THE OXFORD INSTITUTE FOR ENERGY STUDIES
A RECOGNIZED INDEPENDENT CENTRE OF THE UNIVERSITY OF OXFORD

UNIVERSITY OF OXFORD

December 2013

The Swing Producer, the US Gulf Coast, and the US Benchmarks:

The Missing links

OXFORD ENERGY COMMENT

Bassam Fattouh and Amrita Sen*
* Chief Oil Analyst, Energy Aspects

Introduction

Amid rising speculation that OPEC's oil market clout is threatened by US tight oil growth, the group's December meeting ended without much of a bang. The 30 million b/d production quota, an artifact of different times as most members currently produce at their maximum capacity, was rolled over. Saudi Arabia the only OPEC member with the ability and the willingness to alter its output to balance the market, put on a carefree face. Saudi Arabia's Oil Minister Mr Ali al-Naimi dismissed suggestions that the Kingdom might need to reduce production to accommodate growing output elsewhere, telling reporters that 'Demand is great, economic growth is improving, so what more do you want?' Indeed, should global oil demand surprise to the upside and some of the current supply disruptions persist, the issue of how to accommodate growing output from within and outside OPEC will not be a pressing one for next year. But should oil market fundamentals weaken, Saudi Arabia's key challenge is to find a way to accommodate the return of some of the older oil powerhouses like Iran and Iraq while avoiding a sharp fall in the oil price. Indeed, as Naimi calmly batted away journalists' questions, both Iran and Iraq talked about producing 4 million b/d in 2014 (year-on-year increases of 1.4 million b/d and 1 million b/d respectively). However unrealistic those targets may be, the message was clear. Both countries want to punch their weight and they expect Saudi Arabia to accommodate them. The way Saudi Arabia responds to this challenge will be key to understanding global and US oil market dynamics. Thus, contrary to the view that the rapid US tight oil growth has undermined Saudi Arabia's influence over oil markets, the Kingdom's output and export decisions will be a key driver of oil prices in the next few years. After all, it is in an oversupplied market, that Saudi Arabia could exert its maximum influence.

Saudi Arabia and the Role of the Swing Producer

Over the past few years, Saudi Arabia has been the dominant force within OPEC, not only because it is the world's largest oil exporter, but also because the Kingdom has maintained spare production capacity amidst regular supply disruptions and has been willing to swing its production to balance the market. Saudi Arabia's preeminence has been reinforced by steadily declining production in other OPEC nations such as Iran and Venezuela. In these cases sanctions on the former stemming from Iran's difficult foreign relations and the latter's domestic policies that hindered investment were decisive. Stagnating and declining output from other OPEC members such as Libya and Nigeria has played a key role as well.

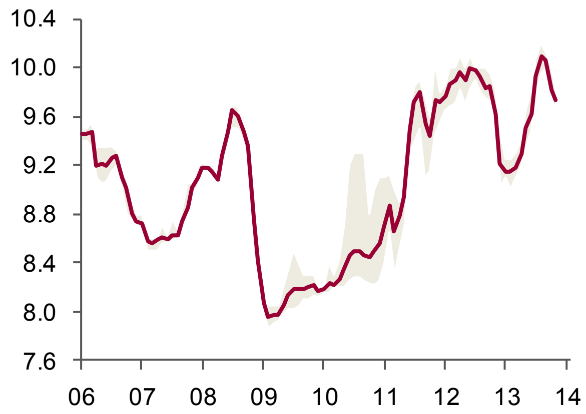
But recently Saudi Arabia's leadership of the oil market and within OPEC has come into question. Many market analysts point out that the growth of both US and Iraqi production threatens the Kingdom's market share. But there is a crucial distinction between these two sources of squeeze. As we have argued previously, 'Iraq is key to the low oil price story, not only because the expected rapid increase from Iraqi production would constitute a major source of squeeze for a key producer such as Saudi Arabia, but also because Iraq is a low-cost producer with massive underground reserves which could therefore affect cohesion within OPEC. The squeeze from a low-cost producer should be treated differently from a high-cost one, as the production of a low-cost producer is likely to be less responsive to price movements and could generate huge rents even in a relatively low-price environment. This is in contrast to a high-cost producer such as the USA, which has a highly elastic supply curve with supply being more responsive both to upward or downward price movements'.[1]

[1] Fattouh, B. and A. Sen (2013), 'The US Tight Oil Revolution in a Global Perspective', OIES Comment, September.

In the past, Saudi Arabia's reaction to squeezes from other OPEC members has been complex and has eventually had serious repercussions for oil market dynamics and prices.[2] Between 1980 and 1985, Saudi attempts to defend the marker price resulted in a large loss of market share: the demand for Saudi oil declined from 10 million b/d in 1980 to 3.6 million b/d in 1985. The loss of market share and revenues proved very costly and the administered pricing system was abandoned in 1985 in an effort to recover lost market share through the netback pricing system, which provided customers with a guaranteed refining margin even if oil prices were to fall. Similarly, in 1998, Saudi Arabia responded to Venezuela's increase in production and rapid capacity expansion by increasing its own output. Against a backdrop of declining oil demand following the Asian financial crisis, the increase in output led to a collapse in oil prices. Only when OPEC (in coordination with a few non-OPEC countries) implemented large cuts did oil prices recover. History suggests that the assumption that Saudi Arabia will acquiesce to large Iraqi or Iranian output increases and remain a swing producer, foregoing any response to a decline in its market share, is naive. There is a critical point where Saudi Arabia may decide to abandon the role of the swing producer and compete to maintain its market share, especially in its key export markets.

This fact implies a different oil market from that of the past five years. Back in 2008/2009, when oil prices had fallen sharply, it was Saudi Arabia that sent a clear signal stating that $70 was a 'fair' price for both producers and consumers. Since then, Saudi Arabia has consistently signaled their preferred price range, which has risen from $70-$80 to be $90-$100 per barrel. The market took this as a signal that Saudi Arabia is willing to defend the oil prices below $90 by reducing output. Since last year, the Kingdom also started signaling a willingness to act to support their preferred upper limit to prices, in order to prevent the global economy and oil demand from weakening, by raising output to record levels above 10 million b/d at various times through 2012 and 2013. Thus, the quarterly average floor and ceiling oil prices were largely set by significant changes in Saudi production volumes (see Figure 1). Despite the various supply shocks and the wide global macroeconomic uncertainty, the Brent price traded within a relatively narrow range. But, in the emerging market paradigm, Saudi Arabia may still be willing to cap oil prices to the upside, but its commitment to limit the downside may have diminished, especially if limiting that downside involves losing market share to other low cost producers within OPEC.

Figure 1: Saudi oil production, million b/d



Source: Energy Aspects

[2] For details, see Fattouh, B. and L. Mahadeva (2013), OPEC: What Difference Has it Made?, Annual Review of Resource Economics, Vol. 5, Issue 1, pp. 427-443.

However, the difference between the 1980s and 1990s and now, one might argue, is the drastic change in Saudi Arabia's own finances. After all, following the Arab Spring in 2011, MENA countries have had to spend billions of dollars to quell domestic discontent about inequality, lack of economic opportunities, unemployment, and low living standards. In this regard, Saudi Arabia is no different and the country's budget has soared in recent years. Deficits were only avoided in 2010 and 2011 because of higher-than-forecast oil prices and output. In 2011, Saudi Arabia announced two fiscal packages totaling SAR480 billion ($130 billion), or near 25% of GDP at 2011 prices. Given the country's heavy dependence on oil income (~90%) to fund government expenditure, the oil price required to finance the growing spending steadily climbed higher. A simple calculation suggests that a balanced budget requires oil prices of at least $90 if Saudi Arabia produces just above 9 million b/d. That number has stuck with the market and Saudi Arabia is viewed as needing to aggressively defend the downside in oil prices because of their own higher price requirement.

While the increase in budgetary oil price break-evens is no doubt true, this calculation does not necessarily take into account the large surpluses that the Kingdom accumulated over the past few years and its limited domestic and foreign debt. Saudi Arabia has the fiscal firepower to withstand a fall in oil prices to $80, or potentially even $70, for a short period of time (~12-24 months). Furthermore, like any other country, Saudi Arabia does not need to balance its budget every year.

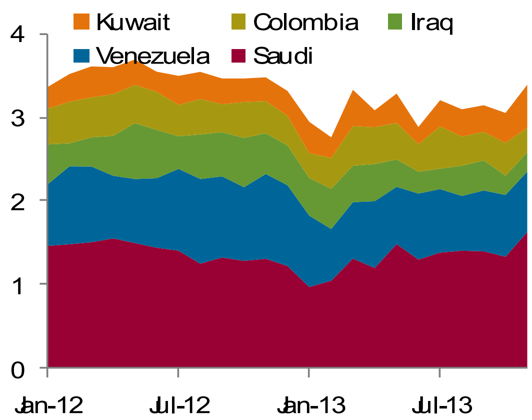
If anything, it is countries such as Iraq and Iran that will not be able to manage if oil prices fall below $90 a barrel for over a year, given the respective price assumptions of $90 and $95 in their 2013 budgets. Iraqi exports have been well below the budget forecast of 2.9 million b/d, meaning that even though realised prices have been above $100 for most of the year, oil revenues will fall short of the levels set in the investment-heavy $118 billion budget. The only reason Iraq is unlikely to register a deficit this year is that bureaucratic inefficiencies prevented the government from spending the budget in full. Iran's actual revenues are also falling well short of budget forecasts. It is expected to face a major deficit despite attempts to cut spending to cope with the sharp curtailment in oil exports because of Western sanctions. Iran's draft 2014 budget raises the oil price assumption to $100 per barrel, in part to compensate for exports being forecast at just 1.1 million b/d. In this context it is hard to see the logic in the comment made by the Iranian oil minister that his country would increase production even if it led to oil prices falling to $20 per barrel. A budget that barely balances with $100 oil and 1.1 million b/d of exports is going to look a lot worse with oil at $20 even if exports rose back to 2.5 million b/d. This is precisely why Saudi Arabia may feel confident competing for market share even if it means accepting lower prices for a while; the Saudis can endure weakening of their fiscal balances for far longer than any of their competitors can.

The US Oil Market is Not Immune

To a certain extent, the competition between some of the Middle East producers has been visible with the steeply discounted Iranian and Iraqi oil earlier this year, but more recently in the export policy to the US Gulf Coast (USGC). The key to clearing current US crude balances lies with foreign imports, a large portion of which are long haul imports from the Middle East. The key for global and US balances next year will be the US Gulf Coast balances. Either, the US gets flooded with light crude as imports prove to be stickier than is currently believed, or the US system has enough flexibility to mitigate the Gulf Coast light crude glut, in part by backing out more imports or by allowing some targeted exports.

One of the biggest surprises to the market has been the resilience of US crude imports (see Figure 2). US Imports were expected to start falling in response to lower prices, albeit with a lag. This anticipated decline, together with the return of refineries from maintenance, were expected to have propped up US benchmarks such as LLS and Mars prices. The latter has happened, and USGC crudes are finally receiving a bid, but crude oil imports into the Gulf Coast have not yet fallen materially. Of course, not all the crude imports heading to the US are long-term committed barrels as the market seems to think. Furthermore, as more Canadian crude reach the Gulf Coast through the course of 2014, blending with the abundant super lights in the region will pick up pace, backing out medium imported grades in turn. Latin American producers will be the worst affected, but some of those medium barrels also come from the Middle East, namely Saudi Arabia and Iraq. In theory, about 1 million b/d of imports could be pushed out without running up against long-term contractual obligations. But this is based on the assumption that falling US crude prices drive oil producers to seek alternative markets. The Argus Sour Crude Index (ASCI), against which Saudi and Iraqi exports to the US are priced, has fallen by close to 20% over the last three months. Saudi's Arab Medium crude shipments to the US now fetch $15-$20 per barrel less than those sent to Asia. And yet, Saudi exports to the US have remained at around 1.4 million b/d since July this year. Saudi Arabia cannot simply divert these volumes elsewhere without this having an impact on the country's overall revenues. Selling all these diverted barrels to Asia, for instance, would lower prices in what is currently Saudi Arabia's largest market and would likely cost the Saudis far more in overall revenues than they are currently losing on exports to the US. Thus, unless Asian demand surprises significantly to the upside, Saudi Arabia will continue to ship sizable volumes to the United States if it wishes to maintain oil production at its current level.

Figure 2: USGC crude imports by country, million b/d



Source: EIA

Furthermore, the US is still the world's biggest oil consumer and thus it is hugely important for the world's largest oil exporters to maintain a key position in the US market for commercial and strategic reasons. For instance, while Iraqi Basrah volumes earmarked for the USGC have already started to decline, there is evidence that Iraq will not give up entirely on the US market, even if there are no contractual barriers to reducing supplies. Iraq's oil minister recently commented that the strategic significance of the US meant Iraq would continue exporting crude to the US. Similarly, for some Latin American producers, logistical constraints as much as strategic considerations keep them tied to the US. While exports to Asia are rising, logistics are challenged until the expansion of the Panama Canal is completed. Until then, the USGC remains the best market for Latin American heavy supplies. Thus, much like Saudi Arabia, other producers may well have other overriding motivations that keep them supplying the US for strategic and commercial reasons, as it may well turn out that selling some of the oil to the isolated US market at a lower price is the lowest cost option to maximise revenues on a global basis.

Thus, the strengthening of US crude benchmark prices such as WTI and LLS depends heavily on non-US suppliers reducing their exports to the US, based on the rationale that US prices will continue to fall relative to prices in other markets as the US oil glut intensifies. But the reduction in exports will not necessarily materialize if producers choose to maximise revenues on a global level or decide not to back their crude sales for strategic reasons. Unless Gulf Coast crudes such as LLS are able to rally, it will be difficult for WTI prices to rise significantly since the incentive to send Midwest crude south is limited. Instead, flows are likely to be channeled back to Cushing, particularly from the Permian basin as these can swing into either Cushing or the Gulf Coast, a phenomenon seen since September. Of course, when refinery runs increase, stock levels will fall, but with the starting point of inventories so high and domestic production rising quickly, it is unlikely that Gulf Coast crude balances will get tight any time soon, until barging crude on Jones Act tankers to the US East Coast and exports to Canada pick up. Thus, if Saudi Arabia chooses to make the USGC the market for signaling its intent to protect its market share and other countries do not cede ground, US imports are unlikely to fall significantly. Keystone XL South volumes (blended or otherwise), which is the final piece of infrastructure needed to help take Cushing to operational minimum levels will simply add to the Gulf Coast glut, adding to the severe price pressure on regional crude prices. And if USGC crude prices fall back, WTI prices will struggle to rally significantly.

Conclusions

In short, the fate of US benchmarks is not just linked to US production growth and US infrastructure logistics such as pipelines, barges and rail, but also to a development that could impact global oil markets –whether Saudi Arabia decides to defend prices by reducing production should other producers increase output or relinquishes its role as the swing producer and becomes protective of its market share. Should global oil demand surprise to the upside the most extreme scenarios of price wars can be avoided. However, should market fundamentals weaken enough and Saudi Arabia decides to maintain its output at current levels, the US Gulf Coast (USGC) remains the lowest cost option for signaling global intentions, and the damage to prices can be confined to one part of the world.

As the oil glut in the US intensifies, the debates surrounding exports of light grades from the US, or at the very least, swaps of Eagle Ford lights with Mexican Maya, are likely to gain traction in 2014. The issue then becomes whether it is US crudes, particularly light grades, that disconnect severely from the rest of the world once again or would the rest of the world share the impacts of growing US production as more crude becomes globally available. So far, US policymakers have avoided the controversial and politically sensitive issue of whether to allow exports of light crude. This issue however cannot be kept under wraps for much longer.