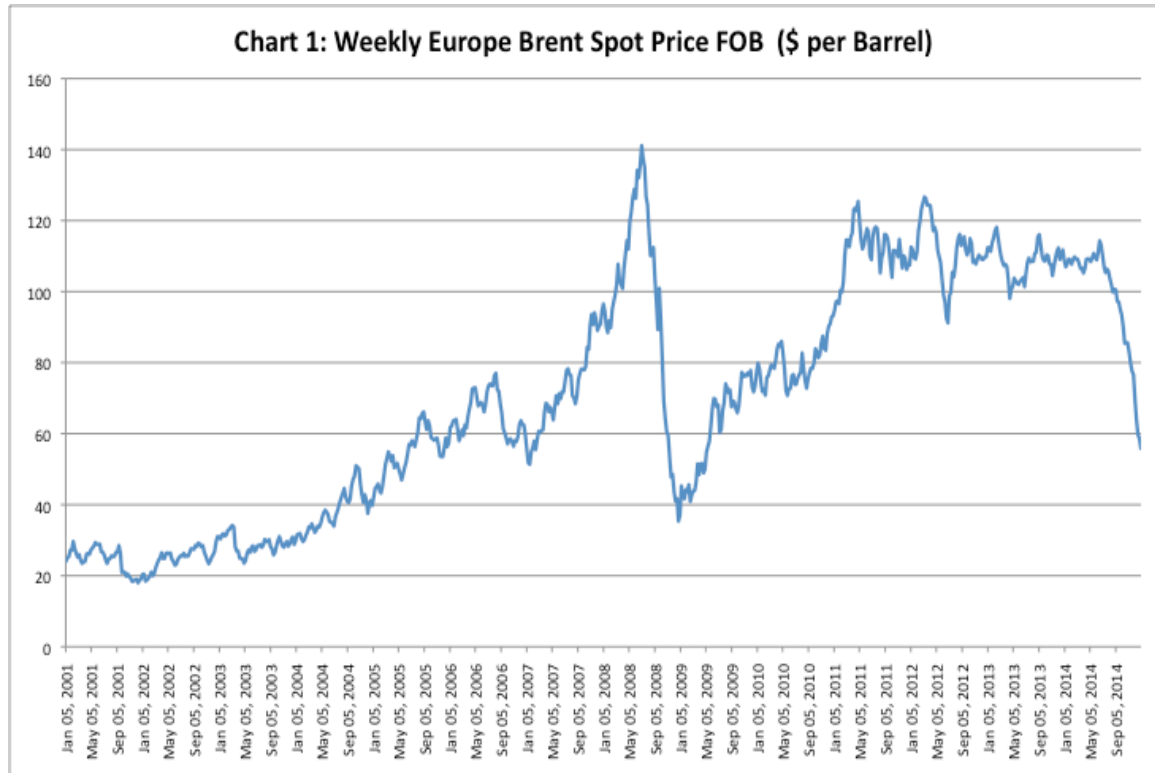


Oil: The big 100 per cent story*

C.P. Chandrasekhar and Jayati Ghosh

The price of Brent Crude has fallen by more than half, from \$115 a barrel in June to around \$46 last week. This comes after a period of relative stability since around 2010. Currently the nominal price is almost touching its post crisis low in March 2009 (Chart 1). This [price collapse](#) has triggered debate on the factors responsible for the precipitous decline.



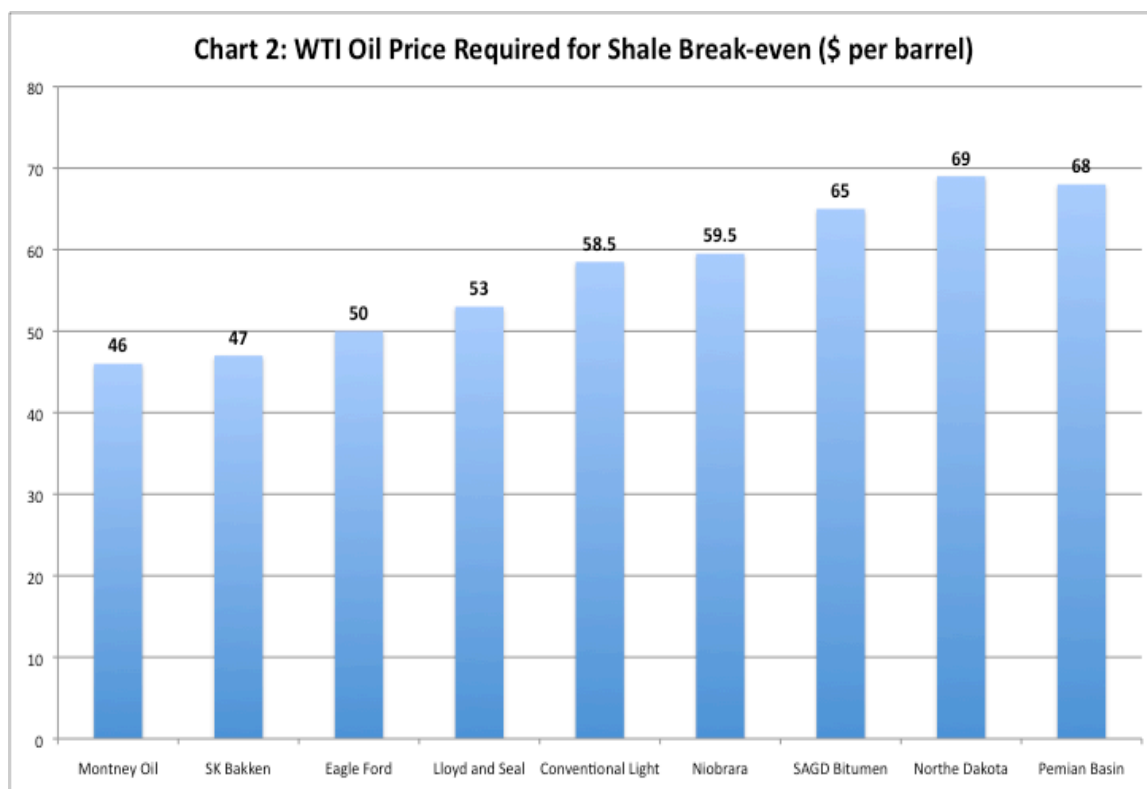
One ready-at-hand explanation, based on the premise that pure supply-demand balances explain global oil prices, is weak demand resulting from the persistent global recession and weakening of growth in countries like China. While the role of that factor cannot be denied, its explanatory power is limited by the fact that over the period February 2011 to August 2014, the price of Brent crude was ruling above \$100 a barrel, even though the developed world was in recession and growth was slowing in China.

The same is true for the argument that the price decline was driven by the excess supply resulting from the shale oil and gas production boom in the US that has reduced the import demand from the US market. The US alone has added around 4 million barrels of crude a day to the total global supply of around 80 million barrels a day. But the boom has been underway for sometime now, and while being an important explanation for low prices, is an inadequate explanation for the sudden price collapse.

One possible explanation for the speed of adjustment of prices in the face of medium term supply-demand imbalances is that those speculating that oil prices would remain at long term highs despite the changing market situation were taken by surprise when prices did begin to fall. These agents must have gained confidence in their predictions when war and political instability in Iraq and Libya, and elsewhere in west Asia, did not affect the combined production of the region too adversely. Moreover, based on past experience, they were betting on the fact that if prices do slip, the traditional "swing producer" Saudi Arabia would cut production and adjust the supply-demand balance to prevent or moderate the fall. Accounting for nearly 10 million barrels a day or a third of OPEC production, which in turn

accounts for around two-fifths of total supply, the swing producer in the past has periodically adjusted production to manage prices.

However, when OPEC met in November to consider its response to the ongoing price fall, Saudi Arabia declined to cut production, for fearing of losing market share to new producers, especially the shale industry in North America. In the past, Saudi Arabia had been holding back production and gradually lost market share, in the interests of keeping prices high. Its changed strategy came as a surprise. It should not have, since the country has over time built up surpluses exceeding \$700 billion that it can dip into and since its production costs are placed at as low as \$5-\$10 a barrel, which insures it against losses even at very low prices. With the Saudis not relenting, the oil glut persists, speculators have taken a major hit and the price of oil has spiralled downwards.



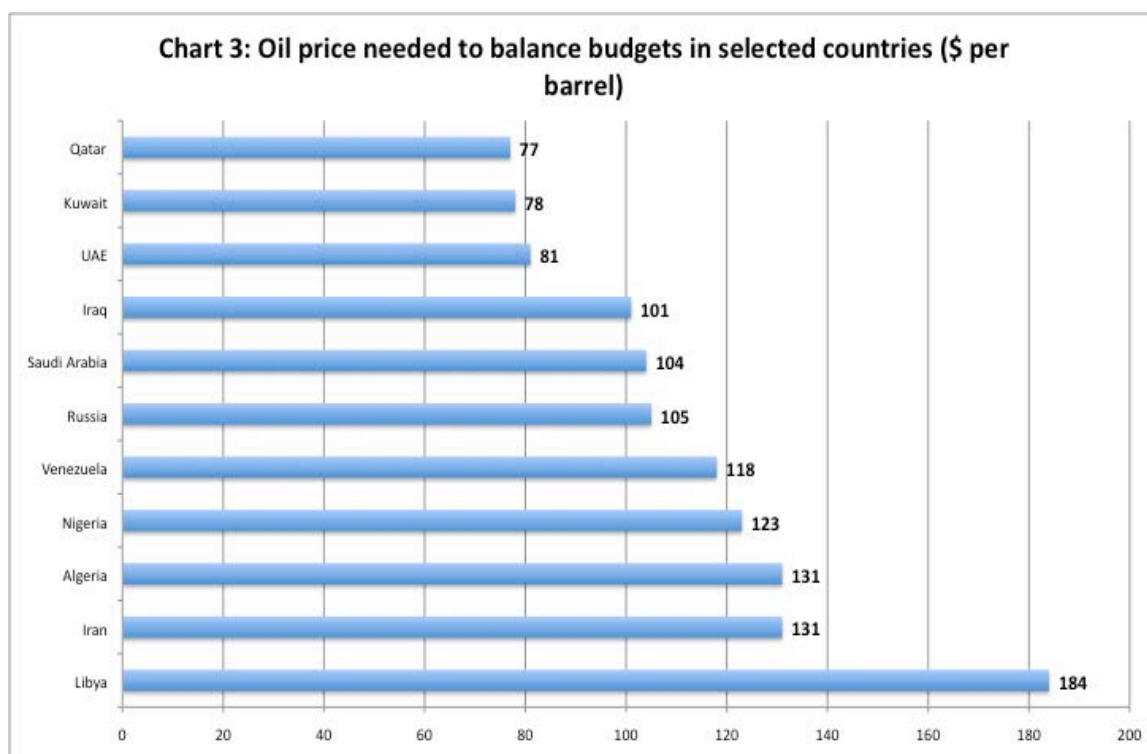
What then is the prognosis? A price decline of this kind is bound to restructure the industry. Higher cost producers would be forced to exit. The immediate impact is expected to be on the shale oil and gas industry in the US, where a number of higher cost producers are expected to be forced out of production. Despite claims to the contrary, a significant part of the [fracking](#) (hydraulic fracturing) industry is likely to turn uncompetitive. Estimates from Scotiabank indicate that even ignoring upfront, sunk costs of acquiring land and undertaking seismic and infrastructure operations, the average West Texas Intermediate oil price that must prevail for fracking sites to remain competitive (with a 9 per cent after-tax return) is \$60-61 a barrel (Chart 2). Add on another \$5-10 per barrel for upfront costs, and the asking price is in the range of \$65-70 per barrel. So at the current price of WTI of around \$45 per barrel, a number of shale fields must be abandoned.

For those who have borrowed hugely to exploit the shale boom, this could badly damage balance sheets. Shale stock prices are falling, and bankruptcies are expected. This is expected to impact adversely also on the banks that lent to them. Besides shale fields, projects involving drilling in deep water, in the Arctic and in the North Sea (where low cost sources have already been exploited) could also face problems, and cut operations or even close. So as it stands now, a massive supply side adjustment is in the offing, unless Saudi Arabia relents and settles for a lower market share.

It is this prospect that explains the ambiguous response to the oil price decline. To many the decline is a cause for celebration for a number of reasons. Consumer would benefit hugely from lower oil prices. The saving that those lower prices would deliver would boost demand for other goods and services, which can help the effort of pulling the world economy out of recession. Lower oil prices also imply lower inflation, especially since oil is a direct or indirect input into most commodities. Low inflation would encourage central banks to adopt a low interest rate and loose monetary policy stance. Since the price decline is large, these effects can be strong enough to deliver much needed growth with low inflation.

However, these possibilities have to be weighed against the adverse fallout of the sharp fall in oil prices. In the first instance, oil exporters are being subjected to a major shock. In the case of some of them, the impact could be on government expenditure, given the dependence of the budget on revenues from oil. Chart 3 presents a set of estimates from Deutsche Bank and the IMF, of the level of the oil price at which the budgets of the selected countries would balance. It moves from \$77 a barrel in Qatar to \$131 in Iran and \$184 in Libya.

Thus while the media has been focusing attention on Iran, Venezuela and Libya, there would be many more countries whose budgets are adversely affected. It is indeed true that some of these have large reserves to dip into and most of them can borrow their way out of expenditure cuts. But on average some adverse impact on state spending across the globe is likely. How much this would affect the global recovery is not clear.



But it is not just governments that are faced with a problem. As noted earlier, pure physical demand-supply balances alone cannot explain the behaviour of prices. The decisions of speculators seem to be important. Their role in oil futures and other derivatives was visible when there were spikes in oil prices in the past. International finance is exposed in various ways to oil, and bets placed on the expectation that oil prices would continue to remain high are bound to unwind at a loss. That too can have spillover effects on growth.

Finally, the impact that the unwinding of the shale boom in the US would have is still uncertain. While the fallout of low oil prices for US consumers is positive, that is not the case for US businesses that invested in shale and for the banks that lent to them. Bankruptcies

and loan losses would take their toll. So some adverse effects would be experienced in the one country that is showing some signs, however weak, of a turn to recovery.

Put together these factors could have a neutralising influence on the gain from low oil prices. So the net effect for the global economy is still unclear. That could explain the initial puzzling “market” reaction to the oil price decline.

[* This article was originally published in the Business Line on January 19, 2015.](#)