



Oxford Energy Comment

April 2012

Oil Markets in 2012: Calm or Turbulent Waters?

By Bassam Fattouh

Introduction

The prospects facing the global economy remain highly uncertain. Earlier this year, a World Bank report noted that the global economy ‘has entered a very difficult phase characterized by significant downside risks and fragility’ warning that ‘the financial turmoil generated by the intensification of the fiscal crisis in Europe has spread to both developing and high-income countries, and is generating significant headwinds’.¹ This wide uncertainty surrounding the health of the global economy and the slow pace of recovery, however, has not prevented many analysts from making bold predictions that oil market fundamentals will tighten, keeping an upward pressure on the oil price. These predictions are based on the following main premises:

- A high probability that Israel will attack Iran in 2012 with or without the USA, resulting in a big oil supply shock;
- The loss of large volumes of Iranian crude oil as a result of US financial sanctions on Iran’s Central Bank, and a European Union embargo on Iranian crude oil imports;
- Persistent supply losses in a series of small producing countries and occasional losses from big exporters such as Nigeria;
- Strong growth in non-OECD oil demand driven by robust economic performance;
- Growth in OECD oil demand driven in part by encouraging signs of economic recovery in the USA, and in part by Japan’s increase in demand for liquid fuels following the closure of many nuclear reactors in the aftermath of the Fukushima disaster;
- Uncertainty regarding the size of Saudi Arabia’s spare capacity, and the impact of rising domestic oil demand on the Kingdom’s oil exports.

The effects of these predictions are far from neutral on oil price behaviour. They can affect market outcomes, influence investment and trading decisions, and shape market



participants' expectations. Changes in expectations in turn influence oil price behaviour. After all, not only do spot and futures oil prices reflect the current supply and demand fundamentals (as these are never known with certainty), but also expectations about these market fundamentals. The different physical and financial layers of the oil market form a complex web of links, all of which play a role in the price discovery process.

To most analysts, the combination of geopolitical and economic factors listed above constituted a 'perfect storm' that has led to the recent sharp increases in oil prices. Between January and March this year, Europe's Brent spot price increased from \$111/barrel to \$123/barrel, briefly surpassing the \$128/barrel level on 13 March. The dominant story in the market is that these factors will continue to unfold throughout 2012, putting an additional upward pressure on the oil price. But is this inevitable? Is it possible to provide an alternative credible story to the one currently dominating the market psyche?

The purpose of this short article is to broaden the debate and consider some potential weaknesses in the dominant story. The article will highlight three main points. First, the premises upon which the story of tightened market fundamentals is built are subject to a wide degree of uncertainty. Second, the channels expected to put an upward pressure on the oil price are not exogenous: they tend to interact with each other and are shaped in part by oil price behaviour. Finally, the feedback from policy circles seems to be different this time from that seen in the previous oil price cycle, and thus should not be ignored. This is not to say that dominant expectations of tightened market fundamentals may not materialize. They may well do, but this is not a foregone conclusion.

The Pillars of the Dominant Story

The geopolitical dimension has assumed an elevated position in the analysis of oil markets in 2012. There are serious fears of escalating tension between Israel/USA and Iran, which would destabilize the entire region. These fears are in part driven by Israeli announcements of war preparations; news that the US President Obama has persuaded Israel's Prime Minister Benjamin Netanyahu to postpone bombing Iran's nuclear facilities; strong rhetoric from the USA that all options, including the military one, are on the table; provocative military exercises in the Straits of Hormuz; and threats by Iranian officials to use the oil weapon and close the Straits of Hormuz. These statements and actions have persuaded many observers that 2012 is the year in which Iran's nuclear issue would be resolved. However, behind the strong rhetoric, there are many signs that the USA is not keen on embarking on another costly war. President Obama has made it clear on more than one occasion that he would prefer a peaceful solution and that he still sees a window of opportunity to reach a diplomatic solution with Iran over its nuclear issue. Thus, confrontation with Iran is not inevitable, and it increasingly looks as if the Iranian issue will not be quickly resolved. As Barclays Capital has recently pointed out:



We do not believe that the Iranian nuclear situation is likely to lead to an attack on Iran in Q2, or indeed for the rest of this year. It is an issue that is likely to continue unresolved, and to a large extent unescalated, into 2013 and perhaps beyond.ⁱⁱ

One can never rule out the possibility that Israel would attack Iran unilaterally, despite doubts about the effectiveness of pre-emptive air strikes in destroying Iran's nuclear programme. In such a scenario, energy flows would be disrupted, as oil and LNG tankers would avoid passing through the Straits of Hormuz during the military strikes. Iran's own oil production would probably halt. This would cause panic in oil markets (as well as among main LNG buyers from the region) as countries competed to gain access to supplies, putting upward pressure on oil and LNG prices. Oil and gas disruption resulting from military action would be temporary, and its effects could be mitigated by spare capacity from Iran's Gulf neighbours and the use of OECD strategic and commercial stocks. This would constitute the worst-case scenario for oil markets. But even if such a bleak scenario materialized, Iran may decide not to restrict its oil exports or to close oil trade routes. Instead, as noted recently by President Obama, the Iranian regime 'can portray itself as a victim'ⁱⁱⁱ and resort to covert tactics to destabilize key regional players. At a time when the region is still grappling with the repercussions of the Arab Spring, this could induce a prolonged period of geopolitical uncertainty and increased tail risk.

But even if there is no military strike on Iran, the imposition of sanctions and embargoes may still result in a large loss of Iranian output. In December 2011, the US Congress passed a new bill that will apply sanctions to all financial institutions engaging in direct dealings with Iran's Central Bank – the recipient of Iranian oil export payments – from 1 July 2012; while the European Union, in January 2012, decided to ban all Iranian crude oil imports with effect from the same date. The US tactic aims, in its essence, to force other, non-EU, countries to in turn reduce or freeze their own oil imports from Iran, since payment for Iranian oil exports would necessarily entail direct transactions with Iran's Central Bank. Iranian officials have reacted promptly to these new sanctions, reverting in turn to the threat to cut European export volumes with immediate effect; and if necessary to block all tanker traffic through the Straits of Hormuz, one of the world's busiest oil and gas traffic choke points.

We have argued elsewhere^{iv} that the potential impacts of such threats and counter threats on oil market dynamics are often exaggerated. Oil embargos against producing countries are, in reality, difficult to implement, for they require a concerted effort by a large number of buyers to prevent oil producers from diverting crude oil from one market to another. Where they result in a tightening of oil markets and rising prices for consumer nations, these sanctions can be relaxed or amended by consumer countries. As for the use of the Iranian oil weapon, the fact remains that despite continuous threats, Iran has never used the oil weapon; it remains an indiscriminate measure that all producers, including Iran, are reluctant to use; and if ever employed, it is likely to be ineffective and counterproductive from a producer's point of view, especially if not implemented in coordination with a core group of producers. Saudi



Arabia has already signalled, on more than one occasion, its willingness to fill any gaps in oil supplies.

The threat of US financial sanctions and the European oil embargo has already resulted in some loss of Iranian supplies, and it is predicted that this will intensify from the month of July. However, there is still wide uncertainty on the potential size of these losses. The estimates vary anywhere between 300,000 b/d to 1,000,000 b/d. It is difficult at this stage to make an accurate prediction of the potential loss, but blocking 1 mb/d of Iranian exports to the market for a sustained period of time would be very difficult. Also, it may not be in the interest of consuming countries. From the US and the European standpoint, the extent to which the financial sanctions and the oil embargo are enforced would ultimately depend on global oil market conditions. If the market tightens as a result of higher demand induced by an improvement in global economic prospects and/or as a result of supply shocks, the sanctions would possibly be eased to prevent a sharp rise in the oil price. In fact, under the new law, the US administration can grant waivers for those countries that are adopting measures to reduce their imports from Iran. Furthermore, the new law gives powers to the US President to waive sanctions altogether if these are deemed to be in the interest of US national security – such interests would include ensuring a stable energy market. These waivers could lessen market pressure, but also result in a loss in credibility of sanctions policies vis-à-vis Iran. If on the other hand oil market conditions weaken, the EU would attempt to fully enforce the embargo, while the USA would intensify its pressure on Asian buyers to reduce their crude oil imports from Iran. Therefore, consuming countries have more flexibility in the use of sanctions and embargoes than oil producers have with the oil weapon.

In addition to the potential Iranian output loss, oil markets have witnessed a series of supply shocks from small producing countries such as Syria, South Sudan, Sudan, Yemen, and Colombia and most recently from the North Sea. The output loss from these countries is estimated at more than 1 mb/d. Also, the market occasionally suffers from some Nigerian crude losses. At such a time – when many market participants are expecting tight market fundamentals – these losses are receiving heightened attention among analysts. It remains unclear whether these supply shocks will ease in 2012, but there is an important asymmetry and bias among analysts when it comes to supply shocks: output losses induce a strong upward price response, but the return of some of these producers to the market receives much less attention. For instance, the quick and unexpected return of the Libyan oil to the market has helped offset many of the output losses, but has not been able to put a ceiling on the price. Perhaps this is related to the fact that production, outside OPEC, has continued to fall short of expectations for many quarters now.

When it comes to global oil demand dynamics, the picture is rather mixed. In the USA and Europe, oil demand continues to decline on a year-on-year basis, although the rates of decline seem to have stabilized. Within OECD economies, the main support for oil demand is likely to come from Japan, whose energy mix has witnessed a major transformation in the aftermath of the Fukushima crisis. The closure of nuclear power generation (currently there are only two plants remaining operational)



has meant that direct crude burn and fuel oil demand have been on the rise in the last few months. In February, for instance, the year-on-year oil demand increased by around 480,000 b/d. Will Japanese oil demand continue to grow strongly throughout the year? Answering this question is difficult at this juncture. On the one hand, Japan has little choice but to continue to rely on liquid fuels to meet its electricity demand. On the other hand, there is a strong move to conserve energy, and concentrated pressure to reduce greenhouse gases. Furthermore, the Japanese government has a strong interest in restarting its nuclear plants soon, but has been reluctant to make this decision given the strong public opposition to such a move. It seems that Japanese oil demand will stabilize at the current high levels of above 5.1 mb/d for the rest of the year, with some potential for demand to grow as summer nears. But there is also a downside risk: the government could decide to take the unpopular decision to get some of the nuclear plants back in operation. Such a decision is more likely if oil prices rise sharply.

In contrast, non-OECD demand dynamics look robust across a broad number of countries, mainly in Asia, but also in Latin America and the Middle East. Recently, expectations of economic growth in both India and China have been revised downward. That being said, Chinese imports of oil have picked up in recent months (part of the increase is often linked to building strategic stocks). Also, these economies still have a lot of leeway in pursuing fiscal stimulus and monetary policy easing to counteract slowdown in economic growth. This does not imply that high oil prices will not impact growth prospects in these economies. In fact, unlike during the previous price cycle, we expect non-OECD demand response to increases in oil prices to be much faster and stronger this time round. At early levels of economic development, the percentage growth in income is likely to be associated with a larger percentage growth in oil demand. Therefore, an increase in petroleum product prices induces two effects working in the same direction: it is not only more costly to finance the purchases of petroleum products, but also the share of energy expenditure in households' total budgets tends to increase. BofA Merrill Lynch notes that the share of energy in GDP is already high in many countries, and this would impose a limit on how high the oil price would rise:

our opinion that there is a limit to how high prices can go relates to our energy as a % of GDP analysis. Energy as a share of GDP is already very high ... In countries like India or South Korea, energy as a % of GDP stands at 12% and 14%, respectively, while frail economies like Spain and Italy are close to their 2008 highs.^v

In the latest price cycle, fuel subsidies in many non-OECD economies weakened this double effect. However, since then, many emerging economies have moved towards aligning their gasoline and gasoil prices with those in international markets.

In short, one could envisage an alternative story to the currently dominant one, based on the following elements: a setback in Europe which could generate negative repercussions for the rest of the global economy; no military strike on Iran takes place and both the West and Iran seek a diplomatic solution to the nuclear issue; the loss of



Iranian output due to sanctions and embargoes turns out to be lower than expected; the growth in Japanese oil demand stabilizes in the next few months; and high oil prices start exerting pressure on households' budgets in non-OECD economies inducing a slower growth in oil consumption. These factors by no means imply a low-price scenario, but one in which the momentum for sharp rises in oil prices is weak. This is especially true if we add another dimension to the equation: potential feedback from governments.

The Policy Feedback

One of the very interesting features of the 2002–8 oil price boom was the lack of response from consuming governments to rising oil prices. In part, this can be explained by geological and policy constraints. On the supply side, some governments can encourage the exploration and development of their oil reserves, but such a policy is ineffective in producing a fast feedback on the supply side, given the limited size of reserves and the time lags involved in bringing supplies to the market. On the demand side, the impact of high prices remains muted given that oil demand in the short run is highly inelastic. As discussed above, high oil prices would eventually have their impact on demand, but such feedback is perceived to be too slow and gradual to fundamentally alter short-term market expectations. A policy announcing the introduction of efficiency measures could have only a long-term impact, and would be unlikely to play an important role in forming market players' short-term expectations. There is one card that consuming countries could use to generate instant feedback in the market: the release of oil from strategic petroleum reserves. In the past, consuming governments have been reluctant to use this card. But this may be about to change.

There are clear indications that several governments would like to dampen oil prices as quickly as possible to counteract 'the new threat that could derail the recovery', as described by Christine Lagarde, the managing director of the International Monetary Fund.^{vi} During his visit to the USA in March, the UK prime minister, Mr Cameron announced that both the USA and the UK would 'like to see global oil prices at a lower level than they are today' and that releasing reserves 'is something worth looking at'.^{vii} France has recently joined in the discussion about stock release, with Budget Minister Valerie Pécresse announcing that 'France is accompanying the US and UK in the IEA consultation, which could allow the release of strategic oil reserves in order to break the rising price spiral'.^{viii} The release of stocks in June 2011 gave more credibility to these statements, and market participants have to factor an additional source of 'policy uncertainty' into their expectations. The market is already discounting (to some extent) the release of stocks in the oil price, but there remains uncertainty about the timing of such a release and its magnitude.

Such signals have not just originated from consuming countries. Mr Ali Al Naimi, the Saudi oil minister, in a letter to the *Financial Times*, sent a very clear signal declaring that 'the bottom line is that Saudi Arabia would like to see a lower price' and 'it has a responsibility to do what it can to mitigate prices'. He emphasized that 'this is not an empty rhetoric. We [Saudis] have proved to be a reliable supplier many times in the past'.^{ix}



The market did not react strongly to these clear signals from policy makers and the impact on prices has been muted and short-lived. Many market analysts considered the Saudi signal to be ambiguous – giving no clear strategy as to how the Kingdom intended to compensate for the potential loss of Iranian output and how fast it could bring additional volumes to the market. There were also doubts about the size of spare capacity; the size of the swing in Saudi domestic oil demand during the summer and its effect on exports; and the typical argument that Saudi Arabia needs a high price to balance its budget. Such doubts diluted the Saudi signal.

It is worth making the following observations. I have argued elsewhere that Saudi Arabia's government expenditure is an endogenous variable. If oil revenues decline due to lower oil prices, then Saudi Arabia has to adjust downward its expenditure outlays. Furthermore, it is also not clear why Saudi Arabia should balance its budget every year rather than smoothing its consumption through borrowing locally or internationally. Thus, it is a gross mistake to assume that the oil price needed to balance the Saudi budget would set the oil price floor in the market. That being said, recent sharp increases in government spending, especially if placed in the context of the Arab Spring, imply that Saudi Arabia has become more dependent on high oil prices. Therefore, many analysts expect an increase in the reservation oil price and a more assertive reaction if oil prices fall below what Saudi Arabia considers as a 'fair oil price'.

One of the biggest challenges facing Saudi Arabia is how to curb the growth of its energy consumption. This requires long-term structural changes such as reforming energy prices, introducing efficiency measures, and improving energy productivity, especially in the industrial sector and power generation. But Saudi Arabia has some options in the short run, such as diverting additional volumes of natural gas into power generation. *Reuters* has recently noted that 'Saudi Arabia is likely to burn less crude in its power plants this summer thanks to rising output from dedicated gas fields and gas that would be associated with any increase in oil output to make up for lower Iranian production'.^x Thus, projections that oil demand will grow at the same pace as has been seen recently are rather simplistic.

There also seems to be some confusion regarding the size of 'spare capacity'. The IEA defines sustainable production capacity as that which can be reached within 30 days and sustained for 90 days. Based on this definition, the IEA, in its March Oil Market Report, puts Saudi Arabia's sustainable production capacity at 11.88 mb/d and its spare capacity at only 1.88 mb/d for February 2012. In a recent interview, the Saudi oil minister, Ali Al-Naimi, announced that Saudi Arabia had 2.5 mb/d of extra capacity that it could bring on to the market if needed. It is important for the market to have a clear idea about the size of available spare capacity, but whether spare capacity can be made available in 30 days or later seems of lesser importance. If the concern is about physical disruption, the focus should be on the availability of Saudi Arabian stocks, which are estimated to stand at around 230 million barrels, and which can be placed immediately into the market. If the concern is about future oil balances, then whether this extra capacity can be made available within 30 days or within 90 days



makes little difference, as long as the market is confident that Saudi Arabia can make this supply available within a reasonable period of time.

In short, unlike what has happened in the recent past, governments have shown interest in dampening the oil price, either through the release of strategic reserves and/or convincing the market to price on a more elastic supply curve. To what extent governments can succeed in achieving this objective remains unclear and may even backfire. But this does not mean that market participants should not incorporate policy responses or feedbacks in their expectations. This is especially true this time, given that any release of stocks will have a full effect on the market, and will not be diluted by concerns that release of the strategic reserves would be counteracted by Saudi cuts in oil production. In my view, this is the most important aspect of the Saudi signal.

ⁱ World Bank (2012), 'Global Economic Prospects: Uncertainties and Vulnerabilities', Volume 4, January.

ⁱⁱ Barclays Commodities Research (2012), 'Petroleum Politics and Economics: Calmer Water for Oil', April 4.

ⁱⁱⁱ BBC News, 'Obama warns against pre-emptive Iran strike', 2 March 2012

^{iv} El-Katiri, L. and B. Fattouh (2012), 'On Oil Embargos and the Myth of the Iranian Oil Weapon', Oxford Energy Comment, February.

^v Bank of America Merrill Lynch, Global Energy Weekly, 19 March 2012.

^{vi} Ambrose Evans-Pritchard (2012), 'IMF chief Christine Lagarde fears oil spike poses serious threat to global recovery', The Telegraph, 18 March

^{vii} Reuters (2012), 'U.S., Britain set to agree on emergency oil stocks release', March 15.

^{viii} Michail Vafeiadis (2012), 'Oil prices: Can US, UK, and France drive them down?', The Christian Science Monitor, March 29.

^{ix} Ali Naimi (2012), 'Saudi Arabia will act to lower soaring oil prices', Financial Times, March 28

^x Reuters (2012), 'Saudi summer oil burn should decline this year', March 31.