"Oil prices jumped to well over \$100 a barrel, and analysts say it's due to tension in the Middle East. So, luckily, it's just a temporary thing."

Jay Leno, The Tonight Show

February 21, 2012

## The Oil Price Decline: Winners and Losers

From its peak last June, the price of a barrel of crude oil fell $60 \%$ to its low in this year's first quarter. While such a decline is unusual, it has happened before. Examining past declines and the reasons behind those, we explore potential winners and losers, as well as what might happen in the oil industry from here.

## Historical View

Because the world oil market is normally in balance between supply and demand, or close to it, large and sudden price moves are atypical. Nonetheless, there have been several periods in the past forty years (1985, 1990, 1997, 2008 and 2014) when oil prices declined significantly and unexpectedly. Generally, the price has recovered to previous highs within a few years. Because of the difference in origin of the decline this time, the price response may differ.


When the price of oil changes rapidly, the normal cause is an imbalance between supply and demand. In three of the four price declines prior to 2014, the principal catalyst was a greater than anticipated drop in global demand precipitated by world economic slowdowns. The decline in the mid 1980's was driven by a sharp increase in supply from the Middle East and muted demand stemming from effects of the Arab oil embargo in 1970's. In 2014, we also experienced a similar sharp supply increase, this time powered by US shale oil production.

| Period | Duration | High | Low | Decline | Primary Cause |
| :--- | :---: | :---: | :---: | :---: | :--- |
| June 2014 - January 2015 | 8 months | $\$ 115$ | $\$ 48$ | $58 \%$ | Global Supply |
| July 2008 - January 2009 | 7 months | $\$ 145$ | $\$ 37$ | $74 \%$ | Global Demand |
| January 1997 - December 1998 | 23 months | $\$ 24$ | $\$ 10$ | $58 \%$ | Global Demand |
| September 1990 - June 1991 | 10 months | $\$ 41$ | $\$ 18$ | $56 \%$ | Global Demand |
| November 1985 - July 1986 | 9 months | $\$ 30$ | $\$ 9$ | $70 \%$ | Global Supply |

When a price drop is demand driven, an eventual increase in global growth generally restores prices to previous levels within 1-3 years, which is exactly what happened after the 1990, 1997, and 2008 price hits. We have far less historical experience dealing with the effects on prices due to supply gluts. It took five years to recover to the pre-decline price level in the mid-80's.

## The 2014 Price Decline

Last summer, the world woke up to the fact that US shale oil production would be 1.2 million barrels of crude per day higher than in the previous year, a greater rise in production than had been thought possible. Why? First, shale oil extraction has proven to be enormously productive - virtually every new shale well produces oil much faster than a conventional well. Second, the cost of production from shale has declined at a rapid rate, thereby improving the economics of drilling and encouraging more activity.

The addition of another 1.2 million barrels of oil per day created market imbalance, as worldwide demand for oil only rose by less than half that amount. In addition, fears of supply disruptions in the Ukraine, North Africa and the Persian Gulf dissipated. The result: a price collapse from around $\$ 115$ a barrel (the peak price last June) to around $\$ 50$ a barrel today.

The reaction from the industry has been swift. Budgets for exploration should fall $30 \%$ this year, and the number of rigs drilling for oil in the US has already fallen $40 \%$ from the beginning of January. However, because of the lag effect between less drilling and current supplies, we do not expect the market to tighten much before this summer. When it does tighten and prices begin to recover, the industry will have to judge at what point to begin new exploration again. With breakeven costs in the US in the \$50-60 per barrel range (down from \$70-80 two years ago), it is likely that new exploration could pick up well before the price approaches last year's peak.

In addition, the response from OPEC, particularly Saudi Arabia, has been very different from past incidents of oil price decline. This time, the Saudis declared that they would not cut supply. In effect, they are willing to endure some budget hardship in the short run to ensure they do not lose market share in the long run. With Iran also looming as a possible further source of increased oil production, total OPEC production may increase even further.

## Winners and Losers

Among the principal winners are oil importing countries, which include Japan, much of Europe, and substantial parts of Asia (such as India, Korea, Taiwan, and Singapore). Losers are the oil exporters, which include Russia, the Middle East, Brazil, Mexico, Venezuela, and African countries such as Nigeria. The US, which used to be a major importer of oil ( 13 million barrels a day as recently as 2008), now imports only 5 million barrels a day, principally from Canada and Mexico, with less purchased from the Middle East. So, as a country, we should see a net benefit to consumers, although certain oil producing regions (such as North Dakota and Texas) will suffer. In general, the consumers of the world win and the commodity exporters lose.

Other winners are oil users, such as airlines, trucking, and chemicals. However, considerable work has to be done to single out individual companies, as each may react more or less quickly and more or less effectively to these new conditions.

In terms of industries, the most obvious loser is oil exploration and service. We believe that one highly probable event is a drop in exploration and drilling budgets on the part of the oil industry, as lower prices lead to lower returns from exploration. Indeed, that seems to be happening right now.

Aureus reduced exposure to the energy industry in the second half of 2014. In addition, we have focused research on a number of individual companies, which have reacted well to changed circumstances and will benefit, or those which have lagged in their reactions to this new reality.

