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ARE PERSISTENTLY LOWER OIL PRICES GOOD?

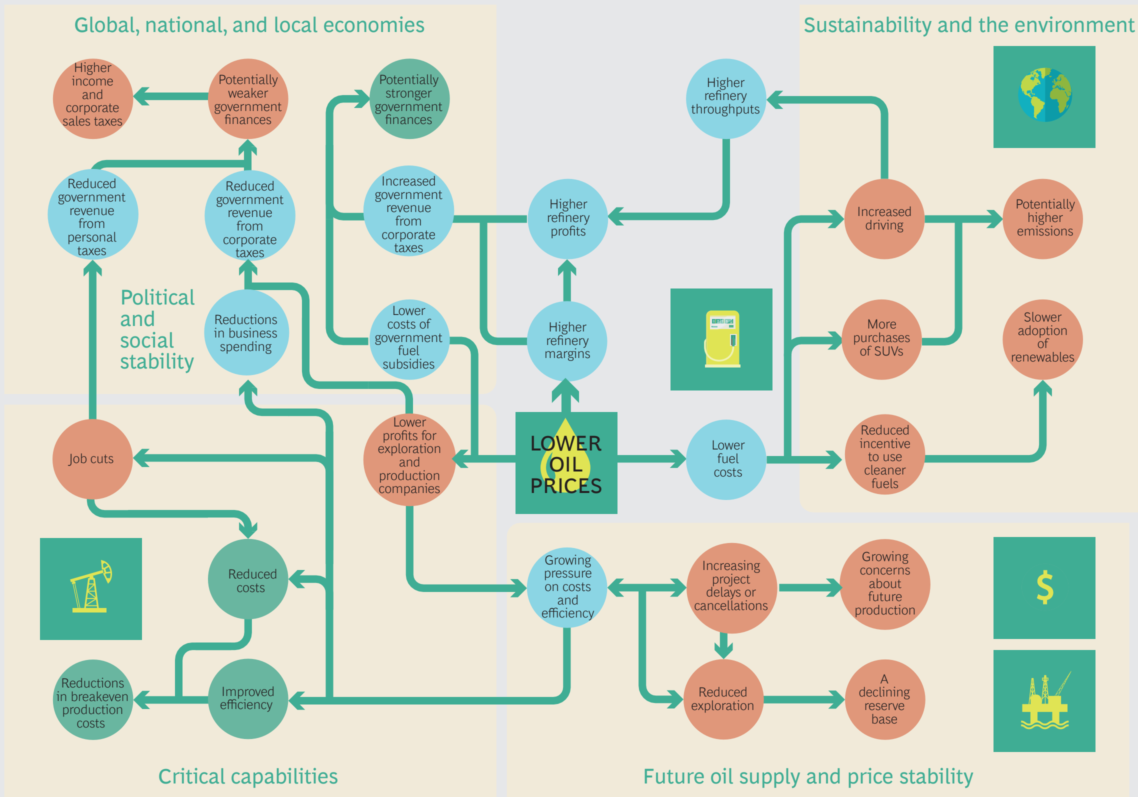
By Iván Martén and Philip Whittaker

In early 2015, many analysts projected that the plunge in oil prices that had begun in mid-2014, assuming it persisted, would be good overall for many segments of the global economy. Revenues for oil and gas producers and producing countries would decline, certainly, and the industry's operating environment would become more challenging. But cheaper oil would be a blessing, on balance, for most other sectors and countries. Car-driving consumers, for example, would need to spend less on gasoline, freeing up funds for discretionary spending elsewhere. Oil-related production costs for businesses would decrease, boosting companies' margins and scope for investment. Some analysts estimated that for every $20-per-barrel decrease in oil prices, global economic growth would expand by 0.4% in the following two to three years.

Viewed from the vantage point of mid-2016, however, the belief that lower oil prices would largely be a boon for the global economy seems both shortsighted and simplistic. Previous estimates of global economic growth have been ratcheted down significantly (though oil price effects are only one factor), as have estimates of growth in oil demand. The sustained lower level of oil prices to date has had a major impact on the economies of several oil-producing countries and spawned ripple effects including, in some cases, political and currency instability. (Although prices have trended upward so far in 2016, they remain relatively low compared with recent history, and the sustainability and momentum of the uptick are highly uncertain.) Cheaper oil has also triggered a host of other, largely undesirable effects on the global economic landscape. (See Exhibit 1.) In short, most of the anticipated benefits of lower oil prices have failed to materialize.

Below we examine some of the major consequences of recent oil prices on five fronts: global, national, and local economies; political and social stability; sustainability and the environment; future oil supply and price stability; and critical capabilities in the oil and gas industry.

EXHIBIT 1 | Lower Oil Prices Have Had Negative Effects on Much of the Global Economy



Positive outcome · Negative outcome · Neutral outcome

Source: BCG analysis.

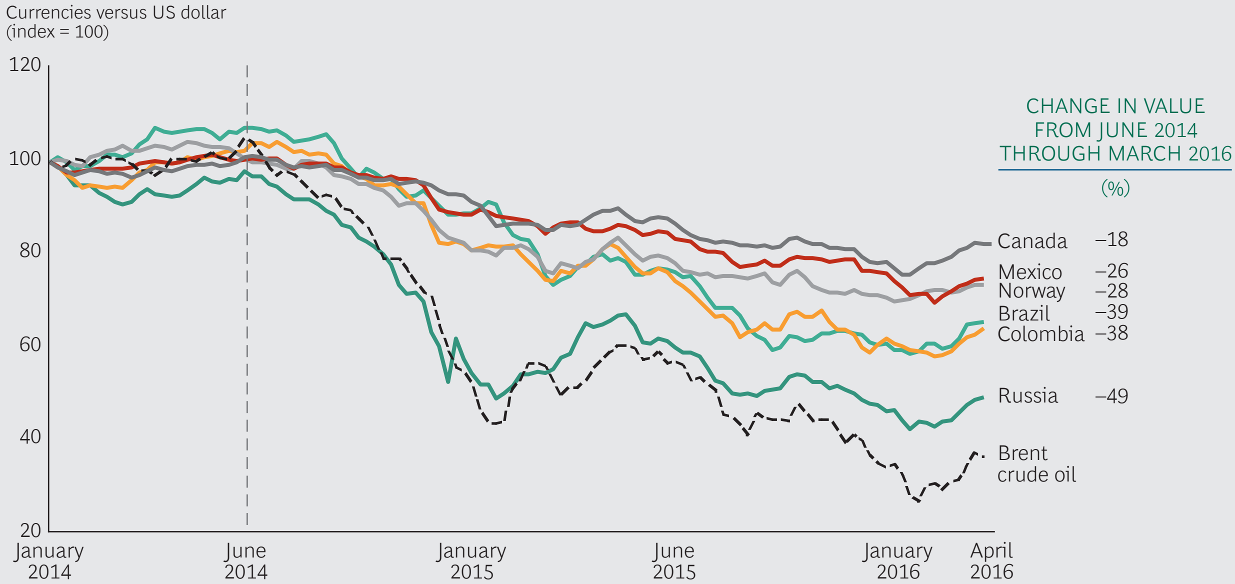
Global, National, and Local Economies

Forecasts of global economic growth have been reduced, as noted: the International Monetary Fund, for example, has lowered its estimate for global GDP growth in 2016 to 3.1%—a 0.4% reduction from its July 2015 estimate—and the smaller-than-expected stimulus provided by low oil prices is a significant factor behind this adjustment. Projections for oil demand have been reduced as well, with the International Energy Agency having scaled back its forecast of 2016 growth in global oil demand from 1.7 million barrels per day in 2015 to 1.2 million in 2016.

Countries that derive a significant share of their revenues from oil-related activities are feeling the slowdown in economic growth and growth in oil demand on several levels. Some countries have seen sharp decreases in the value of their currencies: Russia and Brazil, for example, saw their currencies slide 49% and 39%, respectively, in relation to the US dollar from June 2014 through March 30, 2016, with the declines potentially sowing the seeds of rampant inflation. (See Exhibit 2.) Some major oil-producing countries have considered introducing income, corporate, and sales taxes—an unthinkable prospect not long ago—to compensate for the revenue shortfall resulting from cheap oil. Further, a number of those countries' national oil companies (NOCs) have scaled back investment significantly—annual spending among NOCs is nearly 50% lower today than it was in 2014—which has had ripple effects on these economies. And NOCs continue to hunker down. Mexico's Pemex, for example, plans to spend 45% less in 2016 than it did in 2015. Argentina's YPF plans to spend 34% less.

Local economies in oil-producing regions have also been hit hard as the cycle has turned from boom to bust in response to

EXHIBIT 2 | Currencies of Major Oil-Producing Countries Have Stumbled



Sources: Bloomberg; BCG analysis.
Note: Data as of end of month.

the drop-off in oil prices. In Aberdeen, the UK's oil capital, oil companies have already cut more than 6,000 jobs.[1] Employment has taken a similar turn in major oil-producing regions of the US, with predictable effects on their economies. In Oklahoma, property foreclosures rose 36% in 2015; in North Dakota, they climbed 400%.

The harshness of this environment has forced oil companies to write down significant amounts of assets—in 2015, approximately $100 billion. The companies' debt load is problematic as well, with the debt-to-equity ratio of the 40 largest oil companies rising 44% since 2008 to an estimated 59% in 2016. The strain on these companies' finances is putting a strain on the entire financial system, with banks at risk of having to write down much of their exposure to the industry.

Political and Social Stability

Major oil-producing countries also face potential political fallout from low oil prices because of the sizable negative effects they have on government spending. Spending in Venezuela, for example, where crude oil accounts for 95% of export revenues, has fallen along with oil prices.

Political risks to these governments will likely continue to rise, especially given the growing specter of (further) reductions in fossil fuel subsidies by policymakers. Lower subsidies translate into higher gasoline prices at the pump, potentially leading to protests, riots (as happened in Nigeria in 2012), and unfavorable opinions of the government. Egypt, Indonesia, the United Arab Emirates, and Venezuela have all slashed fuel subsidies over the past 12 months, and further cuts among these and other oil-producing countries seem possible, if not likely. Oman and Kuwait, for instance, are aiming to reduce subsidies by 64% and 35%, respectively, in the months ahead. Higher fuel prices could also further stoke inflation: the IMF predicts that inflation in Venezuela could surpass 700% in 2016. The political risks these countries face could be compounded by the cuts in subsidies for water, electricity, and other essentials that some of them have made or signaled in response to plunging oil-related revenues.

Sustainability and the Environment

Low oil prices do nothing to encourage car buyers to choose fuel-efficient vehicles over gas-guzzling ones. In 2015 in the US, for example, sales of SUVs rose 10% year over year, while sales of hybrids, such as the Toyota Prius, fell by 28%. The shift away from higher-efficiency vehicles will make it considerably harder for the US to meet its 2025 gas-mileage target of 54.5 miles per gallon; in 2015, the average mpg of new cars in the US was 25.2—0.1 mpg *lower* than in 2014.[2]

Similar effects are manifesting themselves in other industries that rely heavily on oil as transportation fuel. Airlines, for example, feeling less urgency to reduce fuel costs, are pulling back on earlier initiatives designed to boost fuel efficiency, such as reducing flight speeds and cargo weights. For the same reason, some container ships and fuel-transport vessels are abandoning "slow steaming"—a practice that many had adopted to lower their fuel use—and are now traveling faster.[3]

These developments run counter to the growing consensus among many countries, evidenced at the 2015 United Nations Climate Change Conference (COP21) in December in Paris, that climate change is an increasingly urgent issue, requiring concerted action over the longer term.

Future Oil Supply and Price Stability

The IEA projects that global demand for liquids will expand until 2020 at an average annual rate of 1.1 million barrels per day—a rate close to historical norms. The collapse of oil prices, however, has sparked strong growth in demand for oil and oil-based products in a number of countries and sectors. In the US, for example, demand for gasoline rose 8.2% from April 2014 through March 2016, compared with only 1.3% from April 2012 through March 2014, according to the IEA.

But the plunge in oil prices has also led to a sharp contraction in exploration spending by exploration and production companies. In 2015, spending on exploration was $102 billion—30% lower than in 2014.[4] And in 2016, it will likely plunge again: analysts expect it to fall to $78 billion—a 24% decline from 2015.[5] Spending on development activity has also fallen. In 2015, companies deferred 68 new projects representing 27 billion barrels of oil equivalent in 2020 reserves.[6]

The drop in production growth may lead in coming years to supply shortages, with resulting whiplash effects on oil prices. However, some factors could maintain downward pressure on prices. One is a potential surge in supply from Iran as sanctions are partially lifted: the IEA projects that Iranian supply could climb to nearly 4 million barrels per day in 2018, as opposed to less than 3 million in 2015. (As of March 31, 2016, supply from Iran had already reached 3.3 million barrels per day.) Another factor that could keep oil prices in check is the potential effects of supply freezes that several producing countries are currently contemplating. A third factor that could weigh on oil prices is the actions of US shale-oil producers. Do they have the financial and technical firepower to ramp up production in response to an increase in oil prices?

Critical Capabilities

The protracted low-oil-price environment has resulted in many layoffs in the oil and gas industry.[7] In the US, for example, where more than 60 oil and gas companies filed for bankruptcy in 2015 (more than three times the number that filed in 2014), 100,000 oil and gas workers, or 16% of industry employment at its peak, have lost their jobs so far. Given the length of the downturn, some of this expertise will not return.

The loss of so many workers exacerbates the challenge presented by the industry's aging demographics. In 2014, for example, 71% of the US oil and gas workforce was 50 years of age or older. A shortage of skilled personnel resulting from the industry's mass layoffs of the 1990s was one of the main reasons why oil companies struggled to raise production between 2002 and 2008, even as oil prices quadrupled. Now history is threatening to repeat itself, with layoffs (and possible related damage to companies' ability to recruit new talent) potentially reducing the industry's ability to meet demand toward the end of the decade and into the 2020s.

Compounding matters, many oil and gas companies have scaled back their investments in developing critical capabilities as their revenues have fallen. Many have also slashed their R&D budgets. BP, for example, reduced its R&D spending by 37% in 2015 relative to 2014; Shell reduced its by 11%. These moves could come back to haunt these companies later.

The toll of persistently low oil prices on industry skills and capabilities extends beyond major production companies. Oilfield services players have been a particular casualty, with the group suffering substantial revenue declines: revenues for offshore drillers, oil country tubular-goods companies, equipment manufacturers, and offshore engineering, procurement, and construction providers were 22%, 42%, 39%, and 35% lower, respectively, in the fourth quarter of 2015 than in the fourth quarter of 2014. Deep financial losses have forced these companies to make significant retrenchments, including major layoffs, to their businesses. These conditions have also put growing numbers of companies out of business, with Cal Dive International, Hercules Offshore, Vantage Drilling International, The Dolphin Group, and Global Geophysical Services all filing for bankruptcy since the start of 2015. The longer-term effects of this potentially permanent loss of capacity and talent on the industry's capabilities remain to be seen.

The plunge in oil prices and the absence, to date, of a meaningful and sustained recovery have taken a heavy toll on the oil and gas industry, its workforce, and oil-producing countries, and raised the possibility of future imbalances in supply and demand. They have also weighed on much of the global economy and are triggering a paradigm shift in the minds of industry stakeholders regarding what the industry's characteristics and structure will be in the future. Oil and gas companies, oil-producing nations, and stakeholders across industries will have to determine how best to negotiate the hurdles that this potentially protracted period of low oil prices presents.

Notes

1. "UK's Oil Capital Aberdeen Reels from Global Price Slump" (Reuters, November 13, 2015).
2. University of Michigan Transportation Research Institute.
3. "Cheap Oil Is Blunting Drive for Fuel Efficiency" (Reuters, April 13, 2016).
4. Wood Mackenzie.
5. Rystad Energy.
6. Wood Mackenzie.
7. For an extended analysis of challenges and opportunities that lower oil prices present to various sectors of the energy industry, including upstream oil and gas, downstream oil, and energy trading, see *Oil Price Volatility: Strategies for the Low Cycle,* BCG e-book, December 2015.

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