

Oil Price Shock—Again by Phil Dodge

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“At the end of this decade, in the year 1980, the United States will not be dependent on any other country for the energy we need to provide jobs, to heat our homes, and to keep our transportation moving.” Richard Nixon, January 1974

The call for energy independence has been made many times since President Nixon first set out that objective 37 years ago. Nixon was responding to the oil price shock that followed an embargo by the Arab members of OPEC in October 1973. The implicit assumption was and is that energy independence as an objective will avoid price shocks.

The record shows otherwise. U.S. crude oil imports were 3.2 million barrels a day (BD) in 1973. They were 5.3 million BD in 1980, when the aftermath of the Iranian revolution triggered another price shock. Crude oil imports today are about 11.5 million BD. In the meantime, there has been major sloganeering, accompanied by minor steps to reverse the oil dependence that periodically causes price shocks.

In March, President Obama put forth a goal of reducing oil imports one-third by 2025. In contrast to the goal set by Richard Nixon and his successors, Obama has made a proposal that can be achieved. A one-third decrease in 14 years is 3.8 million BD, or about 270,000 BD annually. In perspective, the annual reduction target is only 1-2% of consumption. Reaching that goal would seem readily achievable if proposals for both demand decreases and supply increases march forward together.

To his credit, President Obama has avoided pitfalls in previous plans, which involved various factions going head to head with their own specific solutions. And they may continue to do so, even though the President includes something for just about everybody, e.g., accelerated oil drilling and expansion of nuclear power.

The problem with the Obama goals is that they could be reached without avoiding future price shocks. Victory would still allow for about 7.7 million BD of oil imports, and less growth in U.S. production (perhaps none) in the meantime. Some consolation is offered, in that the mix in the 7.7 million BD plus-or-minus would shift from less Middle East to more Canada and other politically stable sources. However, oil does not know where it is coming from. Disruptions in the Middle East could still cause price shocks globally. The U.S. would be unavoidably affected, even if it no longer directly imported from Saudi Arabia, etc.

This part of the problem has been largely ignored. Even if the U.S. becomes disconnected from oil imports, the Middle East, China, India, and Europe will not. Refiners in those consuming regions would bid up the price of crude oil around the world if there were a supply disruption anywhere. Oil independence would need to be across the board to avoid oil price shocks.

In fact, there may be only two effective ways that future oil price shocks can be avoided. One would be a long shot. That would be if global crude oil producing capacity increases enough to offset supply disruptions that would lead to price shocks. Considerable effort is put into answering that question by the International Energy Agency, CERA, the U.S. Energy Information Administration, and OPEC.

Here's where Tuohy Brothers Investment Research comes out on this issue. Demand will grow 1% annually between 2010 and 2015, or 4.1 million BD. Supply from projects currently underway will increase 14.5 million BD. Production from evolving or new discoveries will add 6.8 million BD. Those total increases will be partially offset by a decline of 19.0 BD in the base production level, at a rate of 5% annually. On those assumptions, surplus global oil producing capacity will shrink to 5% in 2015 from 7% in 2010.

That outcome would be what can be called creeping oil price shock. Surplus capacity of only 5% would be tight. It would be a recipe for generally upward pressure on oil prices. If demand grows more than 1% annually, as it recently has done, the ability to replace disrupted supply would be minimal and the price impact intense.

Pressure would be less if the annual decline rate on base production decreases from 5%, as both Chevron and ExxonMobil have recently indicated is a possibility. Growing production from Iraq under the new Technical Services Contracts could also play a positive role. An increase of 1.7 million BD by 2015 would seem reasonable. On paper, it could be more than 1.7 million BD, perhaps a lot more.

Maybe because of the interaction of these variables, surplus capacity could be above 5% in 2015. Nevertheless, even the recent 7% has not been enough to avoid the 2011 price spike. Since uprisings began in Tunisia last January and then spread to other Arab countries, the price of oil has risen from \$87 to more than \$105. The only actual loss of crude oil has been about one million BD from Libya. Much of this shortfall has been made up for by higher production from Saudi Arabia, albeit with some compromise in quality.

It has nevertheless been informative that a 1% decline in production has led to a 20% increase in price in less than three months. Obviously there is concern about more possible disruptions, a risk premium that has existed to some degree over the past few years. It is inflated by actual disruptions.

The other and more manageable way that the U.S. and major consuming countries can mitigate price shocks is to make temporary use of strategic petroleum reserves. The U.S. has 727 million

barrels in the Strategic Petroleum Reserve (SPR), and other OECD countries typically have 90 days. The U.S. SPR can support near-term withdrawals of up to 4.4 million BD.

These reserves could be a powerful fighter against oil price shocks. In the past, the United States has made the distinction that the SPR would be used only to replace lost supplies but not to attack price spikes. This distinction appears inappropriate in two ways. First, tapping the SPR would deal effectively with price shocks if the disruptions are fairly temporary. Second, the expectation that the SPR would provide incremental supply if prices went up too much would be a powerful deterrent against the risk premium. If other OECD countries were on board, the impact would be considerably greater.

We thank Phil for his guest commentary.