

Box 2

FINANCIAL ACTIVITY IN THE OIL MARKETS

Oil prices have experienced high volatility recently, reaching a peak of USD 147.5 in July 2008 before falling abruptly. Such sharp movements in oil prices naturally raise questions as to the reasons for such volatile developments. It is widely acknowledged that the physical oil market is very tight, given the buoyant demand from developing countries and the uncertainty surrounding supply prospects, which together have led to historically low spare capacity. However, financial activity in oil futures markets has also been mentioned as one possible determinant of the recent price developments. This box examines this issue and finds that, overall, there is scant evidence to suggest that financial activity has a strong and lasting impact on oil prices. At the same time, it points to the need for reliable data and, thus, increased transparency on the fundamental determinants underpinning the functioning of oil markets.

The oil futures market

In the oil futures market, standardised oil futures contracts are purchased and sold at an agreed price, for delivery on a specific date. One of the main characteristics of the market is that it separates the ownership of commodity price risk from the ownership of the physical commodity. Therefore, trading in futures enables those who produce/consume the physical commodities to hedge against unpredictable price changes. Accordingly, it serves as a way to transfer risk from the producers and holders of certain commodities to agents willing to accept this price risk. The futures market thus contributes to economic welfare, as it generates a more efficient allocation of the existing risks.

There are both commercial and non-commercial players in the oil futures market. Commercial players hedge against price fluctuations. Agents physically involved in the production and consumption of oil still represent the dominant share of positions in the futures market. Producers may want to sell futures (i.e. hold short positions) and tie down the price for the oil they plan to extract in the future. Users of oil (e.g. airlines) are usually on the opposite side (i.e. hold long positions).

Non-commercial players are not interested in any physical delivery of oil. Among these, speculators (active investors) exploit their supposedly better information by trading in the oil market and trying to make a profit by anticipating market movements in commodity prices. Therefore, speculators may hold either long or short positions, depending on their sentiment.

Index funds (long term-oriented, passive investors) have only emerged more recently and reflect the desire to add commodities to portfolios in view of their risk/return profile. For example, they add commodities to their portfolios in order to hedge against adverse risks from the oil-sensitive assets they hold. Therefore, these funds are “long-only” players; they buy oil futures and roll them over as their expiry dates approach in order to avoid the delivery of the commodity.

The role of index funds

Since index funds, by design, create additional demand for oil futures, it is sometimes argued that they push up oil prices. It is true that the size of index funds has surged since 2001, from USD 10 billion to more than USD 200 billion. However, part of this growth is due to index appreciation and only part of it is invested in oil; the remainder is allocated to other commodities. Put into perspective in terms of the physical oil market, it is estimated that the additional oil demand generated by inflows in index funds for the whole of 2007 corresponded to less than the global oil demand for one day.

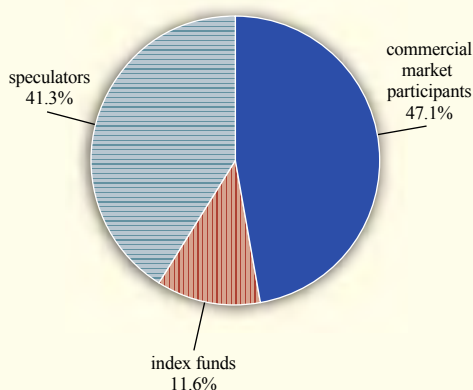
Furthermore, if portfolio shifts towards commodity markets were driving commodity prices, it could be expected that commodities which are not exchange-traded would be isolated from this trend. Instead, the prices of commodities which are not exchange-traded – such as cadmium or steel – have risen at least as strongly as those of exchange-traded commodities, suggesting a stronger role of supply and demand fundamentals.

The role of speculators

It is common to mechanistically associate speculation with a destabilising process. However, this argumentation is too simplistic. When speculators receive new information about factors that change their outlook for the oil price, they place their orders accordingly. Pricing in this new information helps to determine the new market price instantaneously. It is important to

Chart A Crude oil futures and options positions on the NYMEX

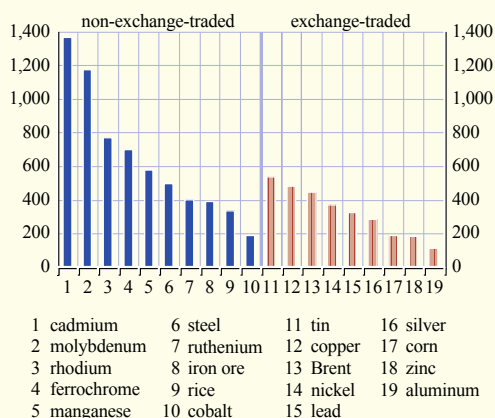
(as a percentage of total positions; May 2008)



Sources: US Commodity Futures Trading Commission and Goldman Sachs.

Chart B Price developments for exchange-traded and non-exchange-traded commodities

(in percentages; April 2008 vs January 2002)



Source: Bloomberg.

note, however, that both supply and demand in oil markets tend to respond very inelastically to changes in prices. Therefore, a relatively small change in the supply/demand balance can have very strong repercussions for prices.

In recent years speculators have assumed long positions by correctly anticipating tight supply/demand conditions leading to higher oil prices. In fact, expectations of stronger supply or weaker demand growth were repeatedly unrealised, which justified ex post speculators' assessment and, thus, higher oil prices. This, in turn, provided an early signal to producers and consumers to adapt their activities accordingly (e.g. to extract more oil or to reduce consumption).

Speculation cannot permanently drive the price away from its long-term equilibrium. When short-term oil demand is very inelastic to price changes, rising input prices only marginally affect refineries' profits since higher costs can be passed on to consumer prices. However, if prices move too far away from fundamentals, the demand response might be more intense and producers may find it increasingly difficult to sell the extracted oil as demand falls.

Therefore, while it is possible that speculative activity leads to greater oil price fluctuations in the short term, speculation may also eventually facilitate price determination and, thus, a smooth and efficient functioning of the market. It is crucial, however, that market participants can operate on the basis of reliable data. Lack of transparency concerning oil market fundamentals and, more specifically, regarding the prospects for supply in a situation of buoyant demand, as well as the level of oil inventories, generates significant market uncertainty. This, in turn, results in increased sensitivity of oil prices to any news or even rumours concerning the fundamentals in oil markets and their prospects. Therefore, it is important to foster transparency and encourage the compilation of appropriate supply, demand and, in particular, stock and inventory statistics.