DALLASFED Economic Update
Energy

OPEC Tips Crude Oil Markets over the Cliff

Fourth Quarter 2015

West Texas Intermediate (WTI) crude oil prices have fallen around 23 percent so far in the fourth quarter. Expectations have shifted toward a weaker price outlook because sanctions against Iran are likely to be lifted in early 2016, the Organization of the Petroleum Exporting Countries (OPEC) has scrapped any pretense of a production ceiling, and U.S. production declines have slowed.

Supply Glut Drives Oil Prices to 10-Year Lows

The imbalance in global supply and demand has led oil prices to slump to levels last seen over 10 years ago. World petroleum production will exceed consumption by an average of 1.7 million barrels per day (mb/d) in 2015, according to December estimates by the Energy Information Administration (EIA). This excess supply is higher than during the Asian financial crisis and the Great Recession. OPEC supply has bloated markets with nearly 1 mb/d more this year than what the EIA initially predicted in November 2014.

In 2016, global supply is expected to exceed demand by 0.6 mb/d on average (*Chart 1*). Since this margin is relatively small, the timing of factors affecting supply and demand is crucial. Three major supply-side factors that have shifted since the third quarter—Iran's likely return to crude oil markets, OPEC's disarray and the U.S.'s slower crude oil production declines—point to a weak outlook for oil prices.

Iran Slated for Early Return to Market

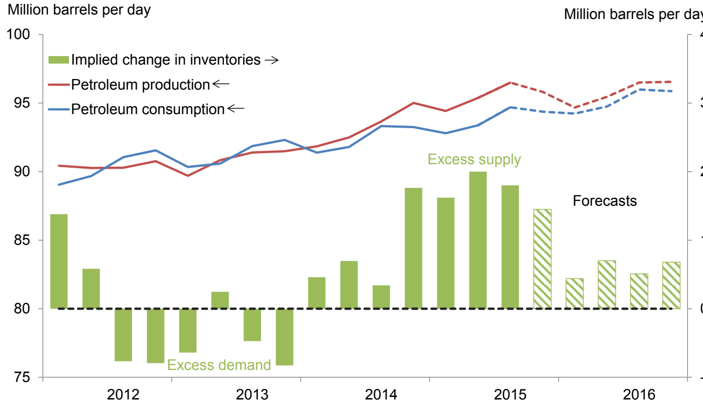
Iran may meet requirements to lift sanctions earlier than expected. According to the United Nations, Iran is dismantling its nuclear centrifuges at a much faster rate than anticipated, and Iran's oil minister and U.S. lawmakers have said that oil export sanctions could be lifted as soon as mid-January 2016. Iran has repeatedly announced its intent to export an additional 500,000 barrels per day in 2016. The country's production outages, mainly due to sanctions, stand at about 800,000 barrels per day (*Chart 2*). Iran also has a large inventory of crude oil that it may release on the market.

December OPEC Meeting Ends in Disarray

At OPEC's December meeting, the impending lifting of sanctions against Iran contributed to increasingly vocal dissonance within the cartel. The meeting ended in disarray, and oil ministers abandoned any pretense of a production ceiling for the first time in decades. A strong divide appeared to develop between Saudi Arabia and its Gulf allies on one hand and Iran and remaining OPEC members on the other.

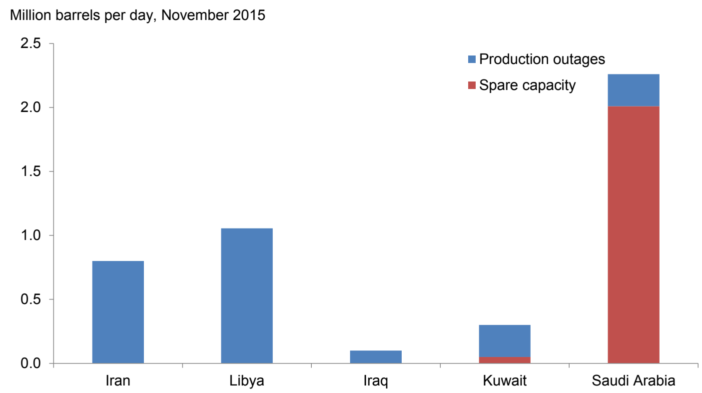
These divisions are driven by three underlying causes. First, there is strong disagreement on how to accommodate Iranian oil supply once sanctions are lifted as Saudi Arabia,

Chart 1
Global Supply Overhang Set to Persist in 2016



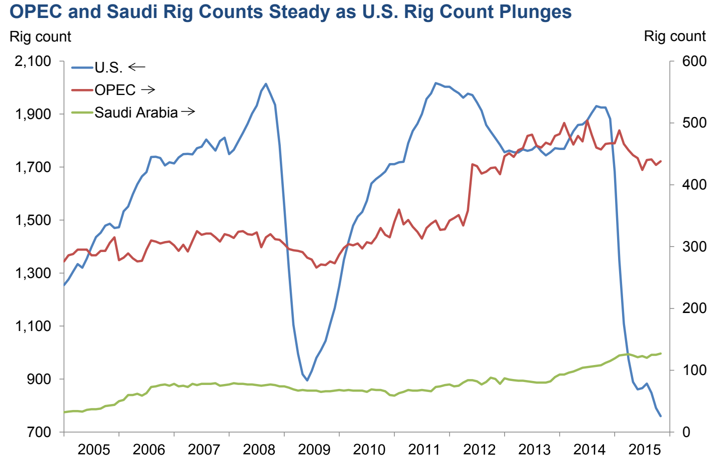
NOTES: Petroleum includes crude oil, lease condensates, natural gas plant liquids, biofuels, other fuels and refinery processing gains. Implied change in inventories is petroleum production minus consumption.
SOURCE: Energy Information Administration.

Chart 2
Iran Production Expected to Come Back Online After Sanctions End



NOTES: The EIA defines production outages as estimated unplanned crude oil production outages. Spare capacity is defined as sustainable production capacity (IEA) minus actual production and outages (EIA).
SOURCES: Energy Information Administration (EIA); International Energy Agency (IEA).

Chart 3
OPEC and Saudi Rig Counts Steady as U.S. Rig Count Plunges



SOURCE: Baker Hughes.

Iraq and others seek to maintain market share. Second, heightened tensions in the Syrian conflict have deepened regional rivalries. Third, low oil prices affect member countries differently because of their different fiscal positions.[1] These underlying causes will make any agreement on reinstating production ceilings or other coordinated action by OPEC unlikely in 2016.

Meanwhile, OPEC keeps on drilling for crude oil. OPEC's and Saudi Arabia's rig counts have stayed relatively stable despite large price declines (*Chart 3*). In contrast, the U.S. rig count has plummeted because of U.S. shale oil's relatively high marginal costs.

U.S. Production Steadies After Slowdown

Despite the falling rig count, incoming data show U.S. crude oil production has remained relatively flat. U.S. production edged up to 9.38 mb/d in September (*Chart 4*). The actual September data reveal that weekly estimates strongly underestimated U.S. production. Gulf of Mexico production—which grew 0.5 mb/d from July to September—has partially offset falling onshore production.

Although production declines have slowed, layoffs continue. Since peaking in October 2014, U.S. oil and gas employment has fallen 14.5 percent (by 70,000 jobs) year over year. Job losses and falling energy prices portend continued distress for the oil and gas sector in 2016.

Spending Cuts, Bankruptcies Loom for Sector in U.S.

Oil and gas sector bankruptcies have reached quarterly levels last seen in the Great Recession. Lower oil prices have taken a significant financial toll on U.S. oil and gas producers, in part because many face higher costs of production than their international counterparts do. At least ten U.S. oil and gas companies, accounting for more than $2 billion in debt, have filed for bankruptcy so far in the fourth quarter. If bankruptcies continue at this rate, more may follow in 2016. Upstream firms have also adjusted to low oil prices by slashing capital expenditures; spending is down 51 percent from fourth quarter 2014 to third quarter 2015 (*Chart 5*).

Overall, market expectations have shifted toward a weaker price outlook due to the prospect of earlier-than-expected production increases from Iran, along with broad disagreements within OPEC and slower-than-expected declines in U.S. crude production. With supply set to exceed demand by 0.6 mb/d per day in 2016, it's possible that global inventories might not begin to fall until 2017. Given the great uncertainty surrounding projections and the timing of supply and demand changes, the coming year promises to be a dynamic one for oil markets.

—Navi Dhaliwal and Martin Stuermer

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Note

[1] "OPEC Likely to Keep Pumping Despite Budget Woes of Some Members," by Martin Stuermer and Navi Dhaliwal, Federal Reserve Bank of Dallas *Southwest Economy*, Fourth Quarter 2015.

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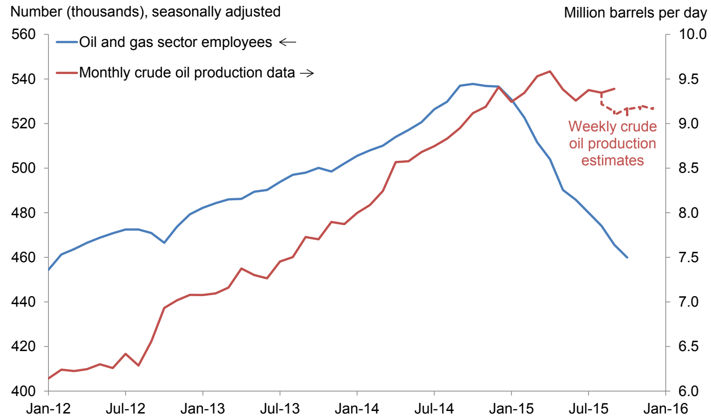
About the Authors

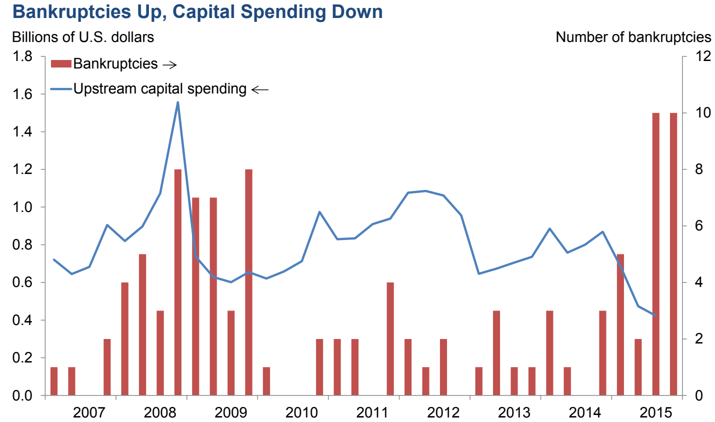
Dhaliwal is a research assistant and Stuermer is a research economist in the Research Department of the Federal Reserve Bank of Dallas.

Chart 4
U.S. Oil Production Stabilizes, but Energy Layoffs Continue



NOTE: Employment includes oil and gas extraction, plus support activities for oil and gas operations.
SOURCES: Bureau of Labor Statistics; Energy Information Administration.

Chart 5
Bankruptcies Up, Capital Spending Down



NOTE: Upstream capital spending is a market capitalization-weighted average of capital spending for 69 U.S. oil and gas exploration and production firms and the upstream segments of three integrated firms.
SOURCES: Bloomberg; New Generation Research.