

Commentary

The Effects of the Financial Crisis on the Future of the Chemical Industry

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The chemical industry is also feeling more and more strongly the effects of the financial crisis and the recession in the important markets of the world. Even so, "horror" scenarios are not appropriate. The marked decrease in the oil price is also having a positive influence on the level of raw material costs and thus on the profitability of downstream industries. The reason why the situation is, nevertheless, critical is, unfortunately, due to the fact that, at the same time, volumes are clearly dropping and production is declining.

The current situation will, therefore, definitely accelerate change in the chemical industry. Behind this change are four important trends:

- Consolidation rates will increase at the same time as globalization remains an issue.
- Product and technology cycles will continue to be reduced; Innovation is and remains a pivot for successful development.
- The industry is well advised to continue to tackle the issue of process optimization – with the added advantage of releasing additional cash.
- The importance of financial investors will be reduced in favor of strategic investors, since it will no longer be so easy to finance attractive leveraged deals.

With regard to these points, the following outlines current trends and developments, using examples of well-known and important market players in Germany.

The end of consolidation and globalization has not yet been reached

Under the impact of the current crisis, specialty chemistry in particular will accelerate

its portfolio optimization process and try to hive off operations which do not satisfy profitability demands.

This will become increasingly more difficult next year due to the lower interest from investors. In addition, bank restraint will often make it impossible for financial investors, and also for strategic buyers, to obtain attractive financing for bigger deals in the current situation. In the medium term this will settle down again once a reasonable base of confidence has been established, especially since, even after significant capital destruction, there is enough investment capital still available which wants to be invested in the medium term. One needs to wait and see what the situation is in spring 2009.

At the same time, it should be stressed that globalization is by no means concluded, but is still on-going. As well as looking at economies of scale, commodity manufacturers will also be looking for proximity to their raw materials sources, and premium manufacturers will be looking at those resources which guarantee that their innovation power for differentiation can be maintained and further developed. In addition, globalization demands that enterprises are present in local markets, and so, in the future, the chemical industry has also to be constantly searching for correct positioning in order to cover these markets. Key factors for success here are concentration on core segments, on the one hand, and, at the same time, flexibility and market adaptability, on the other.

High-wage countries will therefore have to develop themselves into producers of products to meet the highest requirements – as is happening daily in other industries. It is crucial here not only to maintain a scientific lead

through innovation, but also to increase the gap; this especially in view of the efforts of developing countries such as e.g. China and India, whose leading chemistry companies will certainly take advantage of the present crisis to penetrate the West and occupy appropriate niches – in particular, as long as they can profit from the current labor costs advantages. At the same time, it is essential for Western companies to develop their position in these developing countries of high market potential and gain a substantial share of the market.

The consolidation process is continuing even in the current situation as is clearly shown by recent BASF developments, which resulted from a slump in orders in the automobile industry. The group, nevertheless, is still standing by its announced takeover of Ciba for 3.8 billion; at the same time, however, it is planning a large-scale production stop with the closure of 80 plants, 40 of which are located in Ludwigshafen. Approximately 20,000 of a total of 95,000 employees are hit by these cuts in production, initially by cutting down overtime or taking a vacation. The fact that directors Hambrecht, Marcinowski and Kreimyer have bought BASF shares at this time, is proof of confidence in the future of the enterprise, as well as in their own management efficiency. It also shows clearly that chemistry has a positive future even in Western Europe, and that the current situation will doubtless be used to accelerate the necessary processes and adaptation measures in order to have a better standing than ever when the crisis is over.

Placed in a more favorable position in such times are groups such as Bayer, who, in addition to the chemistry business, also focuses on pharmaceuticals, because although this sector is certainly dependent on the rules and regulations governing the health sector and subject to the accompanying increasing pressure on prices, it is clearly affected less by the current financial crisis. Thus, the CEO of Bayer, Wenning, stressed that only sub-group Bayer Material Science (BMS) is affected by current developments and that uncertainty over future economic development is greatest there. In 2002, Bayer began a reorganization of the group which is now paying off; according to the management, approximately 70 % of the business, in particular, the health and nutrition segments, is today less dependent on the economic situation. However, 30 % still hang strongly on the economic situation, and the enter-

prise is indeed hit by the slump in demand from important customer groups. In the plastic business 18 % of enterprise turnover is made with the automobile industry, 17 % with the furniture industry, 16 % with the electrical and electronic industry, and 14 % with the building industry.

Rapid Cost Reduction and Cash Release are currently in the foreground – Continuous and sustainable process optimization should follow in the medium term

Due to the current situation the chemical industry is feeling an increasing downward pressure on prices and must deal with a marked decrease in quantities. This is particularly the case in specialty chemistry, which is close to consumers. Since this consumer restraint is to be felt most with large acquisitions, the effects are showing up very clearly in the automotive and building industry segments. The current focus is on programs to reduce costs, which lead to a fast improvement in results, and on measures for short term cash release, which improve liquidity e.g. by optimizing the working capital.

Here we will see a divide. While companies which have to carry a high borrowing ratio (e.g. as a result of leveraged financed company takeovers through Private Equity Societies) will clearly address the issue of cash release in the short term, listed societies will stabilize their attractiveness on the market by appropriate cost optimization programs.

Not many companies will have the chance to make themselves more independent of these market dynamics – unlike Altana Chemie. Susanne Klatten, Germany's richest woman, is intending to completely take over and privatize the Altana Chemical Group. The industry sees this as a clear commitment to taking firm hold of the reins. Mrs. Klatten's decision is a very clever business one, especially in the current situation, because Altana stock is available at a very favorable price on the stock exchange. Altana thus wins enough scope to maneuver without losing sight of its strategically aligned growth program. In various press conferences, CEO Dr. Matthias L. Wolfgruber conceded that Altana is also feeling the effects of the economic slowdown, and he assumes that for a short period of time the situation will significantly affect the value chains. A complete takeover by Skion (the Quandt heiress' investment company) would therefore

offer him greater financial scope for planned acquisitions, the more so as the special character of the margin-strong and less cyclic chemistry business with specialties and innovations would make a contribution in coming years to enabling the continuous growth of the enterprise at high profitability. Although the structure as a listed company was not, on the whole, felt to be an obstacle, other capital measures could not be considered in view of the current market price.

With regard to process optimization, a focus on the supply chain will become more important in the medium term. Continuous optimization in the medium term will once again involve raising and realizing business-specific and cross-company potential. The improvement potential involved in the concepts "Order to Cash" or "Lead Time Reduction" will also constitute one of the crucial levers for future competitive differentiation.

Regarding the optimization of processes, the matter of optimal organizational structure has to be addressed in the service sector, in administrative as well as in technical and other areas. In the context of a heterogeneous international production and business structure a close investigation must be carried out to decide which activities are to be centralized and which decentralized. The issue of "Shared services" will also be important in the future and will pose a challenge to management. It is crucial to find the optimal mix of outsourcing and in-house solutions, bearing in mind that outsourcing is not "a universal remedy". In some cases, it has been shown that there are quite elegant in-house solutions, which, even when compared to outsourcing, lead to improvements in quality and performance.

Stringent innovation management secures future success

The success of focused specialists in the chemical industry, such as, for example, Munich Süd-Chemie, with its diversity of buyers, shows that technology is a crucial component of future success, involving consistent development by purposeful internal effort as well as external focused acquisitions. Thus, Munich Süd-Chemie, for example, has drastically improved its competence in the special filter business by the recent takeover of the British materials flow technology supplier Cooksen. A similar objective was behind the aim to take over the foundry chemical business of the Evonik subsidiary Alzchem in Upper

Bavaria and the consideration of co-operation with the American enterprise Ashland.

Technological advantages are being increasingly achieved together with the end customers or in partnerships with enterprises from other industries. For example, Süd-Chemie and the plant engineering and equipment construction company Linde announced that they will conjointly develop equipment for the production of second-generation bio-fuels. These are by-products of farming and forestry such as straw, grasses or waste wood. In contrast to conventional bio-fuels, they are not produced from oil or sugary plant components, whose recovery is being regarded with an increasingly critical eye, but from cellulose. The two partner enterprises are bringing together their know-how from different areas for a specific purpose; Süd-Chemie provides the process technology, while Linde proves its competence in plant construction. Together they can now achieve synergy effects which alone could hardly have been realized.

Such a procedure is particularly necessary given that the relative portion of expenditure for research, development and marketing as well as for access to end customers will continue to rise. At the same time, the chemical industry's customers will be increasingly international and it is necessary to follow customers into the respective countries in order to be able to offer local customized solutions. For and in the future, application know-how will play an important role, and network structures, formal and informal, will guarantee presence and efficiency at global level.

An effective and efficient innovation management is one of the basic prerequisites on the road to technology leadership. Purposeful innovation management is not necessarily only a question of on-going creative masterstrokes, but also, and mainly, a clearly defined process. On the one hand, it is important permanently to feed and expand the idea pipeline; on the other hand, enterprises need for this a stringent Stage Gate process, which, by means of clear pre-selection based on firmly defined points, leads the really attractive projects to success. Here, the NPV represents, without doubt, a crucial criterion for the cost-effectiveness of the project. Above all, the period of time needed up to marketing, the "Time-to-Market", is a key to success.

In addition appropriate structures and processes are required in R&D departments and above all, market-focused thinking from employees. Many other industries have already

dy established professional structures in this regard; for the future, in the chemistry sector, it is to be expected that stronger focus will be placed on optimizing the R&D departments in order to establish appropriate processes.

An example such as Süd-Chemie, an enterprise which, when compared with other enterprises, spends an over-proportionate amount more on R&D, shows clearly the success of an appropriate innovation-oriented strategy, which has made an impact even in the crisis. This shows the confidence of the chairman of the board of Munich Süd-Chemie, Dr. Günter von Au, who, in November 2008, delivered a remarkably optimistic view of the coming year, forecasting growth in sales of at least a high single-digit figure. He named his reasons for this as, among other things, the strong presence in Asia and the good business development with new products which have a unique selling proposition (USP). Even if this positive view should diminish somewhat, this example shows, nevertheless, that there are successful strategies for positioning oneself futurally in the high-wage country Germany.

General market dependence remains

With all these things it is necessary to note, however, that for neither large players in the market, like BASF, nor for focused specialists and niche players is it a walk in the park. Thus, Wacker Chemie, for example, reflects the dependence on the market situation or only the psychology of the markets. The stock of the chemical group and semiconductor supplier suffered sensitively in the fall of 2008 from the downwards forecast of a competitor and the subsequent concerns about the profit performance of the Wacker subsidiary Siltronic, after MEMC Electronics Materials, a manufacturer of silicon chips for the solar industry, had to revise downwards its goal for the sales development in the fourth quarter. In the third quarter 2008 the enterprise announced a significant sales increase despite the expected economic slowdown, and for the whole year sales should also increase by significantly more than 10 %. Operational profits should increase further as well.

Broad positioning on its own is not the answer

Even those enterprises which are broadly positioned and also have a substantial part of their business in the building and automobi-

le sectors, will clearly feel the effects of negative market development in these market segments. The current CEO of Evonik, Werner Mueller, has qualified these effects up to now by describing the business model of the integrated industrial group with its three pillars of chemistry, energy and real estate as robust. In addition to the fundamental growth potential in the chemistry segment, the two other business segments, energy and real estate, have stable profit-makers at their disposal. Even so, the situation will slow down. The group can still rejoice that in the third quarter 2008 all three business segments contributed to sales growth and made positive contributions to the results. Due to better selling prices and higher sales volumes in the first nine months the chemistry segment, in particular, could contribute to organic growth of 13 %, the effects of portfolio and exchange rates balancing each other out to a large extent. In the energy segment, behind which hides the former Steag, sales increased by 18 % due to substantially higher coal prices and the corresponding increase in electricity sales. The financial investor CVC has a quarter involvement in Evonik. He has high expectations of an increase in Evonik's appreciation, not least due to the financed, comparatively high purchase price, of his share. This poses a substantial challenge to the group, not least because of the current market situation in important customer markets.