

Petrodollars, emerging markets and vulnerability

- **The phenomenon of “Petrodollar recycling” as it affects global markets today is probably best quantified by comparing the very large recent current account surplus of oil exporting countries with their “normal” level. On this basis it appears that the pool of Petrodollars available for recycling exceeds USD 1 trillion, and growing rapidly. For Middle Eastern oil exporters alone, this pool is close to some USD 600 bn.**
- **International banks are not being used for financial intermediation in the same way as they were in the 1970s; these days, Petrodollars are being channelled directly into asset markets, with both indirect and direct benefits for emerging economies’ cost of capital.**
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Measuring Petrodollar recycling

Measuring the pool of Petrodollars available for recycling is a relatively straightforward process, in spite of the fact that no Gulf state publishes its

To put these numbers in the context of developing countries' asset markets, it is worth bearing in mind that the USD 600 bn of Gulf liquidity alone would be i) much more than enough to buy the outstanding stock of emerging markets' traded external debt (the market cap of Citigroup's ESBI index of emerging markets bonds is less than USD 250 bn); ii) enough to buy 25% of the emerging markets MSCI, with a current market cap of around USD 2.4 trillion; or iii) enough to buy 12% of the stock of US treasuries held by the public (currently USD 4.9 trillion).

It seems reasonable to assume that the influence of Petrodollars on global capital flows, and specifically on emerging markets' asset prices, will not disappear soon. In principle the future of oil exporters' current account surpluses will be some function of the price and output of energy together with the rate of import growth in each country. Easton and Setser (2006) note that imports of the major oil exporting countries have roughly doubled since 2000, but that hasn't been sufficient to prevent a dramatic rise in these countries' current account surpluses: only Iran exhibits a rate of import growth which is some kind of threat to its ability to accumulate current account surpluses. In all, Easton and Setser suggest that if oil prices remain at their 2005 level during 2006-2008 then the annual current account surplus of major oil exporters will remain above USD 300 bn. On the other hand, if oil prices were to fall to USD 55 per barrel, the annual aggregate surplus would fall to around one-half of its 2005 level. Meanwhile, the IMF's forecast for the 2007 current account surplus of large oil exporters – published in the September 2006 World Economic Outlook – is USD 610 bn based on an oil price assumption of USD75.5/bbl. Other things equal, a \$10/bbl change in the oil price assumption will change the current account surplus by approximately USD 80 bn.

In other words, Petrodollars look set to be a feature of global capital flows for the foreseeable future. There seem to be two main questions that arise from this. The first is the relationship between Petrodollar recycling and global risk aversion. While Petrodollar recycling acts as a source of upward pressure on emerging markets asset prices, risk aversion has the opposite effect. A second key issue is the relationship between Petrodollars and the overall external financing requirements of developing countries. Before addressing these questions, we turn to the general question of the link between Petrodollars and asset prices in emerging economies.

Petrodollars and emerging markets asset prices

In principle, there are three channels through which Petrodollars affect developing countries' asset prices. These are:

- i) The "traditional route". This occurs when the investors of Petrodollars make deposits in the international banking system, which then on-lends the surplus funds to developing country borrowers. This is the "traditional" method of Petrodollar recycling in the sense that it was the dominant form of recycling in the 1970s and early 1980s.
- ii) The "indirect route". This happens when the investors of Petrodollars make large-scale purchases of "risk-free" assets, primarily debt issued by

the governments of developed countries. Since this has the effect of pushing down the global risk-free rate, it has the indirect consequence of putting downward pressure on risk premia in global markets. The consequent fall in spreads for risky borrowers creates benefits for developing countries.

- iii) The “direct route”. Finally, the investors of Petrodollars engage directly in the straightforward purchase of emerging markets assets, either on the account of the investment vehicles of oil-exporting economies, or on a sub-contracted basis, through the placement of funds with professional asset managers.

The “traditional route” of Petrodollar recycling. The standard story of Petrodollars in the 1970s was that oil exporters’ surpluses would be deposited in the international banking system, from which these surpluses were then on-lent both to oil importers specifically and to developing country borrowers generally. At first this lending reached oil-importing developing countries who needed to finance the balance of payments deficits caused by rising energy prices. Later in the 1970s an explosion of lending to almost all middle-income developing countries took place, including oil-exporters like Venezuela and Mexico. In any case, a large share of the recycling process was intermediated by the international banking system. The IMF (2006) suggests that in 1974, for example, over half the current account surplus of oil exporters was placed in bank deposits or money market instruments in developed markets.

Figure 2. BIS position and current account data for Middle Eastern oil exporters, USD bn

Current account surplus, 1977-1982	188
Change in assets held in BIS-reporting banks, 1977-1982	51
Change in net position vis-à-vis BIS-reporting banks, 1977-1982	38
Current account surplus, 2002-2005	438
Change in assets held in BIS-reporting banks, 2002-2005	87
Change in net position vis a vis BIS-reporting banks, 2002-2005	23
Current account surplus, 1977-1982	188
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Source: BIS, IMF

It seems clear, however, that the current phenomenon of Petrodollar recycling relies much less on the international banking system than used to be the case. Consider the data in table 2. During the period of the second oil shock, 1977-1982, Middle Eastern oil exporters generated a current account surplus of USD 188 bn. Of this, USD 51 bn, or 28%, was placed in BIS-reporting banks. During the first oil shock, 1973-1974, Middle Eastern oil exporters generated a current account surplus of USD 154 bn. Of this, USD 17 bn, or 11%, was placed in BIS-reporting banks. During the period 1973-1974, Middle Eastern oil exporters generated a current account surplus of USD 154 bn. Of this, USD 17 bn, or 11%, was placed in BIS-reporting banks.

countries themselves. In other words, it seems from the available data that the recycling of recent Petrodollars has largely by-passed the international banking system.

The “indirect route”. If the “traditional route” of Petrodollar recycling doesn’t help explain how oil surpluses affect emerging markets asset prices, then what does? First, consider the “indirect route” of recycling. This works due to the impact that Petrodollar liquidity has on risk-free yield curves, and more generally on assets in risk-free markets. If, for example, Gulf purchases of US Treasuries puts downward pressure on real interest rates in the US, this helps to reduce the cost of borrowing in emerging market economies too: the lower the risk-free rate, the lower is the relative risk premium. Of course this isn’t true in a linear sense: it is quite possible to imagine situations in which the risk free rate and the risk premium can move in opposite directions. Under normal circumstances, though – and under the circumstances of the past five years – a lower risk-free rate tends to be associated with a lower risk premium.

As easy as it is to make these general comments, though, it is almost impossible to say in any detail where exactly the Petrodollars are going. Data transparency in the Gulf economies for example is very poor by emerging markets standards, let alone by standards of developed countries. For that reason, therefore, the only real information that we can get at is from the Gulf economies’ counterparties. From this we can put together a partial picture, but by no means a complete one. The best counterparty data is produced by the US, but even this is outdated. The most recent complete US breakdown of foreign portfolio holdings (an annual survey) is for June 2005. Table 3 presents selected data from the 2005 and the 2000 Reports on Foreign Portfolio Holdings of US Securities, a joint publication of the US Treasury and the Federal Reserve.

What table 3 shows, for example, is that between 2000 and 2005 the US portfolio of Middle East oil exporters grew by a total of USD 65 bn. During the period 2001-2005 the total current account surplus of Middle Eastern oil exporters was around USD 485 bn. In effect then, 13% of the Gulf’s current account surplus during this period was invested in the US capital market. Mean while, Russia’s US portfolio rose by only USD 7 bn, compared to a total 2001-2005 current account surplus of USD 244 bn.

Figure 3. Foreign holdings of US Securities, selected data (USD mns)

	Total	Equity	Debt
2005			
Middle East Oil Exporters	136,427	82,472	53,954
Russia	14,416	227	14,190
2000			
Middle East Oil Exporters	71,352	42,555	28,797
Russia	7,146	336	6,810
2005 less 2000 difference			
Middle East Oil Exporters	65,075	39,917	25,157
Russia	7,270	-109	7,380

Source: US Treasury

assets. It is well known that stock market indices in Saudi Arabia, Kuwait and the UAE more than quadrupled between the end of 2001 and June 2005. Other asset markets in the Gulf region – particularly property – have also been affected by this liquidity.

Outside the Gulf, the emerging markets that have arguably been the most obvious beneficiaries of Gulf liquidity are those with geographic and cultural proximity to the Middle East: Egypt, Lebanon, Jordan, the Mahgreb and Turkey. Here again, though, the evidence is more anecdotal than statistical.

For Turkey, for example, there are plenty of stories about the influence of Gulf liquidity. The most visible of these is the purchase of a Saudi-led consortium of a 55% stake in Turk Telekom for USD 6.55 bn. The transaction will also lead to further investment of USD 3.5 bn over a six to seven-year period. In addition, Dubai International Properties signed an agreement in October 2005 to invest USD 5 bn in tourism, transport and energy projects in Istanbul. More recently, deals are emerging in the financial sector too. Dubai Islamic Bank has bought Turkey's MNG bank for USD 160 mn, and the attraction of the fast-growing Islamic finance sector is likely to draw in further capital inflows from the Gulf.

In Egypt, to take another example, the balance of payments benefits from Gulf liquidity in a number of different ways. In the first place the Egyptian current account has benefited from a higher level of workers' remittances which come primarily from the Gulf (although technically these are not capital inflows, since they would be recorded as outflows from the current account of the source countries).

The IMF's forecast in the September 2006 World Economic Outlook indicates that the 2006 current account surplus in the Gulf was close to USD 282 bn – based on an oil price assumption of USD69.2/bbl – compared to USD 183 bn in 2005. In other words last year's surplus alone will have amounted to nearly one half of the cumulative surplus during the period 2001-

the entire balance of payments that one can generate conclusions about the impact of Petrodollars on emerging markets' asset prices and cost of capital.

In principle one might think about Petrodollar-

possibility is that the rise in Petrodollars has increased the willingness of other investors to take leveraged bets on emerging markets.

Of these two possible explanations, the former is more compelling. Unlike the 1970s the rise in energy prices over the past 5 years appears to be driven essentially by a demand-shock that has helped to lift commodity prices across the board. Since developing countries are net commodity-exporters, the external financing position of emerging economies has, overall, not deteriorated along the lines evident in the 1970s. On the contrary: developing countries are these days net exporters of capital, and so external financing requirements are very limited, albeit with some notable exceptions. This in turn may have produced a greater propensity to invest Petrodollars in an asset class which is benefiting from global growth and stronger commodity prices.

Of course there are notable individual emerging economies whose large current account deficits have been adversely affected by the rise in energy prices over the past few years. The most obvious examples are Hungary, Turkey and South Africa. There are others, of course - particularly among the converging European economies - but none with any systemic importance.

Figure 5. The impact of higher oil prices on 3 economies (% GDP)

	2003	2004	2005
South Africa			
Actual current account deficit	1.1	3.4	4.2
Current account deficit at 2003 oil prices	1.1	3.9	3.6
Hungary			
Actual current account deficit	7.9	8.4	6.8
Current account deficit at 2003 oil prices	7.9	8.1	5.9
Turkey			
Actual current account deficit	3.3	5.2	6.4
Current account deficit at 2003 oil prices	3.3	4.4	4.3

Source: Citigroup

Table 5 provides an indication of the impact that higher oil prices have had on the current account of these countries' balance of payments. Of the three, the country with the most obvious sensitivity to higher energy prices is Turkey, whose 2005 current account deficit would have been some 2 percentage points of GDP lower if oil prices had stayed at their 2003 level.

The fact is though that even in these three oil-importing emerging economies, the negative impact of rising energy prices has been more than offset by net capital inflows, a fact which is evident both from the rise in foreign exchange reserves that each country has witnessed; as well as from the sustained decline in the country-risk premia that each has enjoyed. While this net capital inflow isn't by any means due entirely to the inflow of Petrodollars, the point is that the rise in energy prices has not, in net terms, been consistent with an overall drain on the balance of payments.

The idea that Petrodollars are positively associated with emerging markets asset prices underwent something of a test in the first two weeks of 2007, when the oil price briefly fell towards USD 50/bbl. This period was associated with downward pressure on some emerging markets' asset prices, which then recovered in the second half of

the month as the oil price increased back towards USD 60/bbl. One interpretation of this is that as oil prices fall, investors are likely to sell emerging markets assets in anticipation of a lower stock of Petrodollars available to support asset prices in the future. This episode could lend support to the overall conclusion of this analysis, which is that Petrodollars are, by and large, a source of support to emerging markets' asset prices.

Having said that, the relationship between the oil price and emerging markets asset prices may not be a linear one. While very low oil prices could undermine investor sentiment towards emerging markets, it is equally true that very high oil prices might do the same if market participants associate very high prices with greater geo-political risk, or with an inflationary threat that could require a sustained rise in interest rates. One of the paradoxes of financial markets in the early 21st century is that the deployment of Petrodollars may make the world *look* like a less risky place – in the sense that risk-premia have been subject to downward pressure – while the shift in

Disclosure Appendix

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David Lubin, hereby certify that all of the views expressed in this research report accurately reflect my personal views about any and all of the subject issuer(s) or securities. I also certify that no part of my compensation was, is, or will be directly or indirectly related to the specific recommendation(s) or views in this report.

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