

The oil market

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The financial and economic crisis has caused a drop in the oil demand and the collapse of the barrel price. This decline is beneficial for the real economy as it halts inflation and the loss of purchasing power of consumers. However, we must not get used to current oil prices. Once we exit the recession, we might find a scenario in which credit restrictions and excessively low prices may force the oil industry to postpone investment in necessary projects to adequately secure future supply, which may unleash a new spectacular price spiral. A «green New Deal» should be fostered to allow us to overcome the crisis and reduce our dependence on oil.



In early July 2008, the West Texas Intermediate (WTI) barrel reached its peak after a steady rise started in mid 2003, marking an all-time record \$147.27 on the New York market. After that, it plummeted a staggering 77% within just seven months, thus reaching roughly \$34 in mid February 2009, the lowest value since the first quarter of 2004. Since the beginning of 2009, the WTI index has been highly volatile, oscillating between \$34 and \$49, though its average profile has been relatively flat.

If we look at the WTI barrel price curve over the last ten years, we will be able to divide it into three big portions. The first goes from 1999 to 2003 and is characterised by relatively stable prices within the \$20-25 range. The second starts in mid 2003, with a spectacular surge that finds its climax with the July 2008 all-time record. The third portion reflects the above-mentioned spectacular fall, which seems to have halted, however momentarily, in the first months of 2009, during which there has been a succession of ups and downs around a \$40 per barrel average.

The financial crisis and the economic recession we are experiencing have done away with the speculative factor (no matter if this is now the cause or the effect), while there has been a notable erosion of demand, especially in industrialised countries.

As to the causes of the episode of ongoing price inflation experienced in the last five years, from mid 2003 to mid 2008, one of the most common explanations is the existence of a speculative bubble. This has been the thesis, for instance, of the Organization of the Petroleum Exporting Countries (OPEC), which sustained summit after summit that the market was well served and the price surge was simply due to speculation. However, both the

International Energy Agency and the US Department of Energy disagreed. For these organisations, the high crude prices reflected the worrying perspective caused by an ever higher demand and a limited offer, a situation that was certainly paving the way for speculation. The relative relevance of this phenomenon was not denied, but it was argued that speculation was not the cause of the price rise but a collateral effect of a structural imbalance between offer and demand.

However, everybody agrees that the crude price drop that has been taking place since July 2008 is due to the fact that the financial crisis and the economic recession we are experiencing have done away with the speculative factor (no matter if this is now the cause or the effect), while there has been a notable erosion of demand, especially in industrialised countries. The data on the evolution of global demand provided on a monthly basis by the International Energy Agency, the United States Energy Information Administration and the OPEC clearly show this.

So far the history. But how are oil prices expected to evolve in the short term?

As to the evolution of demand over 2009, the forecast of the three above-mentioned organisations published last March are quite straightforward. As a consequence of the serious decline of the global economic situation, demand will go on falling for a second consecutive year, a situation that had not occurred since 1982-1983.

For instance, the OPEC, in its *Monthly Oil Market Report*, estimates that global oil demand declined by 0.32% in 2008, which is equivalent to 280,000 barrels a day, while the 2009 forecast shows a reduction by another 1.18%, i.e. slightly over a million barrels a day. Overall global demand in 2009 will be at roughly 84.61 million barrels a day, compared to an average 85.6 million in 2008. To the trust, the demand reduction in 2009 will be especially felt in developed OECD countries, where a

2.74% drop is expected, which amounts to roughly 1.3 million daily barrels. This reduction in demand would be partly made up for by a 3.1% (210,000 daily barrels) increase in oil producing countries in the Middle East. As to China and other emerging economies, the OPEC expects a slowdown in the demand increase but not a net reduction. Particularly regarding China, OPEC estimates for 2009 indicate a 1.4% (110,000 daily barrels) increase compared to 2008, which means that the world's second largest consumer will use 8.1 million barrels a day in 2009.

In any case, the 2009 demand forecast published by the OPEC in March reduced the February figures by 430,000 barrels a day and those published in January by 610,000 daily barrels, a downward review trend that may be reinforced in the months to come.

According to the IEA, the demand will suffer the biggest fall in the OECD countries.

In fact, the OPEC forecast on demand in 2009 is more optimistic than that of the International Energy Agency (IEA). In its *Oil Market Report*, the latter organisation –an advisor in energy matters to OECD countries, most of them net oil importers– expects the strongest fall in worldwide crude demand since 1982 this year. The IEA figures for 2009 show a drop in global demand of up to 1.3 million barrels a day, which would result in a daily demand of roughly 84.4 million barrels, that is, 210,000 barrels below the OPEC forecast. According to the IEA, the demand will suffer the biggest fall in the OECD countries, especially the European Union and the industrialised Pacific countries, where an overall drop of almost 1.5 million barrels a day is expected. This decline will partly be compensated by the increase in demand in non-OECD countries, set at approximately 500,000 barrels a day.

The Agency still expects a positive demand growth in China, Latin America and the

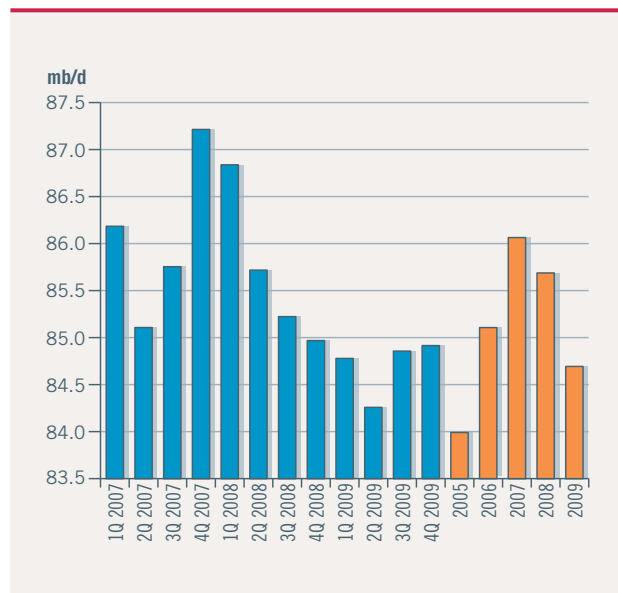
Graph 1. Quarterly oil demand in China



Source: OECD/IEA: Oil Market Report, February 2009

▲ The OPEC expects the demand in China to increase by 1.4% in 2009.

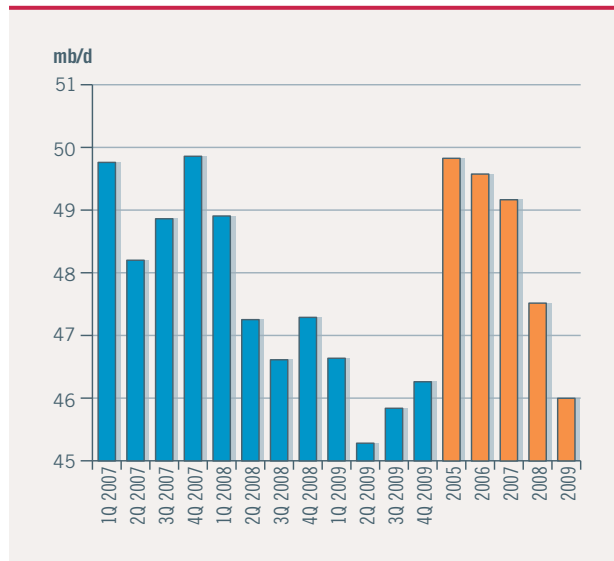
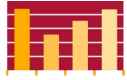
Graph 2. Quarterly oil demand worldwide



Source: OECD/IEA: Oil Market Report, February 2009

▲ The drop in global demand is expected to amount to 1.3 million barrels a day in 2009.

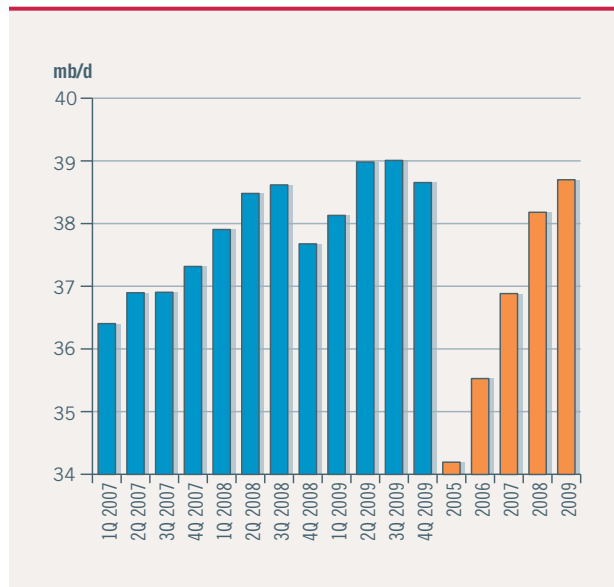
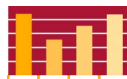
Graph 3. Quarterly oil demand in OECD countries



Source: OECD/IEA: Oil Market Report, February 2009

- ▲ OECD countries will experience the biggest drop in demand.

Graph 4. Quarterly oil demand in non-OECD countries



Source: OECD/IEA: Oil Market Report, February 2009

- ▲ The February data expect a certain stability in demand in non-OECD countries.

Middle East in 2009. In the case of China, the expected growth is almost unnoticeable (25,000 daily barrels) considering the 4.3%, 4.6% and 7.8% rates experienced in 2008, 2007 and 2006 respectively. The IEA further expects a zero growth in the rest of Asia, including India, and asserts that only those regions and countries with highly subsidised oil prices, as is the case of Latin America and the Middle East producing countries, can be expected to have a relatively steady growth in demand, though at less than half the rate of the last years.

As was the case of the OPEC projections, the IEA March report also makes a downward correction of its global demand estimates published in January and February. Put in million barrels a day, the forecast has declined from almost 85.3 (January) to 84.7 (February) and 84.3 (March).

Without any doubt, the ongoing dramatic downward reviews made in the last months by both producers (OPEC) and consumers (IEA) clearly show the extreme weakness and the progressive deterioration of the global economy and also the slowdown of industrial activity and consumption. This situation might become even worse if the most pessimistic forecasts come true, which fear the crisis to spread out to emerging economies and a net destruction of demand in these countries.

Given the ongoing drop in consumption following economic recession, the aforementioned bleak prospect for a demand recovery and the urgent need to halt the fall in crude prices, the OPEC has reacted by deciding several production cuts. Since mid 2008, following the breakout of the financial and economic crisis, the size of these cuts has led to a theoretical withdrawal from the market of 4.2 million barrels a day. This policy has apparently failed to cause a new rise in oil prices, but it does seem to have slowed down their decline, settling at least temporarily at \$35-45.

These figures seem clearly insufficient to secure internal development and stability of the OPEC countries. A recent report on Saudi Arabia by the London-based Centre for Global Energy Studies clearly shows it. The report concludes that the Kingdom's financial and social balance requires a barrel price at around \$62, quite below the \$75 mentioned by King Abdullah at the Organization of Arab Petroleum Exporting Countries meeting held in Cairo in November 2008, which however raises the suspicion that most producing countries wish a minimum barrel price within the \$60-75 range. If this is the case, the possibility of further cuts to be agreed at future OPEC meetings must not be disregarded.

The oil price decline is the result of financial and economic turmoil. Credit restrictions and a barrel price under marginal production costs may force the oil industry to postpone investments in necessary projects to adequately secure future supply, which may unleash a new spectacular price spiral.

Nevertheless, in the absence of unexpected geopolitical troubles, it will be quite difficult to drive the barrel price to this range in the short term, even if the OPEC obtained support from fellow large exporting non-member countries such as Russia. After all, it must not be forgotten that in order to meet its goals, the OPEC needs to keep internal unity and cohesion when implementing agreed production cuts, which will not be an easy thing to do in these times of economic crisis, in which the urgent search of benefits prevails over compliance with reduced production quota meaning less export revenues in the short term.

The lack of discipline and consistency of some OPEC members in complying with new

agreed quota has been recently shown by the International Energy Agency (IEA) and other international organisations. To complete this short-term view of oil prices, it is useful to think about how the situation may develop in the medium term.

Within a few months, the consuming countries have gone from an alarm stage activated by an escalation in global demand and exaggerated high oil prices to a relaxation period in which we have seen the financial and economic crisis cause a global reduction in consumption and an unprecedented collapse of the barrel and overall energy prices. There is no doubt that this drop is beneficial for the so-called real economy of our countries in the short term as it controls inflation and the loss of purchasing power of consumers.

However, this is only one side to it. The other is that this situation is a time bomb in the medium term. The oil price decline of the last months is not the result of successful demand management nor of a technological quantum leap allowing an increase in offer, but of financial and economic turmoil. Once the storm settles, we might find that credit restrictions and a barrel price under marginal production costs cause the oil industry to postpone investments in necessary projects to adequately secure future supply, which may unleash a new spectacular price spiral.

The data of the IEA *2008 World Energy Outlook (WEO)* published in November 2008 are revealing. The IEA believes that due to bleak economic prospects, we will see a reduction or stagnation of demand in the next two to three years, which may result in relatively low crude prices, although markets will remain volatile. However, projections assume that the average barrel price of OECD imports will be at around \$100 in the 2008-2015 period, reaching a nominal \$200 in 2030 (ca. real \$120 as of 2007). These figures clearly correct those assumed in last year's *World Energy Outlook*, which suggested prices at \$57.30 in 2015 and \$62 in 2030 (all in real dollars as of 2006).

What factors led the IEA to double the prices forecasted in its 2007 report? The difficulties lie in the offer. The IEA does not see any problems regarding the availability of oil resources and reserves, at least in the 2030 horizon. Nevertheless, it fears possible refrainment from investments needed to cover the production increase. Over the 2007-2030 period, it is estimated that only in prospect and production, accumulated investment needed to safely cater for the global increase in oil and gas demand will amount to \$8.4 trillion (as of 2007), which means an average yearly investment flow of \$350 billion. Specifically in the oil industry, the IEA alerts that reaching the necessary production level for 2007-2030 requires to implement new extraction capacities of 64 million barrels a day, which amounts to six times the current capacity of Saudi Arabia or a new Kuwait every year. All this requires a yearly investment of \$274 billion.

The oil industry needs to address urgently the issue of decline experienced in oil fields in mature areas, many of which have already passed their production peak.

Apart from facing a significant increase of marginal costs related to the use of non-conventional resources and the development of projects in ultradeep waters and remote regions, the oil industry needs to address urgently the issue of decline experienced in oil fields in mature areas, many of which have already passed their production peak. This decline, if occurring in a natural way –i.e. without taking measures to curb it– has been globally assessed at a rough yearly 9% by the IEA. This rate has been reduced to 6.7% thanks to a considerable scientific and technological effort requiring large ongoing investments.

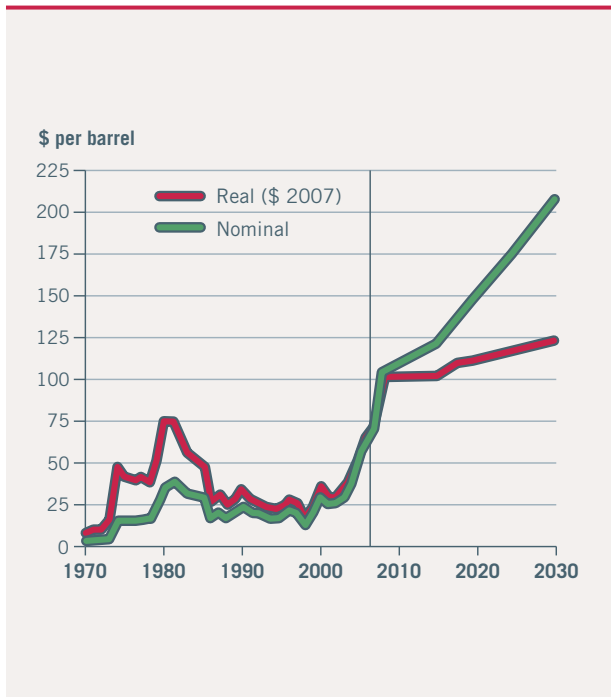
An important issue raised by the 2008 WEO is that, as a consequence of the price forecast,

consuming countries will see their oil bill raise significantly. Referring to that, the IEA points out that while global expenditure on this item increased from 1% of global GDP in 1998 to 4% in 2007, the forecast is a rough 5% for most of the 2007-2030 period. The only time the world spent so much on oil was in the early 1980s, when the expenditure rate was higher than 6%. The great beneficiaries of this new situation will doubtless be the OPEC countries, which will increase their benefit from oil exports from \$700 billion in 2006 to over \$2 trillion in 2030.

The 2008 WEO conclusions are so dramatic that the document could become a reference for consuming countries in ultimately fostering a «green New Deal» that helps them out of the present recession, besides cutting considerably their oil consumption, improving their energy safety and reducing their economies' exposure to oil price volatility.

It is not about starting a conflict with producing countries. Even if consuming countries were ultimately able to reduce their dependence on oil, this source will still represent an important part of their energy mix, especially in transport. However, if they were able to have oil progressively cease to be a strategic raw material and be just one in many instead, perhaps it would be possible to start a constructive dialogue between producers and consumers related to investment and a potential market reform and regulation, thus reaching beneficial agreements for both sides in the short, medium and long term.

Cooperation between producers and consumers should be based on an agreement allowing to reach maximum transparency in the crude market. If proven reserves, extraction flows, idle production capacity, internal consumption and exports of any exporting country as well as data related to demand, consumption and stock and strategic reserve levels in importing countries were precisely known on the spot, it would be relatively easy to keep the offer-demand

Graph 5. Average crude import price by IEA

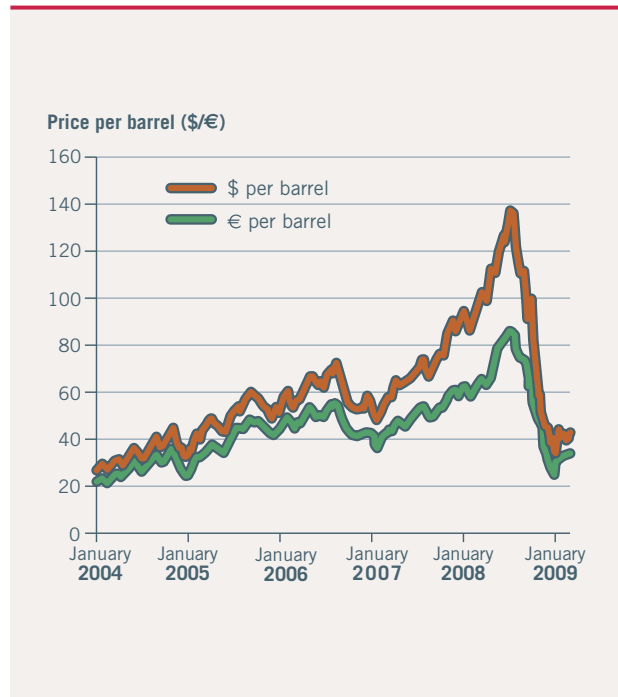
Source: IEA: World Energy Outlook, 2008

- ▲ The IEA expects a strong crude price increase in the 2007-2030 period.

balance permanently updated and detect possible speculative movements distorting the market and exacerbating volatility. Once they were detected, such movements could then be neutralised with adequate, strict regulations.

Nevertheless, despite some well-meant initiatives –such as the *Joint Oil Data Initiative* fostered by the OPEC, the IEA and four other large international organisations– transparency is, as of now, rather a desire than a reality. Of course, not all importing countries, especially OECD non-members, and foremost China, live up to their truth when disclosing required data. But the highest degree of opacity is found in exporting countries, where the oil industry is owned by the government or under strong public control.

These countries have always been reluctant to any sort of external and independent audit on

Graph 6. Blend crude price weighted mean

Source: IEA: World Energy Outlook, 2008

- ▲ The blend crude price also experienced a strong decrease in 2008.

key market data, such as the exact volume of their proven reserves, their extraction flows, natural decline of production in their oil fields and the amount and implementation pace of investments in prospect, production and infra-structures.

Besides, for this group of countries, most of which are gathered in a trust like the OPEC, the barrel price depends rather on the benefit forecast written down in their government budget than on international marginal production costs.

Cooperation between producers and consumers should be based on an agreement allowing to reach maximum transparency in the crude market.

It is probably only when consuming countries prove that oil is not a strategic raw material to their economy anymore that producers will be

readier for more transparency. And this is a *sine qua non* to do away with extreme volatility in the oil markets.

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