ENERGY WATCH

The outlook for US shale production

- Profitability and production at US shale firms has slumped owing to low oil prices
- We expect US oil output to remain low throughout the rest of 2020 …
- … but it could start to bounce back in 2021

Since the outbreak of the coronavirus, oil demand has plummeted, and prices have slumped. In this Energy Watch, we consider what this means for the US shale industry.

We have been here before
This is not the first time that US shale producers have faced an environment of ultra-low oil prices. Back in late 2014, oil prices slumped 40% to below $50 per barrel and remained there throughout most of 2015 and 2016. The then Saudi oil minister, Ali Al-Naimi, refused to sanction production cuts, despite weak oil demand in Europe and China, as part of an attempt to force (rapidly expanding) US shale production out of the market.

While US production initially dipped on the back of the collapse in prices (see Chart 1) it didn’t fall by as much as Saudi Arabia had hoped and the Kingdom’s oil policy was later formally changed in mid-2016 with the departure of Al-Naimi. OPEC oil production was subsequently curtailed as part of a joint agreement with non-OPEC oil producers, led by Russia (OPEC+). Prices rebounded and US shale production started to rise again from early 2017.

The US shale industry emerged stronger from this period of low oil prices. Investors had rallied around shale producers by buying their debt and financing re-structuring. A more streamlined, nimble industry emerged with a focus on exports (as domestic US refineries now had more than enough light oil). And, earlier this year, crude oil output hit a record high of 13.1m bpd, of which around 8m bpd was shale oil.

That said, even before the virus outbreak, we had expected US oil supply growth of just 0.25m bpd in 2020 (down from growth of 1.5m bpd in 2019) as the shale industry was on shaky grounds. For one, it has struggled with competitiveness given its relatively high costs of production (roughly quadruple that of Saudi Arabia) and higher transport costs, particularly to the fast-growing Asian markets which are geographically closer to producers in Russia and the Middle East. In addition, shale firms are typically highly leveraged and have been facing capital constraints in recent years. Financing is a persistent problem in part because the debt of most of the listed shale firms in the US is rated as ‘junk’ (see Chart 2) and makes raising debt expensive. (Shale production is a capital-intensive operation.)

Chart 1: Crude Oil Production (Mn. BpD)

Sources: Refinitiv, OPEC

Chart 2: S&P US Oil & Gas Credit Ratings (Number of Companies at each Grade, April 2020)

Sources: Bloomberg, Capital Economics

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What’s more, well productivity has been in decline for several years and this has put upward pressure on production costs per barrel.

**The coronavirus has made the situation worse**

The problems in the US shale industry have intensified since early March owing to a plunge in global product demand on the back of virus-related travel restrictions and social distancing. Indeed, the price of oil collapsed, with the spot price of WTI (the US-centric oil price benchmark) even falling below zero for the first time. (See our Energy Update.)

Clearly, given current prices, the earnings of US shale firms are set to fall sharply this year. (See Chart 3.) The situation is compounded by the fact that both domestic and export demand have come under pressure and that storage capacity is running out. It is therefore no surprise that some smaller firms, such as Whiting Petroleum (125,000 bpd in Q4 2019), have already declared bankruptcy.

In order to save cash and avoid taking on high-yielding debt, firms that have survived have slashed their exploration and production budgets. Consequently, US drilling activity has collapsed by around 60% in recent weeks and low prevailing prices suggest that it will fall further. (See Chart 4.)

**OPEC to the rescue (again)**

Supply from outside the US, particularly from OPEC+ producers, is also likely to be constrained for the next few years. (See our Energy Update.) OPEC+ recently announced production cuts of at least 7.7m bpd for the rest of this year and some of their members, including Saudi Arabia, have even stated that they will enact additional voluntary cuts. At the same time, global oil demand is likely to gradually pick up as quarantine measures continue to be lifted.

The market should therefore move from a large surplus into a small deficit by end-2020, which will weigh on stocks. As a result, we forecast that the price of WTI will rise to $45 per barrel by end-2020, from $34 currently.
Admittedly, the risks to our 2020 and 2021 US production forecasts lie heavily to the downside for three key reasons.

First, and most importantly, demand may remain persistently weak, perhaps owing to a ‘second wave’ of virus infections. If this were the case, we would expect oil prices to remain low for much longer than we currently anticipate, exacerbating the financial difficulties currently faced by the US shale industry.

Second, there is a risk that OPEC+ member states don’t comply with their promised output cuts, which would act as a drag on oil prices and threaten the long-term health of the US shale industry. That said, we think that most OPEC+ member states will, at least initially, refrain from flouting their quotas given that prevailing low prices and limited storage capacity provide little incentive to overproduce.

Third, the election of a Democratic Party candidate as US President could see a rethink of US energy policy. Details are scarce, but this could involve the removal of certain tax breaks and tighter environmental/production regulation, both of which would probably deter investors.

Conclusion

US shale production has fallen in recent weeks owing to low oil prices and a lack of storage capacity. We expect output to fall further over the coming months as some US shale firms go bankrupt and as those that survive seek to repair their balance sheets. Nevertheless, if we are right and oil prices start to recover, production should rebound a little from early-2021.
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