

Prospects for the International Oil Market and Crude Oil

Prices in 2007

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<Research Objectives>

In July 2006, 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, closed at an all-time high above \$77/barrel. Later, however, the benchmark crude price lost nearly \$20/barrel and has recently hovered around \$60/barrel. The average for the first 11 months of 2006 came to \$66.6/barrel, far above the 2005 average at \$56.7/barrel.

Major factors behind the crude oil spike include **geopolitical risks** such as **growing international tension over Iran's nuclear development program** and the Middle East instability. Another factor is **the flow of massive investment funds into the crude oil futures market**. Amid the crude oil price decline since August, however, we have seen an increase in oil inventories and other signs of an easing supply-demand fundamentals. In response, **OPEC came up with an oil production cut at its Doha meeting in October (and its 143rd OPEC Meeting in December) and indicated its willingness to further reduce output**. The international oil market in 2006 saw crude oil prices posting wild fluctuations on complicated moves of various factors including supply/demand changes, risks and investment funds in the futures market.

The international oil market and crude oil prices in 2007 are expected 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 2007 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 Conclusions>

1. **Supply/demand fundamentals:** As the global economy continues to expand, **global oil demand in 2007 is likely to increase by around 1.4 million bpd from the previous year.** While some analysts predict non-OPEC oil production, mainly in such countries as former Soviet republics and African countries, to **expand oil output by nearly 2 million bpd, the projected expansion could be revised downward due to steep rises in costs for materials and equipment for upstream oil development, human resources and equipment shortages or the impacts of resources nationalism.** OPEC, which has gradually grown willing to keep oil prices at “high” levels (as compared to the past), has been alert to falling oil prices as well as the easing oil supply/demand balances as indicated by high levels of oil inventories. Depending on market developments, OPEC may move to further reduce oil production to prevent or curb price drops.

2. **Risks:** There are various risks that can destabilize the international oil market for the next year. But the Iraqi, Iranian and Nigerian situations are most important. The three oil-producing nations are all important suppliers to the global market, and face instability in domestic and/or international politics. **Developments in their situations could seriously affect the stability of the international oil market.** It is important to note that concerns for supply problems affected the oil market in 2006 but some of the impacts may have been already “factored-in”. Thus, any outbreak of “actual” serious supply problems is a matter of great concern for the market in 2007.

3. **Flow of investment funds into oil futures:** As massive funds flowed into the oil futures market, open interest (WTI futures contracts) doubled from some 600,000 contracts (for 600 million barrels) in early 2003 to about 1.2 million contracts (for 1.2 billion barrels) in the autumn of 2006. Leading investors in the oil futures market reportedly include pension funds and other institutional investors, known for very conservative and stable investors to take “Long” positions. While the flow of massive investment funds into the market continued, such phenomenon have emerged as oil futures price hikes, an upward shift of an oil futures curve (not only front month but also over 30th month futures contract prices increased substantially) and emergence of “contango” structure (accompanied by oil inventory increases). As more funds are expected to flow into the market, their specific moves and sizes are important for forecasting the oil market development in the future.

4. Based on the three factors given above, the “**Reference case**” of the international oil market in 2007 is predicted on the following preconditions: (1) that global oil demand in 2007 will increase

by some 1.4 million bpd from the previous year, (2) non-OPEC oil production will expand by about 1.6 million bpd, (3) oil supply insecurity will sporadically emerge in oil-producing nations while failing to develop into any serious crisis, and (4) investment funds will continue to flow into the crude oil futures market. In this case, call on **OPEC crude oil in 2007 will decrease by some 400,000 bpd from 2006 to nearly 28.5 million bpd**, lower than the current level (at 29 million bpd in November 2006). As **OPEC crude production capacity continues to rise, the cartel's surplus production capacity (an important supply buffer to the global market) is likely to increase**. These developments will be coupled with high levels of oil inventories (at this moment) to lead **the oil supply/demand balances to moderately ease**. If oil prices decline on the easing supply/demand balances, **OPEC will step in and reduce production to support prices**.

5. While the oil supply/demand balances will ease, sporadic **oil supply insecurity and the continuous investment fund flow into the crude futures market will work to support or boost oil prices**. Under such circumstances, crude oil prices will remain at present high levels in the international oil market in 2007. The **average WTI crude price for 2007 in the Reference case will be \$60-65/barrel**.

6. The preconditions for the "higher-price case" are: (1) that global oil demand in 2007 will post a steady increase of 1.6 million bpd from the previous year, (2) that non-OPEC crude production will expand, but just by some 1 million bpd, (3) that oil supply insecurity or risks will emerge in some oil-producing nations to affect the market, and (4) robust investment funds will flow into the oil futures market. In this case, **a tighter supply/demand balances and an expected absence of improvements in surplus oil production capacity will force the international oil market to remain vulnerable to supply/demand changes and external shocks**. Therefore, **crude oil prices will rise further** in accordance with supply insecurity in oil-producing countries and the flow of investment funds into the futures market. As a result, crude oil prices will wildly fluctuate at high levels. The **average WTI crude price for 2007 will be \$70-75/barrel**. If any extremely serious supply interruption emerges, the average may be some \$5 higher (\$75-80/barrel).

7. The preconditions for the "**lower-price case**" are: (1) that global oil demand in 2007 will post a moderate increase of 1.2 million bpd from the previous year, (2) that non-OPEC crude production will expand by a substantial 2 million bpd, and (3) that some limited oil supply insecurity will emerge in some oil-producing nations. In this case, **the oil supply/demand balances will ease, forcing OPEC to substantially reduce production (which leads to a substantial increase in OPEC surplus production capacity)**. As a result, pressures will grow on crude oil prices to drop. The **average WTI crude price for 2007 will be \$50-55/barrel**.

8. The probability rating is the highest for the “Reference case,” followed by the “Higher-price case” and then “Lower-price case.”

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