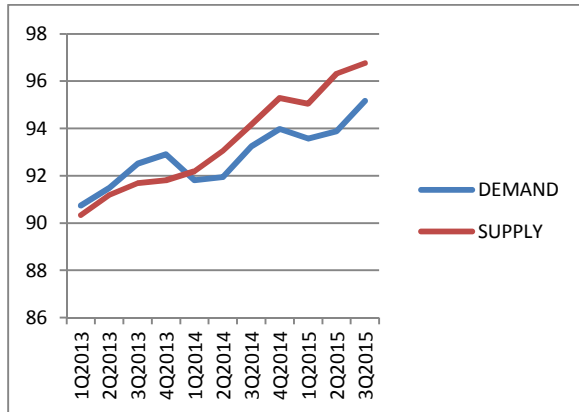
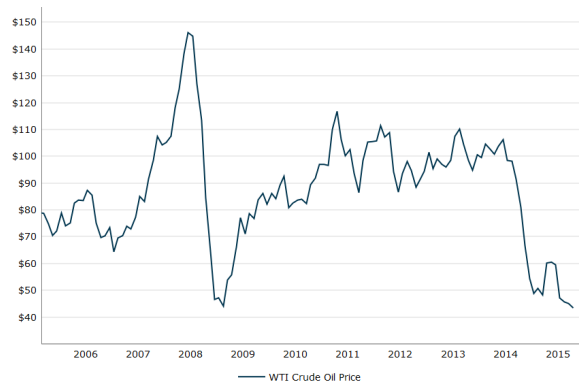


## Viability of the Offshore Oil and Gas Industry around 50 US\$ / barrel. (Part 1 of 3).

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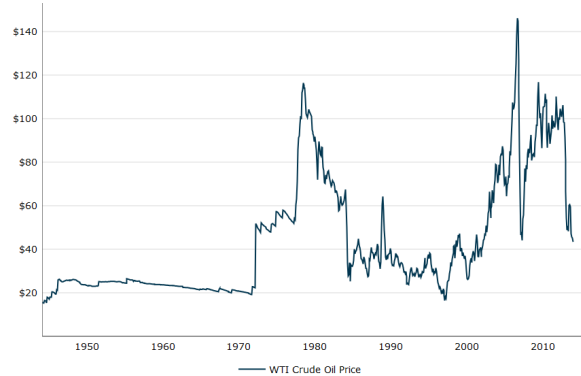


In the first quarter of 2014 the world crude oil supply exceeded the world crude oil demand. This imbalance has continued since then with the logical consequence of a sharp decrease in the price of crude oil.



Over the last ten years the crude oil has been at a high level with an exception between November 2008 and July 2009, during the financial crunch, when basically no offshore contracts were awarded (the trough was in February 2009 with a monthly inflation adjusted average price at 44 US\$). This has given fuel to the line of thinking that the viability of the Offshore Oil and Gas industry is depend-

ent on a high level of crude oil price. Of course this is completely wrong.



If we look back to the beginning of the offshore oil and gas industry (the late 1940's), the picture is quite different: For approximately 65% of that period the price of the crude oil has been below 50 US\$ (inflation adjusted). Did that stop the development of the offshore oil and gas industry? Obviously not!

Some people might put forward the opinion that the Deepwater segment of the Offshore Industry needs a high crude oil price. Well let's just examine this with some historical data. If we look again at the crude oil price graph covering the full period of the Offshore Oil and Gas Industry, then we note that the lowest crude oil price was in 1998 (in December 1998 the monthly inflation adjusted average was 16.42 US\$). The Girassol field (TOTAL) was discovered in **1996** when the GIR-1 exploration well was drilled, and the official go-ahead to develop the project by Sonangol was given in **1998**. So **the development of the first deepwater FPSO project** started the year when **the crude oil price was at its lowest** since the beginning of Offshore Oil and Gas. Some might say that this was an exception, but no - what is interesting is that the Girassol project was not a one off:

- The Greater Plutonio field (BP) was discovered in 1999 and BP received approval for its development plan in

early 2004. The field came onstream in 2007.

- Agbami field (CHEVRON) was discovered in 1998/1999 and came onstream in 2008.
- Dalia field (TOTAL) was discovered in 1997 and came onstream in 2006.

All the above mentioned projects were drilled at times when the price of the barrel of crude was below 50 US\$, well actually they were all drilled at times when the price of crude oil was below 40 US\$.

The conclusions we can draw from this are:

- Offshore Oil and Gas has been explored and produced for approximately 70 years during which period about 65% of the time the price of the crude oil has been below 50 US\$ per barrel (inflation adjusted).
- As proven in the past, deepwater oil and gas exploration and development can be profitable at crude oil price below 50 US\$.
- If the Offshore Oil and Gas projects are struggling to be economically viable today at a crude oil price below 50 US\$, then that can only be a consequence of costs having been added which are not bringing value activities with them.