Oil Prices and the US Dollar

C.P. Chandrasekhar & Jayati Ghosh

The relationship between oil and the US dollar has been at the heart of the way international economic relations have been organised for more than half a century. International capitalism has relied on the US dollar as the basic reserve currency, and has therefore granted it an essential degree of stability for several decades despite the large external deficits run by the US and the periodic swings in its valuation in currency markets.

More than half of aggregate world exports are denominated in dollars; more than 80 per cent of all international currency transactions similarly involve dollars. Loans made by the IMF and other multilateral institutions are denominated in dollars. More than sixty per cent of the foreign exchange reserves held by central banks of all countries are in dollar assets.

This has obviously meant huge seignorage advantages for the US. It has allowed the US economy to benefit from access to imports that can effectively be paid for simply by printing dollars, and has therefore allowed the US to run enormous current account deficits for prolonged periods. It has encouraged the rest of the world to finance these deficits by providing its savings to be held in US or dollar-denominated financial assets, to the point that all the developing regions of the world are also building dollar reserves that directly or indirectly find their way to the US economy.

A key feature of this entire process has been the dollarisation of world oil markets. Oil is the central commodity of industrial capitalism, absolutely essential for the production of essential and widely used goods. All industrial economies, and most developing ones, would grind to halt with even a moderate disruption of oil supplies.

Most of the world oil trade has operated and continues to operate in dollars, even when the US is not the trade partner. Oil prices are defined in dollars for most oil exporters. As
a result, oil importing countries also pay in dollars. The oil-exporting countries accumulate dollar reserves, which have been preferentially invested back in the US because of the zero currency risk involved in this. Indeed, this recycling of petrodollars has been very significant as a source of finance for US trade deficits in several periods, including in recent times. Other countries also hold dollars for the purpose of future oil purchase.

The dramatic increase in the price of oil in the past few years could be argued to have accentuated this tendency. As Chart 1 indicates, oil prices have increased dramatically in dollar terms especially from 2003, going up by nearly 2.5 times between 2003 and 2007. This has obviously contributed very significantly to the wealth of oil exporters, and allowed them to generate balance of payments surpluses and build foreign exchange reserves, which have then been invested dominantly in dollar assets in US markets.

![Chart 1: Index of Oil prices in US Dollars (2005=100)](chart1.png)

*Source: International Monetary Fund*
However, this is also the period that the US dollar has been depreciating, especially with respect to some of the other major currencies such as the euro and the Japanese yen. As a result, the change in oil prices has been less striking in terms of these currencies than in terms of the dollar.

Chart 2 shows this with a comparison of oil price indices denominated in dollars and euros. The start of 2004 appears to mark the significant shift in this case, from when increases in dollar price of oil have been more rapid than the euro price, compared to the earlier period. This reveals some interesting aspects of the oil prices up to 2005. For example, between early 2001 and early 2005, the oil price in dollar terms increased by 46 per cent. However, in euro terms it went up by only 8 per cent, a negligible increase.

Even the most recent oil price increase has been less dramatic in euro terms than when considered in dollar prices. In the two years between January 2006 and January 2008, dollar oil prices rose by 46 per cent but in euro terms they increased by only 17 per cent.
This suggests that a significant part of the sharp increase in oil prices actually reflects the dollar depreciation, rather than pure increases in the commodity’s price. This is not to deny that the most recent period has witnessed very sharp increases in oil prices – as Chart 3 shows, oil prices even in SDR terms have gone up quite sharply, even if not as much as they have in dollar terms.

![Chart 3: Oil price indices in $ and SDRs](image)

However, the fact that the change has been much more marked in dollar prices because of dollar devaluation has significant for both the present and future of the world oil market. This is because dollar devaluation can affect both world oil supply and demand. A 2004 article by Coillin Nunan argued that, other things being equal, “dollar devaluation reduces drilling activities in areas where most of the costs are denominated in non-dollar appreciating currencies such as the North Sea. It also reduces drilling activities in the oil producing countries. Dollar depreciation reduces these countries’ purchasing power and increases domestic inflation levels, all other things being equal. Dollar devaluation increases demand for oil in countries with non-dollar appreciating currencies. It also
increases demand for gasoline in the US as thousands of Americans spend their vacations at home instead of travelling.”

Nunan had therefore argued that, regardless of other factors such as OPEC decisions on production or other events, dollar devaluation on its own can have the effect of tightening supplies, increasing demand and thereby keeping oil prices high.

This is what makes the recent rather sharp fall of the dollar, especially vis-à-vis the euro, notable. Chart 4 shows that between January 2006 and January 2008, the dollar has depreciated by 24 per cent against the euro. Of course, it could be argued that there are other more structural reasons for the high oil prices. Worldwide, oil production has been greater than annual discoveries of new reserves since 1980, and many experts suggest that global production is currently at or near its maximum. If the arguments about global oil production reaching its peak within the near future are correct, then oil exporters will continue to benefit at least as long as their reserves last.
Nevertheless, it is true that the depreciating dollar in effect means a reduction (compared to potential) in real income of oil exporters, especially those that import substantially from other non-dollar areas (such as the European Union and increasingly China). It is obviously possible for such oil-exporting countries to consider seriously the option of shifting towards denominated oil trade in euros.

It is also easy to see why the US would resist such attempts with all the strategic and military means it can command. It would force the US to generate a trade surplus to pay for its oil imports, involving a huge and painful shift from trade deficit to surplus. And this would be required at a time when the US economy is already imploding because of the continuing fallout of the sub-prime mortgage-induced financial crisis.

It is worth noting that the only OPEC country that had dared to make the switch to using the euro in oil transactions in the early part of the decade was Iraq, which formally made the change in November 2000 but paid the price of the US invasion in 2003 and subsequent destruction of the economy and polity. Since then, Iran has also openly considered such a possibility for its own oil exports, and has also aroused US wrath and thinly veiled threats of aggression. More recently, Venezuela has also proposed such a switch within OPEC and is already engaging in non-dollar barter deals for oil within the Latin American region.

Even less blatant policies, such as simply changing the composition of foreign currency reserve holdings away from the dollar, are viewed with hostility not only by Washington but by international finance. Just a few months ago in mid-November 2007 there was a sudden spurt in global oil prices as markets responded to the news reports of OPEC members openly discussing the potential gains of converting their cash reserves to the euro and away from the US dollar.

There is a problem in all this, however – the problem of finding an alternative engine for the global economy, and source of demand for world exports, if the US economy stops playing this role. The problem may not be so severe for oil-exporting countries, since they are likely to face increasing world demand and rising prices for some time in future.
But for other countries, especially oil-importing developing countries, this combination of high oil prices and slowing US demand may well be economically devastating. This may explain why there has been only a marginal shift out of holding US dollar reserves. Between the first quarter of 2004 and the last quarter of 2007, the share of dollars in global foreign exchange reserves fell slightly from 67.5 per cent to 63.7 per cent, and this is probably substantially due to the effect of the dollar devaluation itself.

That is because most other countries, including developing countries, continue to see the US economy as the main source of hope for generating demand for their own future expansion, despite the current woes of the US. But this is over-optimistic, and it is also foolish to think the adverse denouement can be avoided by somehow propping up the distressed US banks that irresponsibly caused the sub-prime crisis through cash infusions. Instead, developing countries must look for other diversified patterns of both import and export.