Improving China´s Domestic Chemical Companies

Dr. Kai Pflug, Management Consulting – Chemicals (kai.pflug@mc-chemicals.com; www.mc-chemicals.com)

In a recent paper, we looked at reasons for the faster growth of local chemical companies compared to multinationals. Overall, this faster growth is a sign of the success of domestic companies. However, this does not mean they do everything right. Local companies indeed display a number of weaknesses. Identifying these weaknesses opens up a huge potential for business improvement. In particular, substantial progress can be made in the areas of strategy, business focus, and operations (see Tab. 1). Of course, not all weaknesses listed in this table will apply to all chemical companies.

Tab. 1: Typical weaknesses of domestic Chinese chemical companies and potential improvement measures

Area	Weakness	Improvement Measure
Strategy	Insufficient long-term research	Provide resources for long-term R&D
	Unfavorable investment timing	Longer-term planning
	Limited focus on specific strengths	Analysis of own competitive strengths
	Sales rather than profit optimization	Project evaluation based on expected profits
Business Focus	Lack of business focus	Stronger focus on core business areas
	Limited geographical reach	Geographical expansion
	Focus on basic chemicals	Stronger focus on specialty chemicals
	Limited product portfolio	Portfolio expansion (more grades)
	Limited service offerings	Expansion of service offerings
Operations	Low productivity	Automation, process improvement
	Limited concern for regulation	Adapting processes to existing regulation
	Limited use of outsourcing	Outsourcing of, e.g., distribution, logistics, etc.

Strategy

Insufficient long-term research

Research activities in domestic chemical companies are often limited, particularly those focusing on longer-term research rather than short-term development and adaptation of existing products. Many domestic companies seem to lack the mindset required for such longer-term activities. Establishing a qualified research department and starting bigger research projects requires patience as the commercial success often only comes after 3-5 years or even longer periods, if at all. However, compared to short-term development work, the upside potential is much higher, compensating for the higher risk. For example, Tianhe, a producer of lubricants and fluorochemicals, invested heavily in long-term research in fluorotelomers and recently reaped the benefits in a highly lucrative IPO.

Unfavorable investment timing

Local players tend to all invest in the production of specific chemicals whenever the market is tightest. While this would be sensible if they were the only players, it immediately leads to overinvestment and overcapacity if – as frequently happens – many companies do it simultaneously. The solar market is an obvious example. It is only slowly recovering now after many of the weaker players have been forced to exit the market due to the existing overcapacity. A longer-term investment planning that also takes competitor´s activities into account could reduce such destruction of capital by local players.

Limited focus on specific strengths

Chinese chemical companies tend to be obsessed with market opportunities while paying too little attention to their own company-specific strengths. However, a company can only be profitable if not only the target market is attractive, but also the company is able to compete with the other market participants. As a consequence, domestic companies should base their strategies more on an analysis of their specific strengths – those properties that allow them to be better than the average competitor in a given segment. For example, many companies currently considering an entry into the area of coal chemicals lack any specific capabilities in this area and thus are unlikely to succeed. Others such as Datang and CNOOC have already realized their limited strength in coal chemicals and have exited the coal chemicals area after suffering substantial losses.

Business Focus

Lack of business focus

Chinese chemical companies often are frequently engaged in activities not related to the chemical industry. For example, Sinochem has businesses in energy, agriculture, real estate, finance and chemicals. While this may be profitable, it also limits the attention and investment capital available for the chemical business and thus lowers the chances of success in this area. Most Western chemical companies have become more and more focused in their activities and this has generally been successful. While the situation is different in China, it is likely that in the long run a more focused approach will also be more promising for Chinese companies.

Limited geographical reach

Most Chinese chemical companies so far focus on the domestic markets. However, for many chemical segments, there are gains in accessing a broader regional market. One is economies of scale. This applies mainly to specialties (high development cost) and basic chemicals that can be shipped economically for longer distances (e.g., isocyanates). For chemicals such as sodium hydroxide, gains may be more limited as these chemicals are usually not shipped for very long distances. Another is attractiveness to customers. Global customers prefer suppliers that can offer the same product at many different regions, though for very basic chemicals this again may be of limited importance. Wanhua, the main Chinese producer of isocyanates, has realized the importance of establishing a global presence and has already expanded into Europe by the acquisition of Borsod, a Hungarian isocyanate producer.

Focus on basic chemicals

MNCs have long shifted from basic chemicals to specialty chemicals due to the lower competition, lower cyclicality and higher margins. Chinese companies, however, still mostly focus on basic chemicals. However, this is an area in which it is difficult to achieve a high profitability as the products are undifferentiated and competition is intense. For example, there are about 50 producers of titanium dioxide in China, and capacity utilization is only around 60%. Rather than entering this market or expanding capacity, domestic chemical companies should rather consider entering a niche segment of pigments such as organic pigments. Such a business (Jiangsu Multicolor Fine Chemicals) was acquired by Clariant last year, indicating the attractiveness of such a specialty business.

Limited product portfolio

The product portfolio of domestic chemical companies tends to be small and focusing on basic grades. For example, while ExxonMobil has about 100 basic grades of polypropylene, the number of grades offered by Sinopec is much smaller (though it is gradually increasing). This narrows their attractiveness to customers and lowers margins as basic grades are being produced by many more companies. However, expanding the number of grades requires both knowledge (which grades does the market need?) and good complexity management.

Limited service offerings

Chinese chemical companies offer fewer services than foreign companies. This is related to some extent to the preference for basic chemicals over specialty chemicals, as in basic chemicals, services are not often required. In specialties, however, they may be quite important. For example, in water treatment, there are three steps of the value chain: the production of individual water treatment chemicals, the formulation (creating ready-made products from the individual chemicals that can then be used to treat water, and offering services (e.g., running a water treatment plant for another chemical company). Chinese companies tend to be strong in the first, weaker in the second and very weak in the third, leaving those lucrative areas to multinationals such as Nalco and Veolia.

Operations

Low productivity

Compared to foreign companies active in China, the productivity of domestic chemical companies is still low. In 2011, foreign companies achieved sales of about RMB2 million per employee while domestic chemical companies only reached RMB1.2 million. However, productivity in domestic companies has already increased at a faster rate than at foreign companies, indicating a gradual catching up of the former. As salaries at domestic companies keep increasing, companies will be forced to consider further measures such as automation, which will drive productivity increases.

Limited concern for regulation

Particularly small Chinese chemical companies sometimes disregard environmental and other regulation. However, this is probably short-sighted as both the regulations and their implementation are getting stricter, and companies not learning to live with these regulations will sooner or later have to close down. This has already happened to many chemical companies in particularly sensitive parts of China, e.g., near Taihu lake.

Limited use of outsourcing

Many state-owned chemical enterprises tend to be reluctant to outsource any activities to third parties, even if this may increase the overall efficiency of the economy. For example, third-party distribution can provide an overall net gain as small customers can get different products from one distributor rather than having to buy at a number of different producers. Other areas in which outsourcing may be considered by domestic chemicals producers include energy production and chemical logistics.

Conclusion

Domestic chemical companies have increased their share of revenue from 73% to 77% in the period from 2006 to 2011 – they are gaining market share at the expense of foreign companies and thus overall must be doing many things right. However, the points above show that there still is substantial room for improvement – even if only a few of these will apply to an individual domestic chemical company. ■