DIAWONDS

**Potash Industry Sector.**

**The potash industry* is highly overvalued (at close on the 12th of September 2013).**

The main end-use for potash in combination with nitrogen and phosphate is as a fertilizer. It enhances crop growth, yield and quality. MOP (potassium chloride - KCI) and SOP (potassium sulphate – $K_2S0_4$) are the two main potash fertilizers. The consolidated statements of accounts among the nine major global potash companies** (which collectively account for 75% of the entire production), have been collected and reviewed to speculate about current market value of this industry, with a specific methodology followed. More precisely, the ability to generate cash in excess of what is strictly needed for company survival has been taken into consideration. This cash is commonly called FCF – free cash flow (a discretionary stream of cash that is available to shareholders for such purposes as dividends, buybacks acquisitions and debt retirement) and is typically calculated by subtracting capital expenditure from operating cash flow. It was possible to reach the fair value of this bundle of stocks compared with its market price, by conducting the following steps: projecting to the future the added free cash flows of this bundle of companies (considered as a whole); discounting it back (by employing as weighted average cost of capital, the average of each single company WACC weighted for market capitalization); performing some other technical steps. The appropriate short and medium term FCF future growth rate of the bundle has been estimated by looking back into the financial reports of each target company to see how it performed in the past. With the bundle meaningful enough, then the entire economic sector's over-valuation might be inferred. The resulting figures are as follows (billions of dollars):

FCF ttm: $ 4.28 | WACC***: 9.3% | short-medium term FCF growth rate: 6.8%

Long term FCF growth rate: 2.8% | Value of Cash, Marketable Securities & Non-Operating Assets:

$ 9.13 | financial debts: $ 17.72 | estimated value of operating leases, stock options, unfunded retirements and post retirements obligations: $ 3.31.

The final computed figure gives an estimated result of fair value of the bundle of companies equal to $ 81.89 BN, which compared to the current market price of around $ 105.8 BN, shows an overvaluation of almost 23%. Financial soundness, measurable by the Altman Zscore index****, has resulted in a quite high aggregated value equal to 3.68***** which is over the "cut-off value" (2.99). The potash industry is amid a challenging time which may lead to a reshape from its current oligopolistic structure. The market is facing:

1) Uncertainty following the July 30th announcement by Uralkali that it would exit the Belarusian Potash Company (BPC), a joint marketing arrangement between Uralkali (50% ownership), Belaruskali (45%) and Belarusian Railways (5%). This accounts for 32% of global potash production. The other major sales group Canpotex (Agrium, Mosaic and Potash), accounts for 30% of 2012 world production. 2) The entry of some giant miners. 3) The desire of emerging countries such as China, India and Brazil (which are strong potash importers) to improve self-sufficiency and reduce their reliance on the oligopolistic supply base. 4) Forecasts of an increasing unbalance between demand and supply of potash in the forthcoming years which may potentially lead to price decrease due to overcapacity and oversupply.

Milan, the 13th of September 2013.

*Abbreviations and notes*

DCF – discounted cash flow

WACC – weighted average cost of capital

CAGR – couponded annual growth rate

OCF - operating cash flow

CAPEX – capital expenditures

FCF - free cash flow (OCF minus CAPEX)

ttm – Trailing Twelve Months

*Chineese producers, Belaruskali, other companies with minor interests in the field have been excluded by the bundle; **Uralkaliy OAO, Potash Corporation of Saskatchewan Inc, Mosaic Corp, K&S AG, ICL Israel Chemicals Ltd, Arab Potash Company PLC, Agrium Inc, Sociedad Quimica y Minera de Chile SA, Intrepid Potash Inc; ***The computation of WACC was exclusively based on the CAPM - Capital Asset Pricing Model. A combined use of the Gordon model was unfeasible due to the specific recent dividend policy pursued by many of the considered companies, so as to prevent overly conservative values; ****The Altman Z-Score is a measure of bankruptcy risk not based on stock price volatility. It segments companies into three groups: "safe" (Z-score > 2.99), "grey" (Z-score between 2.99 and 1.81), and "distressed" (Z-score < 1.81), and may be useful for identifying bankruptcy risk in the coming years. It is based on financial statement data and market capitalization; *****Arab Potash Company PLC has been excluded by the computation. Moore notes available at the web address http://www.myopennote.com/metodo.html (only in Italian)