World Economic Trends
The 2015 Spring Report

Lower Crude Oil Prices and Global Economy – Comprehensive Review of Merits and Risks (Summary)

June 2015

Cabinet Office
Government of Japan
Chapter 1, Section 1. Lower Crude Oil Prices and the Global Economy – Comprehensive Review of Merits and Risks (1) – Factors behind Lower Crude Oil Prices –

- Crude oil prices fell more than 50% between around the end of June 2014 and the end of January 2015 (Fig. 1). According to estimates by international organizations, lower crude oil prices will boost global real GDP by around 0.5-0.7 points (Tab. 2).
- Factors behind the lower crude oil prices include (1) easing of the supply-demand balance (supply side: increase in shale oil production in the U.S.; demand side: slowdown in demand from emerging countries, including China, and developed countries) and (2) weakening of speculative moves in the crude oil market amid the normalization of the U.S. monetary policy (Fig. 3). In addition, expectations for a continued supply surplus have grown since the second half of 2014 because of Saudi Arabia’s decision not to reduce production (Fig. 4).
- Crude oil prices are expected to rise moderately in the period leading to 2020 (Fig. 5).

![Fig. 1 Trend in crude oil prices](image1)

![Tab. 2 Global real GDP boosting effect of lower crude oil prices](image2)

![Fig. 3 Speculative players’ positions and crude oil prices](image3)

![Fig. 4 Global crude oil supply-demand balance and crude oil prices](image4)

![Fig. 5 Future outlook indicated by the crude oil futures market](image5)
Chapter 1, Section 2. Lower Crude Oil Prices and the Global Economy – Comprehensive Review of Merits and Risks (2) – Impact on Developed Countries –

- As most developed countries are net importers of crude oil, lower crude oil prices are having a positive impact on their economies.
- Trade balance: The trade balance improved by 0.8-1.7% as a percentage of GDP for the U.S., Germany and Japan (Fig. 1).
- Household sector: Lower crude oil prices will increase real household income through lower prices of gasoline and other products. The value of gasoline consumption savings in the U.S. is equivalent to approx. 1% of personal consumption (Fig. 2).
- Corporate sector: Although lower crude oil prices are presumed to have a positive impact on corporate earnings as a whole, a steep drop in profits in the energy sector is dragging down corporate earnings in the U.S. and U.K., both of which are oil producers (Fig. 3). Likewise, negative effects can be observed in production and capital investments in the U.S. and U.K. (Fig. 4).

**Fig. 1 Impact of lower crude oil prices on the trade balance**

- Japan 1.7%
- U.S. 0.8%
- U.K. 0.1%
- Germany 1.0%

Note: The trade balance difference was calculated based on the difference (difference between June 2014 and February 2015) in crude oil import unit costs in individual countries.

**Fig. 2 Impact of lower gasoline prices on consumption**

Impact on consumption

- U.S.
- U.K.
- Germany
- Japan

Rate of change in gasoline price (Between June 2014 and April 2015) (Right axis)

Impact on consumption (%)

- U.S. 1.5%
- U.K. 1.0%
- Germany 0.5%
- Japan 0.0%

**Fig. 3 Trends in corporate operating income**

(1) U.S.

<table>
<thead>
<tr>
<th>Year-on-year change, (%)</th>
<th>Energy companies</th>
<th>All companies (excluding energy companies)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quarter 1 2014</td>
<td>20</td>
<td>0</td>
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<tr>
<td>Quarter 4 2014</td>
<td></td>
<td>-20</td>
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</tbody>
</table>

Crude oil price (WTI)

(Quarter) (Year)

(2) Germany

<table>
<thead>
<tr>
<th>Year-on-year change, (%)</th>
<th>Energy companies</th>
<th>All companies (excluding energy companies)</th>
</tr>
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<tr>
<td>Quarter 1 2014</td>
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<td>-20</td>
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<td>Quarter 4 2014</td>
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</table>

Crude oil price (WTI)

(Quarter) (Year)

**Fig. 4 Trend in mining-sector private capital investments in the U.S.**

(Annualized rate, year-on-year, quarter-on-quarter change, %)

- Private capital investments in non-mining sectors
- Private capital investments in mining sectors
- Capital investments in mining sectors

- Private capital investments January-March quarter: down 2.8%
Chapter 1, Section 3. Lower Crude Oil Prices and the Global Economy – Comprehensive Review of Merits and Risks (3) – Impact on Asian Emerging Countries –

- Lower crude oil prices are presumed to have a positive impact on Asian emerging countries in general through an increase in real income and a decline in companies’ production costs. Countries like Thailand and India, which are heavily dependent on imports for crude oil and other resources, are benefiting greatly from lower prices (Fig. 1).

- Lower crude oil prices are accelerating moves to reduce fuel subsidies (Fig. 2), which have imposed a fiscal burden. There are also moves to use the funds saved through the subsidy cuts for strengthening the foundation of new growth, such as infrastructure (Tab. 3). Meanwhile, in Indonesia and Malaysia, which are net exporters of non-oil mineral resources, corporate earnings deteriorated as a result of lower prices of non-oil resources, raising concerns over a possible decline in tax revenues on the fiscal front.

- Lower inflation rates could create more room for monetary easing intended to stimulate the economy (Fig. 4). Meanwhile, an interest rate cut may cause fund outflows mainly due to expanding international interest-spread and inflation by raising import prices through a depreciation of the domestic currency, the monetary authorities have to manage monetary policy carefully.

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**Tab.3 Developments related to fuel subsidy cuts**

<table>
<thead>
<tr>
<th>Fuel subsidy cuts</th>
<th>Indonesia</th>
<th>India</th>
<th>Malaysia</th>
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</thead>
<tbody>
<tr>
<td>*January 2015</td>
<td>Gasoline subsidy abolished</td>
<td>*October 2014</td>
<td>*September 2013 Gasoline and diesel oil prices raised</td>
</tr>
<tr>
<td>*December 2014</td>
<td>Diesel oil subsidy abolished</td>
<td></td>
<td>*December 2014 Gasoline and diesel oil subsidies abolished</td>
</tr>
<tr>
<td>Usage of funds saved through fiscal improvement</td>
<td>*Infrastructure investments, medical care services for low-income families, education</td>
<td>*Agriculture, education, health, etc.</td>
<td></td>
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</table>

**Fig. 1 Trade balance improvement due to lower crude oil prices**

Note: The volume of net crude oil imports in 2013 was multiplied by the figure obtained by subtracting the average price for January-March 2015 from the average price for 2013 to calculate the trade balance improvement, which is expressed as a percentage of GDP in the above figure.

**Fig. 2 Size of fiscal deficit and fuel subsidies (as a percentage of GDP, 2013)**

The countries are arranged from left to right in the order of the size of fuel subsidies as a percentage of GDP.

**Fig. 4 Policy interest rate in major countries**

Note: Prepared based on statistics compiled by individual countries.
Chapter 1, Section 4. Lower Crude Oil Prices and the Global Economy – Comprehensive Review of Merits and Risks (4) – Impact on Oil-Producing Countries –

- Oil-producing countries’ economies depend heavily on crude oil exports. In 2010-2013, their crude oil exports accounted for approx. 30% of GDP (Tab. 1).
- Fiscal revenue depends on income from crude oil and natural gas (Tab. 2). While fuel subsidies are imposing a fiscal burden, oil-producing countries are reducing them as Asian countries are doing.
- Many oil-producing countries are expected to record fiscal and current account deficits in 2015 (Fig. 3). Resilience against lower crude prices varies from country to country (Tab. 4).
- Exports by countries heavily dependent on resources tend to be unstable, swayed by resource price movements (Fig. 5). To realize sustainable, stable development, industrial diversification is essential. UAE and Qatar are moving toward industrial diversification.

Tab. 1 Crude oil exports as a percentage of nominal GDP

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<tbody>
<tr>
<td>Saudi Arabia</td>
<td>28.1</td>
<td>36.2</td>
<td>46.3</td>
<td>43.1</td>
<td>15.0</td>
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<tr>
<td>Venezuela</td>
<td>19.4</td>
<td>22.7</td>
<td>26.3</td>
<td>19.8</td>
<td>0.4</td>
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<td>Russia</td>
<td>6.5</td>
<td>11.9</td>
<td>13.5</td>
<td>13.6</td>
<td>7.1</td>
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<tr>
<td>Weighted average for OPEC</td>
<td>25.3</td>
<td>34.3</td>
<td>37.2</td>
<td>30.5</td>
<td>5.3</td>
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Tab. 2 Tax systems and revenue structures in major oil-producing countries

<table>
<thead>
<tr>
<th>Country</th>
<th>Corporate tax</th>
<th>Individual income tax</th>
<th>Consumption/value-added tax</th>
<th>Share of income from crude oil/natural gas in revenue (2013)</th>
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<tbody>
<tr>
<td>Saudi Arabia</td>
<td>○</td>
<td>x</td>
<td>x</td>
<td>87.7</td>
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<tr>
<td>Kuwait</td>
<td>○</td>
<td>x</td>
<td>x</td>
<td>85.6</td>
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<td>Qatar</td>
<td>○</td>
<td>x</td>
<td>x</td>
<td>42.4</td>
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<tr>
<td>UAE</td>
<td>△</td>
<td>x</td>
<td>x</td>
<td>78.7</td>
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<tr>
<td>Russia</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>50.0</td>
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<tr>
<td>Venezuela</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>46.6</td>
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Tab. 4 Resilience against lower crude oil prices

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Fig. 3 Equilibrium price for crude oil

Fig. 5 Dependence on resources and export volatility

Export instability

\[ y = 0.2967x + 17.055 \]

\[ \text{R}^2 = 0.5163 \]
As a result of lower crude oil prices, the currencies of oil-producing countries, particularly the Russian ruble, depreciated considerably (Fig. 1).

Because of the deterioration of the real economy in Russia and Venezuela, concerns have been expressed over these countries’ ability to repay external debts. The risk of Russia defaulting on public debts is presumed to be low because private debts account for most of the country’s external debts. As Venezuela is going to face a large amount of redemptions from now on, attention needs to be paid to the government’s economic management. The value of credit provided to Russia and Venezuela does not account for a large portion of the overall overseas credit provision by individual countries (Fig. 2).

An increasing number of countries are cutting policy interest rates against the backdrop of lower crude oil prices (Fig. 3), so interest rates are on a downtrend.

Energy-related companies are actively issuing high-yield bonds. There were concerns that the failure of a company involved in shale oil development (January 2015) might have spillover effects on financial markets, but the yields have now dropped (Fig. 4).

It is possible that positive effects of lower crude oil prices will appear later than negative effects. On the other hand, there is a risk that mining-related production and capital investments may continue to weigh on the economy.

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**Fig. 1 Resource-producing countries’ currencies**

**Fig. 2 Outstanding credit provided to Russia and Venezuela**

**Fig. 3 Countries which cut interest rates amid lower crude oil prices (examples)**

**Fig. 4 Yields on high-yield bonds and crude oil prices**