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The Tamar gas processing rig 24 kilometers off the coast of Ashkelon

# Shocks, sheikhs and shale

A guide for the perplexed  
on oil and gas prices

**THIS MORNING**, I filled my car with gasoline and was surprised to find the cost was a little more than seven shekels per liter (with a loyalty card discount), or \$6.95 a gallon, a welcome drop from the August 2012 price of \$9.28, though still way above the US price – now about \$2.40 a gallon.

More than 40 percent of the retail gas price in Israel is taxes, far more than in the US. Since the retail price of gasoline lags in time behind the price of oil, it will soon fall even more, to 6.27 shekels a liter, the lowest in five years.

Recently, the Israel Electric Corp. announced a nine percent cut in the price of electricity. The falling world price of oil (and natural gas) is the underlying cause. Israel Electric generates electricity in part with natural gas and pays a high \$6 per million BTU, nearly twice the current price in the US. I will examine the reasons for this later.

If oil prices were a theme-park roller coaster, few would have the courage to ride it.

The price of oil reached a record peak of \$145 a barrel in July 2008, another in a series of so-called “oil shocks” that began in 1973, but the global financial and economic collapse slashed the price of oil to \$30.28 in December 2008. The price then soared to over \$100 in January 2011 because of Mideast geopolitical instability. In June of this year, oil was \$115 a barrel. It is now less than half at around \$55. This, too, is an oil shock,

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but a pleasant downward one.

With the high cost of living becoming a hot issue in the current rather sleepy election campaign – Israel Radio reports that this is the No. 1 “hot button” issue for voters, more than defense and national security – lower energy costs are a welcome piece of good news for the ruling Likud party. It is also good news for the flagging economy. Fuel and coal imports during the first 10 months of 2014 totaled 24.3 billion shekels (\$6.2 billion), so falling oil prices reduce imports and keep billions of dollars in purchasing power at home.

Despite low prices, the oil fever has infected Israel, too. After the Supreme Court threw out an environmentalists’ petition to block it, Afek Oil and Gas will soon begin exploratory drilling for oil and gas in the Golan Heights.

But why exactly has the world price of crude oil fallen so rapidly? The simple answer is supply and demand – or sheikhs and shale.

Saudi oil sheikhs have refused to slash oil supplies to stabilize prices and US shale-oil producers, who now can extract oil from shale through a process known as fracking, are drilling like mad. Meanwhile, world demand for oil has weakened as alternative fuels and energy sources grow, energy efficiency rises and the global economy remains sluggish.

**ON THE** supply side, the US has surprisingly become the world’s largest oil producer, which means it imports far less of the commodity, thus reducing global demand. According to the UK financial magazine, *The Economist*, American oil producers have completed 20,000 new wells since 2010, more than 10 times the comparable number in Saudi Arabia. Most of those wells use fracking technology, which extracts once inaccessible oil and gas from rock and sand with high-pressure water and steam.

The US now produces more than 11 million barrels of oil daily, a million more than the Saudis, and up from only about five million barrels a day just six years ago. In 2010, America also became the world’s largest natural gas producer.

“The contest between the shalemens and the sheikhs has tipped the world from a shortage of oil to a surplus,” *The Economist* claims. And New York Times columnist Joseph Nocera adds, “...the Saudis are unwilling to lose market share to other countries, and they have the wherewithal to withstand lower prices for a much longer period than any other oil exporter.”

The Saudi sheikhs always play a key role in



Upsetting the gas applecart: Antitrust Commissioner David Gilo

setting oil prices. Because the marginal cost is very low in Saudi Arabia (\$5 or \$6 a barrel), in the past the Saudi sheikhs led OPEC (the oil-producing countries’ cartel) in slashing production, or boosting it, to stabilize prices, simply because it can do so with ease and with little fiscal pain.

But at an OPEC meeting on November 27, the Saudi sheikhs and their allies in the Gulf States, UAE and Qatar refused to throw themselves on the barbed wire. Saudi Arabia has \$900 billion in cash reserves (no one there will starve) while the collapsing oil prices hurt their enemies such as Iran and Russia. Besides, the low price of oil cools America’s ardor for fracking and thus slows investment in Saudi Arabia’s main competition.

Experts note, however, that Saudi oil is “medium and heavy” while shale oil is “light,” so they are complements rather than competitors. The real competitor for Saudi heavy crude is Iraqi and Iranian oil – neither country is a Saudi friend.

Will the current low price of oil last, or will it spike upward as it has in the past? Saudi Arabia’s oil minister Ali al-Naimi predicted “the world may not see \$100 a barrel of oil ever again. Whether oil goes down to \$20, \$40, \$50, \$60 is irrelevant,” he said. The last time the Saudis slashed production to stabilize prices in the mid-1980s by almost three-quarters, they lost market share to com-

petitors. They are determined not to do the same this time.

When the price of oil is \$115, Saudi Arabia earns \$360 billion a year from oil exports. At \$55, its earnings are less than half. If it slashed production, it would earn even less.

Experts recall that in the early 1980s, Saudi Arabia boosted production, leading to falling oil prices, and deeply hurt Russia’s oil-dependent economy, perhaps contributing to the collapse of the USSR in December 1991. A conspiracy theory attributes this outcome to US President Ronald Reagan, who is said to have beseeched the Saudis to help him defeat Russia, which he called “the evil empire.”

History may be repeating itself.

Under president Boris Yeltsin, Russia defaulted on its foreign debt in August 1998 due to falling oil prices and, today, Russia’s economy has been doubly wounded by European and American sanctions in the wake of Russia’s occupation of Crimea, and by falling oil prices. The ruble has collapsed, and Russia’s economy is in recession – the third time falling oil prices have plunged Russia into crisis.

Falling oil prices provide a much-needed stimulus to the world economy, adding an estimated one trillion dollars of new spending to the global Gross Domestic Product. The reason? Petrodollars sit idly in the pockets of oil sheikhs, while consumers in the West and in Asia spend them when oil prices are low.

The International Monetary Fund estimates that a 10 percent drop in oil prices boosts the world economy by 0.2 percent.

China is a big winner from the oil price decline. As the world's second biggest net importer of oil, China saves \$60 billion a year in fuel imports from falling oil prices. This may help China's economy, which has been slowing, and Japan's as well, which is in recession.

Against the backdrop of plunging oil prices, a new controversy has erupted in Israel over natural gas.

Antitrust Commissioner David Gilo announced in December that he was rescinding an agreement he reached last March with Noble Energy and the Delek Group – the joint venture that is developing the Tamar and Leviathan offshore gas fields. Under that agreement, Noble and Delek would control more than 90 percent of Israel's gas reserves, comprising a virtual monopoly. Belatedly, and under public pressure, Gilo decided to seek to break up the monopoly, spur competition and reduce natural gas prices.

Gilo's U-turn was apparently provoked by a strong letter sent by Orit Farkash-Hacohen, Chair of the Electricity Commission, to Prime Minister Benjamin Netanyahu demanding intervention to deal with the gas monopoly, and strong statements by Deputy Attorney General Avi Licht.

Farkash-Hacohen had earlier commissioned a study by Italian energy expert Sergio Ascari, who found that the offshore gas drillers and developers in Israel are earning double what similar bodies earn elsewhere and that "the Israel Electric Corp. and other energy providers are set to spend some 200 billion shekels (\$51 billion) through 2030 on gas that elsewhere would cost only 100 billion shekels." The Israeli consumer will, of course, foot the bill.

## LET'S HOPE THAT KANDEL WILL FIND A WISE COMPROMISE TO KEEP GAS FLOWING AT FAIR PRICES

In addition to Noble, which owns just over 39 percent of the Leviathan project, Delek (controlled by tycoon Yitzhak Tshuva) holds 23 percent, Avner Oil & Gas holds 23 percent, and Ratio Oil Exploration, 15 percent.

Predictably, Noble, an independent US en-

ergy company with more than \$5 billion in annual revenue, responded with fury. Noble's Israeli representative Binyamin Zommer said Noble has invested \$6 billion in developing Israel's gas fields based on its agreement with the government. He implied that Gilo's decision amounts to changing the rules of the game unilaterally after Noble and Delek committed huge sums to the project. Noble was the only company that dared risk investing in developing Israel's offshore gas in the unstable high-risk Mideast, he claimed.

Gilo's U-turn could lead to years of litigation and delay the arrival of Leviathan gas onshore for years, causing major losses not only to Noble and Delek, but also to government coffers.

**THERE ARE** a number of better solutions than breaking up the Noble-Delek monopoly. One is to find another player to enter the market and help develop the gas fields. But as Hebrew University Prof. Eitan Sheshinski observed, a duopoly (two competing firms) does not, according to economic theory, generate sufficient competition. Earlier, Sheshinski chaired two committees that sharply increased royalty payments on both natural gas and Dead Sea chemicals.

The best solution is likely to create a "monopsony" (single buyer), led by the government, to buy gas from the monopoly supplier to keep prices reasonable, while offering sufficient profits to Noble and Delek to justify their large investments and at the same time ensuring Israeli consumers are not gouged. Alternately, the price of natural gas paid to Noble could be linked closely to comparable gas prices elsewhere by regulation and legislation.

Writing in the Tel Aviv financial paper *The Marker*, David Rosenberg notes that Gilo, a former law professor, has not yet said "how he plans to rectify his error and break the gas monopoly."

At present, the Tamar gas field alone supplies 60 percent of Israel's energy requirements. Tamar came on line in the nick of time after Egypt cut off its natural gas shipments to Israel in 2011. But Tamar gas will eventually be depleted and Leviathan gas is crucially needed to replace it.

Leviathan is supposed to come on line in 2017. But Noble has threatened to suspend development of the gas field, pending resolution of the dispute with Gilo. And, to complicate matters, the Ministry of Energy has weighed in, blasting Gilo for not consulting it before announcing his U-turn decision. Netanyahu has asked his economic advisor Prof. Eugene

Kandel to investigate the matter.

I spoke about oil and gas prices with my Neaman Institute colleague, Dr. Gilead Fortuna, head of the Industrial Center for Excellence and formerly a senior executive at leading Israel companies including Teva, Israel Chemicals and others. He has another, novel explanation for why the Saudis may want up-and-down cyclical crude oil prices.

## IF OIL PRICES WERE A THEME-PARK ROLLER COASTER, FEW WOULD HAVE THE COURAGE TO RIDE IT

Natural gas can be converted into the equivalent of crude oil. The world's biggest such plant was built by Shell Oil in Qatar. This is expensive at a cost of about \$60-\$80 a barrel, and takes huge capital investments. Fortuna thinks Israel should do this with its gas, rather than just export raw gas or use it to make electricity.

However, while the long-term return on investment in gas-to-oil may be excellent at prices above \$60-\$80, its stability is crucial for investors. By driving crude oil in cycles that can dive below \$60 a barrel, the Saudis make "gas to liquid" too risky for large-scale investments and forestall a dominant competitor. Even if oil prices rise, the cycling uncertainty may keep "Big Oil" from investing in gas-to-oil.

"The current price Israel Electric pays the gas monopoly for its natural gas may be exorbitant. We do not know for sure as Noble does not by law have to reveal its costs. Once it is officially declared a monopoly, though, it must open its books and we will know a lot more.

But, expensive natural gas is probably better than the alternative: high-pollution coal and crude oil. Let's hope that Kandel will find a wise and reasonable compromise that keeps the gas flowing at fair prices.

Meanwhile, despite falling gasoline prices, my wife and I have bought a hybrid car with advertised gas mileage of 78 miles per gallon (33 kilometers per liter). We think it's prudent to assume oil shocks will recur and not to rely either on shale or sheikhs. ■

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