OPEC's policy challenge in the age of shale oil

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By Antoine Halff

A year after its decision not to cut production in the face of low prices, there is no question that OPEC is feeling the pinch of continued market weakness. Prices have sunk further and the market remains vastly oversupplied – to the tune of 1 million barrels per day (bpd). But the severe strain under which it finds itself will not likely cause the producer group to reconsider its decision and go into policy reversal when it meets on 4 December in Vienna. Last year’s watershed move, which some of OPEC’s core members – Saudi Arabia and Iraq – followed up with steep production gains, was widely misread as a sort of abdication. In fact it merely reflected the realization that new market conditions – namely the U.S. shale revolution – called for new policy measures.

To understand OPEC’s policy, it is critical to look beyond the oil market’s imbalance and the surging oil inventories resulting from a persistent, sticky supply surplus, despite recent declines in shale output. The deeper issue involves the changing anatomy of global supply and the transformative impact of shale oil production. At roughly 4.5 million bpd, US shale oil production accounts for less than 5% of the overall oil market. But shale is a disruptive technology that challenges the industry’s long-established business model and the rules of the game for OPEC.

There are at least three reasons why shale oil makes OPEC production cuts a less palatable, less effective and less practical policy tool than in the past, if not a counter-productive one, at least for now.

Rightly or wrongly, shale oil has turned the long dominant narrative of supply scarcity on its head. The surge in oil prices to a $147/barrel record for WTI crude in July 2008 had been driven by the perception that oil was a finite and fast-depleting resource straining to meet runaway demand growth from China and other emerging economies. Prices, it was then thought, had nowhere to go but up. Today, in contrast, shale oil’s success story has unlocked vast resources and oil reserves have been reassessed, even as emerging-market oil demand has abruptly dropped to a lower gear. As the Paris climate talks gain momentum, producers get a gnawing feeling that oil demand, far from growing forever, might soon reach its peak.

This might look like a long-term concern, but for major resource holders like Saudi Arabia, such long-term worries have short-term implications. Expectations of future demand weakness and resource abundance raise the threat of stranded assets and change the revenue optimization equation. Since the Organization of Arab Petroleum Exporting Countries (OAPEC) Abu Dhabi meeting of December 2014, Saudi Oil Minister Ali Naimi has pointedly and repeatedly come back to his idea of an oil-market “Black Swan” – the risk for the Kingdom of finding itself in 2030 or 2040 sitting on top of an ocean of worthless oil. How such concerns translate into Saudi production policy is unclear, but they are very much on the mind of OPEC’s largest and most influential member.

A second way in which shale changes the equation for OPEC is by redrawing the trade map. While oil product demand continues to creep up, the crude oil market is shrinking and migrating eastward. In just a few
years, the U.S. has emerged as the world’s top producer of oil liquids and of natural gas; once the largest importer of refined products, the US is now their largest exporter. US shale supply went from zero to roughly half of the country’s crude production (and 60% of its natural gas supply). Crude oil imports backed out of North America must fight for a piece of a diminishing market now heavily concentrated in Asia, notably China. The crude market, as the Norwegian oil economist Oysten Noreng has noted, is morphing from an oligopoly – in which a few sellers dominate the market – to an oligopsony dominated by a small group of buyers, led by giant state-owned Chinese companies with growing market power. For producer countries seeking to lock in and expand their footprint in China and the region, this makes it tricky to implement and allocate supply cuts.

The third and even more potent way in which shale oil is preempting OPEC production cuts is by its greater price elasticity than that of conventional supply and the challenges this raises for the rest of the industry. Conventional oil companies are huge, long-established, deep-pocketed, highly specialized, inherently conservative, and have long operated under a price umbrella or some sort or another. Shale oil companies are the opposite: small, newly-minted, nimble, innovative, highly leveraged, constantly adapting to changes in market conditions. Compared to conventional oil, shale oil has low initial capital requirements (fixed costs) but high ongoing funding needs (variable costs), short lead times, short payback times, and steep decline rates. It is much more price responsive than conventional oil. Not surprisingly, shale supply has been among the first production to cave in under the impact of lower prices, but it may be first to come back when prices rebound. The shale revolution has turned oil into a two-speed industry, split between a relatively small short-cycle shale sector and a larger, longer-cycle conventional sector. Spurred by lower prices, technological progress and advances in project management are making the shale oil business cycle shorter all the time.

Since shale oil supply growth accelerated around 2012, its short cycle and price responsiveness have eroded OPEC’s capacity to manage the market via production cuts, as the price support thus provided effectively enables continued shale investment to quickly translate into new supply. OPEC cuts thus amount to a form of subsidy and a transfer of market share to the shale industry.

Does that spell the end of OPEC as an organization and market power? Nothing could be further from the truth. Its high supply policy is already scoring some points. Lower prices, driven in part by surging OPEC production, have at last brought shale supply growth to a halt. Lately aggregate US shale supply (albeit with marked differences from play to play) has started to show annual declines.

So far those dips in shale supply have been more than offset by record growth from Russia, Brazil and elsewhere, but it is just a matter of time before output from those producers starts losing steam too. Faced with collapsing prices, most producers, especially those that have low buffers and depend on high oil export revenue for social spending, find it imperative to produce as much as they can. But just as they lift supply to keep revenue as high as possible, producers are cutting back on expenses by slashing longer-term investment and postponing maintenance. This will inevitably hasten and steepen decline rates from producing fields, even as it results in a dearth of new projects to offset those declines. Most analysts agree that recent gains in supply will plateau and start reversing in 2016, perhaps rapidly.
It may take another year, all things being equal, for the market to start rebalancing in earnest. But as long as shale oil accounts for all of the supply response to low prices, it would be counter-productive for OPEC to reverse course and start cutting production. That would only cause shale supply to return to the market in short order, while also slowing down the decline in other non-OPEC supply. OPEC could resume production cuts later, however. Once other non-OPEC oil supply starts falling in earnest, OPEC could find it advantageous to speed up the price rebound by cutting its own production back again, as long as shale oil’s capacity to ramp up output fails to fill the gap in other non-OPEC production. When the dust settles, both shale oil and OPEC will likely have gained market share at the expense of big-ticket, high–cost, long lead-time conventional supply from non-OPEC countries.

Some OPEC producers will undoubtedly have a hard time getting over the low-price hump. Those include virtually all OPEC producers outside of the core Middle East group. But it is unlikely that these producers will be able to prevail over their Gulf Cooperation Council counterparts. Unsavory as OPEC’s market share policy might feel to them, they will likely be forced to support it for two reasons: first, there is a shared interest among OPEC members, no matter how deep their division, in maintaining a façade of unity. No one would benefit from a public display of internal dissent weakening of the organization. Second, OPEC policy will give the oil ministers of embattled member countries political cover and help them explain collapsing revenues to their home governments and electorates.

Of course, OPEC’s actual production over the next few months will not necessarily be set by the group’s stated policy targets. The most embattled members may extract from the others some form of platonic, rhetorical support for market management. Market constraints – lack of buying from refiners –may also place a ceiling on how much production members can push onto the market. But staying the course would assuredly make more sense for the group than reversing it as OPEC seeks to adjust to a market transfigured by the advent of shale.

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