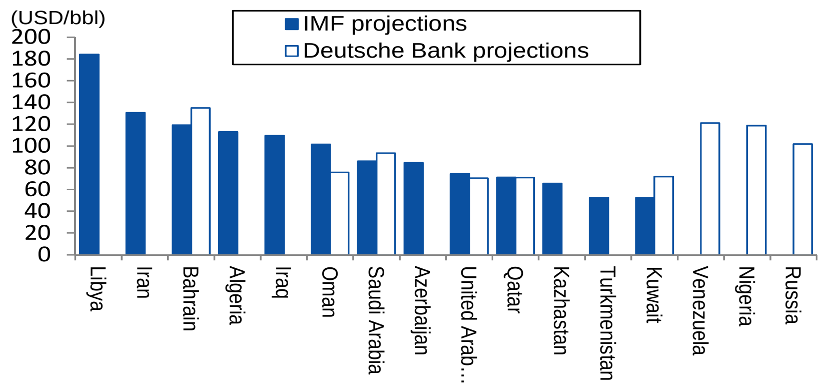
○ Impact upon commodity-importing countries: in countries such as South Korea, Thailand and India, the fall of crude oil prices would ease the risks of capital outflow due to the improvement of the trade balance.

[Commodity trade balance/nominal GDP, 2013)]



Note: "Commodity" refers to plant and animal oils, and mineral products.
Source: United Nations (UN).

[Price of crude oil at break-even fiscal balance]



Note: IMF projections are based upon the simple average of Brent, Dubai and WTI crude oil prices, and Deutsche Bank projections are based upon Brent crude oil price.
Sources: Made by MHRI based upon IMF, *Regional Economic Outlook UPDATE Middle East and Central Asia* (May 2014), Deutsche Bank AG *Commodities Outlook* (July 2014), Bloomberg.

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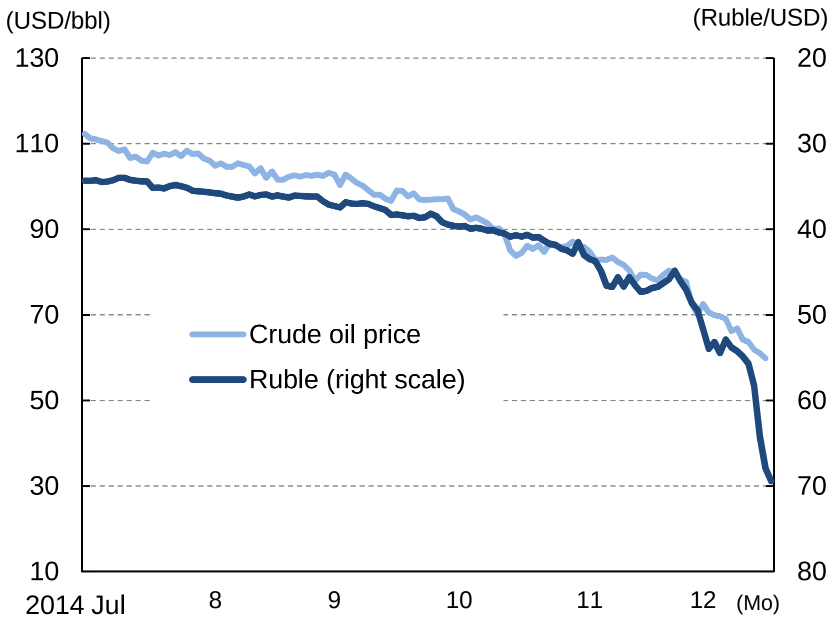
Russia: concerns regarding the ruble crash

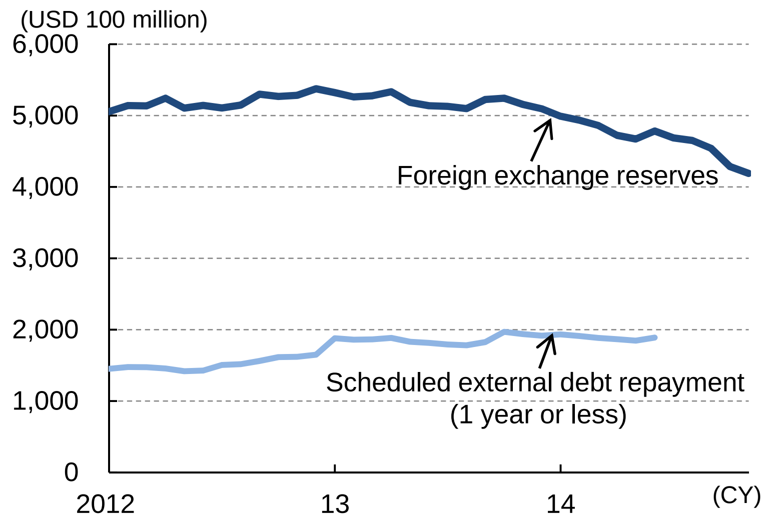
- In response to the plunge of the ruble, the Bank of Russia decided upon an emergency interest rate hike (10.5% → 17.0%).
  - In addition to the fall of crude oil prices, the capital flight stemming from western sanctions imposed upon Russia (from August) and the passage of a bill on additional sanctions by the US Congress (December 13th) are among the background factors.
  - In the event the high interest rate level persists, there are concerns that the real economy may deteriorate further.
- Russia still has ample foreign exchange reserves – although slightly lower – of USD416.2 billion (as of December 5th).
  - Over the next year, Russia is scheduled to repay USD190 billion of its outstanding external debt (as of the end of June 2014).

[The ruble exchange rate and the price of crude oil (Brent crude)]



Note: Crude oil price refers to Brent crude oil price.
Sources: Made by MHRI based upon Bloomberg.

[Foreign exchange reserves and scheduled external debt repayment]



Source: Made by MHRI based upon Bank of Russia.

(Reference) Key political events

	2014 (November, December)		2015		2016	
Global	Nov	APEC Economic Leaders' Meeting	Apr	Spring meetings of World Bank Group and the IMF	Apr	Spring meetings of World Bank Group and the IMF
	Nov	G20 Summit Meeting	May	Annual meeting of the Asian Development Bank	Aug	Brazil summer Olympic Games
	Dec	COP20	Jun	G7 Summit Meeting	mid-Sep	UN General Assembly
			mid-Sep	UN General Assembly	Oct	General meetings of World Bank Group and the IMF
			Oct	General meetings of World Bank Group and the IMF	Dec	COP22
			Dec	COP21		
US	Nov	US midterm elections	Mar	Expiration of measure to raise the debt ceiling	Nov	US presidential election
Europe			Feb	Greek presidential election	by end of year	Irish general elections
			around May	UK general elections	by end of year	Greek general elections
			around Oct	Portugal general elections		
			around Dec	Spain general elections		
Japan	Nov	Decision on postponement of October 2015 consumption tax hike	Apr	Unified local elections	Summer	Upper House election
			Sep	LDP presidental election		
	Dec	Lower house election				
Asia			Autumn	the Fifth Plenum (China)	around Jan	Taiwan presidential election
			end of year	launch of ASEAN Economic Community (AEC)	around Mar	NPC (14th 5-Year Plan scheduled, China)
					around Apr	South Korean national assembly election
					around May	Singapore parliamentary election
					May	Philippines general election
					Autumn	Australia upper house and lower house elections
					Autumn	the Sixth Plenum (China)
					by end of year	National Congress of the Communist Party of Vietnam
					by end of year	India upper house election
					by end of year	Thailand upper house and lower house elections

Source: Made by MHRI.