

Are Skyrocketing Oil Prices justified by Fundamentals?

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The world's oil market has been rallying since 2004 and prices have risen six-fold over the last seven years. The Brent Spot Price, the main European benchmark price for crude oil set in London, jumped from a low of around US\$19 in November 2001 to a record high of over US\$140 as of July 2008. Is the massive increase in price justified by fundamentals or is the oil boom the result of a speculative frenzy in commodities driven by bear markets in bonds and stocks?

The question is indeed a tricky one. Last time real oil prices were so high was in the 1970s due to disruption in production and shipment following the OPEC oil embargo and, later, the Iranian revolution. This time is different: supply-driven shock is not the culprit. In the 2000s, global demand has been rising rapidly thanks to developing countries' fast economic growth, while output has failed to keep pace. Though spare capacity has decreased, there are no signs of an oil shortage, as some have suggested. Different factors account for the hike in prices: let us analyse them in order.

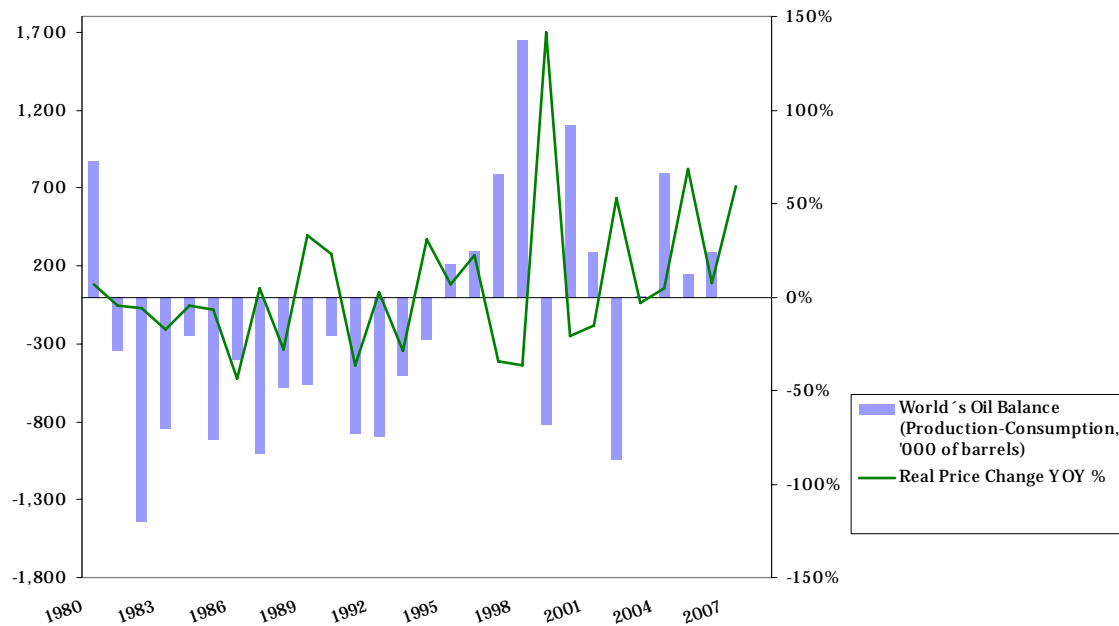
First, demand growth has been significant in non-OECD countries, especially the Middle East and Asia. China, with its energy-intensive development, accounts for almost 9% of global oil consumption and 50% of consumption growth in 2007. Moreover, subsidised prices in developing countries have not allowed pass-through from import to retail prices, preventing high prices from being reflected in reduced consumption. However, China, Taiwan, Malaysia, India and Indonesia have all recently cut their fuel subsidies as the cost of maintaining them rose in line with the soaring price of oil. This move is likely to promote energy efficiency, conservation and investment in alternative sources of energy.

Second, production has stalled because of a lack of investment, geopolitical uncertainty, burgeoning extraction costs, re-nationalisation of the oil industry and dwindling wells in the North Sea, Russia and North America. Saudi Arabia – the so-called 'swing producer' for its ability to boost or curtail supply according to global needs, has failed to considerably increase its output amid concerns for delayed production at Khursaniyah's oil field (expected to be one of Saudi Arabia's major oil and gas plants). In light of the reduction of OPEC's spare capacity to below 2.0m barrels per day (bbl/d) from 2.5-3.0m bbl/d in the past, markets are jittery and price volatility has thereby increased (see Figure 1). Furthermore, terrorist acts and low-intensity conflicts in the Niger Delta restricted production of the world's fourth exporter of crude oil to 1.5m bbl/d from almost 2.6m bbl/d in 2005.

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Figure 1. World's Oil Balance and Real Crude Oil Price Change.
Annual Frequency 1980-2008.



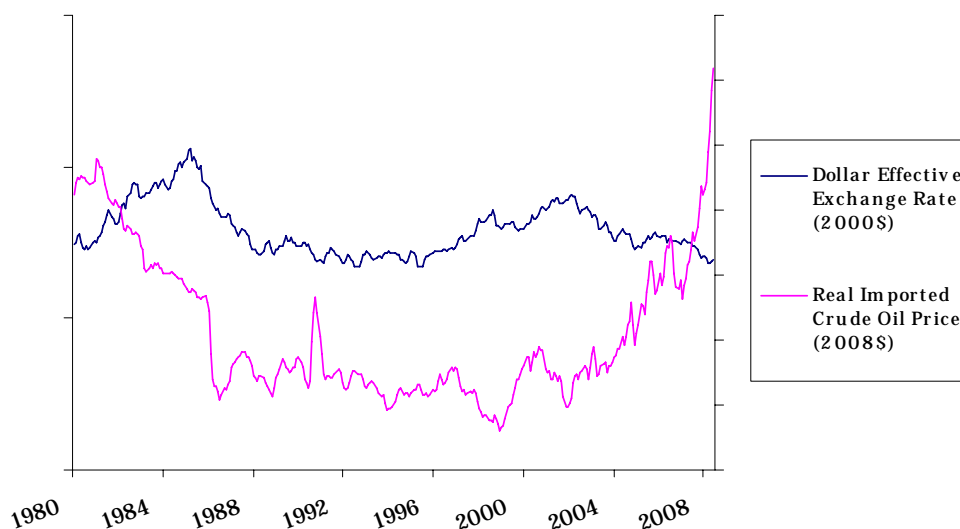
Source: IEA; EAI; US Dept. of Labor.

Uncertainty is a third factor affecting the oil market in a variety of ways. The lack of reliable data on current production, consumption, proven reserves and global stockpiles has been a permanent feature of the oil market. Furthermore, beyond present figures, projections on future consumption are hard to make because of the difficulties in accounting for vastly diverse factors such as technological progress, climate change and international developments. With the entry of financial actors into commodity markets, contradictory statistics exaggerate the scope for speculation and rapidly changing expectations.

This last element is the fourth component of the equation. In spite of the uncertainty surrounding the issue, the belief that we now live in a world where cheap oil is a distant memory is all but confirmed. Expectations of an ever-rising price of oil are thus feeding into speculation. Only a few commentators mention the fact that the same scenario materialised in the 1970s, when it was taken for granted that oil production was reaching a peak. This is not to say that an 'oil counter-shock', similar to the one we witnessed in the 1980s, is on its way. But as the price of oil approaches US\$200, it will trigger a market response that will boost production and reduce consumption; thereby bringing oil prices back to a level reflecting fundamentals (a range of US\$100-120 might be realistic).

This leads us to another factor affecting the recent surge in oil prices: financial considerations. The depreciation of the dollar has had an impact on oil prices: as the dollar slides against other currencies, oil producers must raise their prices because inputs coming from other currency areas have become more expensive. As illustrated by Figure 2, the correlation is not linear and the recent spike in oil prices does not seem to be linked to dollar depreciation.

Figure 2. Dollar Effective Exchange Rate and Real Crude Oil Prices.
Monthly Frequency 1980-2008.



Source: Bank for International Settlement (BIS) and Energy Information Agency, US Department of Energy (EAI – DOE.)

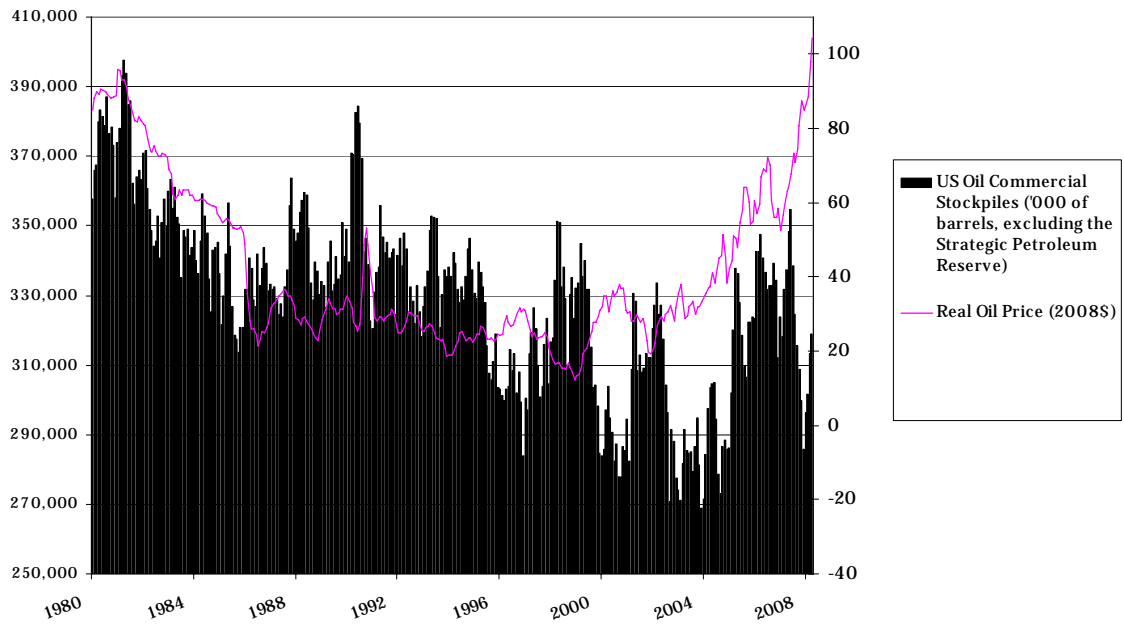
Although speculation in commodities has certainly played a role in accelerating the sudden surge in oil prices, the evidence is mixed. If speculation were the root cause of the phenomenon, you would expect commercial stockpiles to increase so that a profit could be made by selling crude oil in the future. Yet Figure 3 (see below) suggests otherwise: US oil inventories are normal or below the historical average. Some claim that hoarding is not showing in the statistics because producers are just not pumping enough oil, expecting prices to remain high or increase in the foreseeable future.

As long as it is unclear how oil futures impact spot prices, the contradictory evidence has split public opinion between two camps: those who argue that speculators are to blame and those who consider that prices correctly signal economic fundamentals. Clearly, politicians have sided with the former category, as finding scapegoats is a convenient strategy when public resentment turns up the heat on elected officials. Both sides of the debate can boast eminent intellectuals among their ranks, however.

Moreover, as regulatory frameworks across continents have diverged because of distinct environmental concerns and sensibilities, the world oil market has fragmented. This means that once crude oil is refined into gasoline of different qualities, it cannot be exchanged freely to adjust for surprises in demand and supply. In times of distress, this phenomenon can have a direct impact on global oil prices.

To conclude, the sheer complexity of the oil market does not vouchsafe a simple explanation for the surge in oil prices. In the long-term, reduced spare capacity, increased demand and burgeoning extraction costs suggest that oil prices are bound to remain both high and volatile. In the short-term, however, it is a combination of speculation, changing expectations and general uncertainty that has led to the surge in oil prices.

Figure 3. US Oil Commercial Stocks and Real Oil Price.
Monthly Frequency 1980-2008.



Source: EAI.