
The Petroleum Economics Monthly

Philip K. Verleger, Jr.

Volume XXXIV, No. 4

April 2017

Putting a Finger in the Oil Market Dike: This Will Not End Well for Producers



Publication Date: 5/30/2017

© 2017, PKVerleger LLC. All rights reserved. ISSN 1548-8098. Reproduction of *The Petroleum Economics Monthly* in any form (photostatically, electronically, or via facsimile), including via local- and wide-area networks, is strictly forbidden without direct licensed permission from PKVerleger LLC. Contact Dr. Verleger at 300 Glencoe Street, Denver, CO 80220 or phil@pkverlegerllc.com.

(This page left blank intentionally.)

**Putting a Finger in the Oil Market Dike:
This Will Not End Well for Producers**

Philip K. Verleger, Jr.
PKVerleger LLC

Disclaimer: Although the statements of fact in this report have been obtained from and are based upon sources that PKVerleger LLC believes to be reliable, we do not guarantee their accuracy, and any such information may be incomplete or condensed. All opinions and estimates included in this report constitute the judgment of PKVerleger LLC as of the date of this report and are subject to change without notice.

(This page left blank intentionally.)

Table of Contents

Summary	1
Putting a Finger in the Oil Market Dike	3
Needed: A New Protocol	3
History of Naimi Protocol.....	6
Emulating the 1999 Success	8
Alternative Protocols	12
A Different Approach	15
Glossary	19
Statistical Appendix	21

List of Figures

Figure 1. Dated Brent Prices, Monthly Data, January 1990 to December 2000.....	4
Figure 2. OECD Crude Oil Stocks, Monthly Data, 1990 to 2010	5
Figure 3. Oil Price Movement vs. Global Crude Oil Inventory Movement, Monthly Data, 1990 to 2000	5
Figure 4. Crude Oil Forward Price Curve: December 1998 vs. December 1999	6
Figure 5. The Goldman Goal: Crude Oil Forward Price Curve on May 19 vs. Curve Recommended by Goldman Sachs.....	6
Figure 6. From Contango to Backwardation: Forward Price Curve Movements in 1999	8
Figure 7. OPEC’s Dream: Crude Oil Forward Price Curve on May 19 vs. Curve in 2017 Desired by OPEC	9
Figure 8. Theoretical Supply-of-Storage Curve – Relationship between Inventories and Price Spreads	9
Figure 9. OECD Crude Oil Stock Movement vs. Movement of Brent Price Spread, 1995 to 2000	10
Figure 10. OECD Commercial Stocks vs. Third Brent Spread, 1997 to 2017	11
Figure 11. Global Crude Oil Stock Movement vs. Movement of Brent Price Spread, 2008 to 2017	11
Figure 12. Global Commercial Stocks plus Oil in Transit and Floating Storage vs. Third Brent Spread, 2008 to 2017.....	12
Figure 13. BPT Share Price vs. WTI Cash Price, 2016 to 2017	16
Figure 14. BPT-Derived Forward Price Curve vs. WTI Forward Price Curve by Quarter, 2017 to 2023	16

List of Tables

Table 1. Crude Oil Price Required by Oil-Exporting Countries to Balance Budgets.....	8
Table 2. Calculation of OPEC Production Levels Needed to Achieve a 1.4-Billion- Barrel Reduction in Commercial Crude Oil Stocks, Q3 201 to Q2 2018.....	12

(This page left blank intentionally.)

Summary

Oil producers have begun a dialog with hedge funds. As Reuters' Dmitry Zhdannikov reports, Ed Morse, Citigroup's global head of commodities research, and Mohammed Barkindo, Secretary General of OPEC and Nigeria's oil minister, met recently in the Sistine Chapel, part of the Vatican, during an "industry event." Barkindo told Reuters that "it was at the Vatican that we first discussed the idea of OPEC reaching out to the financial players in the oil markets."¹

Cynics will assert that the meetup happened at the appropriate location. Many believe that the oil producers attempting to assert control over the market need an act of god to succeed. The members of OPEC plus the other producers that have joined them in what the press calls "the oil cartel" are desperately seeking to raise oil prices. In the last few months, they have looked to unusual participants such as hedge funds to support their effort.

In March, Barkindo met with hedge fund executives at a large Houston conference, explaining that "times had changed" and adding, "We are more globalized, and the impact of the financial markets on oil continues to be magnified. And in this world we believe that we should adapt to these new changes and therefore reach out."²

The financial industry has responded to the effort by offering advice, lots of advice. Indeed, those working for oil producers as advisers and analysts must be exhausted because they have been deluged with papers proffering all sorts of remedies. Sadly, the remedies are impractical or bad. Almost all the advice would accelerate the trend toward penury and bankruptcy.

One of the worst ideas was put forward by Pierre Lacaze, CEO of LCM Commodities. Lacaze proposes that Saudi Arabia cut production and hedge its future output:

In other words, it should concurrently cut output and sell long-dated oil futures and related contracts. While selling oil contracts to raise the price may seem counterintuitive, by signaling to the market that Saudi Arabia will assume the role of seller of first resort, it would achieve much.³

Lacaze explains that these actions would make it harder for shale producers to hedge. Although he does not say it, his strategy would lead to a decline in US drilling and output. The consequence would be a loss of jobs for those working in US oil fields and for the independent oil companies that have done so well here.

In making his proposal, Lacaze might have fared better had he recalled this observation Ben Franklin made more than two hundred years ago: *One of the greatest tragedies of life is the murder of a beautiful theory by a gang of brutal facts.* In this case, Lacaze ignores two important facts. First, in the United States, the individuals who will lose their jobs almost to a man and woman voted for Trump. Second, most of the successful US frackers are big financial supporters of Republicans. The frontal attack proposed by Lacaze would pay huge dividends to his firm, LCM Commodities, but would cause permanent damage to oil-producing nations. It is a losing

¹ Dmitry Zhdannikov, "From Suspicion to engagement: OPEC, hedge funds and the Sistine Chapel," Reuters, May 22, 2017 [<https://goo.gl/ERiUEn>].

² Gregory Meyer, "OPEC decides to go on speaking terms with hedge funds," *Financial Times*, March 7, 2017 [<https://goo.gl/Hleumq>].

³ Pierre Lacaze, "Saudi Arabi's oil policy must take its inspiration from the Fed," *Financial Times*, May 10, 2017 [<https://goo.gl/sfCQCW>].

proposition. Either the US would act to protect domestic producers or, within a few years, the Republicans would be replaced by Democrats who would back a green agenda aggressively.

Others have equally bad advice. On May 22, Goldman Sachs published a report titled “Backwardation is the Solution.”⁴ The authors explain that if OPEC could “engineer” market backwardation the organization would be able to push prices higher, raise revenues, and gain market share. Backwardation would create low deferred prices, which would “restrain shale’s access to capital, with low-cost producers selling all the production at a higher spot price.” Franklin’s advice applies to this recommendation in spades. While the Goldman authors are theoretically correct, they neglect political realities.

The writers also make a very important empirical mistake because, as we explain in this report, the data imply that OPEC must force the liquidation of roughly 1.5 billion barrels of inventories before real backwardation can be achieved. This would require the members to increase their joint output reduction by four million barrels per day on top of the current 1.8 million barrel per day cut. This action would move the market into backwardation but probably at a much higher price level, which would encourage rather than discourage increased production.

In sum, OPEC is in a no-win situation. Our cover captures the organization’s problem. We show an anonymous sheik attempting to hold back the sea of oil created by financial innovation by desperately sticking a finger into the leaking dike. OPEC’s problem is akin to that of low-lying nations that may be submerged by global warming, that is, financial innovation is to the oil market what global warming is to countries such as the Maldives.

The analogy to global warming offers, though, a remedy for those oil-exporting nations that can survive a prolonged period of lower prices. In the environmental scenario, it is well understood that some regions of the planet will benefit from changes as much of the world, such as sub-Saharan Africa, is devastated by them. It is the same with oil. The abandonment of production ceilings by low-cost oil producers such as Saudi Arabia would devastate numerous high-cost producers such as Venezuela, Nigeria, Libya, and possibly Algeria. Production efforts in other nations such as Brazil would be hampered. Output in Canada would decline. Large producers such as Russia, the United States, and Middle Eastern nations, in contrast, would gain.

Alternatively, oil-exporting countries may be able to survive and thrive by embracing financial markets. Investors today expect oil prices to rise 9.0 percent per year. Futures markets, on the other hand, offer only a 0.5-percent-per-year increase. The difference presents an arbitrage opportunity to oil exporters—if they have the common sense to adopt it. We suggest that OPEC members and other countries cutting back on crude oil production should embrace market and contango. They can profit by doing so.

Saudi oil minister Khalid Al-Falih has committed to “doing whatever it takes” to bring order to the oil market. Ironically, as we show below, doing what it takes requires Saudi Arabia and other producers to take their cue from central bankers and state a specific price increase target, boost output, and let markets work freely. Low-cost oil producers such as Saudi Arabia, Kuwait, Iran, Iraq, Russia, Norway, and the United States will do best if the sheik pictured on our cover pulls his finger from the dike and lets high-cost producers be flooded while giving the world a believable price trajectory.

⁴ “Backwardation is the Solution,” Goldman Sachs Commodity Research, May 22, 2017.