



Impact of the Middle East Unrest on the Global Oil Market

A. Introduction

In Tunisia, Egypt, Libya, Algeria, Oman, and Yemen, protestors have taken to the streets to demand political change, and in Tunisia and Egypt, they have succeeded. The tension between the people and their governments has caught the global media's attention. It has also triggered a domino effect among other autocratic regimes in the region and threatens to topple many rulers.

The protests were sparked initially by rising food prices. In Egypt, for example, food prices have been rising at an annual rate of 17%. However, as the protests gathered momentum, criticism of food policies spread to charges of corruption and economic mismanagement. High unemployment rates among the youth and the reduction in the GDP per capita in Tunisia, Egypt, Libya, Algeria, and Oman added fuel to the protests.

The volatile situation in these oil rich countries eventually led to high spikes in global oil prices.

How Did the Civilian Unrest Spread?

Tunisia: Dec 2010 to Jan 2011

December 17, 2010: Mohamed Bouazizi, a university graduate, sets himself on fire, mainly in protest over the unemployment situation.

January 8-10, 2011: About 21 people die in protest against the government due to riots in Kasserine.

January 14, 2011: Thousands of protesters demand the resignation of Ben Ali, the President of the Tunisian Republic, across the country. Due to the protests, Ben Ali resigns and leaves the country.

Egypt: Jan 2011 to Feb 2011

January 25, 2011: Demonstrations spread across Egypt following month long protests in Tunisia. Clashes begin across Cairo.

February 1, 2011: Thousands of protesters take part in a rally in Cairo. They demand President Mubarak leaves office by February 4, 2011.

February 4, 2011: Thousands gather at Tahrir Square and call for the departure of President Mubarak.

February 11, 2011: Hosni Mubarak resigns and cedes power to the military.

Libya: Feb 2011 Onwards

February 16, 2011: Around 200 protesters gather in the coastal city of Benghazi.

February 21, 2011: Rebels take control of the city of Benghazi. Anti-government demonstrations break out in Tripoli.

February 24, 2011: Violence in the region continues. Global oil prices rise to USD 120 per barrel primarily due to the fear of protests spreading to other oil producing countries in the Middle East.

February 26, 2011: Gaddafi loses control of Eastern Libya.

Political Situation in the Middle East and North Africa



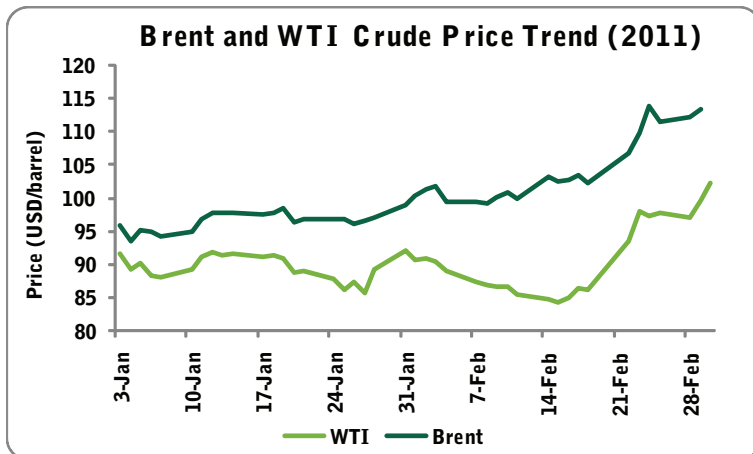
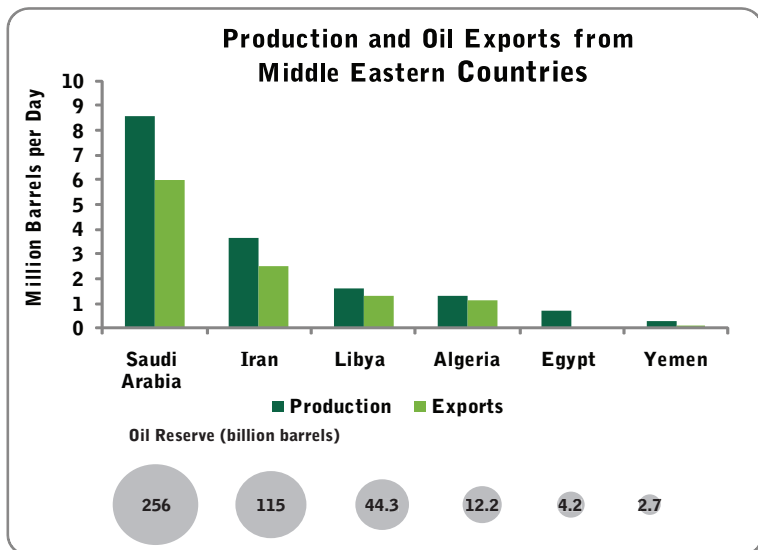
B. Ongoing Crisis in the Middle East and North Africa

The crisis that began in Tunisia and Egypt has spread to Libya and Yemen. There have been instances of minor protests in the major oil producing nations of Bahrain, Iran, and Iraq.

Major Concern Regarding the Middle East Crisis: Energy Markets

The ongoing crisis in the Middle East and North Africa has raised concerns about the supply of energy commodities, especially crude oil and its derivatives.

Major Oil Producers in the Middle East & North Africa



As shown in the graph, Brent crude oil prices surged up to 112 USD/barrel due to supply disruptions in the Middle East.

The increase in the price of crude oil in the Middle East and North Africa was mainly driven by speculation about supply disruptions and concerns about the spread of the crisis to other major oil producing nations, such as Saudi Arabia, Iraq, and Iran. The unrest in Libya reduced the crude oil supply by 1.6 million bpd.

Importers of Libyan Oil	
Importers	% of Total Production
Italy	32
Germany	14
China	10
France	10
Spain	9
US	5
Brazil	3
Rest of Europe	14
Rest of Asia	3

Impact on Oil Producers Based out of Libya

- Italy's ENI, the biggest foreign energy major in Libya, cut oil production in the country by over 50% due to the ongoing unrest. Italy receives 10% gas supplies from Libya.
- Spain's Repsol stopped production in Libya due to anti-government protests.
- British Petroleum (BP) evacuates all staff from Libya.

Therefore, the Libyan crisis significantly affected the supply of crude oil thereby causing the prices to increase.

Impact on Oil Prices

Libya accounts for 2% of the global supply of crude oil. Consequently, the unrest in the Middle East is likely to result in serious consequences for crude oil prices.

The protests in Libya reduced the supply of crude oil by 75%. The major importers of crude oil from Libya are European refiners, especially refiners from Italy, France, Germany, and Spain. These countries import approximately 85% of Libya's crude oil exports.

WTI Price: From the start of the Libyan unrest till date, the price of WTI soared by 20%. The price of WTI touched a two year high of 102.23 USD/barrel on March 2, 2011.

Brent Price: From the start of the Libyan unrest till date, the price of Brent crude rose by 10%. The price of Brent crude reached 112.27 USD/barrel on February 28, 2011.



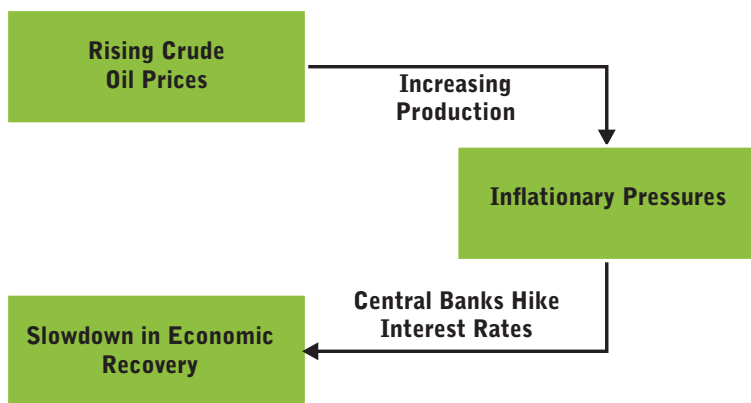
Libya's Port Operations

Libyan port operations have come to a standstill due to the prevailing crisis and bad weather in the eastern part of Libya, which led to a strong rise in WTI and Brent prices. However, the ports in Melittah and Zawiyah have reopened. Es Sider, the largest oil port in Libya, and Tobruk continue to operate as well.

Major Crude Oil Terminals in Eastern Libya		
Port	Capacity (bpd)	Operating Status
Es Sider	447,000	Working
Marsa El Brega	51,000	Shut down
Ras Lanuf	195,000	Shut down
Tobruk	51,000	Working
Zueitina	214,000	Shut down
Zawiyah	199,000	Working



Economic Impact of Crude Oil Price Hikes



If crude oil prices continue to rise, the production cost will increase, which could lead to inflationary pressures that will soon force central banks that are already worried about food prices to tighten the monetary policy by hiking interest rates. This move would reduce some of the liquidity that drove the economy in recent months.

The price rise will impact various regions and countries differently, depending on their underlying economic strength and whether they are oil producers or importers.

Macroeconomic Factors	Scenario 1 Impact	Scenario 2 Impact
Global GDP Growth	No impact	Global GDP growth declines by 0.2-0.5%.
Consumer Inflation	Euro zone inflation increases to 2.2%.	Rising food and fuel costs increase inflation in the US by 1.5% and in Europe by 0.5%.
Industrial Producer Prices	Surging crude oil prices lead to a rise in US and Euro zone PPI by 0.8% and 1.5%, respectively.	Higher energy costs lead to a rise in the Producer Index by 3.5-5%.

Impact on the US Economy

Due to supply disruptions of light sweet crude oil exports from Libya, WTI crude oil spot prices increased by about 15 USD per barrel since mid February 2011. On a short-term basis, the recent and rapid increase in spot crude and gasoline prices led to a significant rise in retail product prices. The average price of gasoline and diesel in the US rose by 19 cents and 14 cents, respectively, during the week ending February 28, 2011 compared to the week ending February 21, 2011.

If crude oil prices remain high in the long term, they could lead to weaker growth and higher inflation.



Impact on Europe

As Europe imports approximately 85% of crude oil exports, the unrest in MENA is likely to increase the inflation rate in the Euro zone by up to 2.2%, mainly due to increasing pressure on energy costs. The political troubles in MENA also caused the prices of oil derivatives to rise. Naphtha quotations in Europe rose by a record USD 74/MT on February 25, 2011.

Long-term Impact:

If inflation exceeds the comfort zone of 2.4% in the Euro zone, the European Central Bank is expected to hike the interest rate to contain inflationary pressure. An interest rate hike by the ECB could push up borrowing costs in the Euro zone. Rising interest rates in the Euro zone are expected to substantially impact heavily indebted nations, such as Greece, Ireland, Portugal, Spain, and Belgium. As a result, the ECB would be hard pressed to bail out all of these governments.

Impact on Emerging Markets

Rising food and fuel costs are likely to result in inflationary pressures in emerging markets. Countries like India, China, Brazil, Russia, and South Korea are likely to increase interest rates in an effort to control inflation. Rising interest rates would have a negative effect on the economic growth of these countries and dampen growth sentiments across emerging economies.

Other Market Changes

The market impact of the civil unrest in Libya goes beyond volumetric losses and price hikes. Some of the other effects of the ongoing crisis are:

Loss of High Quality Grade Oil: Libya's importance to the oil market stems not only from its substantial production, but also from the light, sweet quality of its crude grades. Es Sider, its largest stream, has a slightly lower gravity (i.e. it is a slightly heavier grade of crude) than benchmark grades Brent and West Texas Intermediate (WTI). However, it has a slightly lower sulfur content (meaning that it is sweeter). Light crudes are the easiest to process and can be run by relatively simple refineries that may not be able to handle heavier or sourer substitutes. A loss of light, sweet crude volumes is more difficult to deal with than a loss of heavier, sourer grades.

Supply Shortage Chain Effect:

The ultimate impact of any crude disruption is felt by more than the immediate buyers of that specific oil. As buyers find substitute supplies for the disrupted oil, the replacement barrels are diverted from their original use or destination, causing a secondary impact. If the supply shortage is prolonged, a disruption in Libyan exports could have a larger impact on US oil supply sources. Unlike Libyan production, more than a third of Algeria's light, sweet crude (a possible substitute from fields relatively close to Libya's) is shipped to US refiners, which sometimes use it as a blending stock to lighten heavier crude grades. Should these volumes find a stronger market in Europe, US end-users would have to look for alternate supplies. Light, sweet Nigerian crude, which (depending on market conditions) can wind up in the United States, Europe, or Asia, is another case in point. Global crude oil flows will tend to adjust to best match demand with available supply sources.

C. Market Outlook

The impact of the ongoing protests has been analyzed taking into account the following two probable scenarios.

Scenario 1:

The unrest in Libya worsens in the weeks to come; however, the civilian unrest does not spread to other regions. Protests begin to die down towards the beginning of April.

Expected Impact on Prices:

As the crisis worsens only in Libya but does not spread to other regions, there is likely to be no major disruptions in the supply of crude oil.

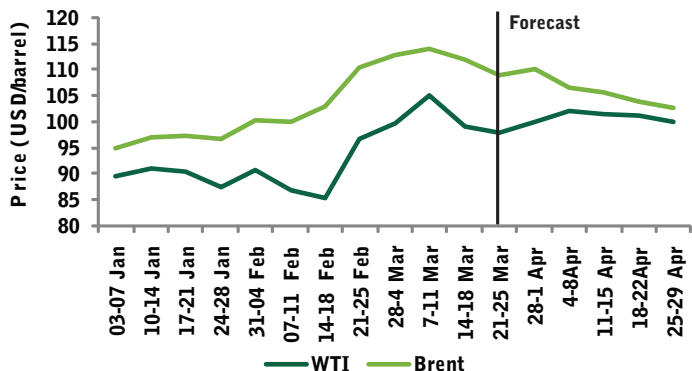
Scenario 2:

The unrest continues in Libya and spreads to Saudi Arabia, Iran, and other Middle Eastern oil producing nations during the month of April.

Expected Impact on Prices:

With the crisis worsening in Libya and spreading to other regions, such as Saudi Arabia and Iran, the supply could reduce by around 10-12%. As a result, there would be a substantial increase in oil prices.

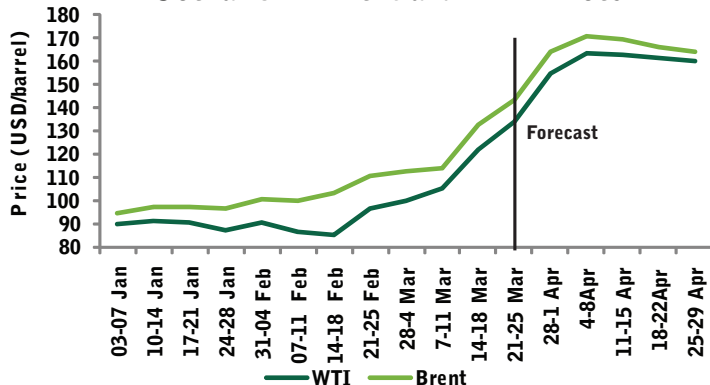
Scenario 1 - Brent and WTI Prices



The price of WTI is expected to peak at 102.94 USD/barrel in the second week of March and then gradually decrease to 91.58 USD/barrel by the end of April.

The price of Brent crude is expected to rise up to 115.29 USD/barrel in the first week of April and then gradually decrease to 102.56 USD/barrel by the end of April.

Scenario 2 - Brent and WTI Prices



The price of WTI is expected to increase to 152 USD/barrel in the first week of April and then marginally decrease to 146.52 USD/barrel by the end of April.

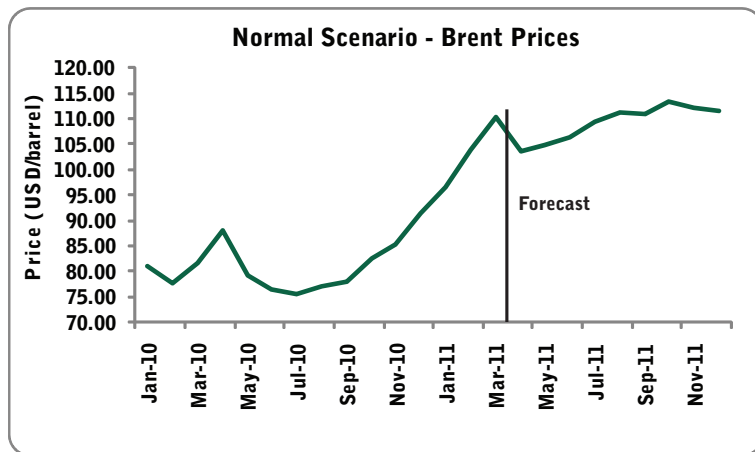
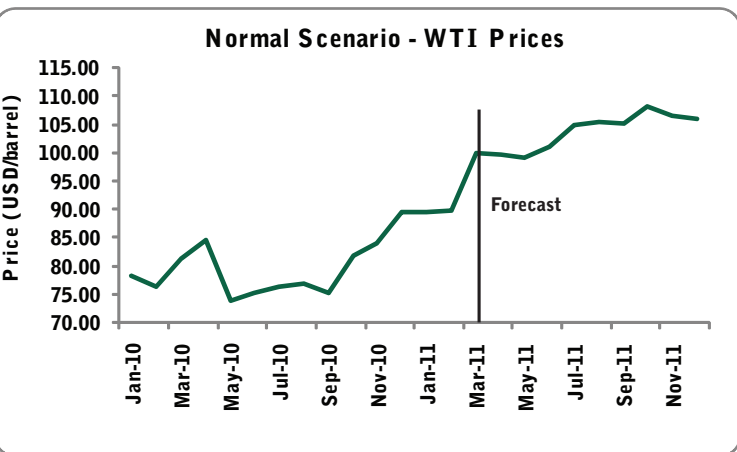
The price of Brent crude is expected to increase to 170.4 USD/barrel in the first week of April and then fall to 164.10 USD/barrel by the end of April.



Conclusion

The recent crisis in the Middle East was caused by the lack of socioeconomic development in the region. The recent surge in the price of oil and oil products is a result of speculation regarding supply concerns and the probable spread of protests.

If protests spread to other countries in the region, an additional spike in crude oil prices is likely. However, taking into account that the demonstrations are likely to cease by the end of March 2011, the annual average price of WTI is expected to be around USD 102/barrel and the average price of Brent is expected to be USD 108/barrel.



Under normal circumstances, and if the crisis in the Middle East ends without spreading to other countries, the WTI price is expected to increase to 108.28 USD/barrel in October 2011 and be 106.94 USD/barrel in Q4 2011.

As the unrest eases in MENA, the Brent price is expected to increase to 113.38 USD/barrel in October 2011 and be 112.3 USD/barrel in Q4 2011.

Note: This report was created on March 18, 2011. The situation in the Middle East may have changed since then.

Sources: Market Oracle, Reuters, Heraldextra, National Post, The Economist, The Economic Times

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