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Report Summary

Prospects for the International Oil Situation and Crude Oil Prices in 2010

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<Problem Identification and Research Objectives>

Crude oil prices fluctuated wildly in 2009 as seen in the previous year. In 2008, the West Texas Intermediate crude oil futures price (the daily closing price of the front-month contract) hit a record $145/barrel in July before plunging to a $33/barrel level in December. The benchmark crude oil futures price remained weak in early 2009 and started a rise from a $33/barrel bottom level. It soared briefly to $81/barrel level in October before staying at around $70/barrel. In 2009, the crude oil price soared by as much as 139% from the bottom to the peak, indicating wild fluctuations.

The biggest factor behind the wild crude oil price fluctuations (hikes) in 2009 was the impact of financial factors. As global oil demand declined substantially under the financial crisis, the world oil market was basically in oversupply. Crude oil prices turned upward despite the oversupply as money flowed into crude oil and other commodity futures markets on expectations of an economic recovery that came in response to indications of the world economy's bottoming-out from early spring. Crude oil that has been increasingly characterized as a financial asset soared along with stock prices, mirroring expectation on economic recovery and the weakness of U.S. dollar as the key currency. In the second half of 2009, however, crude oil prices and the financial market indicators seemed to weaken their linkage. Then, the WTI price stayed in a $70-80/barrel range. Behind such crude oil price moves might have been a lingering sense of oversupply in the international oil market, oil-producing and consuming countries' cautions and concerns over excessively high or low oil prices, and oil market participants' common acceptance of the present conditions. In this way, the international oil market in 2009 fluctuated wildly on a complex combination of various factors including financial and supply/demand factors.

The future international oil situation and crude oil prices may change dramatically depending on developments regarding the factors cited above. Since the international oil situation and crude oil prices have a significant impact on future developments of the world and Japanese economies and the international energy market, it is vital to grasp their trends and analyze their future outlook. Under the above recognition, the report explores the prospects for the international oil situation and crude oil prices in 2010 by examining the trends of the world economy, effects of financial factors, oil supply/demand factors, OPEC policy trends and the like. 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 2010**

1. **<u>The "reference case" for the international oil market in 2010</u>** is predicted based on the following preconditions: (1) the world economy, though getting on a recovery path, will remain unstable with recovery lacking strength, (2) global oil demand, though turning upward, will limit its growth to 1.0-1.2 million barrels per day, and (3) non-OPEC crude oil output will increase slightly with OPEC NGL keeping an upward trend. In this case, call on OPEC (demand for OPEC crude oil) in 2010 will level off or increase slightly from 2009. Oil market will remain in oversupply as indicated by surplus OPEC production capacity and oil inventories. The supply/demand relationship will thus remain easy. Meanwhile, a stock market gain accompanying

economic recovery and the dollar's relative stability will support crude oil prices. OPEC countries, including Saudi Arabia, could implement production adjustments to correct excessively high or low crude oil prices. Given these factors, crude oil prices are likely to have both lower and higher resistance levels. Under such situation, the WTI price, though fluctuating to some extent, will remain at low levels around $65/barrel in the first half of 2010 as economic recovery is still uncertain with a sense of oil oversupply lingering. As the economic recovery makes progress in the second half, the benchmark oil price will be at higher ranges around $75/barrel. Eventually, **the average WTI price for 2010 is estimated at around $70/barrel (plus or minus up to $10/barrel).** .

◆ Basic Concept of the Above Prospects

2. **Global economy**: A growing number of forecasts say that the global economy has passed its worst phase and may be gradually going in the direction of recovery. The latest IMF outlook (released in October 2009) predicts that the global economy will post a positive growth rate of 3.1% in 2010, a sharp rebound from an estimated 1.1% contraction in 2009. While the global economy has shown some bright signs, many analysts attribute the recent recovery to unprecedentedly large economic stimulus packages and monetary easing in major countries and believe that basic economic fundamentals have yet to be improved substantially. The United States has seen private consumption slumping under the deteriorating employment situation. Without a U.S. economic recovery, growth may be limited in export-oriented emerging economies. In such countries as China, effects of large economic stimulus packages have come to a lull. There are some domestic market bubble fears. These factors do not allow us to be optimistic. Under such situation, the global economy's growth in 2010 is likely to be limited to a 2.0-2.9% range. In the first half of the year, particularly, concerns could surface about the future economic situation and downside risk fears.
3. **Oil demand and non-OPEC oil production**: Global oil demand in 2009 is estimated at 84.85 million bpd, posting a sharp decline of 1.46 million bpd or 1.7% from the previous year. This is the second consecutive decline. The largest factor behind the demand drop is a substantial fall (estimated 2.06 million bpd) in oil consumption in the OECD member countries. While the global economy is likely to post weak growth in 2010, oil demand is expected to turn upward and limit its growth to the 1.0-1.2 million bpd range. While industrial countries may see a small decline in their oil demand, China and other developing countries may expand their demand to bring about a global demand rise. Among non-OPEC oil producers, Mexico, UK and Norway may continue to reduce oil output. But the reduction may be more than offset by an increase in Russia (and other former Soviet republics), Brazil and the United States (particularly in the Gulf of Mexico region). Overall non-OPEC oil output is expected to increase by more than 0.4 or 0.5 million bpd. OPEC NGL (condensate) production is also expected to expand by more than 0.5 or 0.6 million bpd in tandem with a natural gas output expansion.
4. **Supply/demand balance outlook:** Under the above oil demand and non-OPEC output forecasts, call on OPEC (demand for OPEC crude oil) in 2010 is expected to level off or increase slightly from the previous year. As far as OPEC continues production meeting market needs, therefore, little improvement may come in oversupply as indicated by high-level OPEC surplus production capacity and oil inventories that have characterized the present international oil market. Meanwhile, no particular risk events are taken into account for the reference case[1].
5. **Financial factors' impacts**: Financial factors had great impacts on crude oil prices in 2009 as indicated by these prices' strong linkage with stock prices and the value of dollar. In early spring, crude oil prices, stock prices and the dollar launched their sharp turns in their values almost

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[1] Risk events can serve basically as price-boosting factors. Surplus supply capacity is viewed as large enough to absorb any effect of risk events in this case unless they are considerably serious.

simultaneously. Crude oil price soared while keeping strong correlations with rising stock prices abd weakening dollar. This phenomenon indicated that crude oil futures, characterized increasingly as financial assets, were bought irrespective of oil supply/demand as economic recovery expectations (as mirrored by stock price hikes) were coupled with a change in market participants' views about the value of the dollar as the key currency. In the second half of 2009, however, crude oil prices and the financial market indicators weakened their linkage slightly. Then, the WTI price stayed in a $70-80/barrel range while stock prices continued to rise. Such developments are also worthy of attention. They apparently indicate that oil market participants began to pay attention to impacts of oil supply/demand factors and grew conscious of the present oil oversupply problem. As the global economy is expected to moderately grow in 2010, stock prices are projected to moderately rise (with the dollar leveling off). These developments are likely to support crude oil prices. If major risk factors emerge in the global economy to lower stock prices and boost the dollar's value against other currencies, however, crude oil prices may come under downward pressures. If stock prices continue rising on growing economic recovery expectations in the second half of 2010, however, more money may flow into the crude oil futures market to create upward pressures on crude oil prices.

6. **OPEC policy and market expectations**: OPEC countries have agreed to prevent excessively low oil prices and had incentives to cooperate in implementing production cuts. Meanwhile, oil-producing countries seem to have different views on the problems over high oil prices. Among them, OPEC leader Saudi Arabia seems cautious about excessively high oil prices from the viewpoints of their impacts on the global economy and its long-term oil income maximization efforts, and is expected to even increase oil output as needed to avoid execcesively high oil prices. At the same time, market participants seemed to begin to believe that excessive crude oil price drops would not be sustainable as they trigger under-investment, affect the economic efficiency and output of high-cost oilfields and reduce incentives for energy conservation and new and renewable energy investment. Their expectations based on such belief might have influenced actual crude oil prices, leading to the recent price trend. This means that crude oil prices are likely to have both lower and higher resistance levels unless the above –mentioned expectations change dramatically.
7. **Crude oil price trend**: Under the above market environment, the WTI price in 2010 is likely to have wild volatility and fluctuate around $70/barrel within a $60-80/barrel range. In the first half including the first quarter, particularly, crude oil prices may remain vulnerable to downward pressures amid the present sense of oversupply. Any economic turbulence may even strengthen downward pressures. If the global economy enhances its recovery toward the second half of 2010 in the absence of any financial or economic turbulence, however, crude oil prices may move upward. The mean level of the WTI crude oil futures price is projected at $65/barrel for the first quarter, $70/barrel for the second and third, and $75/barrel for the fourth. The mean level for the whole of the year is estimated at around $70/barrel (plus or minus up to $10/barrel).

◆ Higher- and Lower-Price Cases

8. **The higher-price case** will feature the following developments: (1) in the absence of any major turbulence, the global economy will post signs of full-fledged stabilization/recovery from the middle of 2010, (2) global oil demand will increase by some 1.4 million bpd from the previous year under such economic situation, (3) as non-OPEC oil producers delay their output expansion, the sense of oversupply will be eliminated gradually on progress in lowering inventory, and (4) money will aggressively flow into the crude oil futures market on the global economic recovery, improvements in the oil supply/demand balance, and expectations of further economic growth and a tighter oil supply/demand balance in and after 2011. In this case, crude oil prices will rise particularly in the second half. **The WTI crude oil futures will average around $90/barrel (plus or minus up to $10/barrel) in 2010.** In this case, any risk events may work to boost the price

further.

9. **<u>The lower-price case</u>** will feature the following developments: (1) fears of another economic deterioration will emerge as downside risks surface in the global economy in the first half of 2010, (2) global oil demand growth will be limited to the 0.6-0.7 million bpd range from the previous year, (3) expectations of Iraq's production expansion will grow, while non-OPEC oil output increases faster than anticipated, (4) oil oversupply fears will grow as surplus oil supply capacity expands further, and (5) bearish sentiment will increase in the crude oil futures market due to expectations on deteriorating economic and financial situation and the easing oil supply/demand balance. In this case, crude oil prices will decline substantially mainly in the first half of the year. **<u>The WTI crude oil futures will average around $50/barrel (plus or minus up to $10/barrel) in 2010.</u>**
10. Among the three cases, the "reference case" has the highest probability of 60% (conceptual value). The probability for the higher-price case will be similar to that for the lower-price case.

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