

VIEW POINT: FACTORS DRIVING OIL PRICES AND MITIGATING STRATEGIES FOR IMPORTERS

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Summary

This article looks at why oil prices are on an upward trend and explains some derivatives concepts in managing oil price exposure. A policy to carefully adopt the use of such financial instruments in a risk management strategy can save importers of crude oil or petroleum products from the devastating effects of higher oil prices as well as protect budget plans.

The Demand factor

Crude oil prices continued their random walk in 2004 showing an upward trend and reaching new milestones. Futures prices for West Texas Intermediate (WTI) peaked at \$55.17/barrel on October 22 and in London the same day, Brent Crude climbed as high as \$51.65 - a staggering 80% higher on previous year's prices. After a brief cooling down period, prices in 2005 have continued their relentless rise, smashing the \$60 mark and trading at record highs. Are we in for more records to be set this year or will prices eventually subside? What will the impacts be and what can importing countries do to mitigate their exposure to current prices?

Oil prices are driven by a multitude of factors but the demand factor is the major cause of the current high prices. A rapid expansion of Chinese and Indian economies in particular fuelled by reliance on heavy industries which lack energy-efficient technologies has driven demand to unprecedented levels. In the first half of 2004, China's oil imports alone surged nearly 40% to feed a robust economic expansion. The new wealth created in the country has found a healthy appetite in cars and other modern energy-dependent conveniences. This high demand has propelled China to a position as the world's No. 2 oil consumer after the United States with India occupying sixth place. The IEA estimates that Chinese and Indian demand will continue to grow at almost a million barrels a day - that is almost 40% of total world growth. We are in an era in China's and India's history comparable to the economic growth of the Asian Tiger Economies where oil consumption was significantly increased and also comparable to the 1950s and 1960s when enormous growth in aviation caused the oil market to expand rapidly. The American demand pull also cannot be overlooked even though there has been a shift from energy-sapping industries like manufacturing to more service-oriented jobs, which has resulted in the share of fuel in consumer spending in the USA declining from 7.2% in 1980-1981 to around 5% now. The reality is that the 200 million cars on America's roads including the gas-guzzling sports utility vehicles are consum-

ing 11% of total world production. A fall in production intensity has not necessarily affected consumption intensity which therefore adds additional pressure on world demand.

Unfortunately attempts to boost production to keep pace with demand have their limitations because of dwindling spare capacity in OPEC and non-OPEC producers: both groups are operating at full capacity. For that reason, the imbalance in supply/demand and low stocks to counteract supply disruptions has created a tight market that will quickly respond to accurate and inaccurate information on shortfalls in production. Investments in capacity may be the key to subdue rising price but higher prices for OPEC reduce the urgency to encourage investment. Furthermore, there is a lag period of investment and bringing oilfields on-stream which makes it clear for now that the demand factor alone will continue to keep prices buoyant well above the \$22-\$28 target range that OPEC introduced in 2000 (and which it "temporarily" suspended in 2005, with OPEC officials commenting that, just to compensate for the lower value of the US\$, it would have to be replaced by a 30-38 \$ price range). A new lower floor target of \$40 has been proposed by some OPEC members whilst some analysts still believe we are in for further average price increases in the coming years.

After repeated IMF warnings, the impact of high prices has begun to hit the global economy showing in rising consumer price indices, falling consumer demand and slower growth in the first quarter of 2005. In Africa, the transport sector which forms the backbone of any economy is particularly vulnerable to high oil prices. High fuel prices in the transport sector have led to massive demonstrations as a result of producers, transport companies and retailers all increasing their prices in an attempt to recover some of their costs. Sometimes artificial shortages are created by fuel distributors leading to even higher black market prices. The dependence on fossil fuels for transportation accounts for up to 65% of the total commercial energy use in some countries and exposure to sudden price increases has a profound effect on the economy. Also exposed are industry, agriculture and utilities depending on petroleum products. Governments have tried to play a role in reducing the burden on the consumer but it is evident that the increased oil bill, usually being the biggest cash flow item in the budget running into millions of dollars, puts an enormous pressure on public spending and cannot be sustained.

Strategies for importing countries

A few years ago, governments of African oil importing countries could have used rather simple hedging schemes to save their economies from crumbling. Then, prices were normally in a fairly steep backwardation, with prices quoted for two-three years forward 5-10% below current prices, something of which importers could benefit. Also, price volatility was not very high, so options were affordable. Both have changed now. For example, in early May 2005, WTI prices for July delivery were about the same as for December 2007, and even after that they remain very high.

Nevertheless, while this may not be the best time to lock in future prices, governments of oil importers should still consider the possibilities of risk management instruments in organized exchanges or negotiating risk management contracts privately over the counter (investment banks, financial institutions, trading companies, energy producers etc). Importers must be proactive in managing their exposure in order to reduce potential balance of payment problems and overcome budget deficits.

The diverse instruments available requires a careful selection of which instrument is most appropriate to shift the risk you are exposed to and a good knowledge of how it operates. A futures contract guarantees the holder the price that was paid for when the contract was bought. To illustrate how a hedge will work in practice consider a country which plans to purchase crude/refined products sometime in the future. To successfully reduce the risk of unexpected high prices a position is taken in the futures market that is equal and opposite to a position at risk in the anticipated physical market. The futures position taken in this case will be a long futures position where the hedger is looking to buy into the future to hedge the possibility of price hikes. Setting up a futures contract however requires a margin account to be set up and frequent cash calls when the market is moving against the position you have taken. It may therefore not be appropriate but other possibilities exist.

Options give you more flexibility in managing your price risk. Buying an option will cost you a premium (like an insurance contract), but gives you the right to exercise buy the underlying asset at a certain price known as exercise or strike price and a specified quantity by a certain date; but the buyer is under no obligation to do so. It is this distinguishing feature about options and the ability to participate in favourable market moves that makes it attractive to use in a risk management programme. An importing country wishing to protect its planned budget expenditure on crude oil imports as a result of rising oil prices may choose to pay the upfront premium to buy June Brent crude oil at \$x on or before July xx. Buying a call option will lock in price level at which purchases can be made while still participating in price declines. When market price is above the exercise price, the seller is then obligated to sell the required amount of crude oil specified by the contract. The buyer can also allow the option to expire when the market price is lower than ex-

ercise price and buy directly from the market incurring only the loss of premium.

Swaps and other over the counter instruments can be used as an alternative to options and futures. In a swap, the commodity does not change hands, but an exchange of periodic payments between two parties with one side agreeing to pay a fixed price and the other side paying a variable price. The payments are calculated as the difference between the fixed and variable multiplied by a notional volume specified in the swap contract. The variable price is usually linked to an agreed upon market index, normally Platt's Oilgram, NYMEX or IPE.

Hedging using any of the above instruments will give oil importing countries more stability in planning, and reduces exposure to the demand pull by China, India and America that has pushed oil prices to current high levels. It is not gambling with the nation's coffers, but simply a way to safeguard future plans.