Financial Trading: A boost to Energy Market Competition

Paul Dawson, director of commodities regulation at Barclays Capital, argues that greater competition, transparency and liquidity in EU physical energy market will attract even more participation from institutional investors and hedge funds.

Setting the Scene

This is a pivotal time for European electricity and gas markets as the European Commission, Governments and Regulators strive to ensure that energy supplies remain competitive and secure in the light of ever-tightening emissions constraints. On 10 January 2007 the Commission released details of a "third package" of legislation alongside the results of DG Competition's Sectoral Inquiry. The net result of these changes will be a major programme of "root-and-branch" reform to the EU's regulatory and policy framework and, potentially, significant changes in the underlying industry structure.

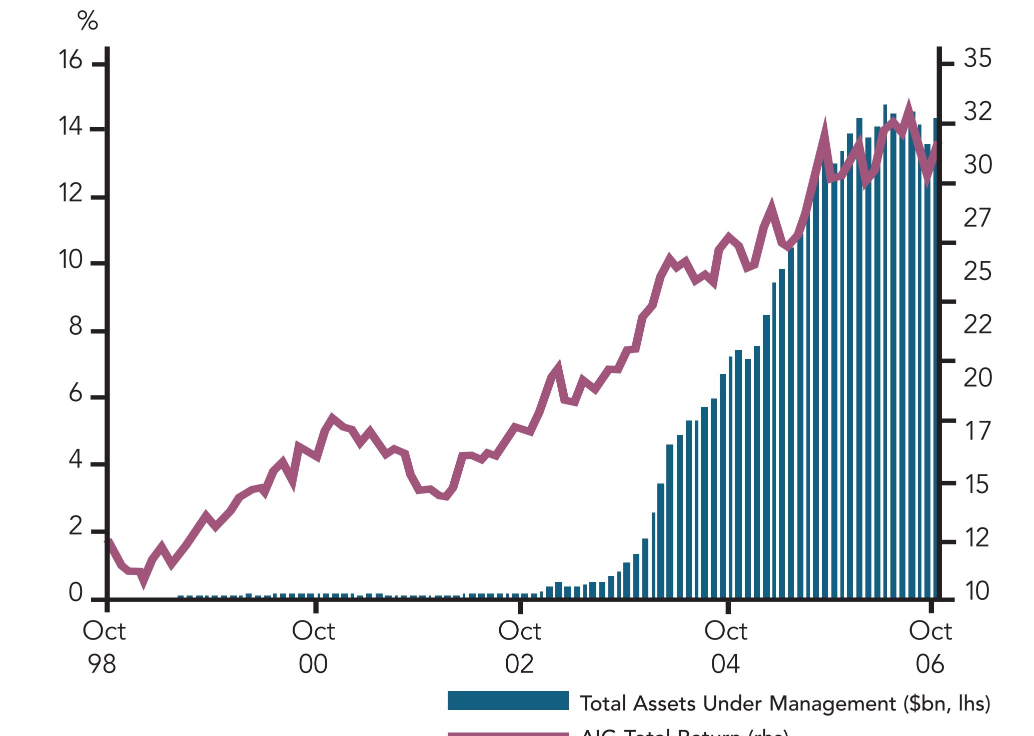
Alongside these reforms, recent years have seen massive growth in "financial" participation in the commodity markets as hedge funds, institutional investors and financial market participants have sought to diversify their portfolios and enhance their returns by focusing on commodities as an alternative "asset class" to the more traditional financial market instruments.

As we embark on fundamental reforms to the physical market, now is good time to consider what has driven increased financial participation in the commodity markets generally and, therefore, how best to harness the benefits of increased liquidity and efficient risk management that greater financial participation in the EU power, gas and emissions markets offers to bring.

The Global Trend in Commodities Investment

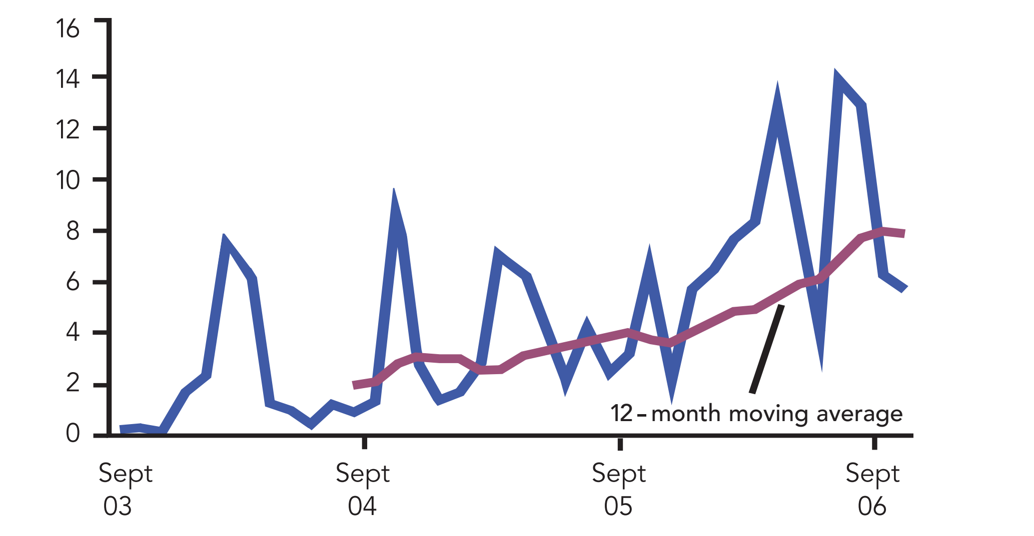
The last five years have seen billions of dollars flow into the commodity markets as investors seek to capitalise on the growth of commodity prices and diversify their portfolios away from more traditional assets. Pension funds are increasingly investing in the commodity sector, commodity-linked mutual funds have exploded in size and new commodity-linked products have shown significant growth **(as Charts 1 and 2 on the next page demonstrate).**

Chart 1: US Commodity Index Linked Mutual Funds – Total Assets Under Management



Source: Bloomberg

Chart 2: National Value of Commodity – Linked Medium Term Note Issuance ($mn)



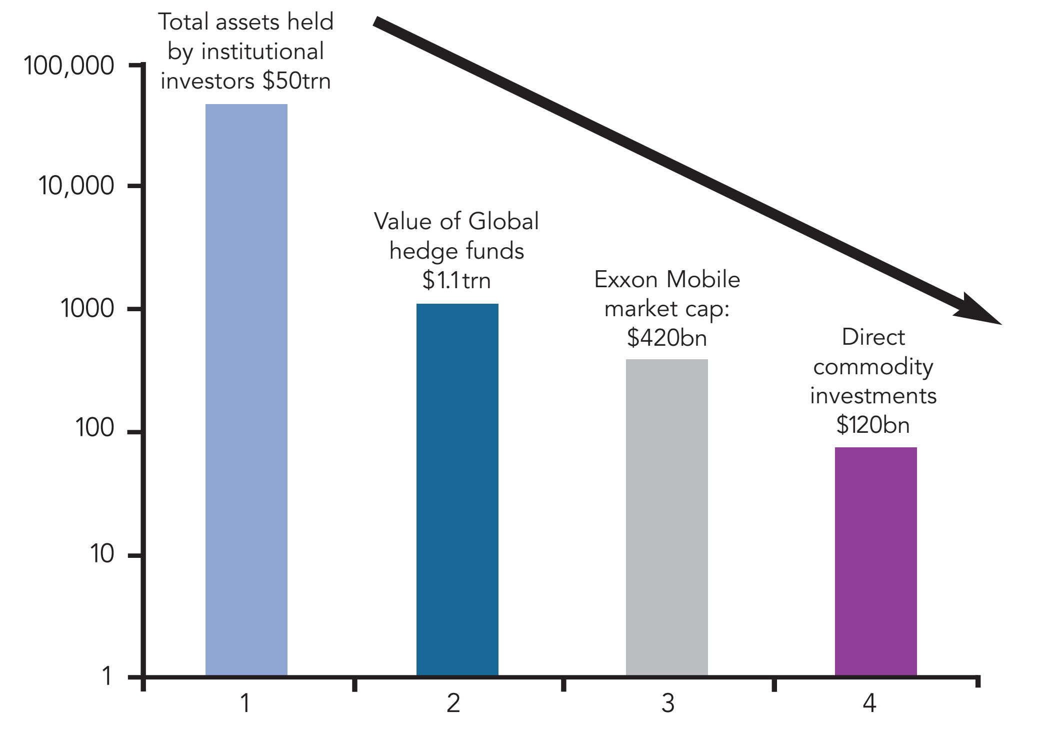
Source: MTN-I

In turn, investments in commodity-based funds and instruments has driven greater direct participation in the underlying commodity markets as the providers of these instruments and other intermediaries seek to manage the corresponding exposures. At the more active end of the spectrum, there has also been expanding interest from institutional investors and hedge funds in taking positions and direct risk exposure to individual commodity markets. Despite the impressive recent growth, the expansion looks set to continue. As **Chart 3** shows, against several other metrics, investors remain relatively underinvested in commodities. Commodity investments representing less than one quarter of one per cent of the total assets held by institutional investors, one-tenth of the amount invested in hedge funds and around a quarter of the market capitalisation of Exxon Mobil.

Financial Participation in the EU Power and Gas Markets

Although the global expansion of financial trading in commodities has extended to the EU gas, power and emissions markets – with billions of Euros now at risk or invested in these markets – in relative terms they have been slow to take off. There are also significant differences in the relative degree of financial trading between these markets. For example, the emissions market has been particularly successful in attracting financial participation given the ability to trade a relatively simple product across the entire EU with few, if any, delivery complications and with the option of trading on established futures exchanges. These fundamentals – coupled with the interest generated by the market's potential for huge global expansion and the opportunities presented by investments in emissions reduction ▶

Chart 3: Relative Importance of Commodity Investement



Source: Barcap Estimates

credits, has drawn a diverse range of participants and investors into the sector.

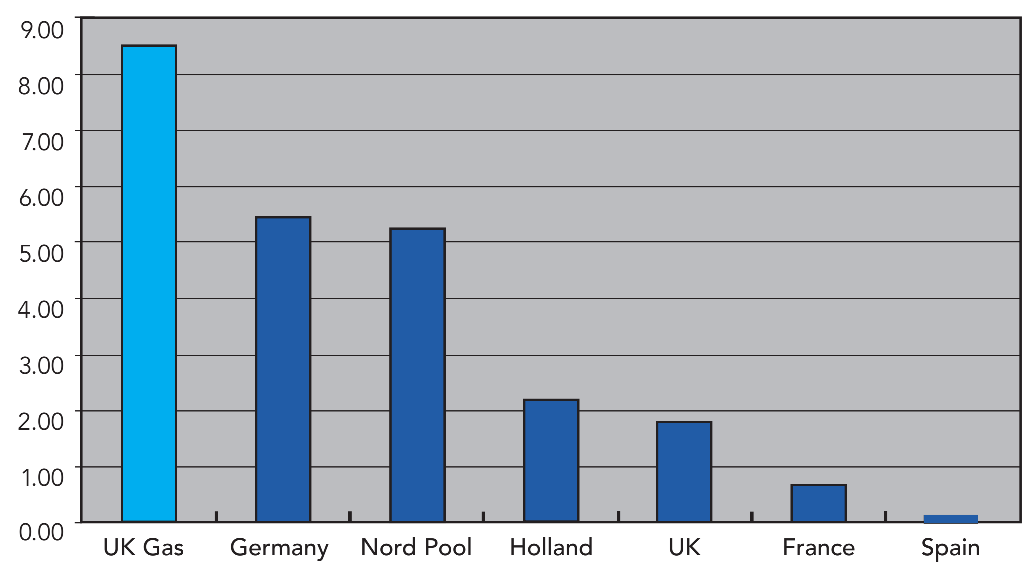
In comparison, interest in the energy sector has been more muted generally and interest has focused on German power, UK gas, Nord Pool and, to some extent UK power, with relatively little participation in other markets. To date, European power, gas and emissions markets are also yet to feature in the main global commodity indices that form the basis for much of the institutional investment in the commodities sector. The reasons for this relative lack of penetration for financial capital in the European energy markets – and the relative differences between these markets – are relatively unsurprising.

- **Lack of competition and maturity:** Most EU power and gas markets (outside of Nord Pool and the UK) are in their relative infancy and sufficiently competitive and liquid physical markets are yet to develop as a basis for significant financial trading.

- **Scale and liquidity:** in contrast to global metal, oil and agricultural markets, the lack of effective market integration and ineffective cross-border arrangements mean that EU power markets remain largely national in scope, which limits their scale, liquidity and the potential interest to financial participants. As **Chart 4 below** demonstrates, the relative liquidity of the underlying markets also goes a long way to explaining the relative penetration of financial trading into EU power and gas markets.

- **Reliable benchmark price:** financial participants require confidence in an index that is universally accepted, reliable and not subject to manipulation. Power exchanges in themselves are neither necessary

Chart 4: Ratio of Traded Baseload Volumes to Load (July 05 – July 06)



Source: Barcap Estimates

nor sufficient to provide such a benchmark. The UK power and gas markets attract financial participation despite the absence of an auction price and although most other European power markets have transparent power exchange prices, concerns about residual local market power undermines confidence in the derivation of prices on many exchanges. Outside of the UK, the EU gas market also has insufficient competition, transparency or liquidity to derive any meaningful price benchmark for financial trading.

- **Transparency.** Most other commodity markets have significant transparency over the sources of production, the state of inventories/storage, consumption patterns etc. By contrast the EU power and gas markets are typically models of opacity and obfuscation (outside of the UK, Nord Pool and Spain) even though the level of detailed information required to understand the market fundamentals is even greater than in other markets (largely due to the externalities associated with network delivery and the non-storability of the product).

While exploring these drivers can help to explain the limited development of financial trading in EU energy markets to date, it also holds the key to accessing additional financial liquidity in the future. Increasing the scope for competition, the number of industry competitors, greater transparency over the supply and demand fundamentals and greater integration between markets will all be required to generate sufficient "mass" and confidence in traded prices as a reference for financial trading.

A Good or a Bad thing for the Market?

So far so good: not only is there huge potential for the EU power and gas markets to access the growing financial funds flowing into the commodity markets generally, but the Commission and EU energy regulators are already on track to improve competition, integration, transparency and wholesale market liquidity which will provide the base for greater financial participation. However, the growth in global commodity investment has also generated concern that financial trading and/or speculation has driven commodity prices to unduly high levels.

It is difficult to substantiate the claims that greater financial involvement has had a negative effect on commodity markets and that growing participation in EU markets would be unwelcome. While speculative interest can – and undoubtedly does – lead to transient movements in forward prices, financial trading is ultimately a zero-sum game. Every seller must find someone willing to purchase at the prevailing price and the "net" market sentiment is unlikely to deviate from the fundamentals for long. Moreover, the ultimate winners and losers are determined by spot settlement prices that reflect the underlying **physical** supply and demand (especially in power and gas markets where storage is relatively scarce or non-existent).

This expectation is also borne out in practice. For example, our physical model of the oil market is able to explain 86 percent of oil price movements since 2004 (an incredibly high proportion from a modelling perspective). Moreover, it should be remembered that, although significant, fund investments in commodity indices remain a tiny proportion of the market (less than 1% in nearly all commodity markets). There has also been no correlation between returns and the relative significance of index trading (returns have been flat in agriculture and livestock where indices play a relative large role compared with high returns in the metals markets where index investments account for less than one-fifth of one per cent of the traded market volumes). The lesson from other commodity markets therefore supports the expectation that while financial trading offers significant benefits in terms of additional liquidity, it is unlikely to have any significant negative impacts on the overall efficiency of the wholesale power and gas markets.

Conclusion

As the EU power and gas sectors embark on a period of fundamental structural and regulatory reform, commodity markets are undergoing a fundamental transformation wrought by the greater financial participation from institutional investors, hedge funds and intermediaries. Although the drivers and focus of these transformations differ, they are inherently complementary: greater competition, transparency and liquidity in the EU physical energy markets will facilitate greater financial participation, which in turn will reduce entry barriers and promote further competition in the physical market. While financial trading can appear remote and unconnected from the technicalities of the power and gas markets, the truth is straightforward: if we build it, they will come.