

OIL SECURITY and OIL PRICES

Implications for Asia

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The Security Issue

This is undoubtedly an important issue. It induces however emotions related to fears, justified or exaggerated, rational or irrational. This may affect the design and implementation of efficient policies aiming at ensuring greater security. Fear is never a good counsellor but rather the mother of bad decisions.

Energy security was initially, and still is about oil. Recently the EU has expressed concerns about the supply of natural gas and Europe's dependence on Russia for a substantial volume of its gas consumption. The International Energy Agency (IEA) has added another element to the security agenda – the problem of electricity brown-and black-outs.

I do not think that Europe has a gas security problem. The continent is surrounded with actual and potential sources: Russia, Norway, the Nederland, Algeria, Nigeria, Libya, Egypt and even distant Qatar is now supplying some European countries. It is ironical that Europe should now worry about Russia considering that in the 1970s it dismissed US concerns about European dependence on the Soviet pipeline. Is Russia today less reliable politically than the Soviet Union of yesteryears? As regards electricity, supply interruptions are a domestic or national problem caused by a lack of needed investments or regulatory failures. In short, the gas issue, at least for Europe, is not a serious one; and the electricity problem where it arises is amenable to straightforward solutions, be it investment or regulation.

We are thus left with oil security. The problem arose in 1973, the year of the oil shock. The 1973-74 crises had two dimensions, an economic and a political one. The economic component was an increase in the price of oil in international trade. This increase, significant by the measures of the time, could be easily absorbed by the rich industrialised countries. Those who suffered most were the oil-importing developing countries. Because the rich are more vocal than the poor and have more

ways for expressing themselves, ensuring that they are heard loud and clear, they complained very strongly in the media and in national and international fora while the poor who were most affected remained silent.

The political component, consisting of production cuts and an embargo on the USA and the Nederland imposed by Arab countries in the context of the Arab-Israeli conflict, gave rise to the supply security issue. Higher prices may result from supply interruption but do not cause them (on the contrary they induce supply increases). A politically motivated supply interruption is more difficult to accept than a price rise because the former is perceived as an act of aggression and the latter as an economic development.

The 1973 oil production cuts and the embargo were an action by a group of third world countries against a group of powerful, advanced and industrialised countries used to rule or impose their will on developing nations, and certainly not used to be threatened by them in such a critical area as energy. There was hurt pride. There was a feeling that the normal balance of power which gave the advanced countries the upper hand was being upset. And of course there was the legitimate desire to protect one self from future oil supply interruptions as these have wide and costly repercussions on the economy.

It is rational to adopt policies that provide an insurance against disruptions. But the costs of the policies must be related to the risks and costs of the disruption. Sometimes, however, the political shock affects the judgment and lead to an exaggerated assessment of the possible crises. A sober appraisal involves the following considerations.

First, the balance of power is always in favour of the advanced countries, never in favour of developing nations. Power must rest on a number of solid foundations: economic, demographic, military, strategic, financial. It involves a rich endowment of human capital, an industrial base, a legitimate political system, a tradition of innovative activities and a very advanced educational system. The developing countries do not score very high on many of these criteria.

True, the oil-exporting nations possess on certain occasions some oil power. But this is not identical to the power required to sustain an embargo on oil exports or to impose some oil sanctions on important Western countries or Japan. Power in the international oil market simply means that they may be able to move prices by varying the volume of production. But even this type of power is subject to constraints.

The security issue is about supply interruptions. These may occur in two ways. The first is the use of the oil weapon. My argument here is that its use in 1973 cannot be repeated. In fact, it was abandoned after about four months then without achieving its objective of bringing about a solution to the Arab Israeli conflict. And the reason was that the Arab countries involved did not have the wide power base mentioned above that is required to sustain the pressures put on them by the USA and other countries. And this despite the fact that the Cold War was restraining the USA from using its military might. Today, the USA is the sole super-power. Its military presence in the Gulf is overwhelming. This is enough to deter any one who may be thinking about

using the oil weapon. The asymmetry of oil power between oil exporting countries and the West is evidenced by the fact that the 1973 oil sanctions lasted a few months while sanctions imposed on Libya, Iran or Iraq by the USA or the UN were applied over many long years.

The second causes of supply interruption are political events such as revolutions, wars, civil unrest etc affecting a major or several important oil exporting countries. The Middle East has been unfortunately prone to such events. We had the Arab Israeli wars, the Iranian revolution, the Iraq-Iran war, the Iraqi invasion of Kuwait, the US war in Iraq, plus political unrest in Venezuela and civil strife in Nigeria.

The points to remember, however, are, first, that all interruptions do not have the same market impact because all depends on the relationship between supply and demand at the time. The oil supply decline from both Iraq and Iran in the 1980s did not cause oil prices to rise. In fact they collapsed because demand was then stagnant and non-OPEC output was rising significantly. Secondly, on most occasions Saudi Arabia, sometimes on its own, sometimes with Abu Dhabi and/or Kuwait used their surplus capacity to make up for the shortfall. This did happen in the early 1980s, in 1990-91, and in 2003. In other words, the existence of surplus capacity in Saudi Arabia proved to be the first line of defence of the supply system.

Fears that political disturbances or wars affecting oil-exporting countries would disrupt supplies sometime in the future are perfectly legitimate. And it is wise to have policies in place to cope with an emergency. The correct policies are as follows: First, to have strategic inventories of both crude oil and petroleum products. It is now important to have inventories of petroleum products because another problem has arisen, namely a constraint on refinery capacity due to insufficient investment in this sector over the past years.

Secondly, to define a clear scheme about the release of oil from these stocks in case of emergency.

Thirdly, to diversify both oil and energy supplies as widely as possible.

Fourthly, to promote energy efficiency in use.

There is a qualification however. It was mentioned before. The costs of these measures should not exceed the expected costs incurred in an emergency. To be sure, these may be difficult to compute because of many uncertainties. But it is not impossible to form a broad judgment on the adequate size of a strategic stockpile. One can easily recognise a situation where the stockpile is too small and one where it is excessively large.

Japan has done more than any other country on all these scores. The inventory is very large. In fact, my judgment is that it is far too large and there is no real need to build it up further. I am not informed about the policy in place for release in case of an emergency but I assume that it is clearly defined. It is interesting to note here that strategic stocks have rarely been used in Japan, the USA or Europe. The only exception is the response to the interruptions caused by the hurricanes Katrina and Rita in the USA in 2005. Interestingly, the disruption was due to natural phenomena hitting an OECD country and not to a political event in an oil-exporting country.

Supply diversification and energy efficiency measures have been implemented with great determination in Japan since 1974 and progress in your country has been more significant than in any other OECD country.

Supply diversification, however, is not without its problems. It has involved nuclear which has caused more problems than oil in the years after 1973/4. Coal causes environmental problems; and it is very difficult to protect oneself from an interruption in the supply of natural gas by building up a significant strategic inventory.

The rest of Asia is in a different situation than Japan. Many Asian countries are too poor to afford holding important strategic stocks. Supply diversification in India and China for example is diversification out of coal, not oil. It implies greater dependence on oil. And enormous progress on energy efficiency remains to be achieved. This is an expensive and difficult task for a developing country with low per capita income.

The solutions involve international aid as regards energy efficiency and regional co-operation as regards strategic stocks.

The Oil Price Issue

Oil prices in international trade began to rise in mid-1999 after their dramatic collapse in 1998 and the early months of 1999. After a while oil prices returned to their pre-1998 levels but did not settle there. They continued to rise.

The average WTI price in 1998 was \$14.39; in 1999, \$19.31 which was a bit below than the 1997 level. The oil price exploded in 2000 with WTI reaching an average of \$30.37 per barrel. In 2001 and 2002 the price averaged around \$25/26. This seemed to be a stable price supported by the OPEC price band mechanism. The years 2003 and 2004 witnessed a continuous price rise which carried on in 2005. The average WTI price in 2003 was \$31.07 similar to 2000. In 2004, it reached \$41.49 and although we do not yet have an average for the full 2005, it is clear that it will be higher than in the preceding year. Remarkably a peak of \$69.85 was reached on one trading day in 2005.

The reasons for these increases in 2003-05 can be grouped in three sets: First, the geo-political reasons. There was the US/UK intervention in Iraq which caused much destruction to oil facilities mainly due to insurgents. There was unrest in both Venezuela and Nigeria. Later Russia became a cause of worries because of the conflict between the Russian government and Yukos. The market had then concerns about the sustainability of oil supply growth from a country that was able to increase its production by 600-700 thousand barrels since 2000. The further cause of worries about political stability was a sustained campaign by US think tanks against Saudi Arabia considered by them as an unreliable source of oil in the future because of a threat from Islamic extremists to the current regime. This is of course rubbish, but we cannot expect oil traders in New York in London to have a different view on such matters from what they read in think tank reports. Later the concern shifted to Sudan as some asked whether oil sanctions will be imposed on that country and on Iran because of the nuclear issue.

Secondly, economic factors. In 2004 there was a huge, unprecedented increase in world oil demand particularly in China and the USA. World oil consumption increased by 3.4% over 2003 in sharp contrast with previous years when the annual rate of growth never exceeded 2.0%. This gave rise to concerns about the volume of surplus capacity available in Saudi Arabia. The market looking ahead wonders whether the 1.5 or 2.0 million barrels per day still available will still be available if Chinese demand continued to expand at the then current rate. In 2005 the focus shifted from the upstream to refining. It became apparent that the US refining system was constrained causing petroleum product prices to rise, and crude oil prices to rise in sympathy.

Thirdly, accidental factors. In 2004 the hurricane Ivan caused much damage to facilities. There were strikes in Norway and accidents, more serious than usual, in US refineries. I refer to these as accidental or contingent factors because they are unlikely to recur every year. Unfortunately the hurricanes in 2005 had devastating effects on the oil production structure as in 2004.

It is not surprising that oil prices rose so much in 2004 and 2005. It is surprising that so many people were surprised that they did in fact rise.

The question on most people minds today is whether levels of \$60 or \$70 per barrel are sustainable?

There is a very simple answer to this question, and this is that all depends on the behaviour of world oil demand in the next four or five years. Demand growth at an annual rate of 3.4% as in 2004 is unsustainable. Such a demand expansion will push oil prices to such a high level, perhaps \$90-100 a barrel that demand will be choked off, the growth of the world economy killed and oil prices will then begin to fall rapidly and sharply.

An annual growth rate of 2% per annum between 2005 and 2010 will result in a demand increment of 8.6 million barrels per day in five years. This could broadly correspond to a supply increase of crude oil on the following pattern:

Russia		1.0 mb/d	
Caspian		1.5	
Angola and other non-OPEC			
West Africa		1.5	
US offshore		1.0	
Brazil		0.3	
Canada		1.0	
Mexico		0.2	
Others		0.3	
Total			6.8 mb/d
Minus			
North Sea	0.4		
Egypt	0.3		
Oman	0.2		
Syria	0.2		
Others	0.2	-1.3 mb/d =	5.5 mb/d

Under this scenario OPEC will have to fill a gap of 3.1 mb/d consisting of crude oil and NGLs which should not be too difficult

Assume now that world oil demand will only increase at a annual rate of 1.4% between 2005 and 2010. The demand increment will thus be of the order of 5.8 mb/d. This is marginally higher than the increase of non-OPEC production. OPEC will face difficulties in defending a preferred price level of say \$45-50 per barrel. The likelihood is that prices will then fall.

This analysis misses however an important aspect of the oil situation, namely the possible impact on prices of refining constraints. I doubt that the world refining system will be able to cope with a demand increase of 8.6 mb/d in 2010 even if the upstream sector can deliver the crude oil. World refining capacity will have to increase by 8-9 mb/d in five years. This implies the construction of 16 to 18 big 500,000 b/d refineries or 32-36 medium size refinery of 250,000 b/d. And they should have the required plant configuration that it the appropriate capacity of deep conversion. This is a tall order indeed.

It would seem, therefore, that if all factors are taken into consideration, the probability is that oil prices will be high, that is in the \$45-75 bracket in most of the 2005-2010 period.

The economic implications for many Asian oil importing countries are likely to be severe. High oil prices have an adverse impact on the balance of payments which may induce, or even force, governments to adopt deflationary policies. The consequences are a drop in the rate of economic growth and a drop in the rate of growth of energy demand. This may check the increases in oil prices but will not be sufficient to bring them down significantly, that is to \$20-25 per barrel unless they induce a deep world economic recession.

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