US Crude Oil – Factsheet

Introduction

Crude oil trading

Crude oil, also known as petroleum, is the most actively traded commodity in the world. Leading marketplaces are Geneva, London, New York, Chicago and Singapore. Because crude oil serves various production needs as the primary raw material and energy source, it is often referred to as “the black gold”.

There are several grades of crude oil with respect to the gravity/density and sulphur content. These are the three primary benchmark grades:

- West Texas Intermediate (hereafter “WTI”), also known as “Texas Light Sweet”;
- Brent Crude, which is sourced from the North Sea; and
- Dubai Crude, extracted from the United Arab Emirates.

Other well known blends/grades include the OPEC basket (weight average made up of many blends), Malaysian Crude (known as “Tapis Crude”) and Nigerian Crude (known as “Bonny light”).

WTI is recognised as a high grade crude oil and is used primarily in the United States of America, it is also considered worldwide (alongside with Brent) as a benchmark for oil pricing.

WTI is a light (low density) and sweet (low sulphur) crude oil thus making it ideal for producing products such as low-sulphur gasoline and low-sulphur diesel. WTI crude oil is refined mostly in the Midwest and Gulf Coast regions of the USA.

WTI crude oil is lighter and sweeter than other grades of crude oil (such as Brent for example). This difference in grade quality compared with others, results in WTI being traded with a premium over the others.

Oil price is usually quoted per barrel (around 160 litres). The price of oil, as quoted in the news, generally refers to the spot price per barrel of either WTI or Brent. The price of a barrel of oil is highly dependent on both its grade and its location.
Recent price history

In July 2006, crude oil futures peaked at a close of over USD 77. In October 2007 crude oil rose above USD 90 for the first time. This price was a reflection of rising tension in Eastern Turkey and the decline in strength of the USD.

Oil broke again through USD 110 in March 2008; in the same year it continued its rise, passing USD 135 in May and USD 140 in June. On 11th July 2008, oil prices rose to an all-time high of USD 147.27 following concerns over Iranian missile tests being carried out at the time.

On 14th July 2008, US President Elect George W. Bush lifted the order banning offshore drilling that had been implemented by former US presidents. As a direct consequence, oil prices declined very quickly in the following days by more than USD 20 to reach USD 125. By October 2008 it had dropped further to USD 70, finally culminating in December 2008 when the price of a barrel of oil attained USD 33.87, less than ¼ of the price reached four months earlier.

Throughout 2009 prices continued to drop, descending to below USD 34, however by the beginning of 2010 it began its slow rise again, hitting USD 113.93 a barrel by April 2011.
Which factors can affect oil prices?

The price history of oil shows that demand and supply can be impacted by various different factors such as:

- Politics
- Social factors
- Environmental factors (such as natural disasters)
- Macroeconomics
- Speculation
- Technological advancements (such as with alternative energies)

It is important to note that currency trading is also directly affected by oil prices. For example, the US dollar may cause the rise or fall of the price of oil, and vice-versa. Due to this fact, the US dollar is known as a commodity currency. Other commodity currencies are the NOK, CAD, AUD and NZD.

Who uses the crude oil market?

The crude oil marketplace comprises of a large array of participants, including:

- Commercial enterprises with a direct stake in the price of oil: the contract can be a valuable hedging instrument. As a safeguard against falling cash market prices, producers and traders can sell oil futures to lock in prices for future delivery, protecting the value of future crude oil sales.
- Other oil industry participants: such as refiners.
- Professional energy traders.
- Investors and speculators: with no intention of buying or selling actual physical commodities, are simply trying to make money by trading its value.

What are the underlying risks of oil trading?

The risk of loss in trading oil or other commodities can be substantial. You should, therefore, carefully consider whether such trading is suitable for you in light of your financial condition.

Oil trading is speculative and influenced by many factors

Oil trading can be very volatile and involves a high degree of risk. The low margin deposit required permits an extremely high degree of leverage. Accordingly, a relatively small price movement in an oil contract may result in immediate and substantial loss or gain to the investor.

Price movements are influenced by among other things; changing supply and demand relationships, trade, fiscal, monetary, and exchange control programs and policies of
government, weather (climate conditions) and emotions of the market place. Foreign policy of certain countries can have a big impact on oil prices, and investors can do very little about this aspect of oil trading. As an example OPEC is a huge driving factor in the price of oil. While OPEC carefully regulates oil production to keep the oil market steady, fluctuations in the market can cause drastic changes in the price of oil, therefore making oil trading extremely risky. War or civil unrest can decrease oil production, increasing demand and sending prices skyrocketing, however producing too much oil can lead to a drop in oil prices, resulting in a big loss for oil traders.

None of these factors can be controlled and no assurance can be given that the trading activity will result in profitable trades and not in substantial losses. OIL TRADING IS SPECULATIVE AND INVOLVES A SUBSTANTIAL RISK OF LOSS AND MAY NOT BE SUITABLE FOR ALL INVESTORS

Demand for oil can be extremely difficult to predict

Analysts generally predict the demand for oil to go up, and therefore the price to increase.

Crude oil has many applications and the oil demand is worldwide. As this demand increases, prices should also be expected to rise. However, crude oil demand is a tricky thing to predict! As the price of oil increases, this places greater pressure on consumers’ consumption. For example, should oil prices increase at a time when the economy is worsening; this will more than certainly result in the drop in demand from consumers. Less demand means a decrease in oil price, with oil traders ultimately losing money.

Trade leverage

Depending on your experience level, trade leverage can be a powerful tool to help maximize returns, or alternatively it can be the cause of significant loss. Due to its complexity, trade leverage must not be taken lightly and it is recommended that you refrain from trading until you have read and fully understood the mechanisms described in the Forex contract, in the Account opening documentation and on Swissquote’s websites.

In addition, oil trading with leverage may not be suitable for all investors as it carries a high degree of risk. As you could lose your initial deposit, you should ensure that you fully understand all the risks. These risks are also intensively described in the Forex contract, in the Account opening documentation and on Swissquote’s websites.
Failure of Electronic Trading System

Electronic trading systems are susceptible to temporary breakdown. In the event of system or component failure, it is possible that (for a certain period of time), you may not be able to enter new orders, execute existing orders, or modify or cancel orders that were previously entered.
WTI Crude Oil

Swissquote aims to facilitate to its retail clients the access to online crude oil trading as well as provide an alternative to current solutions offered by other online brokerage platforms (namely futures).

We aim to propose an oil trading alternative with the same trading features that are currently applied to currencies and bullion on our Forex platforms such as;

- Real time trading.
- Deep liquidity.
- Low cost trading.
- Leverage use.
- Automatic closing out.
- Automatic rollover of open positions.
- No physical delivery.

A WTI oil trading transaction through Swissquote is made against USD (OIL/USD).

**What does Swissquote propose?**

Through its WTI crude oil contract, Swissquote proposes a combination between:

- OTC trading (with no physical delivery); and
- Derivative products (which imply automatic management of expiration dates).

The WTI crude oil transaction is a computation derived from the WTI Light Sweet Crude Oil future contracts (hereafter “WTI futures”) traded and quoted at the Chicago Mercantile Exchange (Symbol: CL).

WTI futures are organized through a specific calendar and only standardized contract months are available in the marketplace (for example: January 2012, February 2012, March 2012, etc). On the other hand, WTI futures contracts have the benefit of a very high liquidity. Every day, around the world, WTI futures and options markets average 1’000’000 contracts traded, that translates to one billion barrels of oil.
**Price generation**

The WTI crude oil is constructed through the combination of two WTI futures with different maturities.

The WTI Crude Oil price is based on the 1st Maturity Future (CL1) and adjusted by the Spread between the front contract (CL1) price and the next available Future (CL2) price; spread itself adjusted by a Delta Factor and a Time Factor

\[
\text{WTI Crude Oil} = \text{CL1} - \left[ \left( \text{Spread} - \text{Delta Factor} \right) \times \text{Time Factor} \right] \pm \text{SQ Markup}
\]

**Spread** = CL2 - CL1 (eq to. Price difference between 2nd Maturity & 1st Maturity Future contract)

**CL1:** the 1st Maturity Future

**CL2:** the 2nd Maturity Future

**Delta Factor** = Price adjustment computed once a month to avoid a price gap at the Future contract switch.

**Time Factor** = ratio combining the remaining days before CL1 expiration and the total number of day between the last and the next expiration.

In order to smooth the price difference between the two Futures contracts (CL2 & CL1), which basically represent the monthly rollover cost, we would apply this difference on a daily basis, as a rollover fee.

Lastly, with such a fee actualized on a daily basis, the client does not suffer from the switch from one contract to another.

**Daily Rollover** = \((\left( \left( \text{CL2} - \text{CL1} \right) - \text{Delta Factor} \right) / \text{Y}) \pm \text{SQ Markup}

\text{Y} = \text{total number of days between the last and the next expiration.}

**Leverage**

Deciding which of Swissquote’s various platforms to trade WTI crude oil on will also allow you the choice of leverage you wish to have. Opt to trade on either the Java, Web Trader or MT4 platforms and you will experience a constant maximum leverage of 30:1, weekends included.

When choosing to trade on the FXBook platform, you will also enjoy a maximum leverage of 30:1; however this leverage is only available between 11:00 pm on Sunday and 10:00 pm on Friday.

On weekends (between 10:00 pm on Friday and 11:00 pm on Sunday), the maximum leverage is 10:1.
Regardless of which platform you choose, a 30:1 leverage with a capital outlay of USD 1,000 will allow you to invest USD 30,000 in the market.

**Automatic closing out**

You are fully responsible for monitoring the activity on your account. However to ensure that your losses do not exceed your entire equity, Swissquote operates a system which ensures the automatic closing out of all open positions as soon as the margin threshold is breached, at the next available market price for the corresponding execution size.

For additional information, please refer to the Forex contract, the Account opening documentation and Swissquote’s websites.

**Rollover/overnight fee**

It is not possible to physically deliver the oil traded on our platform. The WTI crude oil contract trade is purely speculative by nature. In order to prevent the delivery, the open oil positions are automatically renewed for the following maturity date.

\[
\text{Monthly roll over cost} = \text{Spread (CL1, CL2)}
\]

This rollover mechanism is applied on daily basis and therefore has consequences on your account.

An amount is credited or debited to your trading account and is related to the renewal of your position: this being the price difference between the next available WTI maturity (CL1) and the subsequent available WTI maturity (CL2).

\[
\text{Daily roll over cost} = \frac{\text{Monthly roll over cost}}{\text{Number of days between CL1 and CL2}}
\]

The rollover takes place automatically between 11:00 p.m. and 11:15 p.m. The debit or credit is booked to your account on the following day.
Practical examples

Example 1

Date of transaction: 24 January 2011

Available WTI future contracts:

<table>
<thead>
<tr>
<th></th>
<th>Price</th>
<th>Roll date</th>
</tr>
</thead>
<tbody>
<tr>
<td>CL1 maturity</td>
<td>87.87</td>
<td>13.02.2011</td>
</tr>
<tr>
<td>CL2</td>
<td>89.53</td>
<td>-</td>
</tr>
</tbody>
</table>

Delta Factor = -0.24

Time factor = 0.57

Spread = 89.53 – 87.87 = 1.66

WTI crude oil price = 87.87 – ((1.66 - (-0.24)) * 0.57) + mark-up = 86.78 + mark-up

Roll over fee: 0.041 + mark-up

Example 2

Date of transaction: 30 March 2011

Available WTI future contracts:

<table>
<thead>
<tr>
<th></th>
<th>Price</th>
<th>Roll date</th>
</tr>
</thead>
<tbody>
<tr>
<td>CL1 maturity</td>
<td>104.27</td>
<td>10.04.2011</td>
</tr>
<tr>
<td>CL2</td>
<td>104.84</td>
<td>-</td>
</tr>
</tbody>
</table>

Delta Factor = -0.40

Time factor = 0.39

Spread = 104.84 – 104.27 = 0.57

WTI crude oil price = 104.27 – ((0.57 - (-0.4)) * 0.39) + mark-up = 103.89 + mark-up

Roll over fee: 0.006 + mark-up.
Help

If you need help or further information, please do not hesitate to contact our Customer Care Center +41 44 825 87 88

Swissquote

Swissquote is the leading Swiss bank in the area of financial services and online trading, it is listed on the Swiss Stock Exchange (SIX, ticker symbol SQN). With branch offices throughout Switzerland and an international location in Dubai UAE, Swissquote is headquartered in Gland (VD) in a building housing the latest technological advancements.

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