DALLASFED Economic Update
Energy

OPEC Reloaded: More Appearance than Substance?

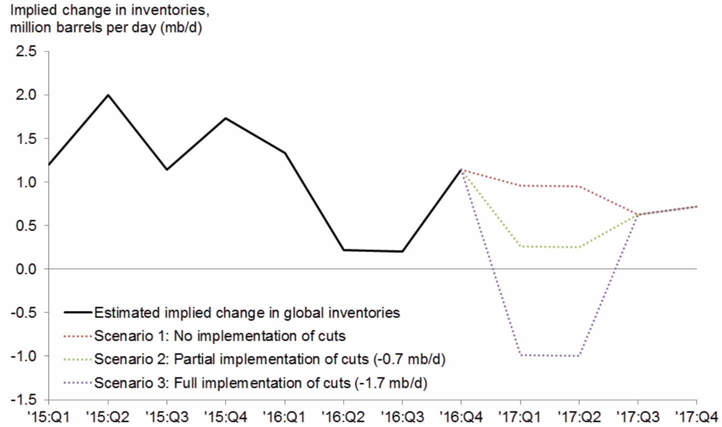
Fourth Quarter 2016

After two years of defending market share, the Organization of the Petroleum Exporting Countries (OPEC) returned to its old strategy of managing production. Joined by 11 non-OPEC countries such as Russia and Mexico, OPEC aims to cut output by 1.7 million barrels per day (mb/d) in the first half of 2017. This decision sent oil prices up roughly 20 percent during the fourth quarter. Although the output cuts look impressive on paper, implementation is far from assured. The actual effect on the global supply-and-demand balance is likely to be muted.

Oil Market Hinges on OPEC Agreement

The fate of the global oil market is back in the hands of OPEC. Chart 1 illustrates three implementation scenarios. If the announced agreement is not implemented, the market would be oversupplied throughout 2017. If OPEC and non-OPEC countries fully cut 1.7 mb/d, inventory draws could occur in the first half of 2017. The most likely scenario is that OPEC and non-OPEC countries will only partially implement cuts (about 0.7 mb/d). In this scenario, world consumption and production would be roughly in balance in the first half of 2017, but slight inventory builds would persist. The effect on the second half of 2017 would depend on whether OPEC agrees to extend the cuts at its May meeting.

Chart 1
Global Inventory Buildups Hinge on OPEC Agreement Implementation



SOURCES: International Energy Agency; Organization of the Petroleum Exporting Countries (OPEC); Federal Reserve Bank of Dallas.

OPEC Agreement Impressive at First Sight, but Details Make It Less So

Although the OPEC agreement sends a powerful message of cohesion, the details could derail much of the impact. Stated cuts include declines in output due to seasonal fluctuations and natural declines in field production, which would have occurred regardless of the agreement and were already expected. For example, Saudi Arabia's anticipated cut of 0.5 mb/d includes a roughly 0.3 mb/d seasonal decline due to lower oil production in the winter for domestic consumption. Venezuela promised a 0.1 mb/d cut, but its production was already expected to decline due to deteriorating operating conditions.

OPEC's Track Record of Poor Compliance

Historically, OPEC has demonstrated a poor record of complying with its quotas, producing 10 percent more than its official target, on average, over the last decade. Typically, only Saudi Arabia and the Gulf states have upheld their commitments. The ability to cope with low oil prices largely differs across OPEC member countries, as Table 1 shows. This may lead countries to attach different levels of importance to the success of the agreement.[1] Moreover, it will be hard to assess cuts by non-OPEC countries because no baselines or individual country cuts are outlined in the agreement. Data released in mid-February 2017 will reveal whether countries began complying with the cuts in January.

Upside Risk to World Output from Libyan Production Comeback

A partial resolution of outages in Libya and Nigeria that increased OPEC crude production to 34.2 mb/d in November presents a major risk to the market outlook. The reopening of oil fields and ports in east Libya has increased the country's output by more than 0.2 mb/d since last quarter. According to press reports, operations are also resuming in western oil fields, which could add another 0.4 mb/d over the next couple of months. Nigeria was also able to restore about 0.2 mb/d of output that was offline due to insurgent attacks. While the OPEC agreement exempts Libya and Nigeria from cuts, it includes both countries in the OPEC quota of 32.5 mb/d and makes no provisions for possible further production increases.

Table 1: Ability to Endure Depressed Market Mixed Across OPEC in 2017

Country	Fiscal breakeven oil price ($/bbl)	Oil asset buffers (years)	Gross debt-to-GDP ratio (%)
Saudi Arabia	68	12	20
Iraq	56	0	73
Iran*	54	14	15
UAE	58	134	19
Nigeria	78	0	15
Venezuela	165	0	28
Kuwait	62	49	22
Qatar**	127	19	66
Libya	163	3	100
Algeria	95	3	17
Angola	60	1	74

* Iran national accounts and government finance data used are for an April–March fiscal year.

** Qatar government finance data used are for an April–March fiscal year.

NOTES: The fiscal breakeven price is the oil price at which a government can balance its 2017 budget. Oil asset buffers are an estimate of how many years the expected 2017 fiscal deficit could be bridged through liquidation of its sovereign wealth funds. The gross debt-to-GDP ratio suggests how much more debt a country could take on were it to keep incurring its expected 2017 deficit in future years. See the paper by Dhaliwal and Stuermer (2015) for details on the methodology.

SOURCES: International Monetary Fund; Sovereign Wealth Fund Institute; authors' calculations.

Effect on U.S. Output Likely Limited in Short Run

The impact of the OPEC agreement on U.S. output will likely be muted in the near term. Industry contacts view the agreement skeptically, which may deter firms from drilling substantially more than what is already planned. The U.S. oil rig count has been trending higher since mid-2016 *(Chart 2)*. If OPEC fully implements its cuts, this will most likely lead to an uptick in U.S. drilling activity and begin to push up U.S. crude output after six to nine months, according to industry contacts.

Bankruptcies Decline, but Associated Debt Rises

The number of new bankruptcies in the oil and gas industry declined from 29 in the third quarter to 20 so far in the fourth quarter, according to data from Haynes and Boone LLP. Declines were mainly in the oilfield services sector *(Chart 3)*. However, the amount of associated debt grew—by about $2 billion to $10.2 billion—signaling continued restructuring and consolidation in the sector. Simultaneously, OPEC's agreement and the related oil price increase provide a lifeline to firms, which are able to use the opportunity to hedge production at current prices.

—Rachel Brasier and Martin Stuermer

Notes

We are grateful for the excellent research assistance provided by Justin Lee and Navi Dhaliwal.

1. See "OPEC Likely to Keep Pumping Despite Budget Woes of Some Members," by Navi Dhaliwal and Martin Stuermer, Federal Reserve Bank of Dallas *Southwest Economy*, Fourth Quarter, 2015, www.dallasfed.org/~/media/documents/research/swe/2015/swe1504g.pdf.

About the Authors

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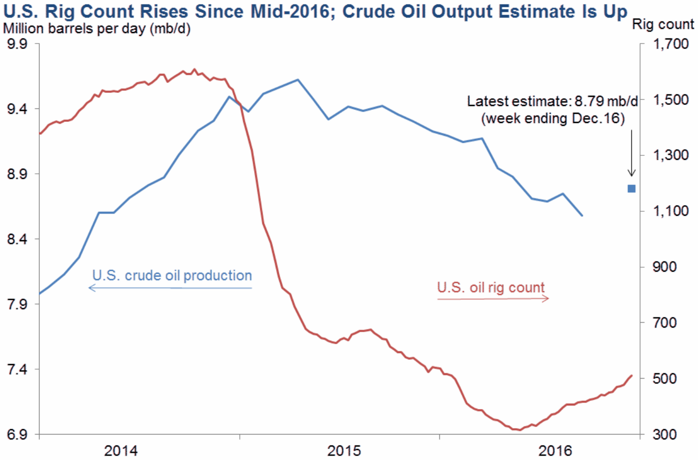
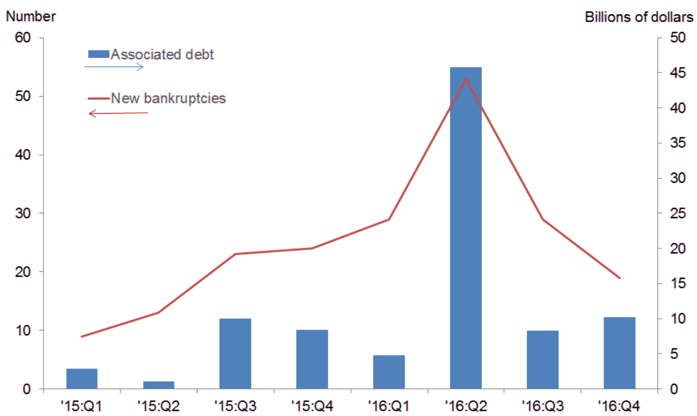
Chart 2
U.S. Rig Count Rises Since Mid-2016; Crude Oil Output Estimate Is Up



SOURCES: Energy Information Administration; Baker Hughes.

Chart 3
Bankruptcy Count Declines from Second-Quarter Peak but Is Still Elevated



NOTE: Data for fourth quarter 2016 represents records through Dec. 14, 2016.
SOURCE: Haynes and Boone LLP.