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Commodities and Downstream Integration Policies: the Challenges of a Complex Strategy

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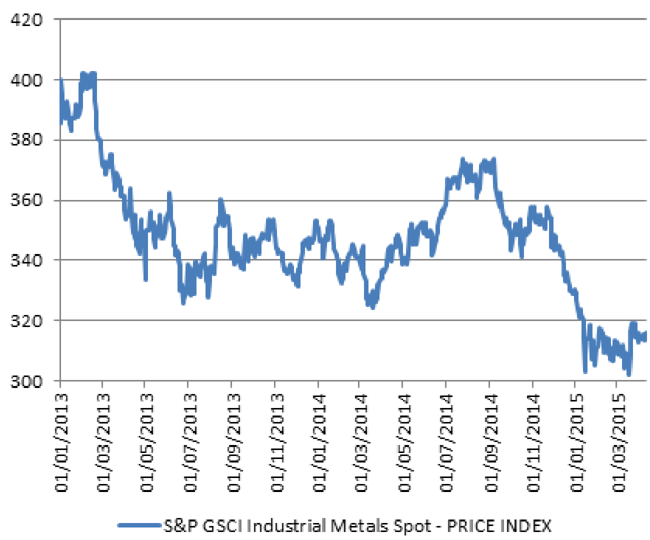
Summary

For several years, many commodities producing countries have been engaged in a downstream industrial integration strategy in order to obtain a larger share of value added resulting from the processing of their resources. Although relevant, this ambitious policy is not always easy to implement and many factors need to be controlled so that it can succeed. While technological, industrial and logistics are obviously critical, financial issues, including risk management, should not be underestimated.

Oil markets are not the only ones that have experienced a particularly difficult year in 2014: base metal markets also declined sharply due to production overcapacity and disappointing global growth. Representative of this trend, the GSCI index for industrial metals declined by nearly 6% between January 1, 2014 and January 1, 2015 (Figure 1). Disparities naturally exist: iron ore (CFR China) is one of the metals that has most suffered, losing nearly half of its value over this period, while during the same time period the aluminum spot price on the London Metal Exchange (LME) progressed 4%and nickel9%. The price level is however not everything, and it is clear that volatility has accompanied this dynamic. For example during the first half of 2014nickel benefited from a particularly strong bullish momentum and experienced two runs. While the spot price for this metal was quoted at USD 13,496 / MT on January 6, it reached a maximum of USD 20,955 on May 13. From January 6 to 15th alone, its price rose by over 7%, while a similar episode occurred in early September with an increase of 6% over several days. At the origin of these price changes was the perception of a shortage risk fueled by Indonesia's and the Philippines' desire, the first and third world producers respectively, to no longer export raw ore in favor of local processing, in particular ferronickel. In January 2014, Indonesia ceased exporting, while at the end of August 2014, the financial markets considered the idea that the Philippines could follow a similar path. Catalyzed by the trend of rising commodity prices prior to 2013, the will to integrate downstream extraction and production activities indicates a revival of mining policies in developing and emerging countries.

Figure 1: Evolution of the industrial metal prices (2013-)



Source: Data stream

This strategy is legitimate because it serves several interrelated goals: the first aims to obtain a fraction of the value from ore processing and increase national income. The second, which is linked, aims to strengthen the economic structure of these countries. Economic history shows the long-term perspective: the production or extraction of commodities in abundance is not necessarily a blessing. Often listed on organized financial markets, such as the LME for metals, or the Chicago Mercantile Exchange (CME) for agricultural products, commodities experiencing sizable price-volatility can exacerbate the fiscal instability of a poorly diversified nation from an economic point of view. In addition, with the so-called Dutch disease, it is understood that when a significant share of a country's GDP depends on commodities production, without protective measures, this production can promote capital inflows and trigger a lasting appreciation of the real exchange rate. The price competitiveness of a nation can deteriorate and lead to the disappearance of traditional industrial sectors, which is an obvious sign of economic weakness. The downstream integration of a sector, which aims to complement extraction with a primary or even a secondary processing activity, rather enables the emergence of an entire ecosystem, capable of diversifying the economy that benefits. It also allows the emergence of positive externalities related to improving a country's knowledge base when its macroeconomic benefits are well established. Economic growth does not only result from increased production factors (capital, labor, raw materials) or miraculous technical progress: it is endogenous, self-powered by the importance of human and technological capital, as has been highlighted in particular by the American economists Robert Lucas and Paul Romer.

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This downstream integration strategy is not specific to the nickel industry and a common trend is observed today in many countries to reduce the relative share of mining in favor of primary and secondary processing. In Morocco, OCP Group, the world's largest exporter of phosphate rock, has committed to a comprehensive development program for the production and export of fertilizers. In the same way, through its national industrialization strategy, Gabon has the objective of processing 35% of manganese ore produced by 2016, while in Botswana, the diamond industry will be developed through an overhaul of the Mining Code. Senegal has also sought to revise its mining code dating from 2003, to make it more competitive and better take into account the interests of different stakeholders. The implementation of a new mining strategy may also not be the act of a single country. The West African Economic and Monetary Union (WAEMU) mining policy implemented in 2000 aims to create a regulatory framework conducive to international investment and make the mining policy an economic and social development tool. The "Africa Mining Vision" initiative implemented in 2008 under the aegis of the United Nations Economic Commission for Africa is a similar approach. Bilateral trade strategies can also be developed to exploit the comparative advantages of each nation, like the recent partnership on gas and phosphates established between Morocco and Gabon.

A question naturally remains unanswered: from an industrial and financial point of view, what is the best strategy to achieve this downstream integration? Without an unequivocal answer, it is possible to identify a number of variables influencing the probability of success of this industrial evolution. Beyond the general arguments mentioned above, it is appropriate, first, to ensure that there is an economic incentive to do so which according to Ronald Coase and Oliver Williamson, is to determine if an integrated company's internal transaction cost is less than the cost of a transaction carried out by market mechanisms. From a more operational point of view, this means assessing whether the frequency and cost of renegotiating business contracts are high. The economic relevance of such an operation can also be perceived in terms of strengthening market power. This means determining whether the acquisition of an industrial position downstream is likely to strengthen the power of the company or the economy in question.[1] From this point of view, the problem of the availability and the cost of inputs, either mineral, energy or water resources, is central.

[1] Seethe excellent article by Tanguy (2013) cited in the bibliography.

The geographical proximity of consumer markets is also important, as is the ability to master the resulting logistical constraints. The acquisition of technological know-how and the implementation of a financial strategy to fund a capital-intensive development are also necessary conditions that are by themselves insufficient. It must indeed be recognized that within the commodities sectors, more than in any other sector, the investment cycle is not one of production, and the high volatility of the commodities prices can permanently impair the profitability of the investment project. The fall in industrial metals prices observed for many months is a reminder: nickel was "only" worth USD 12,581 / MT on April 10, 2015, a price collapse of nearly 66% since its peak in May 2014. Mastering the investment timing is essential, as is the ability to obtain funding, in particular international, which is largely dependent on the legal and regulatory investment framework, as well as the evolution of the company’s free cash-flows. From this point of view, receptiveness towards financing methods can, like securitization, reduce the cost of debt and must be taken into account.[2]

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Secondly it is important to fully understand the complexity of competitive interactions that occurs at the investment strategy level in terms of production capacity and storage and not directly at the production level. The economic history of commodities indeed provides recent examples when an insufficient consideration of this dimension, while prices rose, led to a production overcapacity that continued for many years.

In the short-term, downstream industrial integration changes the nature of the financial risks to which the company is subjected because it is now part of a processing strategy and not of a production strategy in the strict sense. The risk management strategy must therefore ultimately be reformed: from an approach of price fixing towards an issue of locking in the margin between the input prices and the price of the processed product. However, as technological and industrial aspects of this change are fully considered, those related to the management of market risks (commodities, currencies, interest rates) are sometimes not. It therefore seems important to develop in-house expertise in this area and, perhaps, to promote the emergence of a company culture whereby financial markets are tools, among others, for funding and hedging. Integration within a group, an international trading activity -for which the control of financial risks is fundamental- may be a way to achieve it.

[2] See OCP Policy Center Policy Brief No. 15/13, "The securitization technique: a relevant tool for financing the mining sector?"

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