

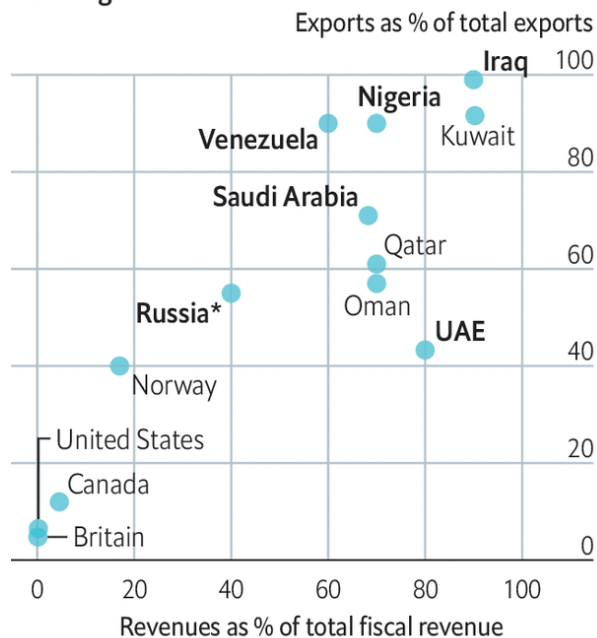
Beyond oil

Petrostates must diversify to cope with fluctuating oil prices

Demand has become more unpredictable

The price of dependency

Oil and gas



Source: International Energy Agency

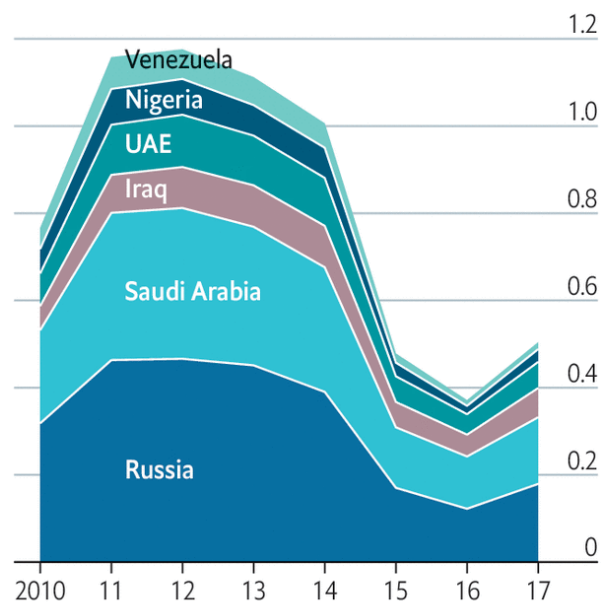
The Economist

Oct 26th 2018

SAUDI ARABIA, a giant petrostate, has a well-known plan to become something more, known as “Vision 2030”. This week the kingdom held an investment conference in Riyadh to discuss its drive to modernise its economy, although it was overshadowed by the murder of Jamal Khashoggi, a journalist. Saudi Arabia’s urge to diversify away from energy is shared by many other countries. Bahrain, Qatar and the United Arab Emirates each have “vision 2030” plans that include reducing their dependence on oil and gas. Iran, Kuwait, Nigeria and Oman have their own strategies for diversification. The idea is not new—these countries have sought to restructure their economies since the 1970s. But the task has become more urgent.

Revenues from oil and natural gas have plunged in recent years, as prices have fallen. A new report from the International Energy Agency (IEA) puts the challenge in stark relief. In six large petrostates the IEA examined—Iraq, Nigeria, Russia, Saudi Arabia, the United

Net income from oil and natural gas, \$trn



*Federal budget (excludes Russian regions)

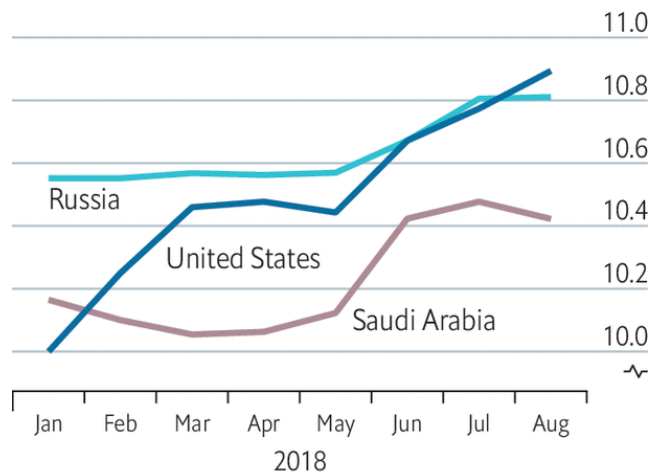
Arab Emirates and Venezuela—net income from oil and natural gas in 2016 was less than one-third of its level in 2012. Such a huge drop-off is painful. In Russia, oil and gas receipts account for about 40% of the government's revenue. In Iraq they account for 90%.

The response to sinking prices has varied. Many countries ran deficits rather than slash their generous domestic spending programmes. Bahrain requires a crude price of \$113 a barrel to support its budget, according to MUFG, a bank. But most countries have started talking more earnestly about diversification. Fatih Birol, director of the IEA, predicts that countries' efforts will gain more urgency for two reasons.

The first is a change in global oil supply. Thanks to shale, America has become the world's biggest crude oil producer, reducing the power of the Organisation of Petroleum Exporting Countries to control the market. The second is a change in demand. Concerns about climate change make demand much harder to predict, as energy efficiency increases and electric cars become more popular. Oil prices will become more volatile, making it harder for countries to achieve steady economic growth. "Now, more than at any other point in recent history, there is a need to fundamentally change," argues Dr Birol. Nevertheless, progress may be slow. Plans for reform were hatched when oil prices were low. Now they have ticked up and revenues are rising again. There is a danger that some petrostates rest on their oil riches, as they have many times before.

Gushing ahead

Crude oil production, barrels per day, m



Source: EIA

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Trumpsy turvy

The oil price swings dramatically

Blame the turmoil on American policy



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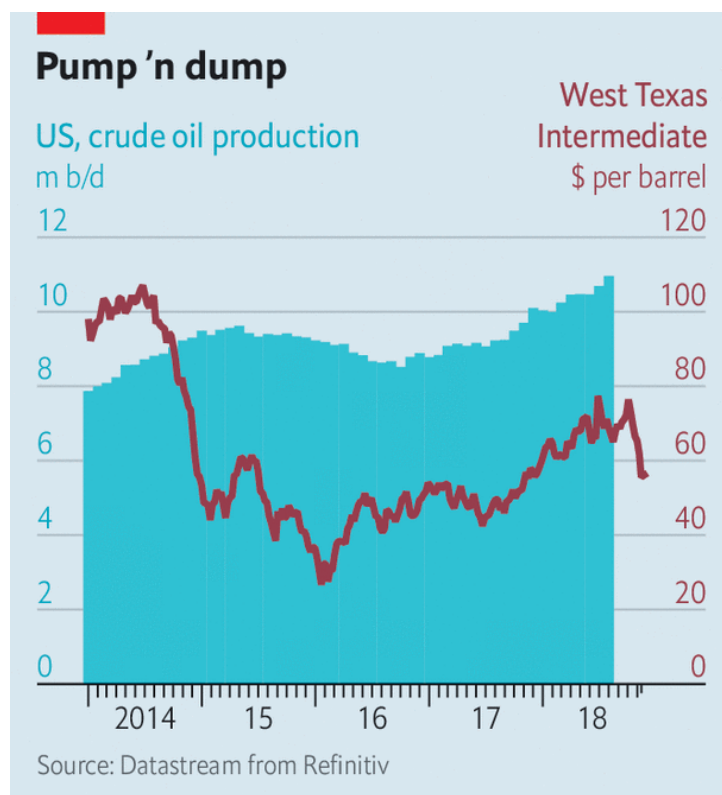
The oil price was supposed to be soaring around now. With American sanctions against Iran taking effect earlier this month, exports from that country, the world's fourth-largest producer of crude oil last year, were expected to shrink to close to zero. In anticipation the price of Brent crude, the international benchmark, went above \$86 in early October, a four-year-high, and some warned of prices above \$100 a barrel.

Instead, by November 8th oil had entered a bear market. The price of Brent crude stood at \$66.53 on November 14th. West Texas Intermediate, the American oil benchmark, dropped for 12 straight trading sessions, until November 14th, when it at last ticked up (see chart). That was the longest uninterrupted decline in over three decades. American crude futures have plunged by 20% from their recent peak.

Some of the reasons for the slump are standard fare. In October the IMF lowered its forecast for global economic growth. Trouble in emerging markets has an outsize effect on their demand for dollar-denominated oil, as it becomes more expensive in weakening local currencies. But the oil market's recent volatility also reflects new forces, including the limits of conventional producers and the peculiar impact of America's president, Donald Trump.

The Organisation of Petroleum Exporting Countries (OPEC), led by Saudi Arabia, aspires to cosy stability. Prices should be high enough to sustain its members' budgets and low enough to support global demand. But its grip has slipped. There are now three dominant oil producers: America, Saudi Arabia and Russia, only one of which is a member. As America's shale industry has boomed, Saudi Arabia has turned to Russia to help coordinate production. Their interests are not perfectly aligned. Saudi Arabia's oil minister, Khalid al-Falih, this week said the kingdom would lower output by 500,000 barrels a day in December; Russia's oil minister doubted that there would be oversupply.

But it is America that has had the greatest destabilising effect. This year it became the world's top producer of crude. Its shale companies are pumping out oil at a phenomenal rate. Output in August was 23% above the level 12 months earlier. But the shale industry is beholden to investors, not an oil minister, and production may taper if oil prices continue to slide and investors demand higher returns. On top of that comes Mr Trump's policies, which are helping to shove oil markets this way and that.



The Economist

After he announced sanctions on Iran in May, OPEC and its allies agreed to increase output. Production from Saudi Arabia and Russia has climbed to record highs. Then, on November 5th, America announced that it would grant 180-day waivers to China, India and six other countries to continue to import from Iran—countries that together account for more than 75% of Iranian exports, according to Sanford C. Bernstein, a research firm.

Mr Trump's trade policies are also depressing demand for oil. The IMF's lower forecast for growth is due in part to a slowdown in emerging markets, but also to rising tensions between America and its trading partners, a strain that further weakens emerging economies. The growth in air freight and shipping has fallen by about half in the past year, says Edward Morse of Citigroup, depressing demand for diesel fuel. Mr Trump's trade war with China is particularly important for oil markets, as China accounted for about 40% of the growth in demand for oil last year. On November 13th OPEC lowered its forecast for global oil demand next year.

But even as oil prices fall, there is reason to think they could spike again soon. More production cuts may come next month, after OPEC and its partners meet in Vienna. On top of uncertainty in Iran, disruption in Venezuela, Libya, Nigeria or Iraq could squeeze global supply. These "fragile five", as some investors call them, accounted for 12% of global oil production from July to September, more than Saudi Arabia.

Then there is always the possibility that Mr Trump could reverse course—striking a trade deal with China, for instance, or tightening restrictions on Iran once more. Or he might simply write a tweet. On November 12th he took to Twitter to call on OPEC to refrain from cutting production. The oil price fell.

The Economist explains

What is Brent crude?

The world's most widely used oil benchmark faces challenges from rivals



[The Economist explains](#) Oct 29th 2018 by B.F.

BRENT CRUDE is the benchmark against which the majority of the 100m barrels of crude oil traded every day are priced. At the start of October the price of Brent crude rose above \$85 a barrel, its highest level in four years. But the black stuff that makes up the Brent benchmark comprises a tiny fraction of the world's extracted oil. Why is it used to determine the value of 60% of oil on international markets?

The international oil trade is relatively new. It was not until 1861 that the first deal between two countries was recorded, when the *Elizabeth Watts*, a cargo ship, took a consignment of oil from Pennsylvania to London. Before the second world war, oil was mainly traded regionally. After the war the market became increasingly global as the number of producers expanded. Its price was largely set by oil companies, and later by the 15 countries that make up OPEC, the oil-producers' cartel. It is only since the late 1980s that prices have been determined by international markets. As crude oil differs in quality and availability depending on where it comes from, producers and traders need a reliable benchmark against which to judge the correct price.

The most widely used benchmark is Brent crude, oil extracted in the North Sea. Brent makes such a good benchmark because it is easy to refine into products such as petrol, so demand is consistent. Because it comes from the sea, output can be raised as required and extra oil tankers can be chartered to ship the stuff. Supply of the more easily refined but landlocked West Texas Intermediate (WTI) crude, a benchmark commonly used in America, is constrained by pipeline capacity. When the Brent benchmark was first adopted for widespread use in 1985, the oil came from Shell's Brent oil field. But as production diminished, crude oil from other fields in the North Sea was added into the blend that makes up the benchmark. Today, the price of a barrel of Brent crude is taken from the most competitive of five different types of crude, only one of which comes from the Brent field. This has maintained the security and volume of supply essential for a reliable benchmark.

Although Brent crude is well-established in the world's markets, its continued importance is not assured. North Sea oil reserves are depleting. New sources of crude from outside the North Sea could help guard against supply-side price swings, but also affect Brent's consistent quality. WTI, the second-most-common benchmark, has been gaining influence after the American government lifted a ban on oil exports three years ago. Earlier this year, China launched Shanghai crude futures, an attempt to create an Asian benchmark to rival the two Western incumbents. Many of the trades pegged to this benchmark use the yuan, which could make China's currency more important in the global economy. Shanghai crude has had some early success, but it needs to attract more foreign interest to become a global alternative. Brent crude is still the most prevalent gauge of the price of oil, though competition could one day have it over a barrel.

Tapped out

Saudi Arabia's might as an oil producer is being tested

Will it be able to fill the gaps left by smaller producers?



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Oil traders are inherently strong-stomached, but even for them October has been a woozy month. On October 3rd the price of Brent crude reached \$86 a barrel, a four-year high. On October 23rd it slid to \$76, on the news that demand might ebb, stockpiles rise and production increase. At the centre of this is Saudi Arabia, the world's most powerful petrostate. Khalid al-Falih, the country's oil minister, said on October 23rd that the kingdom was prepared "to meet any demand that materialises". But that is not an easy task.

Exports from Iran have plunged and are due to fall further after November 4th, when new American sanctions take effect. Even as America's crude production soars, President Donald Trump has demanded that the Organisation of Petroleum Exporting Countries (OPEC) boost output to lower prices. Saudi Arabia seems keen to appease him, both because it supports the sanctions and because of anger over the killing of Jamal Khashoggi, a journalist, in the Saudi consulate in Istanbul. But the gains from producing

more are uncertain. Both *oprec* and the International Energy Agency (*iea*) have cut their forecasts for oil demand in 2019.

Even if Saudi Arabia wants to fill the gap left by Iran, it is not clear that it can. That is in part because Saudi output is already so high. As Iranian exports have dropped since May, when Mr Trump announced the sanctions, Saudi Arabian exports have picked up. The kingdom is producing more than 10.5m barrels of oil a day (b/d); officials claim the capacity to produce around 12m. “They can reach about 11m barrels with relative ease,” explains Neil Atkinson, head of oil markets at the *iea*. Analysts debate how quickly—or whether—the country can ramp up to 12m b/d. “They have never actually proven they can do that,” says Ehsan Khoman of *mufg*, a bank.

Saudi Arabia may also be unable to counter weakness in smaller petrostates, where supply could drop unexpectedly. In the past six months Nigeria, Libya and Venezuela have helped to offset falling exports from Iran. But they are a volatile trio.

Violence and political unrest make production in Nigeria and Libya prone to big swings. The situation is more extreme in Venezuela where, thanks to political turmoil, production is about half of what it was in early 2016. Still, Venezuela produced 1.2m b/d in September. Exports actually increased by 250,000 b/d between April and September, according to Bernstein, a research firm, equivalent to more than half the rise in Saudi exports in that period. There is ample room for Venezuela’s output to drop further.

The result may be further dramatic swings in the market, with Saudi Arabia’s oil production put to the test. “It is the first time in modern history that countries have faced so many restrictions at the same time,” according to Mr Atkinson of the *iea*. Much depends on just how far exports from Iran sink—some countries are pushing for waivers from sanctions. Mr Falih remains confident that Saudi Arabia can help provide stability. But as it increases output, spare capacity may reach a record low by the end of the year. “The more they produce, the less there is in the tank for any additional supply outages,” says Mr Khoman. Get ready for a bumpy ride.



The Economist