

# **Policy Brief**

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### **Commodities:** a new era

By Yves Jégourel

#### Summary

The end of supply chain is the natural corollary of the sustained price fall of virtually all commodities observed over the past many months. If it appears premature to state exactly what is the impact of this deconsolidation in the commodities value chain, it is believed that the strategic role of physical trading is strengthening. Under such circumstances, the industrial strategies of developing countries and commodity exporters may have to evolve and, in priority, foster optimizing international distribution networks and managing price risk.

At what level will the oil price be in a month, six months, or one year? This question, as fundamental and haunting as it may be, wrongly dominates the treatment that the media and -probably- the academic circles now reserve for commodities on an economic basis: 'wrongly' because this predictive exercise is clearly very randomized, if not impossible. Also 'wrongly' because the problem exists just as much in terms of price level, as its volatility, which necessarily implies a technical treatment of this issue. Lastly, 'wrongly,' as this reduces de facto the focus on other commodities related topics, certainly more complex and, therefore they are considered "less sellable," but equally fundamental. This (over) exposure of oil dynamics and to a lesser extent gas is, of course, understandable since fossil fuel prices are one of the cursors in global economic growth, but also because it is not a question about the economy, far from it. The oil price levels are obviously the -intermittent- reflection of political and geopolitical interactions between producing countries. OPEC members and non-OPEC members. and the rest of the world. The recent Iranian nuclear agreement and the subsequent return of the country's crude oil on international markets, as well as the Libyan oil issue are two recent examples attesting to this fact. To discuss oil is to ultimately question the state of the world.

However, other commodity market developments need to be mentioned. Among them, the deep organizational restructuring of the commodities sectors, which now seems to be emerging in the wake of falling prices, could represent a paradigm shift in which it would perhaps be wrong to underestimate the economic, political and therefore social consequences.

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Specifically, this concerns the consideration of the impact of a sustainable drop in commodity prices on the economic and financial strategies of companies in the sector, both upstream on an oil or mining group, and downstream on a user of these materials. The combination of rising prices – which was considered by some as so sustainable that the reversal of the so-called supercycle did not have to be anticipated - and the abundance of monetary liquidity in international markets had led most to engage in vertical integration strategies aiming for users to secure their supplies and for producers to capture a larger share of intermediation margins and the existing value added in the supply chain. This strategy was all the more relevant as it created market barriers for outside companies and thus limited the potential competition. This is however not the only reason.

#### « Beyond previous arguments, economic theory indeed provides an additional explanation to the vertical integration policy.»

According to the "transaction costs theory"<sup>1</sup> developed by the American economist and Nobel laureate Oliver Williamson<sup>2</sup>, they are not justified solely by strategic focus where technological complementarities can occur between firms in the same industry, but also by the existence of market failures in the narrow sense, that is to say, involving transaction costs (Williamson, 1971, p. 114). The Nobel Prize winner identifies several causes: uncertainty, bounded rationality and opportunism of the agents, and the specificity of certain assets necessary for this transaction, whether tangible or intangible, human or financial. The existence of risk and the inability of the buyers and sellers to know all the variables that can affect the transaction terms impose ex ante costs of collecting and processing information, and of drafting commercial contracts. Whatever their level of precision, they remain incomplete since all the "states of nature" cannot be fully anticipated. Ex post, renegotiation or non-compliance are both not without cost. The latter, linked in particular to the opportunism of one of the contracting parties, in fact, legitimizes recourse to arbitral or judicial proceedings that can be particularly costly. The concept of asset specificity makes reference to the existence of interdependence among stakeholders to exchange, inseparable from the business relationship. In case of discrepancy, the latter will thus have an even greater incentive to renegotiate their contracts since any breach would be severely damaging to both parties. There are many possible reasons that a company chooses to integrate vertically and thus replace a market transaction with an intra-company transaction, less costly in terms of the previously discussed elements.

The approach by transaction costs is not specific to the commodity sector, but it perfectly appropriate. Several examples can help to illustrate this. The extent of productive investments made when price rises impose, especially for producers of non-renewable commodities, the reduction of uncertainties that threaten them. In this context, the drafting of commercial contracts "for protection," however well documented, often proves to be a strategy that is time consuming and expensive, as well as largely imperfect. A fixed-price long-term contract in theory certainly allows a user to secure their supplies and a producer to ensure the flow of quantities produced based on a particular level of costs / income. In theory, although not always. The high volatility of commodity prices can indeed, when they are below (above) the contract price, push the buyer (seller) not to respect its commitments in order to take advantage of the more favorable market conditions. Vertical integration helps to avoid this opportunistic behavior. Similarly, the argument of asset specificity highlights, for example, the geographical, economic and financial proximity that may exist between a power plant and a primary aluminum production unit, both being inherently linked industrially.

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The end of the bullish momentum naturally changes the game and thus integration strategies fall out of favor. Companies that are indebted are obliged to reduce their balance sheets, which implies a strategy to divest less profitable assets allowing them to focus on their "core business," while the need for securing supplies for consuming businesses diminishes. BHP Billiton, engaged in a large-scale ecological catastrophe after the rupture of a tailings dam in Brazil, thus housed its least profitable mines in a new entity, South 32. This desire for deleveraging is even more significant given that some investors, guided by sluggish Chinese demand, abandon the commodities sector. In late September, a wave of panic in the London and Hong Kong stock exchanges affected the shares of the company Glencore, formerly a trader that became an integrated mining group with the acquisition of Xstrata, when rumors about the group's insolvency surfaced. The closure of the Mopani mine in Zambia, the sale of a ferronickel plant in the Dominican Republic or the transfer of a portion of the silver production activity of the Antamina mine in Peru are among the recent actions by the Swiss group to reduce its 10 billion dollar debt by the end of 2016. Further downstream, the US giant Alcoa, a big bauxite consumer, in order to supply its primary aluminum production activity, has chosen to reduce its alumina production capacity and to split into two listed entities to better cope with the tough and recent competition from Chinese producers in export markets and thus meet their shareholder expectations.

<sup>1.</sup> Ronald Coase originally introduced the concept of transaction costs in 1937.

<sup>2.</sup> Oliver Williamson won the Nobel Prize in Economics in 2009.

Should we make these examples into a truth to be imposed on the entire world of commodities? Probably not. The economic ties between firms at different stages of a sector are even more complex as they are structured differently from one commodity to another. It would actually make little sense to equate agricultural sectors to those of nonrenewable resources, the global aluminum and iron ore industries to those of energy and, in the past, oil to coal. Counter-examples exist elsewhere such as cocoa. This sector is highly integrated and price increases, unusual in the current context, do indeed occur (Chart 1). Last October, the Singapore trading group Olam completed the purchase of Archer Daniels Midlands' (ADM) cocoa branch to increase its bean processing capacity and better penetrate consumption areas, while in 2013 the Swiss company Barry Callebaut purchased Petra foods. Combined, Cargill, Barry Callebaut and Olam now represent 60% of global cocoa processing.

Chart 1: Change in cocoa prices (USD / kg)



Source: The World Bank (the pink sheet)

If caution is therefore required to depict what the general appearance of commodities sectors would look like in the coming years, a historical and economic analysis nevertheless makes it possible to outline. It indeed appears reasonable to think that the sustainable decline in commodities prices should lead to reducing the magnitude of behavior guided by political and strategic considerations in favor of a (more) simple price optimization strategy where the implementation of competitive mechanisms prevail. Since the overall market offer is in surplus, buyers can now seek supplies at

the best prices, while producers, constrained financially, try to compensate for falling prices by increasing their sales volume and thus their sales outlets. In other words, this should result in strengthening the position of the international «independent» trading companies of producers and users.

#### « The issue of price volatility referred to earlier, and that of the market structure (and its instability) are also essential elements in the short-term dynamics of commodity prices.»

In fact, the resulting risk management is precisely at the heart of the traders' activity. This does not mean that these companies will experience a prosperous future even if commodities' prices are low. Reduced margins and the prospect of stricter rules for them are two clear signs that they do not escape the downturn of the sector. Additionally, it is important to not assert that a unique (or: single?) development pattern of an international trading activity, to the detriment of integrated sectors, is about to establish itself as long as the reality may be different from one company trading to another, some of which are also incorporated upstream or downstream (Jégourel, 2015a). If this trend continues, however, industrial strategies led by many developing countries that aim to increase the share of commodities processed locally in domestic exports<sup>3</sup> may have to be amended in favor of a consideration of optimizing commercial distribution channels and price management, and therefore on the development of «physical trading» structures. It is understood that the benefits that could be achieved in terms of economic and social development can in no way be compared with those that a successful industrialization policy allows. It is also understood that the development of a trading business requires a significant number of prerequisites, foremost among them the existence of a strong banking sector with the opportunity to promote access to international financial markets for commodities. It remains nevertheless true that, in a context of a bearish market and highly volatile prices, this strategy needs to be considered.

<sup>3.</sup> And thus mitigate the well-known "resource curse."

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#### About the author, Yves Jégourel

Dr Yves Jégourel is associate professor in finance at the Universi-ty of Bordeaux (France), affiliate professor at Toulouse Business School and a Senior Fellow at OCP Policy Center. Y. Jégourel conducts research in commodity economics and financial risk management. His most recent research examines the link between the volatility of the futures market, exchange rate uncertainty and the export of cereals. He is also the head of a master program fo-cused on banking, finance and international trading both at the University of Bordeaux and at Vietnam National University (Ha-noi, Vietnam).

Dr. Jégourel has authored several books in the field of finance, including a work studying financial derivatives. He holds a BA from Middlesex University and a MsC and a PhD from the Uni-versity of Bordeaux, and is a former auditor with the Institute of Higher National Defence Studies (IHEDN).

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OCP Policy Center Ryad Business Center – South, 4th Floor – Mahaj Erryad - Rabat, Morocco Website: www.ocppc.ma Email : contact@ocppc.ma Phone : +212 5 37 27 08 60 / Fax : +212 5 37 71 31 54