China's Mid-Level Coatings Market

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China's coatings market in many respects mirrors the microeconomic model of perfect competition. There are thousands of producers with near-identical business models based on third party formulation knowledge - because no single firm has pricing power, no one profits. And, as prices and other types of information considered sensitive in the west are widely discussed, players can act very quickly on an advantage.

Unsurprisingly, participants view the industry as anything but perfect. It is not just the paint formulators who decry an inability to make money in the world's largest paint market; customers and end-users do not get their desired consistency of quality. China's regulators and planners are unhappy, too, about the inability of the system to produce a PPG or Akzo-Nobel. A fragmented supply base, it seems, helps nobody.

Could a slowing PRC economy shake the industry out? Over 2015 almost every area of coatings demand faced headwinds. Construction starts in shrank by 15% from a year earlier; the purchasing manager's index contracted for 12 consecutive months up to February 2016; commercial vehicle production fell by 11% as did a range of proxies such as cement, steel, rail freight and imports.

As we have seen across raw materials markets, notably titanium dioxide pigment (TiO_2), a slowdown has caused low-end capacity to close while the larger producers have expanded. This consolidation has resulted in growth in the mid-level market, which had been neglected a few years ago. Assuming the formulated paint market follows a similar trend, its mid-market will be the theatre of greatest change and the source of most opportunities.

Formulated products

Defining mid markets is tricky. While the high and low ends of a market can be succinctly described by a set of price, function and quality parameters, the middle of the market is defined by what it is not: an extremity. In practical terms for the coatings industry it is a product that sells for a 15%-20% discount to a premium coating by using lower cost raw materials.

In the architectural segment, a mid-market coating would use an alkyd resin, organic diluent (although in recent years, water has been substituted into the formulation to a degree where mid-market producers claim the product is waterborne but is actually a reduced organic solvent), locally sourced pigment and higher quality dispersants and additives. A typical producer would have a nameplate capacity of between 10 000 and 20 000 tons per year of formulated product. Production equipment such as tanks, agitators and fluid handling devices are almost exclusively bought locally but some laboratory and process control equipment may be imported. Prices for its architectural paint would be in the RMB7-10 per kg range.

By comparison, a top multinational producer (MNC) will use an acrylic or styrene acrylic resin, imported pigment such as Ti-pure™ and be virtually VOC free, with prices in the RMB12-15 per kg range.The average size of one of its plants is over 100 000 tons per year nameplate. At the other end of the spectrum, a low-end producer will formulate with an alkyd resin and an aromatic diluent such as toluene used in high proportions, priced at RMB3-6 per kg. Its plant capacity is typically in the 5 000-10 000 tons per year range.

As readers may have already noticed, there is a much greater gap between the mid and high-end of the market than there is between the low-end and the middle. This is because suppliers to the middle market either originate from the low-end, being local producers that are trying to climb the value chain, or from the high-end where an MNC wants to "defeature" its product to sell it at a lower price. It has been a commonly observed trend throughout formulated products markets (indeed, almost all industrial markets) that the supply to a middle market has emerged in this way. It may be inaccurate to talk of the emergence of a middle market in China. From an application perspective middle markets have probably always existed but were filled by the extremities of either overpriced (high-end) or underperforming (low-end) products.

The size of the middle market of coatings is not easily determined, as a formulator could simultaneously produce high-end, middle market and low end coatings using the same production lines. However, based on a survey of architectural coatings formulators, approximately 15% of market volume is high-end, 40% middle market and 45% low-end. A survey of general industrial coatings formulators yields a similar structure. The mid-market is significant not just for its overall size but also the fact that it has been the fastest growing segment, suggesting there are relatively more commercial opportunities for growth.

Coatings raw materials

Coatings raw materials share many of the same traits of market structure. TiO_2 for example, has a distinct middle market that is characterized by price-performance. In

China mid-market white pigment sells for approximately RMB11 per kg, compared to RMB13 for a high end product and RMB9-10 per kg for a low grade product.

From a technical perspective a middle market TiO_2 will exhibit similar chemical stability (measured by parameters such as pH, oil absorption and conductivity) as high grade pigment. However, optical performance parameters such as brightness, colour and undertone will be worse when compared to high-end Chinese TiO_2, and particle size and distribution parameters such as fineness in paint will be significantly worse.

Unlike for coatings formulators, the size of a TiO_2 plant has little bearing on which market it serves. Only two of the five largest producers make a pigment that, based on the above description, can be priced as high-grade while the producer many paint companies consider as having the best whiteness only ranks ninth in terms of capacity. In fact the companies that are most commonly associated with the middle market are also some of the largest producers.

This may seem counter-intuitive, but the TiO_2 middle market evolved from low end producers gradually improving their product while increasing plant capacity. As a result of scale being prioritized over quality, the middle-market changed from being served by either excessive price (products meant for higher value applications) or insufficient quality to having its own dedicated range of products by large local suppliers.

Understanding the cycle

It is often said that margins in the paint business see-saw between raw materials producers and the formulators. If the 2008-2012 period, which saw a spike in oil and minerals prices, favoured the former, the current collapse in oil and metals prices now contributes to the margins of the latter. Globally, coatings producers reported their lowest post GFC quarterly profit margins in Q4 2011 (averaging 4% for decorative coatings) while TiO_2 producers reported their highest profit margins (35% EBITDA) in the same period. Currently, coatings producers are reporting above average profitability at a time when TiO_2 producers are losing money.

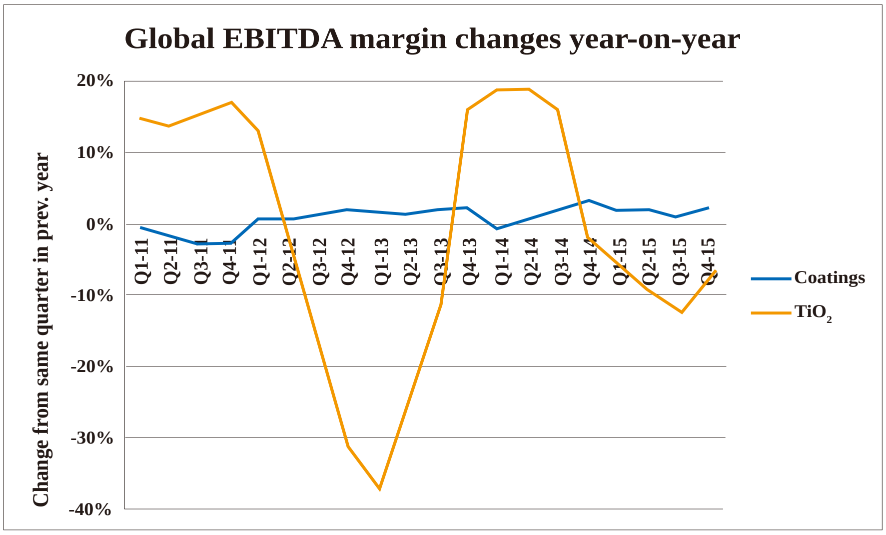
Despite different profitability cycles, China's economic slowdown, which has been most pronounced in its industrial sector, is having the same effect on coatings formulators and pigment suppliers, albeit at different speeds. Chinese TiO_2 producers were already losing money when reduced demand from coatings end-users began to bite. To date, there have been many closures of low-end and some smaller middle market plants. For small and medium sized coatings producers, the consolidation and shutdowns of capacity have yet to be felt, although many believe that in 2016 smaller coatings plants will close down or be acquired by larger rivals.

The government is also pushing industry consolidation in the form of structure environmental regulations. These have a disproportionately larger impact on smaller and medium sized business. For example, in Hebei province in 2015 many smaller companies were told to case production while larger producers have been offered assistance with relocation.

What effect will this consolidation have on the mid-market? Leaders of China's coatings association believe it will be positive. The thinking goes that as smaller formulators exit, larger formulators expand and earn greater margins on the basis of improved economies of scale. These earnings will be used to fund formulation R&D and allow a native technological standard to evolve in China as opposed to taking the lead from Europe, Japan or North America. In this sense, raw materials producers face a slow disruption as the traditional pattern of customer needs shifts to local Chinese producers. They will likely need to follow with increased R&D spend targeting China. Indeed, as the structure of China's economy changes to a less prominent role of the so-called export platform to one that is more consumption driven, local needs will become more dominant.

Market engagement

China's coatings industry is entering a new phase of development, characterised by the exit of small, homogenous producers that have been suppressing margins for the whole industry. Consolidation will see larger scale formulators undertaking a more customized approach to the middle market. Even in a slowing market opportunities exist everywhere. Specialist formulators and raw materials producers will need to re-examine their customer base in China, not only to



Source: Company reports, TZMI

manage the risk that a partner shuts down but also the risk of a partner growing rapidly.

Quality control is becoming increasingly important to mid-market customers. To this end many preeminent Chinese formulators need to improve their industrial automation. Opportunities exist for a PLC or DCS package supplier with experience in coatings. The Coatings Association states this is one of their most often heard requests.

For foreign formulators looking to grow into the middle market, the acquisition of a Chinese company may be the fastest way to grow. Not only do local companies have physical capital but also a well-developed sales network. But successful deals are very challenging. Consider the case of company 'H' from Guangdong. H is a 50 000 ton formulator of architectural and furniture paint. It sells approximately RMB500 million per year, implying a price of RMB10 per kg, putting it in the upper end of the mid-market. It is the go-to brand for some factory coat architectural applications.

H sees the future is in waterborne formulations, UV-cure and nitrocellulose resins. The company wants to double its capacity and introduce new formulations within a year. To do this it tried to sell out to a multinational formulator. One such offer came from an Asian paint MNC, but the company was not happy with the amount, thinking it had been undervalued. H's new strategy is to swap some of its equity for the equivalent value of the technology it needs. This may sound like a more complicated approach to valuation, but it is the deal that H wants to do. A potential suitor may have to be more flexible in China.

Concluding remarks

China's slowing economy is forcing structural changes on the coatings sector and this trend will open as many doors as it closes. It is important to keep a close watch of the entry and exit of market participants, learn who is expanding and how they are managing to do so. With the shrinkage of the low-end and the entry barriers to the high-end, growth and opportunities will come from the mid-level market.

Formulators will continue to take technical direction from the west until improved margins allow for greater R&D. But forward looking companies are investing in modern management practise, applying it to the mid-market. Technology transfer is still needed to ensure quality consistency and companies will put a premium on solutions they perceive to be usable. Getting the right automation solution is very important in today's market.

The business cycle is expected to force consolidation in China's coatings sector, helped by the nation's regulators. The industry that emerges will be more uniquely suited to local market requirements and will offer a fresh perspective on how, for example, mergers ought to be done. Getting ahead of the curve will ensure that the companies that made money in the growth phase will continue to do so in a maturing market. ■

REC Partners Asia Pacific Breweries for Solar Installation Project

Asia Pacific Breweries Singapore (APBS) has recently launched the solar installation plan at its Tuas plants. Renewable Energy Corporation (REC), under Chinese Bluestar, its partner in the solar energy initiative, has installed 8 038 solar panels on the rooftop of Tuas plants, spanning an area equivalent to three FIFA football fields in size. The first stage of solar power generation has started, and the second and third stages will follow successively. This project is expected to generate 2.3 million kilowatt-hours (kWh) of electricity per year via the solar facilities, equivalent to 20% of current electricity consumed by APBS, and will reduce 1 500 tons of carbon emission per year.

According to the Power Purchase Agreement inked between the two sides, APBS will pay REC the electricity charges over the following 25 years. The recent rise of such a partnership in the renewable energy industry is because it allows companies to apply renewable energy technology with minimum or even no initial costs.

"We hope this partnership will pave the way for the future adoption of clean energy initiatives within the various commercial industries," said Kenneth Choo, Managing Director, HEINEKEN Asia Pacific.

"This is the company's third PPA signed in Singapore," said Steve O'Neil, Chief Executive Officer, REC."Thanks to the advantages of solar power generation which suits the heat in Singapore perfectly, the company has received quite a number of orders and inquiry calls recently from clients such as the National Gymnasium, Bugis Junction and Sheng Siong." He predicted the production capacity would be increased to 1.3-1.7 billion kWh and the business would be expanded to other parts of Asia, including China.

Steve O'Neil added: "the PPA mode will change the game rules for the renewable energy industry. Since it's the solar energy solution provider that covers the investment in, installation and maintenance of solar energy power generation facilities, what our clients need to do is pay the electricity bill within the stipulated time period. We hope that more companies will join us in using solar energy to create a sustainable environment."

Parliamentary Secretary for Trade & Industry and Education Ms. Low Yen-Ling, present at APBS' solar installation project launch ceremony, hoped that the landmark project would set a model in energy conservation for other companies in Singapore and encourage more companies to follow suit and abandon the traditional power generation mode for clean energy, to build a sustainable environment and homeland for themselves and for the country. ■