Article

Low Oil Prices: Who Are the Losers?

By Vaclav Smil

March 11, 2015

Trying to forecast any future shifts in oil prices, or their eventual duration, is useless, as I wrote in December. Since that time, oil prices fell even more, then rose by more than a fifth in a matter of days, and then began to fall again — providing those commentators who will never learn with opportunities to argue that we will see $30/barrel oil before any price recovery, or that $200/barrel oil will be here sooner than people think. I will never add to these useless predictions, and while I recommend enjoying low oil prices (and by that I mean anything around $50/barrel and lower), I also think we need to question the media's simplistic identifications of the winners and losers — and to a large extent that is a dubious divide — that would be created if oil remained cheap for a year or more.

As we are repeatedly told, every consumer is a winner because lower oil prices mean that it is cheaper to drive and fly, to ship goods, and to buy fuels and feedstocks for industrial production. Aggregate savings would be enormous: selling some 4.5 billion tons of annual global crude oil output at half price saves about $1.7 trillion, more than 2 percent of the world's economic product. But for the governments of oil-producing countries, now led by the United States and with Canada the fifth-largest producer, that is also $1.7 trillion less to be taxed in order to cover the ever-higher burden of non-discretionary spending on social support and health care. Of course, having more disposable income, the consumers, including those in oil-producing countries, could save some of those sudden gains and stimulate parts of the economy with the rest. But if they were, as some recent polling indicates, to use most of that new (and, in per capita terms, relatively modest) wealth to buy more clothes and more fancy electronics, virtually all of which are made abroad, they would only widen chronic trade deficits. And on a state, provincial, or local level those savings are not so appealing to the residents of Oklahoma or Alberta, or to the inhabitants of some of Norway's or Mexico's coastal towns, where oil companies are already pulling back, cancelling rig contracts, postponing new developments, and letting some workers go, and where a longer spell of low prices would bring higher unemployment and lower house prices, to say nothing of rising budget deficits.

The oil price decline is only months old but it has prompted the premier of Alberta, Canada's richest province, to mention a previously unspeakable option: the introduction of a sales tax.

And here is a quote from a recent message I received from Oklahoma:

> My oldest friend signed a lease in Osage county in August. It had 50 working wells. He was going to rebuild them and then do some horizontal drilling. But now, he can't afford to do anything but band-aid the existing pumps and hope prices go up enough to service his debt. None of the oil folk are in a position to stop the pumping, therefore it's exacerbating the supply. They're going to pump or go broke. It's a weird oil field cash-flow psychosis. It's happened before.

Indeed, it has happened before, due to the imperatives of debt servicing. It surely does not make those drillers feel better that it now costs them 40 percent less to fill their cars than it did five months ago.

We are also told that the most obvious winners are those countries that are heavily dependent on imports of crude oil. If the price averaged $50/barrel during 2015, rather than around $100/barrel, where it was during the summer of 2014 before the beginning of the latest decline, the European Union, by far the world's largest oil importer, would save nearly $250 billion, China would save $110 billion, and Japan could cut by about $80 billion its trade deficit (caused to a large extent by the increased import of fossil fuels following the closure of all nuclear power plants after Fukushima's March 2011 disaster). These savings would be equal to about 5 percent of the value of China's recent annual imports, and they would amount to roughly 10 percent of both the European Union's and Japan's foreign purchases. These are significant import shares, but in themselves these totals would not be large enough to change the dismal trajectories of the affected economies — a deflationary EU, minimal or no growth in Japan, and much-reduced growth and the need for serious output and consumption adjustments in China.

We need to question the media's simplistic identifications of the winners and losers — and to a large extent that is a dubious divide — that would be created if oil remained cheap for a year or more.

The largest monetary loser would obviously be the world's largest crude oil exporter, Saudi Arabia: halving the value of its oil exports means losing $140 billion a year. But Saudis clearly do not see themselves as losers; they have chosen to act in order to win. To live with such losses they count on their $750 billion of reserves and on their enormous ability to borrow (the country has only a very small external debt and an AA credit rating). They are determined to continue their high level of oil production in order to trim, or to forestall, the more expensive oil output in other countries, such as US shale oil or crude oil from the deep waters off Mexico, Brazil, or Greenland. Saudi Arabia aims to emerge, once again, as the leading exporter of the fuel with an assured, and at least temporarily stable, high market share.

And would Russian President Vladimir Putin be a real loser? Halving the value of Russian oil exports means forgoing about $150 billion a year in income. However, Russia's monetary reserves are now more than $500 billion, and despite the oil setback and the ruble's associated plummet, Putin's popularity remains very high. Russia keeps producing oil (and demonstrating Ukrainian weakness) without letup, and any further hardship may only increase the country's chronic sense of injustice and isolation, feed the charges about the nefariously conspiratorial West, and strengthen Russians' resolution to prevail. This would not be the first time for Russia's leaders to advance dubious political visions with the prodigious capacity of the country's population to suffer.

So perhaps we should look for the real losers among smaller, less obvious, or largely unknown players whose already unfolding losses offer perfect illustrations of the peculiar interconnectedness of modern economic fortunes. I will note just two of them: American producers of high-quality sand, and Indian guar bean farmers in the country's arid western states. The fortunes of both of these groups have been increasingly tied to hydraulic fracturing, the extraction technique that has driven the United States' return to global primacy in oil and gas production.

In mass terms, water dominates the composition of fracking liquids (it's typically 90 percent), but the rest is mostly sand introduced in order to keep open the fractures in the shale and hence to enable gas and oil flow. And it is not just any sand, but pure, crush-resistant quartz made of fairly uniform spherical grains (in order to minimize turbulence) with diameters mostly ranging from one half to one millimeter. As American fracking was expanding, annual US production of this special sand roughly quadrupled between 2009 and 2014, and its price rose by more than 50 percent. As fracking activities are reduced (because many fracked wells need at least $50 or even $60/barrel in order to be profitable), many sand producers will be left with large surplus capacities and shrunken earnings.

And so will the Indian guar bean farmers. Less than 1 percent of fracking liquids is made up of various additives — chemicals to help dissolve minerals, initiate tiny cracks, control corrosion, inhibit scaling, reduce friction, modify surface tension, and kill bacteria whose growth may plug up the works, as well as gelling agents added to thicken fluid and help suspend sand grains. Guar gum, derived from guar bean, is a leading thickener, and during the last decade it found a huge new market in fracking. India produces about 80 percent of the global guar bean harvest, particularly in Rajasthan, and as the industrial demand expanded so did Indian production. Between 2009 and 2014 the harvest more than quadrupled, due to very low 2009 yields in a drought year, and the price at Jaipur, Rajasthan's main guar bean trading center, nearly doubled.

Given their relative earnings and savings, there is no doubt that the sand excavators in Oklahoma and peasants in a few western states in India would be affected more by a prolonged spell of very low oil prices than would be the Persian Gulf states or Putin's quest for a new empire.

Vaclav Smil does interdisciplinary research in the fields of energy, environmental and population change, food production and nutrition, technical innovation, risk assessment, and public policy. He is the author of 35 books and has just finished writing "Natural Gas: Fuel for the 21st Century."

Vaclav Smil

Latest Work

December 22, 2014

Article

Are Low Oil Prices Good or Bad?

October 29, 2014

Article

Who Really Leads the World in Trade?

October 04, 2014

Article

Article

Do the Locomotive

Tags:

Globalization | hydraulic fracking | oil | Vladimir Putin

Related

Article

January 20, 2015

Why Did No One Predict the Oil-price Collapse?

By Alex J. Pollock

Article

January 30, 2015

National Review

Article

Why Obama and the Saudis like Low Gas Prices

November 06, 2014

National Journal

Plunging Oil Prices Set off a Global Chess Game

By Norman J. Ornstein

Article

February 01, 2015

Operational Environment Watch

Larijani: The Price of Oil in the Iranian 2015-16 Budget Is "unrealistic"

By Michael Rubin

Article

December 22, 2014

Bloomberg View

Don't Fear Oil Prices and Deflation

By Ramesh Ponnuru

Donate Subscribe

About

About AEI

Organization and Purpose

Leadership

Annual Report

Contact

American Enterprise Institute
1789 Massachusetts Avenue, NW Washington, DC 20036

Main telephone: 202.862.5800

Main fax: 202.862.7177

Policy Areas

Economics

Foreign and Defense Policy

Health Care

Education

Politics and Public Opinion

Poverty Studies

Society and Culture

Technology and Innovation

Legal and Constitutional
Studies

Scholars

Find a scholar by policy area:

Agricultural Policy Studies

Economics

Education

Foreign and Defense Policy

Health Care

Housing

Legal and Constitutional

Politics and Public Opinion

Poverty Studies

Science, Energy, and Environment

Society and Culture

Technology and Innovation