

Prospects for the International Oil Market and Crude Oil Prices in 2009

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<Problem Identification and Research Objectives>

In July 2008, the front-month West Texas Intermediate (WTI) crude oil futures price (front month and closing price), which serves as a benchmark for crude oil prices in the international oil market, briefly hit an all-time high exceeding \$145/barrel. The price later plummeted, however, in the rapidly sinking global economy triggered by the intensified financial crisis in the United States, finally to the \$30/barrel line on December 2008. As the market in 2008 has developed with unprecedented volatility, amid skyrocketing and plummeting oil prices, the average price for the period between early 2008 and December 19 came to \$101.5/barrel, indicating the average price for the whole of 2008 would reach a new high above \$72.5/barrel in 2007.

The biggest factor behind the significant fluctuation in crude oil prices is the impact of the financial crisis. Amid a period of financial instability in the aftermath of the subprime loan problem having emerged, a massive amount of money/investment flowed into the oil futures market as an alternative investment to traditional assets, which accelerated the spike in crude oil prices. Triggered by the bankruptcy of Lehman Brothers Holdings Inc. and other subsequent news in the United States, the financial instability exploded into a financial crisis, with a credit crunch and declining stock prices dispersed worldwide, resulted in an extremely bearish market in the oil futures market. Corresponding to the increasingly deteriorating global economy caused by a progressive financial meltdown, global oil demand sharply shrank, expected to record a year-on-year decline in 2008 unseen since 1983. The downward spiral in the futures market associated with the financial crisis, coupled with the drop in oil demand in the global economy, contributed to the downspin in crude oil prices, hitting the \$30/barrel line, 70% or more below its peak level. In response to the plummeting crude oil prices, OPEC decided to further reduce oil production at its 151st general meeting in December to launch a large output cut of 4.2 million barrels per day (bpd) from the production level in September. With the reaction by the market quite limited, however, the price has remained low. Consequently, in the international oil market in 2008, trends in financial markets and global economy, various supply/demand factors and the OPEC decisions/actions have combined with other factors to bring unprecedented volatility in crude oil prices.

The international oil market and future crude oil prices are likely to dramatically change depending on the factors cited above. Since trends in the international oil market and crude oil prices have a significant impact on future developments of the Japanese and global economies and of the world energy market, it is vital to understand these trends and analyze their future outlook. This report explores the prospects of the international oil market and crude oil prices in 2009 by examining the trends in the global economy, supply/demand factors and the actions of OPEC based on understanding of the above. In the prospects, the most likely "Reference case" has been projected along with different (Higher- and Lower-price) cases.

<Key Conclusion>

◆ Prospects for the International Oil Market in 2009

1. **The "Reference case" for the International Oil Market in 2009** is predicted based on the following preconditions: (1) global oil demand will slow down, remaining at the same level of

or slightly declining from the previous year in the continued sluggish global economy, and (2) non-OPEC crude oil production will expand by around 400,000 to 500,000 bpd (OPEC NGL output is also estimated to rise by around 500,000 to 600,000 bpd). In this case, demand for OPEC crude oil will decrease by one million bpd or more from 2008 and OPEC will have to cut output further. OPEC will try to adjust the supply/demand balance by reducing the production, however, the market will show a stronger reaction to the negative economic and financial news, restricting the effect of this output cut. Furthermore, with the slow-moving reduction of inventories (days), currently at a relatively high level, as well as the OPEC's production capacity surplus, expanded by the strengthened output cut, and refining capacity growing at a pace exceeding demand, the world excess supply capacity (surplus) as a whole will rise. Under such circumstances, crude oil prices will remain low while remaining subject to wild fluctuations, with **the average WTI crude price for 2009 around \$45-50/barrel**. The market will falter in the first half year, especially in the first quarter.

◆ Basic Concept of the Above Prospects

2. **Global economy:** The global economy has been increasingly slowing down. While the latest IMF outlook (released in November 2008) predicts that the global economy will grow by 2.2% in 2009, many analyze the actual growth as being far below this prospect¹. In the United States, the government will inject public capital to financial institutions and invoke monetary easing and economic stimulus measures to halt further deterioration of the situation and boost the economy. Amid the fundamental negative climate of a further slide in the housing market, worsening employment conditions and stagnant consumption, however, the economy in that country will remain severe over the next year, and is highly likely to remain that way until recovery late in the year at the earliest. Corresponding to the ailing economy in the United States, the largely export-dependent growth in emerging economies will strongly decelerate. Under such circumstances, the global economy is highly expected to bottom out at an extremely low level.
3. **Oil demand:** World oil demand in 2008 is expected to be 85.84 million bpd, marking a year-on-year decrease of 0.2% for the first time in 25 years since 1983. The biggest factor behind the decline in demand is the significant drop in oil consumption in the United States (1.31 million bpd over the previous year). With the seriously low global economic growth rate in 2009, oil demand will also remain stagnant. While continuing to plummet in developed countries, including the United States (some one million bpd in developed countries in total), expanding oil demand in developing countries, including China, will decelerate, and world oil demand as a whole will remain at the same level of decline slightly as the increase in developing countries and the decrease in developed countries will be virtually balanced out.
4. **Non-OPEC trends:** The rise in non-OPEC production has been slowing down since 2006 against a background of factors such as declining production from existing oilfields, and delay in new investments and projects. These trends will continue in 2009, during which a moderate production increase is expected to be retained as a whole. Major countries (regions) of estimated production increase include Kazakhstan, the Gulf Coast in the United States and Brazil. The expanded production in these countries will compensate for production declines in Mexico, the United Kingdom, Norway, Russia and elsewhere, with overall production increased by around 400,000 to 500,000 bpd compared to the previous year. Along with the continuously growing natural gas production, the production of NGL (condensate and other related products) from OPEC countries will expand by around 500,000 to 600,000 bpd.
5. **OPEC policy:** Although there is no concrete agreement on a desirable crude oil price level (the

¹ The results of the interview survey performed as part of this research found that many respondents predict near zero-growth of the global economy for 2009.

price required to balance fiscal revenue and expenditure, and other factors) shared in all OPEC countries, they share a basic common concern about the current excessively low crude oil price level, and are striving to recover the market through additional output cuts. Saudi Arabia has been playing a key role in this initiative, which will pursue the output curtailment while maintaining the reasonable compliance by other OPEC countries with the output agreement. In addition, the production decrease in collaboration with non-OPEC countries, including Russia, will be discussed. While output cuts by OPEC basically represent a measure to support the market, their effect is likely to be restricted due to market priorities focusing on economic and financial trends, the uncertain effectiveness of the output curtailment, and other reasons.

6. **Flow of money into the oil futures market:** The money inflow into the oil futures market, which has played an important role in recent crude oil price formation, is breaking its momentum. The extremely high future unpredictability is likely to remain in the situation of money inflow/ outflow in the oil futures market, reflecting the circumstances of the global economy, financial market situation and global oil supply/demand. In this reference case, specific risks and other factors are not included²².
7. **Trends in crude oil price:** Under the market conditions cited above, crude oil prices in 2009 will basically remain low while remaining subject to overwhelmingly excessive volatility. In response to the information concerning economic and financial deterioration, the price is likely to remain under downward pressure in the first half year, especially in the first quarter. If the inventory level is corrected by the facilitation of OPEC's output cut, there is no turbulence in financial and economic conditions, and signs of an economic recovery appear in the United States late in the year, the market conditions will show slight signs of recovery. The expected major fluctuation range of the WTI crude price will be: \$40-45/barrel in the first quarter (1Q); \$45-50/barrel in the 2Q and 3Q; and \$50-55/barrel in the 4Q. The yearly average WTI price range in 2009 will be \$40-45/barrel.

◆ **Higher- and Lower-Price Cases**

8. The preconditions for the **“Lower-price case”** are: (1) with the global economy further deteriorated, world oil demand will decrease by some 600,000 bpd from the previous year, (2) despite the OPEC's output cut, the market will be dominated by increasing concern about excessive supply, and (3) in response to the economic/financial trends and glut in oil supply/demand balance, the selling pressure will become stronger in the futures market. Under these circumstances, crude oil prices will decline sharply, mainly in the first half year. **The average WTI crude price for 2009 will be around \$35-40/barrel.** In this case, the crude oil price may touch the lowest level on the \$20/barrel line in the short term.
9. The key points for the **“Higher-price case”** are: (1) with the global economy showing signs of stabilization and recovery earlier in around the middle of the year, global oil demand will increase by some 500,000 bpd from the previous year, (2) as non-OPEC production expansion will not be effectively launched as expected, inventories will be further liquidated as a result of OPEC's output cut, to gradually cast aside concern about excessive supply, and (3) improved market conditions will call back money inflows to the futures market. In this case, crude oil prices will be recovered, especially from late in the year. **The average WTI crude price for 2009 will be around \$65-70/barrel.** In this case, if any risk factor emerges, the crude oil price may further rise by that pressure.
10. As for the probability order for the three cases, the “Reference case” is the highest, followed by the “Lower-price case” and “Higher-price case.” (End)

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²² While a risk is basically a supporting factor for a price increase, this case assumes that sufficient supply capacity has been developed to address the prospect in this case, excluding extremely serious risks.