Should OPEC Price Its Oil in a Basket of Currencies Rather Than in U.S. Dollar?

*By Mamdouh G. Salameh**

Introduction

With the continued weakening of the U.S. dollar since 2001 and with OPEC's eleven members heavily reliant on oil revenue as their main source of income, many members have been considering a switch in their oil-pricing policy from the U.S. dollar to a basket of currencies as a way for safeguarding their oil revenues against a declining U.S. currency and also stabilizing the oil prices.

Iraq already prices its oil in euros, having made the switch in 2000. Iran has also been considering such a switch for several years and the subject has been discussed in Saudi Arabia. Venezuela currently sells part of its oil output under a barter system to avoid using any currency at all. Last year, a senior OPEC official suggested that such a move might one day make economic sense for the Organization. Nobody thinks any such switch is imminent.

Russia sells most of its oil to Europe and gets most of its exports from the eurozone. So pricing oil in euros would enable both sides to save on the costs of currency conversion. But this would only represent a very small saving, so in a sense, the move would be economically insignificant. The real importance of such a move would be political. It would be hugely symbolic in the context of the European Union's (EU) ambitions to establish the euro as an alternative reserve currency to the dollar. The risk is that it would also do damage to the dollar and to the global economy.

And now Norway is also considering pricing its oil in euros and also establishing its own commodities and energy bourse. Norwegian Bourse Director Mr Sven Arild Andersen is of the opinion that Norwegian oil should be traded in euros, which can be advantageous for international customers. He said that Norway has the prerequisites for building a Norwegian or Scandinavian energy bourse. He added that his Bourse has performed market studies which showed that both Russia, which is a large oil exporter, as well as the countries of the Middle East have large parts of their economies in euros. They would be able to view such a bourse as a contribution to balancing their economies in a better manner than at present, where their products are traded solely in dollars.[1]

There is, however, a political dimension for switching from U.S. dollar to a basket of currencies. The question is do the Arab Gulf members of OPEC have the political will to make such a switch. Any such switch will be interpreted by the United States as an anti-American political act. The U.S. could understand it if Iran and Venezuela were to adopt such a pricing policy given their anti-U.S. attitude but not the Arab Gulf producers whose security is defended by the U.S.

This paper will endeavour to analyse the economic and political impact of such a switch on the economies of the OPEC countries and the stability of the oil price. It will assess the impact of such a switch on the U.S. economy and the value of the U.S. dollar. The paper will argue that it is highly essential for oil producers worldwide, particularly the OPEC countries, to restructure their oil-pricing policy in order to achieve higher oil revenues and obtain more stable oil pricing in the global oil market.

OPEC Oil-Pricing Background, 1970-2000

OPEC members currently supply 41% of global oil production and possess 74% of the world's proven crude oil reserves.[2] They also export some 25 million barrels of oil a day (mbd).

However, in recent years the economies of OPEC countries and, therefore, their oil revenues, have been adversely affected by the weakening U.S. dollar. For instance, UAE's oil revenues declined from $19.4 bn in 1980 to $6.9 bn in 1985 and then rose to $26 bn in 2000. Without any doubt, these figures impacted heavily on the gross domestic product (GDP) of the country. GDP declined from $30 bn in 1980 to $21.5 bn in 1985 then increased to $35.5 bn in 2000.[3]

The current economic situation in the United States since September 11th 2001 and the accounting mismanagement of many American corporate firms such as Enron and WORLCOM have shaken the U.S. economy and the U.S. dollar.[4] Furthermore, the introduction of the euro has provided an alternative petro- and reserve-currency. The euro is expected to play a key role in the global economy and to be a strong contender to the unstable U.S. dollar. However, I very much doubt that the euro could, on its own, replace the U.S. dollar as the global petro-currency.

An early assessment of the impact of OPEC's pricing policy on its oil revenues between 1970 and 2000 compared two baskets of currencies with the U.S. dollar. The first basket consisted of five equally-weighted currencies consisting of the U.S. dollar, Japanese yen, British pound, French franc and the German deutschemark. The second basket was made up of seven equally-weighted currencies, namely, the U.S. dollar, Japanese yen, British pound, French franc, Canadian dollar, German deutschemark and Swiss franc.

The assessment showed that total savings of $170 bn to $178 bn could have been achieved had OPEC tied its oil pricing to either of the two baskets of five and seven currencies respectively in the 30-year period. These extra savings are approximately equivalent to the revenues generated in one year of an average OPEC oil production and export.[5]

Although the OPEC members produced and exported oil at a steady and consistent rate throughout the 30-year period, the price of oil showed a great instability throughout the same period. These price fluctuations and instabilities had a significant impact on the economic growth of the OPEC countries and their oil revenues especially in the mid-1980's (see Table 1).

---

*Mamdouh G. Salameh is an international oil economist, a consultant to the World Bank in Washington, DC and a technical expert of the United Nations Industrial Development Organization (UNIDO) in Vienna. He is Director of the Oil Market Consultancy Service in the UK and a member of both the International Institute for Strategic Studies (IISS) and the Royal Institute of International Affairs.

Table 1
OPEC Countries's Oil Revenues, 1970-2000
($ bn)

	1970	1975	1980	1985	1990	1995	2000
Oil exports (mbd)	22.09	26.63	20.51	14.55	20.58	22.30	25.90
Oil price (U.S.$/b	1.80	11.09	38.00	27.81	23.17	17.24	28.50
Oil revenue ($ bn	14.51	107.78	284.50	127.18	174.05	140.32	269.42

Sources: OPEC Annual Statistical Bulletins, 1988-2003 / BP Statistical Review of World Energy,1989-2005 / Author's calculations.

Therefore, it is highly essential for the OPEC countries to consider restructuring their current oil-pricing policy in order to achieve higher returns and obtain more stable oil pricing in the world's oil market. The question is what basket of currencies should OPEC adopt now.

A Restructuring of the OPEC's Current Pricing Policy

The U.S. Energy Information Administration (EIA) estimated OPEC's oil revenue in 2004 at $338.4 bn based on exports of 25 mbd and an average price of $37/barrel. However, OPEC's oil revenues in 2005 were estimated at $501 bn based on exports of 25 mbd and an average price of $55/barrel. They are projected to reach $548 bn in 2006 based on a price of $60/barrel (see Table 2). The Arab Gulf producers accounted for an estimated $271 bn of OPEC's projected revenues in 2005.

Table 2
Estimated OPEC's Oil Revenues, 2004-2006
($ bn)

Country	2004	2005	2006
Algeria	22.6	32.1	36.6
Iran	32.5	48.2	52.6
Iraq	20.0	29.7	32.4
Kuwait	27.4	40.6	44.2
Libya	18.1	26.9	29.3
Nigeria	29.8	44.2	48.2
Qatar	13.5	20.1	21.9
Saudi Arabia	115.1	171.0	186.6
UAE	30.3	45.0	49.1
Venezuela	29.1	43.2	47.1
Total	**338.4**	**501.0**	**548.0**

Source: U.S. Energy Information Administration (EIA) / Author's calculations.

Despite this projected rise in OPEC's oil revenues, economists are concerned about the health of the economies of the Arab Gulf producers for two reasons: first, the continued weakening of the U.S. dollar against the yen and the euro, the two currencies used the most to pay for these countries's imports; second, the gradual rise in the interest rates of the U.S. dollar to which the Arab Gulf currencies are pegged. This could slow down economic growth in this region.

As a matter of fact, net per capita income in the Arab Gulf is three times lower in real terms than it was thirty years ago.

In a new assessment I compared OPEC's dollar-based oil revenues in 2005 with yen-based and euro-based revenues and also with a basket of currencies made up of three equally-weighted yen, euro and dollar (see Table 3).

The assessment showed that if OPEC priced its oil in either the yen or the euro, they would have earned an extra $75 bn and $80 bn respectively. If, however, OPEC priced its oil in a basket of currencies made up of the yen, euro and dollar, they would have earned an extra $52 bn in revenue. Though OPEC's revenue resulting from the adoption of a basket of the three currencies is $23 bn and $28 bn short of adopting either the yen or the euro, respectively, the risk spread is better. Moreover, neither the euro nor the yen can individually act as a global petro-currency while a basket made up of these two currencies and the U.S. dollar can.

Table 3
OPEC Oil Revenues in 2005

	U.S. Dollar	Yen	Euro	Basket of Currencies
At 2005 U.S.$ exchange rates	501 bn	576 bn	581 bn	553 bn

Sources: EIA / Handbook of Energy & Economic Statistics in Japan / Author's calculations.

How Does Reserve Currency Status Benefit the U.S.?

The U.S. derives a small benefit from 'seigniorage' – the profit the U.S. makes from the circulation of nearly $3 trillions worth of U.S. banknotes outside the U.S., which cost little to print but are backed by interest-bearing Treasury bills. This is worth $10 bn a year. But the real benefit of reserve currency status is that it ensures a virtually insatiable demand for dollars from the world's Central banks, who need the U.S. currency to boost their own reserves and thereby support their own currencies.[6] China alone, for instance, holds an estimated $800 bn in U.S. Treasury bills while Japan holds more than $1 trillion and South Korea $500 bn. This has given the United States carte blanche to borrow unprecedented amounts of money to fund its tax cuts and consumer spending at very low interest rates.

There are far more serious implications for the U.S. economy were OPEC to adopt this shift in their oil-pricing policy and were other oil producers to follow suit. The value of the crude oil traded in the global market exceeds $1.5 trillion per annum. This is equivalent to 15% of the United States GDP. A shift to a basket of currencies made up of the yen, euro and dollar, would have added $36 bn to the estimated U.S. oil bill of $285 bn in 2005. It will also expand the U.S. budget deficit significantly, lead to a lesser demand for the U.S. currency in the global markets and would result in a further steep fall in the value of the U.S. dollar.

It would be devastating for the dollar if the crude oil transactions were to be priced in a basket of currencies rather than in the dollar alone and the world's Central banks were to start switching part of their reserves into euros and yens, or even simply stop buying dollar assets. Because oil importers would need to buy euros and yen to pay for oil, demand for these two currencies would surge. This would also increase the use of the euro and the yen as reserve currencies. The value of the dollar would collapse, since demand for dollars would fall. Worse still, the U.S. would find it very hard to finance its giant twin deficits – its trade and budget deficits. The dollar's reserve currency status has allowed it to run up debts no other country in history could have got away with. America's trade deficit now stands at $600 bn, equivalent to

6% of GDP while its external debts are many times bigger.

This would have been unthinkable under the gold standard, when those debts would have been redeemable in gold. It was because Britain ran up similar debts in the 1930's and 1940's that sterling had to be devalued and thus ceased to be the main global reserve currency.[7]

Impact on the U.S. Economy

Over the last year, portfolio (private) investment in the U.S. has dried up amid fears that the trade deficit is unsustainable and that a fall in the value of the dollar is inevitable.

America shows no signs of being prepared to live within its means: the response to every tax and interest rate cut of the last few years has been a burst of consumer borrowing and spending. But Asian Central banks have spent billions propping up the dollar – and thus funding this debt binge – because they fear a collapse in the dollar would choke off their own economic growth. But despite this intervention, the dollar is still weakening.

The euro and the yen are the main beneficiary of the weaker dollar and their strength has added to their appeal as potential reserve currencies. But a collapse in the dollar could be as much as a disaster for both Europe and Japan and the world at large as for the U.S. The U.S. could be faced with higher inflation, higher interest rates and a stock market and property market crash, while the eurozone and Japan could find their goods priced out of world markets. Unable to rely on exports to the U.S., the nascent eurozone and Japanese recovery would collapse. The eurozone and Japan may hope this scenario can be avoided by collective government action, as it was in 1986 with the Louvre Accord, following a 44% collapse in the dollar's value. The answer then was interest-rate cuts, which led to a boom followed by a stock market crash in 1987. This time, a solution would most likely involve big sacrifices by the U.S. – sacrifices that in the current political climate it may not be able to make.

Conclusions

OPEC members should seriously consider restructuring their oil-pricing policy by switching from the U.S. dollar to a basket of currencies made up of three equally- weighted dollar, yen and euro. This will safeguard their oil revenues and stabilize the oil prices and also provide a better risk spread.

However, it is inadvisable for them to price their oil in either the euro or the yen separately as neither of these two currencies can act individually as a global petro-currency or a global reserve currency. A basket of the three biggest currencies would provide stability to the oil market and assured revenues to OPEC oil producers. This will also open the door for other non-OPEC producers like Russia and Mexico to follow suit.

The added revenues amounting to at least $52 bn per annum could be used to expand their oil production and refining capacities and exploration and also to improve their health and educational services and renovating their infrastructure.

Footnotes

1 Energy Bulletin published on 27 December 2005 by NRK.

2 BP Statistical Review of World Energy, June 2005, p.4 & p.6.

3 OPEC Annual Statistical Bulletin, 1988-2004.

4 S. Pearlstein, *Corporate Scandals Taking Toll on Markets*, Washington Post, June 26, 2002, p. A01.

5 Data secured via Prof. MU.S.a Essayyad, King Fahd University of Petroleum &Minerals, Dhahran, Saudi Arabia.

6 Money Week, 9 July, 2005,p.2.

7 Ibid., p.2.

IAEE Mission Statement

The International Association for Energy Economics is an independent, non-profit, global organisation for business, government, academic and other professionals concerned with energy and related issues in the international community. We advance the understanding and application of economics across all aspects of energy and foster communication amongst energy concerned professionals.

We facilitate:

- Worldwide information flow and exchange of ideas on energy issues
- High quality research
- Development and education of students and energy professionals

We accomplish this through:

- Providing leading edge publications and electronic media
- Organizing international and regional conferences
- Building networks of energy concerned professionals

!!! Congratulations to the 2007 IAEE Officer Nominees !!!

Nominations chair Tony Owen and committee members Larry Chow, Carol Dahl, Sophie Meritet, and Paul Stevens are pleased to announce the following nominees for the 2007 IAEE Officers election:

President-Elect	Andre Plourde
Vice President for Development & International Affairs	Sophie Meritet
Vice President & Treasurer	Jan Myslivec