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POLICY BRIEF

DON'T BLAME THE PHYSICAL MARKETS:

Financialization is the root cause of oil and commodity price volatility

The sharp price movements of many primary commodities, including oil, have fuelled intense debate about the causes of the price hikes and possible remedies. Growing demand from large developing economies and frequent supply shocks, such as adverse weather and export bans, are generally accepted as more tangible factors that explain volatility, rather than the hundreds of billions of dollars of bets placed on expectations of temporarily rising prices. Despite a growing body of evidence on the destabilizing influences emanating from financial markets, the "real economy" explanations still dominate the debate. It is not commonly recognized that demand from financial investors in the commodity markets has become overwhelming during the last decade. Of course, supply and demand shocks can still move commodity prices time and again. But with the volumes of exchange-traded derivatives on commodity markets now being 20 to 30 times larger than physical production, the influence of financial markets has systematically transformed these real markets into financial markets. This calls for strong and prompt policy and regulatory responses in the financial markets, rather than in the physical markets.

Key points

- Commodity markets increasingly integrated with financial markets.
- Financial investors dominate price discovery of commodity derivatives.
- Financialized markets not always sending correct signals on fundamentals.
- Global policy response is urgent to prevent recurrent price instability.

Commodity prices remained high and volatile in 2011 and through the first half of 2012. In the case of crude oil, for instance, the average price of UK Brent (light), Dubai (medium) and West Texas Intermediate (WTI) in July 2012 was 65 per cent higher than the averages reached during the commodity price boom of 2003–2008.[1] The price of oil has fluctuated significantly, rebounding at the beginning of this year and dropping sharply in the second quarter. By the end of August 2012, oil prices had regained what had been lost during the second quarter, notwithstanding faltering growth prospects for the global economy.

Price volatility has long been a major feature of commodity markets, given the tightness in many global commodity markets and the inelasticity of demand. While commodity-specific shocks have played a key role in the past, especially on the supply side and in the oil market, this factor lacks persuasive power today. When political shocks occur, the biggest oil producers undertake remarkable efforts to stabilize prices and to compensate for falling supply by stepping up production in other areas. Rapidly, but steadily growing demand for a range of commodities, especially in emerging economies, does not explain the huge swings recorded in many of these markets from quarter to quarter. Moreover, many commodity prices across all major categories, such as for metals, agriculture and energy, are clearly moving today in tandem, and this trend excludes explanations based on shocks in single markets. Hence, questioning the very functioning of contemporary commodity markets is inescapable.

Financial investors lead the herd: "Keep them doggies rolling"[2]

Undeniably, a major new element over the past few years is the greater presence of financial

[1] *Source: UNCTADstat.*
[2] *http://www.youtube.com/watch?v=3fh1dnspEHw.*

investors in all these markets. At the beginning of the new century, investment in commodities (or their derivatives) became one part of a larger investor portfolio allocation. This resulted in a significant increase of commodity assets under such management, from less than $10 billion around the end of the last century to a record high of $450 billion in April 2011 (Institute of International Finance, 2011). Consequently, the volumes of exchange-traded derivatives on commodity markets are now 20 to 30 times greater than physical production (Silvennoinen and Thorp, 2010). Similarly, financial investors, who accounted for less than 25 per cent of all market participants in the 1990s, now represent more than 85 per cent; in some extreme cases, they represent all commodity futures market participants (Masters, 2008).

These investors treat commodities as an asset class, which means that they are betting on a certain price trend during the period they are invested in commodity assets. They do not trade systematically on the basis of fundamental supply and demand relationships in single markets, even if shocks in those markets may influence their behaviour temporarily. In general, however, their decisions to buy and sell are rather uniform (herding) and are driven by the same kind of information that is available for other financial markets. As they hold by far the largest positions in the commodity markets, it is undeniable that they exert considerable influence on the price movements of those markets. Hence, the prices on financialized commodity markets should follow the prices on other purely financial markets.

UNCTAD reported a strong correlation of the prices in several commodity markets with prices in other speculative financial markets as early as 2009 (UNCTAD, 2009 and 2011a). If anything, the correlation has become stronger since then. In a forthcoming UNCTAD Discussion Paper, the co-movements between returns on several commodity markets and on the United States stock market over the 1997–2011 period are analysed using tick data.[3] (Bicchetti and Maystre, 2012).

Significant positive co-movements of the returns of the futures contracts of oil or a broad range of other soft commodities with futures contracts on the United States stock market at high frequencies appear up to one-second intervals. Clearly, these very short-term commodity price movements cannot be justified by the changes in supply and demand in specific markets. Fundamentals for the United States stock market and commodities markets differ greatly, and different fundamentals cannot induce similar price movements simultaneously, continuously and consistently for the past few years across all the markets investigated. Indeed, given the large selection of commodities considered, different behaviours would have been expected due to the seasonality, industrial usage and specific physical commodity market dynamics. However these differences have not been observed.

While fundamentals cannot explain these price co-movements, the stock market and commodities do share one common, critical feature: the dominant position of financial investors. In the current period of great economic uncertainty, news about the evolution of the world economy and political announcements has a huge impact on the activities of herds of financial investors whose position-taking in commodity derivatives markets follows market sentiments or expectations, and much less so the fundamentals.

An enlightening example is to be found in the course of this year. After briefly rebounding in early 2012, commodity investments turned negative in the second quarter. According to Barclays Capital (2012), investors withdrew $8.2 billion from commodity investments in May 2012 in what was described as “something approaching a stampede ... evoking memories of 2008”. But more than any rumours of war preparation here or better-than-expected macroeconomic news there, the evolution of oil prices has coincided with that of the European stock markets and the evolution of political decisions and rumours in the eurozone.

Charts 1 and 2 illustrate the price evolution of the Euro Stoxx 600, WTI crude oil price – a United States benchmark – and the Standard & Poor’s Goldman Sachs Commodity Index (SPGSCI), which is a broad commodity index composed mostly of futures traded in the United States for the first eight months of 2002 and 2012, respectively.

[3] That is, market data which show the price and volume of every print.

Chart 1

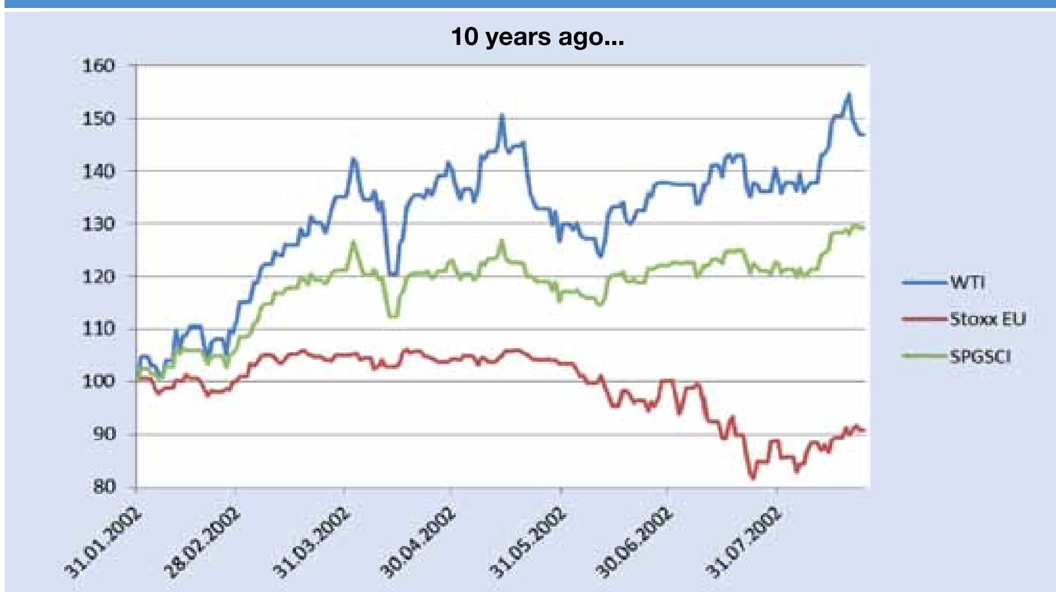

Chart 2

Sources: UNCTAD secretariat calculations based on the Bloomberg database.

Comparing the evolution of these prices during 2012 with those of the previous decade, the financialization of commodity markets reveals a dramatic change. Despite the similarities in 2002 and 2012 in terms of real shocks – insecurity in West Asia, the aftermath of a stock market crash and a difficult cereals harvest – the evolution of the three indices could not be more different. Ten years ago each market had its own dynamics, but in 2012 they are moving in nearly perfect tandem.

More than anything else, the SPGSCI and WTI crude oil prices follow closely the unfolding events in the eurozone that shape market sentiments or expectations. This illustration is all the more striking because the WTI crude oil futures remain confined to the Mid-West of the United States. Nevertheless, eurozone events and market sentiment determine commodity prices, regardless of trade logistics issues, war, drought and other ongoing supply shocks.

Yet another illustration of the influence of financial investors on commodity markets is found in the rally in the oil markets following the bank recapitalization agreement reached in the eurozone in late June 2012. At that time, the price of Brent oil rose 7 per cent in one day and that of WTI, by 9 per cent – an increase, clearly visible on chart 2, that was unrelated to fundamental supply and demand changes.

Time to recognize the pervasive impact of financialization

Due to the increased participation of financial players in those markets, the nature of information that drives commodity price formation has changed. Contrary to the assumptions of the efficient market hypothesis, the majority of market participants do not base their trading decisions purely and independently on the fundamentals of supply and demand; they also consider aspects related to other markets or to portfolio diversification to be important. This introduces spurious price signals into the market.

Moreover, in a situation of widespread herding in financial markets, the assumption of an atomistic market, in which participants trade individually and independently of each other on the basis of their own interpretation of fundamentals, no longer holds. The price discovery market mechanism is seriously distorted. Prices can move far from levels justified by the fundamentals for extended periods.

Because of these distortions, commodity prices in financialized markets do not provide correct signals about the relative scarcity of commodities. This impairs the allocation of resources and has negative effects on the real economy. To restore the proper functioning of commodity markets, swift political action is required on a global scale.

Policy recommendations

- Increasing transparency in physical markets. Providing better and more timely data on fundamentals.
- Improving transparency in commodity futures exchanges and over-the-counter markets. Providing more data on market participants and position-taking, at least to regulators.
- Tightening regulation of financial investors. This could include the suppression of certain vehicles for investing in commodities, the imposition of position limits and a ban on proprietary trading by financial institutions that are involved in hedging the transactions of their clients. Internationally coordinated measures.
- Introducing a transactions tax system. This could generally slow down financial market activities, in particular high-frequency trading.
- Establishing schemes to deal with speculative bubbles. Market surveillance authorities could be mandated to intervene directly in exchange trading on an occasional basis by buying or selling derivatives contracts with a view to averting price collapses or deflating price bubbles. Such intervention could be considered a measure of last resort to address the occurrence of speculative bubbles if reforms aimed at achieving greater market transparency and tighter market regulation are either not in place or prove ineffective.

For further details, see UNCTAD (2011b and 2012).

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