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Report Summary

Prospects for the International Oil Market and Crude Oil Prices in 2008

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<Research Objectives>

In November 2007, **the front-month West Texas Intermediate (WTI) crude oil futures price**, which serves as a benchmark for crude oil prices in the international oil market, **briefly hit an all-time high above $99/barrel.** The price later fell slightly and now stands at around $90/barrel. The average for the period between the beginning of 2007 and December 17 came to $71.7/barrel, indicating the average for the whole of 2007 would reach a new high above $66.2/barrel in 2006.

Major factors behind the crude oil spike include concerns **about sufficient supply meeting growing oil demand** as well as supply/demand factors such as an oil inventory decline causing a sense of tightness in the supply/demand balance. Geopolitical risks, including the volatile Iran and Iraq situations, also contributed to the crude oil spike. Furthermore, observers have pointed to the impact of **massive speculative investment money flow into oil futures amid global excess liquidity.** OPEC's responses to the crude oil spike have attracted attention. OPEC decided to expand oil production at its 145th general meeting in September but refrained from coming up with any additional expansion at its 146th general gathering in December. In the international oil market in 2007, various supply/demand factors have been combined with other factors to substantially boost crude oil prices.

The international oil market and crude oil prices in the future are likely to dramatically change depending on the factors as cited above. Since the trends in the international oil market and crude oil prices have a great impact on future developments of the Japanese and global economies and of the world energy market, it is extremely important to understand these trends and analyze their future outlook. This report explores the prospects of the international oil market and crude oil prices in 2008 by examining the supply/demand fundamentals and various risks based on the above recognition. In the prospects, the most likely "Reference case" has been projected along with different (Higher-price and Lower-price) cases.

<Key Conclusion>

◆ Prospects for the International Oil Market in 2008

1. **<u>The "Reference case" for the International Oil Market in 2008</u>** is predicted on the following preconditions: (1) global oil demand will increase by some 1.4 million bpd from the previous year, (2) non-OPEC crude oil production will expand by 900,000 bpd (OPEC NGL output is estimated to rise by 300,000 bpd), (3) oil supply insecurity will sporadically emerge in major oil-producing nations but fall short of developing into any serious crisis, and (4) money flows into the crude oil futures market will continue at the present pace. In this case, **demand for OPEC crude oil will increase by some 300,000 bpd from 2007 and OPEC will be required to expand production in a timely fashion to stabilize the supply/demand relationship**. As OPEC crude production capacity rises, the group's surplus production capacity will expand slightly. Overall, there will be no **serious problems in the global oil supply-demand balances in the year.** OPEC will increase or reduce production in response to an oil price spike or a decline on a global economic slowdown. Sporadic oil supply insecurity and money inflow into or outflow from the crude futures market

will affect crude prices. But overall. There is no serious problem about stability of the global oil supply-demand. If and when there is money outflow from the current overheated oil futures market, oil prices will be adjusted downward. Under such circumstances, **crude oil prices will fall slightly from the present levels but remain high. The average WTI crude price for 2008 will be around $80/barrel ($78-82/barrel)**.

◆ **Basic Concept of Above Prospects**

2. **Supply/demand fundamentals**: While **the global economy will slow down moderately**, global oil demand will likely expand by about 1.4 million bpd from the previous year on **firm demand growth in such regions as China and the Middle East**. Any increase in non-OPEC oil production may be limited to less than 1 million bpd **due to emerging equipment and human resources shortages for upstream oil development, delays in oil development projects and falling output at mature oilfields.**
3. **OPEC policy**: It is pointed out that there is a growing preference **for higher oil prices** in OPEC, under the current situations of high oil prices and the sellers' market for oil. While being concerned about excessive oil price spikes' adverse effects on the world economy and demand for OPEC oil, OPEC will likely continue to adjust production **under the basic policy seeking to restarin any increase in oil inventories**.
4. **Risk factors**: There are various risk factors that could destabilize the international oil market. Notable among them are **the fate and impact of international tensions over Iran's nuclear development problem, Iraq's domestic stabilization and developments in Iraq's relations with neighbors**. Given the two countries' great importance for the international oil market, we can expect that emergence and development of risks regarding these countries would greatly affect stability of the international oil market. We would also have to take note of accident risks in the downstream sectors in major oil-consuming countries including the US.
5. **Flow of money into oil futures**: As **massive money flowed into the oil futures market amid global excess liquidity,** open interest of crude futures and options contracts expanded from some 700,000 contracts (700 million barrels) in the middle of 2003 to some 2.5 million contracts (2.5 billion barrels) at the end of November 2007. Factors behind the sharp expansion include **(1) concerns about future oil supply/demand, (2) geopolitical risks and (3) the crude oil market's growing attractiveness as a new asset class in the presence of financial market-destabilizing factors such as the subprime mortgage crisis, the dollar's depreciation and stock market weakness.** It has been noted that various influential market players such as **pension funds, hedge funds and soverign wealth funds** have poured massive money into commodity market including crude oil futures market which is relatively small in size as compared to traditional asset class market, **contributing to price fluctuations and excessive spikes affecting oil price formation. Accumulation of knowledge has been insufficient** about such massive money flow's cause-to-effect relations with oil futures price spikes, an upward shift of the oil futures curve (from front-month contract prices to longest contract prices) and structural futures price changes (contango or backwardation and their impact on oil inventories). **More detailed analyses of such relations** may be required in future. The fate and degree of money inflow into oil futures are a key point in projecting a future oil market.
6. **Oil futures price formation**: In a sense, price formation on the present oil futures market **depends on all market participants' average views, market parceptions.** Key market developments can be expected to dramatically change their market perceptions. The recent overall upward shift of the oil futures curve indicates that market expectation of oil prices in the future have been revised upward because such factors as future demand growth, constraints on expansion of supply and rising costs and huge money flows have been affected market sentiment.

◆ **Higher-Price and Lower-Price Cases**

7. The preconditions for the "**Higher-price case**" are: (1) that demand for OPEC crude oil will increase substantially as **non-OPEC crude production slackens unexpectedly**, (2) that **oil supply insecurity or risks** will emerge in some major oil-producing nations to affect the market, and (3) **massive investment money** will flow into oil futures. In this case, **crude oil prices will rise further** in response to supply insecurity and investment money inflow as well as the tighter supply/demand relationship. These prices will shift to a higher range while repeating wild fluctuations. **The average WTI futures price for 2008 will rise to around a $90-95/barrel range**. If any serious supply interruption emerges, crude oil prices may be some $10/barrel higher.
8. The key points for the "**Lower-price case**" are how serious any global recession would be and how oil demand growth would slacken. If oil demand growth slackens considerably, changes in market perceptions may be coupled with the easier supply/demand relationship to exert downward pressures on crude oil prices. Despite OPEC efforts to support prices with production cuts, **the average WTI futures price for 2008 will fall to around a $60-65/barrel range.**
9. The probability rating is the highest at some 50% (conceptual figure) for the "Reference case." Ratings are similar for the "Higher-price case" and the "Lower-price case."

(End)

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