

Oil situation in 2013 and trends

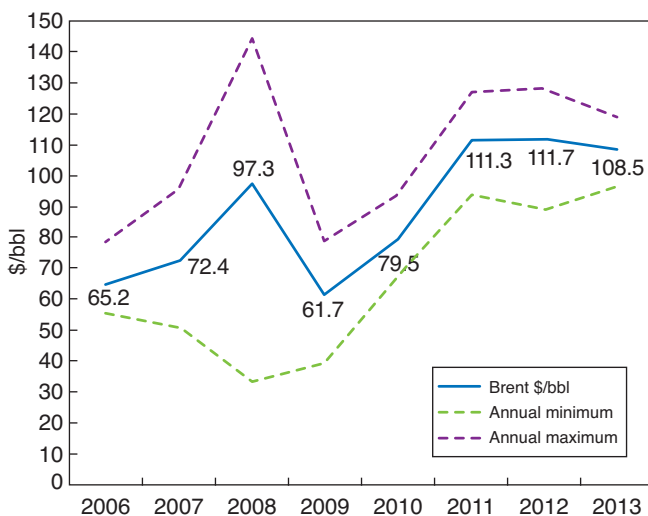
The average price of Brent in 2013 was \$108/barrel (bbl) (WTI was around \$98), slightly below the 2011 and 2012 averages (\$111/bbl). The tensions with Iran in the early part of the year, then in Egypt and in Syria during the summer, drove Brent towards \$120/bbl. The pressure on prices also reflected the drop in supply in certain OPEC countries, particularly Libya, but also in Iran because of the oil embargo that was implemented in July 2012. The increase in the US production of shale oil certainly prevented a stronger market reaction. This is an important issue over the medium-term, which is likely, together with the possible lifting of the embargo on Iran, to favour a significant easing in the price of oil... nevertheless according to the geopolitical context.

The price of Brent within the \$100-120/bbl zone in 2013

Brent stood at an average of \$108/bbl⁽¹⁾ in 2013, slightly down compared to the \$111/bbl that was reached in the two previous years (Fig. 1). The upper and lower differences remain significant (+/- \$10/bbl), but rather less than what we have seen over the last six years.

These differences are the reflection of several events that affected the year 2013, including in particular:

Fig. 1 – Annual price of Brent between 2006 and 2013



Source: IFPEN – Reuters

(1) On 4 December 2013

- the tension with Iran in February following the threatening declaration made on 4 February by the US vice-president Joe Biden “the diplomatic window is closing”, which pushed Brent to its maximum during the year (\$118.9/bbl);
- the easing in the second quarter (\$102 on average) related to the increase in US supply (shale oil) and the trend view of a reduced OPEC supply requirement. The rumours concerning the planned withdrawal of support by the US central bank (Fed) are also behind this drop;
- the pressure during the summer (\$117/bbl in August) following the deposition of president Morsi in Egypt on 3 July, the drop in Libyan supply and the revelations concerning the use of chemical weapons in Syria on 21 August. The Russian proposal of 9 September aiming to place Syria’s chemical arsenal under international control then eased prices until the beginning of November (\$103/bbl on 7 November);
- the return towards \$110/bbl at the end of the year due to an excessive downward price correction, but also probably due to two events: firstly, six Iraqi shells being fired at Saudi Arabia on 21 November; secondly, the very negative Israeli declarations following the signature of the interim agreement concluded on 24 November in Geneva between Iran, the five permanent members of the UN Security Council and Germany.

The geopolitical context therefore once again had a significant influence on the price of oil, which is highly sensitive to the slightest tension. The equilibrium conditions of the

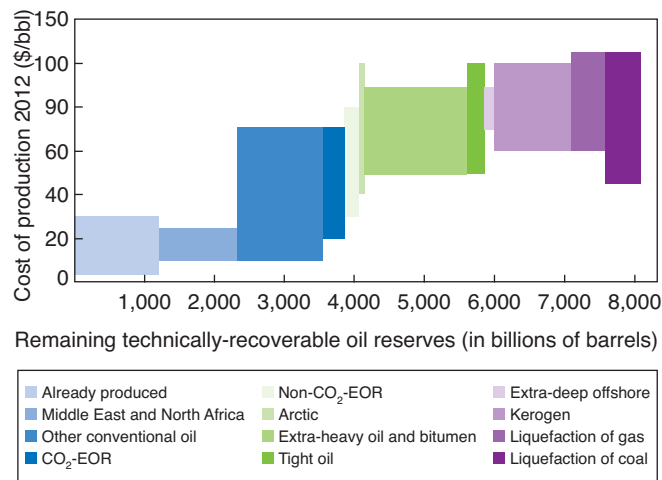
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oil market are the cause of this responsiveness. The oil market is in fact a just-in-time market with very narrow margin for manoeuvre, estimated at only 3 Mbb/d by the IEA, representing less than 4% of world oil demand. Any real or imagined instability therefore has a significant effect on the price. Because supply cannot be increased quickly, prices rise permits to reduce demand.

The price trends over the next few years will remain influenced by OPEC's production margins and the geopolitical context. These two factors will determine the volatility and risk premium on the international price of oil.

The floor price will be defined by the maximum production cost, currently estimated at between \$80 and \$100/bbl (Fig. 2). Assuming \$90/bbl to be the minimum tenable price, this indicates a premium that has varied between \$0 and \$40/bbl since 2011.

Fig. 2 – Costs of production of petroleum liquids



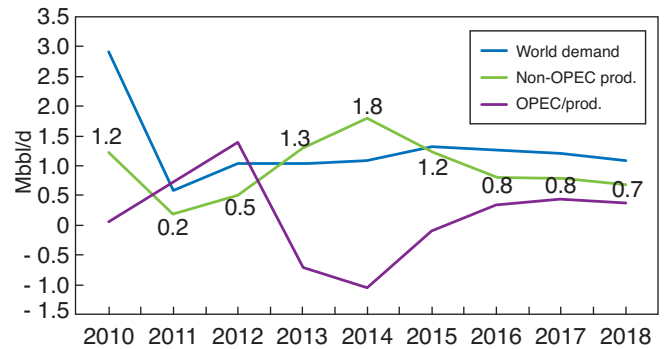
Source: AIE, WEO 2013

An expected drop in the requirement for OPEC oil

The trends that are currently expected in the oil market over the next five years suggest an increase in OPEC's production margins. Such a development would be likely to reduce market volatility and probably put downward pressure on prices.

This anticipation is the result of the expected exceptional production increase in non-OPEC countries, particularly that of the United States: 1 Mbb/d more in 2013 and a volume of the same order hoped for in 2014. Including the non-OECD countries and biofuels, the "non-OPEC" supply will again be up in 2014 by 1.8 Mbb/d, a volume that is greatly superior to the increase in demand (about + 1 Mbb/d – Fig. 3).

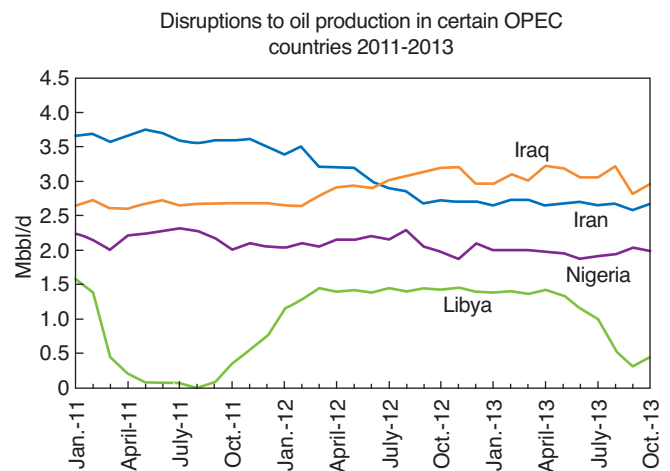
Fig. 3 – Oil market equilibrium – annual variations from 2010 to 2018



Source: IFPEN – IEA MT 2013

In this context, OPEC will certainly have to lower its production at least until 2015. This downward adjustment could lead to tensions amongst the members of the organisation because some are likely to increase their production. This could be the case with Iraq, Libya or even Iran (Fig. 4), if the embargo on this country is lifted during the summer of 2014 (see box).

Fig. 4 – Oil production in Iran, Iraq, Nigeria and Libya – 2011 to 2013



Source: IFPEN – IEA OMR

The volumes in question could reach up to 2.5 Mbb/d if we take into account:

- the possible increase in Libyan production around April 2013 (+ 1 Mbb/d, production at 1.4 Mbb/d). This development will depend on the political and security context that is currently very degraded in this country;
- the increase that is also possible in Iraqi production around August 2013 (+ 0.3 Mbb/d to 3.2 Mb/d);
- the suspension of the Iranian embargo in the second half of 2014 (+ 1 Mbb/d to 3.6 Mbb/d).

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The issue of the Iranian embargo being lifted

Providing that the conditions defined in the agreement of 24 November are complied with, the Iranian oil embargo is likely to be lifted after six months, meaning during the summer of 2014. In force since July 2012, it led to a drop of 1 Mbb/d in deliveries (0.8 Mbb/d to Europe and the rest to Asia) compared to 2.5 Mbb/d of exports in 2011. China and India have remained important purchasers, taking about 0.8 Mbb/d. There are numerous issues related to the possible lifting of the oil embargo, particularly:

- an internal economic issue for Iran because the drop by 1 Mbb/d in exports in 2013 caused a \$37 billion drop in income, the equivalent of about 38% of the 2011 budget; it is therefore primarily an essential economic issue for this country, which has suffered greatly from the negative impact of the embargo (inflation, currency depreciation, economic decline, etc.);
- a potentially downward impact on the price of oil, except in the case of persistent tension with Israel (possible, given the declarations after the signature of the agreement) and/or chronic instability in Libya and Iraq affecting production and/or in Egypt and Syria (indirect risks to the oil trade);
- a potentially negative impact for Saudi Arabia, which might have to adjust its production downwards to cope with the return of Iran to the market. The adjustment may have to be significant, if we also consider the expected drop in the requirement for OPEC production over the next four years and the possible production increase by Libya and Iraq;
- extremely important issues for the oil industry, given the oil and gas potential of this country. International companies are expected to be called upon to best extract value from these resources. A contractual framework more favourable to international companies has also been mentioned (Iran wishes to invest \$100 billion over three years according to an Iranian official). This context would be likely to quickly lead to a return to production of 4.2 Mbb/d, representing 1 Mbb/d more than current production (including oil and NGL).

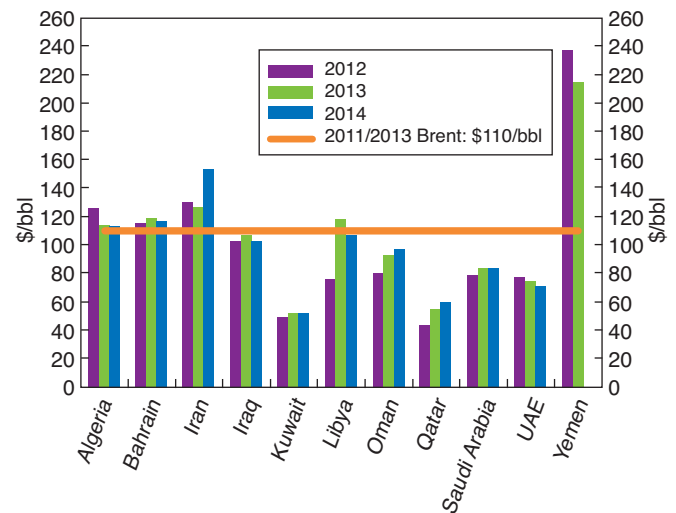
Towards a rational adjustment strategy for Saudi Arabia?

In this environment, we may wonder about Saudi Arabia's strategy. Apart from in the middle of the 1980s, this country has always agreed to adjust its production

to avoid excessive variations in the price of oil. This should again be the case, to avoid strong downward pressure on the price of oil.

A different choice would only be conceivable in the case of a geopolitical position of opposition, aiming to negatively affect the two Shiite neighbours, Iran and Iraq. These two countries need a minimum price of more than \$110/bbl to balance their budgets (Fig. 5), against only \$80 for Saudi Arabia. However, this would be taking a significant risk for regional stability, while other countries are also hoping for strong oil prices, such as Algeria, Libya and Venezuela.

Fig. 5 – Minimum price of oil to balance the budgets of certain exporting countries



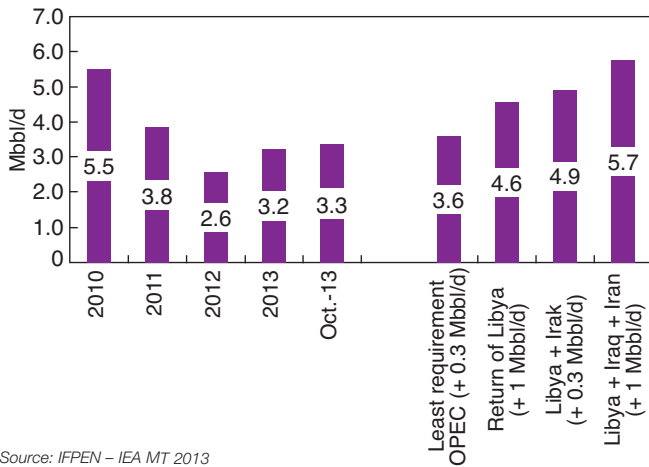
Source: IFPEN – IMF November 2013

In this context, given internal and regional issues, the downward adjustment of Saudi Arabian production appears the most credible strategy in line with its historical position as a "swing" producer. This adjustment would avoid excess supply but would result in an increase in OPEC's production margins.

In 2014, depending on the envisaged scenarios, they are likely to be located between 3.6 Mbb/d and 5.7 Mbb/d against 3 Mbb/d in October 2013 (Fig. 6). In the highest scenarios, this would be a favourable factor tending to drive Brent down and thus accompany the expected return of economic growth in the Western countries. As an illustration, it should be remembered that \$10/bbl represents about 0.25% of GDP in terms of imports for European countries, for example.

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Fig. 6 – OPEC production margins 2010-2013 and scenarios for 2014



Source: IFPEN – IEA MT 2013

Short-term instability factors

Changes in the price of oil will obviously not be related only to the supply of oil within OPEC and to the resulting production margins. The economic and financial context as well as geopolitical risk will have an effect, as was the case in 2013.

On the economic side, the latest prospects from the IMF for 2014 are relatively optimistic, with worldwide growth of 3.6% expected, representing 0.7% more than in 2013. Recovery in Europe, sustained growth in the United States and moderate growth in China are among the expectations. However, many uncertainties remain, particularly the consequences of the planned withdrawal of the Fed's support plan in the United States.

Concerning geopolitical matters, developments in North Africa and the Middle East will continue to weigh on prices. Real or assumed threats to production or to the oil trade (via Hormuz or Suez) will, of course, be factors tending to support prices. This is why the situation in Egypt or Syria, although having no direct impact on the oil market, plays a role in the pricing of oil.

The Israeli position concerning Iran will also probably affect the market. Israel threatened to intervene alone after the signature of the 24 November agreement, which it called a "historical error". This type of declaration is enough to maintain a premium on the oil market.

The North American context, the great unknown over the long term

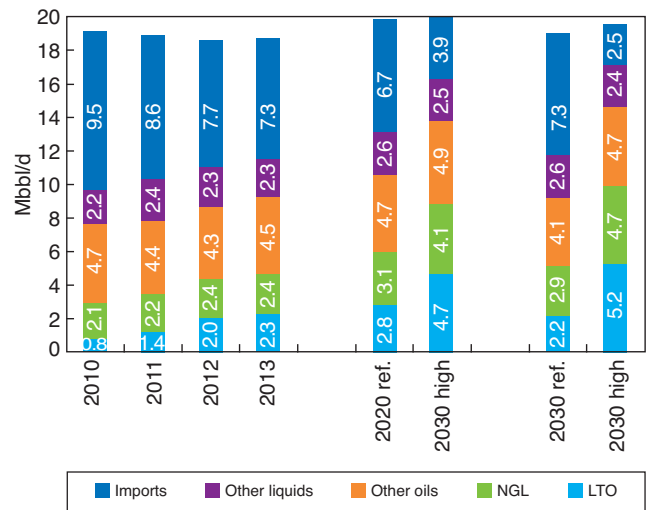
For the medium/long term, many questions remain concerning the actual development of the potential of numerous countries. In a recent report (WEO 2013), the

IEA mentioned several countries that could, if the political, legal or financial conditions were appropriate, quickly increase their production: for example, this is the case of Brazil, Venezuela, Iraq and Iran.

Beyond these questions, the great market unknown remains the development potential of light tight oil (LTO) in the United States and its impact on exporting countries, including Canada.

The DOE's relatively prudent central scenario for the United States is characterised by slow progress towards 3 Mbbbl/d in 2020, followed by a subsequent decline (Fig. 7). This scenario already seems outdated as production reached 2.3 Mbbbl/d in 2013 and short-term forecasts expect more than 3 Mbbbl/d from 2014.

Fig. 7 – Oil balance in the United States (oil, NGL and ethanol)



Source: IFPEN – DOE EIA, AEO 2013

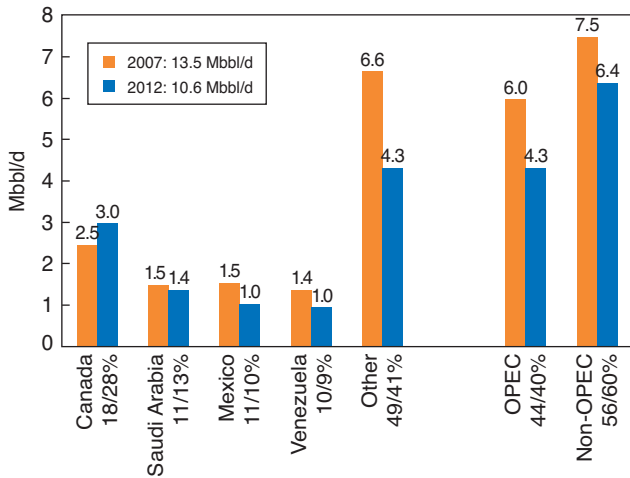
This trend is in line with the DOE's high long-term scenario, which envisages 5 Mbbbl/d in 2020, followed by stability until 2030. Taking into account natural gas liquids (NGL), which are also growing, the total stands at 9 Mbbbl/d in 2020 (a little under 5 Mbbbl/d in 2013) then 10 Mbbbl/d in 2030. In this scenario, annual combined production reaches 51 billion barrels (Gbbbl) for LTO in 2035, which is consistent with the potential of 58 Gbbbl estimated basin by basin by the DOE. It therefore does not appear unrealistic. This will obviously be disruptive for the American oil balance, and also for the worldwide balance.

The impact for oil exporters will obviously be considerable, like what has already happened since 2007. External American purchases of oil and oil products have been reduced by 3 Mbbbl/d, including 1.7 Mbbbl/d for the OPEC countries (Fig. 8).

Canada is the only country to have increased its exports, but by granting a large discount on its crudes. The light

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Fig. 8 – Imports of oil and oil products into the United States (2007-2012)



Source: IFPEN – DOE EIA

Canadian crudes, as well as WTI, have undergone a drop of \$10 to \$20/bbl compared to the international reference, Brent^[2]. The heavy oils are more affected with a drop of \$15-50 against \$5-10 at the beginning of the 2000s. Given this situation and constraints for enhancing export channels (e.g., the Keystone pipeline), this country, as expressed by its prime minister Stephen Harper, is wondering about the strategy to choose: should Asian markets now be targeted?

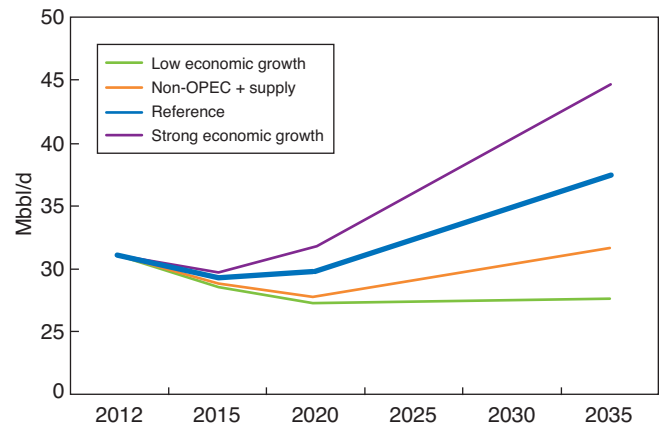
OPEC would obviously also be affected by significant tight oil development in the United States or even in other countries throughout the world (Argentina, Canada, China, Russia, etc.), as the IEA envisages in its latest long-term report. There are two issues, one relating to the possible fall in its market share and the other to the equilibrium price in the market. So, in a recent report, OPEC is banking on stable production at best until 2020 (Fig. 9) due to the increase in supply from non-OPEC countries, including the United States.

Slight easing in oil prices in 2014?

Numerous parameters lead us to assume that prices may ease in 2014 and perhaps beyond. World economic growth should strengthen in 2014, but it remains both fragile and below what we saw from 2004 to 2008. The

[2] The southern part of the Keystone pipeline to Texas is expected to open at the beginning of 2014 (0.7 Mbb/day) which is likely to reduce the WTI/Brent differential

Fig. 9 – OPEC production 2012-2035 by scenario



Source: IFPEN – OPEC WOO 2013

oil supply should be increased for the non-OPEC countries, particularly the United States, with the ongoing tight oil revolution, after the one that occurred for natural gas. Concerning OPEC, production margins are likely to strengthen to a greater or lesser extent, according to future developments in Libya, Iraq or Iran (will the oil embargo be lifted in mid-2014?).

This context therefore seems to favour an easing of oil prices. Nevertheless, given the relatively high marginal production costs and a probable “conciliation” strategy by Saudi Arabia, it seems quite unlikely that prices will collapse below \$90-100/bbl. This may be possible sporadically, but a sustainable drop could only be imagined in a severely degraded economic context, such as in 2009. Happily, this is not the scenario that is currently envisaged.

The geopolitical environment in North Africa and the Middle East will, furthermore, define the level of risk premium. For example, we may wonder whether the agreement concluded with Iran might lead to a new regional process of enhanced cooperation? Nothing is less certain while geopolitical, religious and ethnic rivalries seem to be exacerbated. In fact, a nil premium currently seems quite unrealistic today. Will we ultimately be condemned to repeat the “\$100-120/bbl” instability scenario that we have seen since 2011?

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Manuscript presented on December 2013