

THE AFRICAN HUB for
Risk Management, Trading, Investing and Capital Raising

WTI CRUDE OIL

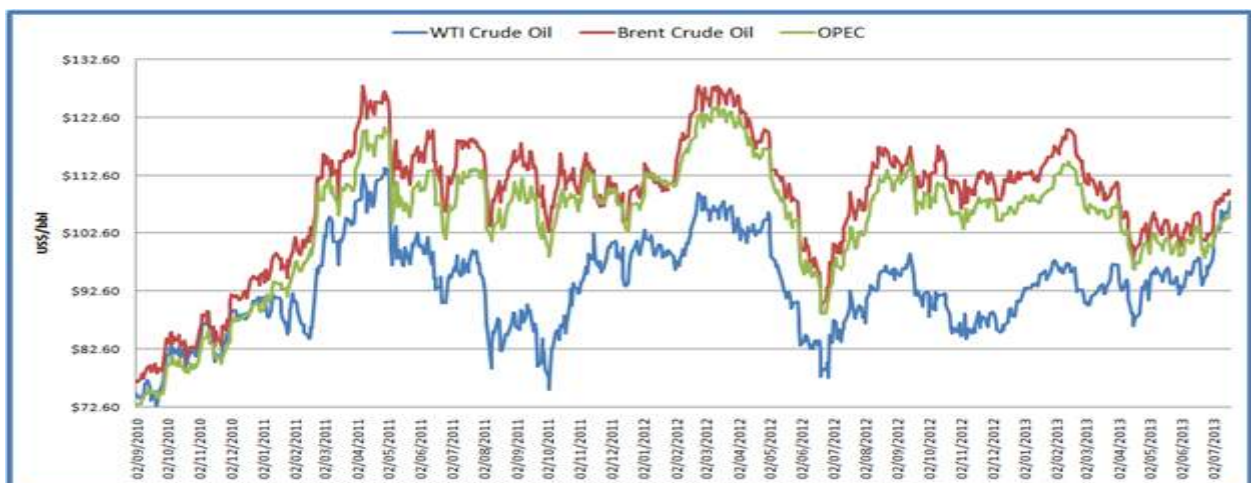


Any increase in oil prices has multiple impacts on the economy. On a macro level, the initial impact of an oil price increase is an adverse effect on the terms of trade of the economy by increasing the import bill. This in turn translates into higher general level of prices in the economy - thereby increasing inflationary pressures. If the increase in prices is persistent, it could lead to a situation whereby economic growth and output are affected, resulting in recessionary pressures on the economy.

For developing economies, the impact could be deeper since the industrial sector is more energy intensive and less energy efficient. On a micro level, increase in oil prices directly affects end users of oil and oil products. This category includes large refiners or any other enterprise which requires oil or oil products for its operations (for instance passenger and cargo transport firms). Increased oil prices translate itself into higher prices for most other goods and services in the economy thereby indirectly affecting all segments of the population. For instance, exporters and importers of goods are affected due to the higher freight costs, vehicle users suffer due to the higher fuel costs and most consumers - irrespective of the good consumed - are affected by to the cascading effect of higher production/delivery costs.

Not much can be done about the increase in oil prices since it is a global phenomenon and is mostly being driven by economic fundamentals such as the increasing demand pressure for oil coming from fast growing emerging economies along with the diminishing oil supply from the main producers. Oil price movements are also influenced in the short run by any social or political events that disrupt oil production in any of the oil producing economies, especially in the Middle East.

Price movements of oil prices of the three main oil grades



Source: Bloomberg

As shown above, WTI prices have been trailing behind Brent and OPEC (This has to do with supply and logistic issues at Cushing). The price gaps between these three grades have also increased since 2010 period. It can also be seen that prices have been on a general increasing trend.

Given this situation of increasing oil prices, it therefore becomes inevitable for those being exposed to oil price risk to hedge themselves against adverse price movements. The most effective and widely followed practice for mitigating risk of oil price movements is by hedging using financial derivative instruments such as Futures.

Bourse Africa WTI Futures have been launched with the objective of providing oil consumers and producers with an effective hedging mechanism against oil price volatility. Futures trading enables market participants to mitigate risks on the highly volatile commodity. With the derivatives, Bourse Africa provides an apt platform for its members and their clients from Africa and the Middle-East to safeguard against market oil volatility. In addition, the contract specifications are tailored to meet the risk mitigation needs of all oil traders and commercial oil companies across the region which further strengthens the bourse's vision of creating markets for the masses.

Hedging on Bourse Africa WTI Crude Futures contract

For instance, a utility organization is importing crude oil. Any increase in the price of crude oil increases its expenses. Consider the organization to be importing 1000 barrels of oil each during the months of November and December.

At the current price of US\$ 85 per barrel the firm calculates its expenses as US\$ 85,000 (1000 barrels * US\$ 85) in November and US\$ 85,000 in December as well. So its total expected expenses would be US\$ 170,000.

Now, if the price of crude oil increases to US\$ 100 in the month of December then the firm will have to pay more per barrel in December thereby increasing its expenses. Its total expenses would now be US\$ 185,000 thereby spending US\$ 15,000 more than what it had planned in November. This can be considered as a loss. Now, if the firm wants to lock its expenses at US\$ 170,000 for the total period November and December, it needs to enter the futures market and buy futures contracts worth that amount in November and when prices increase in December sell those contracts for the higher price, thereby making profits which cover the losses it makes in the goods market.

DESCRIPTION	SPOT MARKET (Without Hedging)	Futures Market (With Hedging)
Expected expenses in November for its purchases in November and December (Since market price of crude oil is US\$ 85 per barrel in November)	November: US\$ 85,000 December: US\$ 85,000 Total = US\$ 170,000 for Aug and Sept	
Actual expenses in November Market Price = US\$ 85 per barrel	US\$ 85 per barrel (1000 barrels) = US\$ 85,000	Buys 4 futures contracts (250 barrels per contract size) at the futures price of US\$ 85 (4*250*85) = US\$ 85,000
Actual expenses in December Market Price = US\$ 100 per barrel	US\$ 100 per barrel = US\$ 100,000	Sells the 4 futures contracts at the price of US\$ 100 (4*250*100) = US\$ 100,000
Total Amount spent	US\$ 185,000 (US\$ 85,000+US\$ 100,000)	
	Losses from the expected expenses = US\$ 185,000 - US\$ 170,000 = US\$ 15,000	Profits from futures transaction = US\$ 100,000 - US\$ 85,000 = US\$ 15,000

Despite the fact that the organisation can gain or lose from hedging, the basic purpose of hedging is to know exactly how capital would be required for this import deal irrespective of the uncertainty associated with future exchange rate movements. This example depicts the elimination of foreign exchange risk using futures contract available on Bourse Africa.