

W13154

CUMI INDIA'S GLOBAL STRATEGY: THE CHINA PUZZLE

S. Ramnarayan, Charles Dhanaraj and Krithiga Sankaran wrote this solely to provide material for class discussion. The authors do not intend to illustrate either effective or ineffective handling of a managerial situation. The authors may have disguised certain names and other identifying information to protect confidentiality.

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The 2011 summer meeting of the board of Carborundum Universal Murugappa Limited (CUMI) was in progress in the Parry building, overlooking the busy city traffic of Chennai, India. The company, a leader in the abrasives and ceramics industry in India, had recorded 25 per cent annual growth in sales revenue, topping Rs. 16 billion, almost half of which was coming from overseas. For K. Srinivasan, managing director, the performance was tracking well with his company's strategic vision of becoming a global leader in the abrasives industry by 2020, a goal he and the management group had established in the early 2000s. This was all happening, in part, because CUMI was growing its operations in Russia and turning around its South African operations. However, the China market continued to pose several challenges. CUMI entered China in 2006 through a joint venture with a Chinese state company and had subsequently bought out the partner in 2009. As of 2011; the company's Chinese operations were improving but continued to incur losses. China was expected to hold 50 per cent of raw materials for the industry and was the largest market for abrasives worldwide. For Srinivasan, it was clear that winning market share in China was a necessity to realize the company's vision, but the complexity and foreignness of the Chinese market was a challenge. The board was keen to hear what CUMI's China strategy was and how he would execute it.

CUMI: MAKING OF A GLOBAL LEADER

After nearly 60 years in business, CUMI had emerged as a leading player in the abrasives and ceramics industry. (Exhibit 1 presents an overview of the company financials.) As of 2011, CUMI's business operated around four segments: abrasives (41 per cent of the total revenue), industrial ceramics (11 per cent), electrominerals (36 per cent) and super refractories (12 per cent). Abrasives were hard, tough and wear resistant substances for grinding and polishing operations. Manufactured through a complex and highly technological process, these abrasives were used in metal removal, cutting and finishing operations in almost all industries. The industrial ceramics segment made products that harnessed the wear and corrosion resistant properties of ceramics, as well as impact resistance (ballistic applications) and electrical insulation (vacuum circuit breakers). Refractory was a material used in applications that required extreme resistance to heat, such as linings in furnaces used in the steel industry. Electrominerals were raw materials used in the production of abrasives, refractories, ceramics and other applications. For example, CUMI manufactured silicon carbide and aluminum oxide, fused zirconia and other specialty products within its electrominerals segment.

Early History (1930-90)

CUMI was the flagship company of the Murugappa Group, with total revenue of US\$4 billion in 2011. Dewan Bahadur A.M. Murugappa Chettiar started an indigenous banking business in Burma (now Myanmar) in 1900, which grew and spread to Malaysia, Sri Lanka, Indonesia and Vietnam. In the 1930s, during the Japanese invasion of Burma, Murugappa Chettiar moved to India and restarted his business as a steel furniture manufacturing company in Chennai, Ajax India Ltd.

Ajax also ended up making coated abrasives, or sandpaper as it was called, to finish steel furniture and safes. In the 1950s, Carborundum Universal, USA, and Universal Grinding Wheel Company, UK, two leading global players in the abrasives industry merged their global operations and were exploring a joint venture in India; they chose to partner with the Murugappa Group, leading to the formation in 1954 of Carborundum Universal Madras International (CUMI), a tripartite joint venture. By the early 1990s, Murugappa Group had bought out both partners and was running CUMI as a listed company with more than 17,000 shareholders. Over the years, the group diversified into a wide range of businesses, including financial services and rubber plantation. The group was perceived within the country as a professionally well-managed company with sound governance. See Exhibit 2 for an overview.

CUMI's history of its early days in post-independent India showed several key traits within the company. After its independence, India followed the Soviet model of central planning for economic growth and development, and the licenses awarded by the Indian government controlled business growth and expansion. In the early 1960s, securing only one of the applied five licenses and with a restricted imposed growth rate and expansion, CUMI integrated vertically as the only way to expand the business and achieve input self-reliance. M.M. Murugappan, vice-chairman of the group and chairman of CUMI, recalled:

Our DNA from our very early days focused on three core foundations. One was to be selfsufficient in terms of input material. In our industry, our raw materials come from outside the country. Even in the early sixties, we were working with customers to design and develop new products, which today are more popular as application engineering — our second core foundation. In 1974, we initiated our own in-house research and development (R&D). Often your collaborator handed you down, in hindsight perhaps, dated technology, but relevant enough with what was happening with the customer base here. We wanted to be able to develop and engineer new processes to advance our capability and our product line. Most people saw no real need for R&D in India at that time, but we chose to be different.

Post-Liberalization Growth and Internationalization

In the early 1990s, India ended its insistence on tight control amid a closed economy and liberalized its economy by opening it up to global competition. CUMI's main competitors in 1990 were Grindwell Norton (GN), a U.S.-based company and a global leader in the abrasives industry, and Wendt (India), a subsidiary of Wendt Corporation, owned by Winterthur Technologies, a Swiss-based supplier of precision grinding technology serving the industrial, automotive, aircraft and cutting tool industry. Saint-Gobain, a French multinational firm, more known for its glass manufacturing, acquired GN in 1990, just around the time Indian liberalization moves began. With the backing of Saint-Gobain, and the new open environment in India, GN was planning an aggressive expansion in India. In 1994, CUMI responded by getting partial control (41 per cent) of the Indian operations of Wendt Corporation, which held a distant third of the market share in the industry. Wendt India, a leading manufacturer of super abrasive grinding wheels and tools (diamond and cubic boron nitride), was incorporated in 1980 as a joint venture between Wendt GmbH and The House of Khataus. With the acquisition of Wendt, GN and CUMI held two-thirds of the abrasives market in India.

With increasing competition, management wanted to take their generic products overseas through distribution agents and their niche products worldwide, directly leveraging their strength in application support in industrial ceramics. Management was inspired by the success of the Indian software industry abroad and wanted to leverage its overseas partners. Murugappan recalled:

We were still seen as an Indian company with an Indian product, which perhaps was an initial disadvantage in the overseas market. But we thought if we could put our knowledge base along with our product and start addressing customers' unique problems, we would have an opportunity. So we first started identifying products which could take on a worldwide stance where there were little gaps in the market and went into those markets, went to the customers along with application support. We were thus carefully treading overseas, not attempting to do things on our own but always trying to leverage the fact that we worked well in partnerships.

In the early 2000s, CUMI established offices in the United States and Australia to provide application support to key customers in abrasives and also entered into a partnership with their distributors to provide application support for customers in coal lining. CUMI established marketing offices in China, Thailand, the Middle East and Europe. Although the overseas operation was a small fraction of their overall business, success of these initial international forays in the ceramics business allowed CUMI to extend the strategy to all other areas.

Strategic Visioning and Diversity

In 2004, Murugappan was elevated from vice-chairman to chairman of CUMI, and Srinivasan, who was then the vice-president of marketing at the abrasives division of CUMI, was appointed as managing director. Prior to the appointment, Srinivasan was the marketing head, and later CEO, of Wendt India; in 1999, he joined CUMI in its industrial ceramics business, taking charge as the vice-president of marketing of the abrasives division in 2002. Murugappan reflected on the transition:

I chose Srini personally, clearly for two reasons. He was an outstanding manager and understood this business. And secondly, he came from a joint venture partnership. By being on the receiving end, he saw the fairness of our group. His thinking resonates well with our philosophy, which was instrumental in him coming on board and later heading CUMI.

The company brought together the senior management under an umbrella named Business Group Management Committee (BGMC) and went through a strategic visioning exercise. After much introspection about CUMI's strengths and weaknesses, they noted that CUMI's growth was just keeping pace with inflation, and thus they needed a new strategy for growth. They articulated a new vision for CUMI to grow into a global ceramic/abrasive company with sales in excess of \$2.5 billion by 2020. This plan became known as its "Vision 2020." Realizing this vision meant that CUMI had to grow more than 20 per cent annually and also expand internationally, so it had to step outside its home shores of India to gain access to resources in the form of raw material, energy, technology or brand and then to access global markets. Srinivasan commented on CUMI's global strategy:

Ours would necessarily have to be a resource-restricted expansion that is very different from those of the developed world multinationals. We don't have their deep pockets, so we have to be cautious about the bets we take. We are likely to make different choices in terms of size and risk profile. We may even go with companies that are not so easy to do business with. Our engineers and managers have to step up to bigger challenges.... We have certain advantages — we have a very well-trained and efficient work force, such as the engineers, middle managers or technologists. We can deploy them, and their skills can be utilized across the globe. Now that's a huge advantage that we have compared to everybody else. For example, we have 530

technologists available here. We can move them to where the need exists to turn around a business quickly or acquire a business and enhance its performance. That's a big advantage that we have.

CUMI's managers embraced the new vision enthusiastically Management realized that in order to create a global company, it needed to increase the diversity and demographic mix of the company; since its inception, CUMI's employees were mainly from South India. Muthiah, vice-president of human resources, commented:

We had to move from a "tn" to a "TN" company: "tn" is Tamil Nadu, the state we are located. "TN" is transnational, our goal. We had to adapt our recruitment changes, put in place new training mechanisms for the new demographic profile, etc. We consciously worked hard and measured our diversity to reach a pan-India employee profile. We recruited from specialized geographies. Calcutta has a history of ceramics, and thus we brought in ceramics people from there. Now our factories have people from Bihar and Northeast India. We are moving to get at least 25 per cent women to get different perspectives at all levels. We realized we had mainly linear thinkers like engineers and finance persons. Over the past several years, we have brought together lateral and abstract thinkers. We have put together a core team of these youngsters, all under 25, from diverse backgrounds, like writers and painters, to bring diversity in our thinking, to create future businesses.

GLOBAL VENTURING

CUMI faced intense competition both from within India and from overseas (see Exhibit 3 for an overview of CUMI's competition). The company focused on a two-pronged strategy for its internationalization. One was a product-specific, backward-integration strategy where CUMI would go overseas to access cheap sources of raw materials to control input cost. For example, CUMI made acquisitions in Russia and South Africa, both of which were sources of key raw materials for abrasives. The second was a country-specific strategy where CUMI went to countries to leverage its competitive advantages and access markets for their products. For example, China, the single largest market for abrasives, was a target for such a strategy. Exhibit 4 gives an overview of CUMI's global strategy.

Acquisition of Volzhsky Abrasives Works (VAW), Russia

Volgograd, earlier called Stalingrad, a city about 500 miles north of Moscow, was rebuilt after the Second World War. Orlovsky, on the right bank of the Volga River, was a source of silica sand, and Volgograd Petroleum Refinery was a source for petroleum coke, a carbonaceous solid derived from oil refinery cooker units or other cracking processes. Volzhsky Abrasive Works (VAW) was set up to cater to the growing demand of grinding materials from silicon carbide. The plant started in 1962 with markets in Russia and neighbouring countries and expanded over the years to include an abrasive tool shop and a silicon carbide production shop. In 1993, the company was listed in the stock exchange of the new Russian Federation following the Soviet collapse. As of 2006, VAW was the largest producer of silicon carbide (SiC) abrasives in Russia, with 65,000 tons per annum installed, along with other products, such as bonded abrasives and refractories. Total sales topped US\$54 million. The management was looking for a strategic investor for infusing capital and management to grow the company.

CUMI was on the lookout to set up a manufacturing facility overseas for silicon carbide. Its management was evaluating a proposal to either set this up in North Africa or in the Middle East when they learned about the VAW opportunity in Russia. VAW's production capacity was 20 times that of CUMI's. Both pet coke and silicon carbide, key raw materials for abrasives, were available in Russia, and thus this

acquisition would allow control over input costs. This was also an opportunity that would allow CUMI to take a global position in these products. Murugappan recalled:

Srini brought the opportunity to my attention. My initial reaction was, "It's great, but is that doable?" And then we worked on very diligently, and we found that we had the best chance to take the company forward. Everyone else who was in the bidding process wanted bits and pieces of it. I suppose the investors were primarily interested in selling it at the best price, but we wanted to emphasize the relationships with the local management. Srini worked with local management, and I worked with the investors and the administration to give them the confidence that we would invest in the business and that we had some good policies in terms of operations, dividends, capex, etc. I told them that we will ensure that we don't strip the assets and we don't disaggregate the business. The fact that we were a people-oriented business did augur well for us.

Even in the late 2000s, Russian investments were viewed as high risk due to both the political and economic conditions in that country. Language also was a significant barrier to most investors, as many Russian executives speak only Russian. Many multinationals that had considered taking over VAW dropped the proposal, thinking it was a risky option, and there was a general perception among Indian business executives that the mafia controlled business in Russia. Thus, CUMI undertook an intensive due diligence process. P.R. Ravi, who was then president of the ceramics and electrominerals division, recalled:

After our discussions with many of the government officials, we felt that this was largely one of perceived risk as opposed to real risk. The real issue was that only one of the senior leaders in the Russian management team was fluent in English and had business experience in India. We had a big language barrier. We hired two full-time translators, one in India and one in Russia. So we had full-time interpreters with us who knew the whole time what was going on. Then we also had one person in the Russian management who could speak English and that was very helpful. We also engaged Russian language translators to train CUMI managers on basic Russian language and etiquette.

After a year of negotiations, being the only bidder that offered to take the company in its entirety and due to CUMI's reputation, CUMI secured the bid comfortably and decided to go in as a strategic investor with the mindset of a partner. Srinivasan commented on CUMI's acquisition philosophy:

CUMI does not approach the acquired partner with the mindset of a "conqueror." It goes with a mentality of humility, joint learning and sharing of good practices. We never do a deal on the basis of just synergy or cost reduction. We don't say that we will put these two businesses together and that would reduce the costs. If that happens, it would be a bonus; we never look at that as a reason to buy a company. We justify a deal based on growth stories. What will we do differently compared to the existing management? We need to write at least five growth stories when we do an acquisition.

Immediately after the acquisition, CUMI rolled out a100-day integration plan with joint teams from both India and Russia. Growth in revenues were expected to come from increasing silicon carbide production by 25 per cent (from 52,000 to 65,000 tons), introducing technical improvements, doubling the production of bonded abrasives from 12,000 to 24,000 tons annually and changing the product mix from metallurgical to higher value crystalline material. CUMI retained the local management and continued to use cross-functional teams from India and Russia to source good business ideas, which were embraced and implemented irrespective of their origin. Srinivasan commented:

As a policy, we do not disturb the local management. By and large we leave them to run the business. First, after an acquisition, we don't put a "superman" from India and declare that this person would be the new boss. The local team continues to run the business in all locations unless there is a compelling reason to do otherwise. We don't try to transplant people unless there is a strong need for someone to go and help.

Second, we employ cross-functional teams. Such teams would have people from the acquired business and from the Indian business. They will travel to each other's place. They will take projects together. To build mutuality, CUMI invites the team from the acquired company to implement two or three projects in India. Once the team decides that this is a better way, then it becomes the CUMI way — open and available to all.

For CUMI, the Russian acquisition had been a great success. The company had reinvested profits into the business and provided generous salary hikes for its Russian employees. In 2010, Sergey Kostrov, general director of CUMI Russia, was voted as the manager of the year in the Volgograd region. In April 2011, during the celebration of the fiftieth year of VAW, the mayor of the town congratulated CUMI on its model employer performance. The mayor's words as paraphrased by Srinivasan and Murugappan were as follows:

We are highly delighted that CUMI is here and has operated this company for the last four years. As I can see three things have happened — there is growth in the investment in the company, the employee salaries have gone up by 20 per cent year on year in the last four years and the taxes that the company pays have grown by 10 times in the last four years. I look forward to more such Indian companies coming here. CUMI had achieved the status of a model employer in our region.

Acquisition of Foskor Zirconia, South Africa

The Industrial Development Corporation (IDC), a government-owned corporation in South Africa, founded Foskor Corporation in 1951 to produce phosphates for the country's agricultural sector. The group's core activities focused on the mining and beneficiation of phosphate rock and subsequent production of phosphoric acid and phosphate-based fertilizers. The company commissioned a plant in Phaloborwa, South Africa in 1991 to produce zirconia, a critical ingredient in the manufacture of ceramics, abrasives and refractory products. Foskor went through a difficult period between 2004 and 2006, with losses for three consecutive years. Coromandel Fertilizers, a Murugappa Group company, acquired 2.5 per cent equity in the Foskor group in 2005 through a business management/sweat equity route. They later bought into Foskor with a 15 per cent stake. Subsequently, Foskor spun off its zirconia division, which was at that time the world's third largest producer of zirconia, as Foskor Zirconia (Pty) Limited, and CUMI acquired 51 per cent of the company. For CUMI, the strategic intent was to become the leading supplier of fused zirconia products in the world market. But it also came with several management challenges. Murugappan commented:

South Africa gave us an opportunity to build our position in the raw material availability and we bought into an existing company and this particular division was a non-core asset for Foskor. We already had [a] relationship with the parent company, as our group owns 15 per cent of their stake in the fertilizer business. It came to us at [a] fairly attractive but fair price. But the management of the unit has been a major challenge.

As planned, CUMI rolled out the100-day integration plan with targeted goals for building synergies, but execution was limited by unexpected external and internal challenges. Zircon sand prices suddenly rose more than 200 per cent, and the global meltdown in growth was stalling the steel industry, both of which significantly affected the market for refractories. CUMI shifted its product mix to make zirconia bubbles

instead of grains and started investing in zirconia bubble production to broaden the customer base. Internally, CUMI was disappointed with the company leadership and the work culture it found in the South African plant. CUMI let go the country head whose performance was not acceptable and appointed one of their own. V. Ramesh, president of abrasives, recalled:

Unfortunately we ended up with a CEO and top management which was just not coalescing. In Russia we were very lucky to have the leadership which was pulling the way we wanted to pull the company. But the leadership in South Africa was not inclined to perform or cooperate.... We had no option but to ask the CEO and CFO to go. We sent a manager from India as a CFO, and now he is also the CEO. He basically is covering for multiple positions now.

CUMI management also felt that apart from the strategic challenges, South Africa posed unique workplace challenges due to the contradictions embedded in a society that was transitioning from its history of apartheid. While CUMI leaders wanted to change the discriminatory work practices, they were unable to do that quickly. Murugappan reflected:

South Africa is culturally very different from India because of the predominantly white management and the predominantly black work force. I thought the management kept us away from the workforce until I made the effort to meet them personally. I will never forget my first day in South Africa when we had this lunch just after we had taken charge of the company. It was called a *braai*, an open-air barbecue. We went into this lunch where the whites were sitting with the blacks, the blacks were sitting with the blacks, the ladies were sitting by themselves and the Indian in me did not know what to do. Just at that time, I got a phone call, which caused me to move away for a couple of minutes. That helped me make my choice. I just took my plate and went around to each table and stood rather than sat with any one group, so there is fair balance between everybody. So this was also cultural learning in a way.

Although South Africa posed several management challenges, CUMI management was confident it could resolve them gradually due to the broad support they had from the management and workforce. Srinivasan echoed:

There are paradoxes. Top 10 managers are drawing as much salary as 100 workmen. This is like India in the sixties. While it hurts us to perpetuate this system, we can only bring about gradual change. We try to be sensitive to local customs, don't make dramatic changes but gradually try to move things to what is acceptable globally. For instance, we are stopping separate lunch for different categories of employees. Now we have the same lunch facilities. As Indians, we are used to working with such contradictions. For generations, we have lived in a society that was never homogeneous in terms of language, culture, religion or governance. Survival needed us to be flexible, handle conflicts and build consensus.

CUMI also had to battle the rising cost of raw materials and the strengthening of the South African currency, the rand. CUMI wanted to augment the capacity of the South African plant and, overtime, leverage its presence in South Africa to expand into Africa at large.

CHINA STRATEGY

As CUMI embarked on a global strategy, China presented a huge opportunity. More than 50 per cent of the raw materials — alumina and silicon carbide — required for the manufacture of abrasives globally were available only in China. China was expected to become the largest abrasives consumer by 2015. (Exhibit 5 presents an overview of the global abrasives market.) China was competing aggressively in the global abrasives market through cost-effective manufacturing, and thus low-cost Chinese imports were a

strong competition to CUMI even in the domestic market. CUMI saw the possibility that China would be setting the global standards for pricing, quality and delivery and decided to build a base in China to gain competitive strength and potentially to build that as a base for global export. In 2006, when CUMI was considering China, international investment in the grinding wheel business was restricted. Srinivasan recalled:

In China, international companies were not allowed to invest in the grinding wheel business. The only way we could enter the Chinese grinding wheel business was either to buy an existing company or to go into a joint venture in a related space and then put up a new grinding wheel plant. We looked at both options. Some of our competitors had gone and bought an existing grinding wheel company and had grown it. We decided against starting with old baggage and machines. Our preference was for buying a company in a related space and then getting a license for grinding wheel business.

CUMI approached Jingri Industrial Diamond Company, a state-owned company producing synthetic diamond grits and small quantity diamond tools, items related to some of the product categories in which CUMI was operating. Synthetic diamond grits were used for the manufacture of high-end abrasives. Within a few months, company management saw the matching interests and started discussions for a joint venture. The partnership would give CUMI an opportunity to enter China and company access to diamond grits. The joint venture would also allow CUMI to establish its abrasives manufacturing facility subsequent to the market entry.

After brief negotiations in June 2006, CUMI signed the joint venture agreement with Jingri Industrial Diamond Company creating Jingri—CUMI Super Hard Materials Co. (Jingri). CUMI held 49 per cent and China Metallurgical Geology Bureau (CMGB), the owner of Jingri, held a 51 per cent stake. As a joint venture, CUMI started a greenfield venture for the manufacture of diamond grits and abrasives. During the initial stages of setting up this plant, the Chinese partner provided all the necessary help to CUMI in China. Srinivasan recalled the early days:

The Chinese partner helped us with all the organization. They helped us get the land allotment. They were unbeatable in building the factories. They did it in eight months, which we could not have done. When we first went to their factory, it was an old red brick plant in the heart of Beijing. I wondered how we could ever run a factory there. As we were driving down the highway, I expressed a wish that the location there seemed ideal for a brand new plant. They made that possible within three months. We sent the technical teams from India, but all other employees were Chinese.

As the operations got under way, differences in the management styles of the two partners slowly began to surface. CUMI preferred to make small investments, test the market, consolidate at every stage and bring in efficiencies, all before moving to the next stage. But the state government enterprise in China differed vastly from CUMI in terms of risk appetite and size of investment. Ramesh commented on these differences:

We seem to differ strongly in our business philosophy. The Chinese basically believe in volume; profits are secondary. Add to that, we are a conservative Indian company. When we talk of an investment of X. They talk of 10X, whereas we would ideally like to see the results of X before investing the next X.

As these differences in the two business philosophies surfaced, management found it difficult to agree on a shared growth plan. As the joint venture reached its third year, both partners decided to go for a friendly demerger. After a year of negotiations and statutory approvals, the demerger was achieved in 2009.

Following this, in April 2010, CUMI formed a 100 per cent subsidiary under the name CUMI Abrasives and Ceramics China Ltd (CACCL) for the grinding wheel business, and the diamond tools and diamond grits operations moved back to the Chinese company. CUMI had the abrasives factory built to their design and specifications but separate from the Chinese partner. The two enterprises were located within a common compound and continued to share common utilities, dormitories, canteen and security.

GROWTH OPPORTUNITES AND CHALLENGES IN CHINA

CUMI management believed that China would be a dominant force in the future of abrasives; being in China and learning how to do business in China was a strategic imperative to CUMI's global aspirations. China remained the largest market for abrasives in the world and was expected to grow 10 per cent annually to US\$17.0 billion in 2015. The growing manufacturing industry and a healthy demand for manufactured products in both the global and domestic markets forecast significant growth in the decade. Saint-Gobain, for instance, was aggressively expanding its production base in China.

While CUMI's operations in China were profitable when it was operating as a joint venture, the standalone operation was struggling to reach profitability. The existing diamond business was profitable and helped the joint venture to be profitable overall, but the grinding wheel business that CUMI eventually separated out was still struggling to turn the corner. Secondly, as a state-owned enterprise (SOE), the unit enjoyed certain advantages such as preferred access to raw materials and capital. These were no longer available when CUMI started operating as a stand-alone venture. Finally the Indian CEO was not quite able to understand the nuances of doing business in China, and as a result management found it difficult to keep costs under control. Srinivasan said:

Our original objective was to start with making low-cost commodity products for export. That would have meant keeping all investments and costs at the lowest level. From my observation, Chinese in China get China cost, but we (Indians) in China get only Indian cost even when we operate in China. Our Chinese partner expected us to come up with an investment to build an international company that serves as a showpiece. There was visible pomp — luxury cars, largest meeting hall in the town, flashy offices, etc. It was not possible to deliver cost competitive products for exports out of a "Wow" plant. Chinese units without such baggage could give us a rough time. We had not planned to make high-end premium products, which could have fitted with the investment and infrastructure and investment. In a sense, we were stuck in the mid-court; we could neither rally nor volley.

Srinivasan listed a few more factors that had resulted in conflict between objective and execution. The objective of low-cost commodity products implied that all aspects must be aligned to low costs, but this was not the case with CUMI's operations in China.

We had too many Indian team members. Costs of expatriates in any country tend to be much higher than that of locals for the same job, given the need for international housing, international school for children and so on. Continuity and stability of the work force was and is still a challenge in China. For example, around half the workforce going for February spring festival will not come back for work. Our cost of capital was high, often 8 to 10 per cent. So ours was always a resource-constrained growth. But in China most of the local companies are used to resource abundance and government help. The support government provides to businesses allows them to have big dreams. But in India we work despite the many constraints that government imposes on us.

There was consensus among the management group that doing business in China required understanding the complexities and challenges unique to China and the Chinese market. And management strongly felt that local leadership was indispensable. An Indian executive, who had been in China for five years, was heading the Chinese operations. Srinivasan reflected:

Language is pictorial in China. They think differently. Their mindset is different. They want to be the biggest, fastest and largest in the world. This influences their thought processes. Just as an Indian best understands how an Indian employee thinks and acts, and so is best suited to manage an Indian business, a Chinese should lead a Chinese business. This is probably a mistake we made.

CUMI decided to initiate the process of recruiting a Chinese executive for that position. Having established a 100 per cent subsidiary in China, there was also a need to tap the growing Chinese market. CUMI leaders felt that there were still a number of advantages in China: CUMI had a world-class manufacturing facility just 40 minutes from Beijing airport; there was a huge and profitable local market for CUMI's products with no one big local player; China was still the world's largest producer of most of the raw materials that CUMI could use in its business, and the costs of these in China was still cheaper than anywhere else; and there were labour productivity advantages.

The company had also decided to move from a simple cost strategy to a product performance strategy. The idea was to come up with world-class products that were not currently available in China at a competitive cost. As there was a market in China for the whole range, all the way from low-cost, mid-range and high-cost high quality products, a decision was made to address the Chinese market with premium products. China accounted for 24 per cent of the global car capacity in terms of manufacture, and CUMI's grinding products of premium quality could address this market. This approach, however, exposed the company to the threat of giving away its knowledge and technology, but it could still retain its edge through continuous improvement of its products. After all, there was a need to find a way forward.

INDIA/CHINA TRADE AND BUSINESS

Despite the proximity and prosperity of China, Indian businesses traditionally had not taken an optimistic view of investing in that country. They focused more on the West and on their local markets rather than on exploring the neighbouring markets in China. India and China had fought a war in 1962 and ceased diplomatic relations with each other afterwards. After the restoration of their diplomatic relations in 1976, trade resumed officially in 1978. In 1984, the two countries signed the Most Favoured Nation Agreement, which allowed for preferential tariffs for trade between them. When the Indian government started its economic restructuring at the beginning of the 1990s, it was clear that East and Southeast Asia would be important for its own growth. However, as late as 1999, trade between India and China was less than \$2 billion, much lower than the trade volume between India and Sri Lanka at that time.

In the late 2000s, India and China's relationship was warming up. Following several high level interactions between their leaders, bilateral trade was growing dramatically, increasing from US\$300 million in 1999 to more than US\$73 billion in 2011. In fact, China overtook the United States as the number one trading partner with India, and India/China trade is expected to top US\$100 billion by 2015 as Indian businesses start to invest heavily in China. For example, Tata Consultancy Services, one of the first companies to enter China, was a leading software house even within China. Mahindra and Mahindra, an Indian company in the automobile industry, started a tractor manufacturing unit in China in September 2011, investing more than US\$110 million and capturing more than 10 per cent share of the local Chinese market. Srinivasan said,

Many manufacturing companies have had a rough time succeeding in China. The companies that have done well are those with a strong, recognizable brand. They have used these brands to

address the Chinese market. But if a company has gone with a limited intent of using the advantage of low cost of Chinese manufacturing, it has typically not done well. It is a flaw to think that an international company will get Chinese cost. Indian companies like Tata Consulting Services and National Institute of Information Technology have been successful in China because they operate in a space of IT [information technology] services, where India is seen and accepted as the global leader.

Language and cultural distance between the two were also significant barriers. Though most Western businesses tend to look at India and China as "Asian" cultures, the cultural distance between the two were significant. Exhibit 6 provides an overview of Hofstede's cultural measures for India and China, along with some comparisons with the United States, Germany and Finland. Many companies in India saw the Chinese government's insistence on joint ventures with Chinese partners as a major constraint for their expansion. Many analysts pointed to the historical success of many Western companies that had mastered the art of joint ventures in China and suggested that Indian companies should learn from them.

THE BOARD PRESENTATION

While CUMI had done an incredible job in building the business both within India and overseas, Srinivasan was clear on the challenges moving forward:

I think we have a good strategy in place which will take us through the next two, three years to give us the growth and profit targets. But, beyond that, we need China. We have been successful in Russia and we have learned a lot from our South African venture. The challenge for us is how we apply our learning to China. China remains a mystery for most of us in the management and the board. But China is the largest market for our industry. China is the country which has most of the raw materials for our industry. China has the "lowest cost" advantage in the industry. China is important for our long-term strategic growth. The real business challenge for CUMI is to understand how to work in China successfully. That is what the board wants to hear from me.

	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11
Gross Sales Net Sales	4.04 3.55	4.92 4.36	6.13 5.46	8.78 8.02	11.38 10.78	12.30 11.83	16.28 16.01
Profit before interest and tax (PBIT)	0.70	1.24	1.20	1.36	1.63	2.02	2.62
Profit after tax (PAT)	0.48	0.86	0.75	1.19	1.04	1.02	1.71
Country Sales							
Russia	-	-	-	2.61	3.19	3.21	4.36
South Africa	-	-	-	-	0.69	0.80	0.94
China	-	-	-	-	-	-	0.15
Australia	0.13	0.22	0.26	0.32	0.48	0.55	0.51
CUMI America	0.04	0.05	0.05	0.05	0.06	0.03	0.06
CUMI Middle East	-	-	0.03	0.11	0.12	0.14	0.08
CUMI Canada	-	0.02	0.23	0.16	0.13	0.11	0.14
Profit After Tax							
Russia	-	-	-	0.14	0.25	0.44	0.51
South Africa	-	-	-	-	0.06	0.03	0.07
China	-	-	-	-	-	-	(0.10)
Australia	0.02	0.03	0.05	0.05	0.10	0.14	Ò.10 ́
CUMI America	0	0	0	0	0	(0.01)	0
CUMI Middle East	-	-	0	0	0.5	Ò	0
CUMI Canada	-	0	0	(0.04)	(0.05)	(0.03)	(0.03)

EXHIBIT 1: FINANCIAL PERFORMANCE OF CUMI 2004-2011

(All Figures in Rupees Billions)

Source: Company reports.

EXHIBIT 2: AN OVERVIEW OF MURUGAPPA GROUP COMPANIES

Coromandel Fertilizers Ltd (47.2 per cent)

- Fully integrated fertilizer complex
- Second largest producer of Diammonium Phosphate in India

Tube Investments of India Ltd (18.0 per cent)

- Market leader in the manufacture of specialty
- Steel tubes and strips
- Metal forming supplies doorframes to all major auto manufacturers
- Major exporter of chains
- Wide range of cycles

Cholamandalam DBS Finance Ltd (7.0 per cent)

• Leading holistic financial services provider in the country

Cholamandalam MS General Insurance Co. Ltd (5.8 per cent)

Offers a wide range of non-life insurance products

Carborundum Universal Ltd (CUMI) (9.8 per cent)

Pioneering presence in abrasives, refractories, electrominerals and industrial ceramics

EID Parry India Ltd (8.8 per cent)

- Four integrated sugar complexes
- Largest producer of neem-based pesticides in the world
- Leader in the production of nutritional supplement, spirulina algae

Parry Agro Industries Ltd (2.5 per cent)

One of the high yielding rubber plantations in the country

Note: Revenue contribution as a percentage of the total revenue is shown in brackets. Source: Company documents.

Product Segment	Competitors in India	Competitors outside India
<u>Abrasives</u>	Grindwell Norton Ltd. 3M John Oakey & Mohan SAK abrasives	Saint-Gobain Tyrolit Winterthur Sia Abrasives 3M Mirka VSM
Industrial Ceramics	Jyothi ceramics BHEL	Saint-Gobain Ceramtec Coorstek Bitossi ETEC Multotec KCC NTK
Super Refractories	ACE refractories (Calderys) Tata Refractories Limited Maithan ceramics Vesuvius India SEPR (Saint Gobain)	Saint-Gobain RHI Vesuvius Calderys Chosun Krosaki
<u>Grains</u>	Grindwell Norton, Orient Abrasives and SNAM Abrasives	Saint-Gobain Treibacher Washington Mills Kollo Elfusa Shinano

Source: Compiled by authors.

Country (Year & Details)	Name of subsidiary	CUMI's Equity (Per Cent)	Strategic imperatives
Russia Entry 2007 Electrominerals, Abrasives, Ceramics	Volzhsky Abrasives Works (VAW)	97.44	 Low cost manufacturing location for electrominerals Access to silicon carbide, key raw material for abrasives and electrominerals High capacity for abrasives manufacturing 7-8 per cent of VAW mineral production sold internally to CUMI for further value adds; rest of the mineral sold externally in Europe and Russia In terms of current and future demand supply, silicon carbide is attractive market to be in, with VAW having the necessary pricing power against the existing peers
South Africa Entry 2008 Electrominerals	Foskor Zirconia Limited - Subsidiary	51	 Access to strategic mineral zirconia Potential for further value add operations
China Entry 2007 JV acquired in 2011 Abrasives	CUMI Abrasives Ceramic Company Limited- Subsidiary	100	 Largest market for abrasives — strategic position Low cost location; establish a base in China to expand in future Potential to build up as centre of excellence for abrasives
Australia Entry 2003 Ceramics	CUMI Australia Pvt. Ltd Subsidiary	51.22	Market access & service
CUMI America Entry 2000 Abrasives	CUMI America - Subsidiary	100	Market access & service
CUMI Middle East Entry 2006 Abrasives	CUMI Middle East - Subsidiary	100	Market access & service
CUMI Canada Entry 2006 Abrasives	CUMI Canada - Subsidiary	100	Market access & service

EXHIBIT 4: CUMI'S GLOBAL STRATEGY OVERVIEW

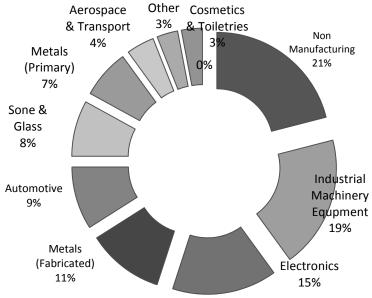
Source: Compiled by authors

EXHIBIT 5: ABRASIVES MARKET OVERVIEW

Abrasives were used for a very wide range of consumer and industrial goods from cosmetics to industrial equipment. The abrasive industry consisted of four major segments: bonded, coated, super abrasives and loose abrasives. Bonded abrasives, such as grinding and polishing wheels used in the manufacturing industry, were made up of grains of aluminum oxide, zirconium oxide or silicon carbide. The grains were held together by a metallic, vitrified or resin bond and were mainly used in the form of grinding wheels. Coated abrasives consisted of grains of aluminum oxide, zirconium oxide or silicon carbide laminated to paper, fabric (e.g., cotton, polyester) or tape backing and came in belts, discs, rolls and sheets. Super abrasives involved high quality grains such as diamond or cubic boron nitride (CBN), bonded with ceramics, metals or resins and applied to a metallic, ceramic or other core. Loose abrasives are used for applications such as sandblasting. Company estimates put coated and bonded abrasives roughly below one-third and super abrasives just above one-third of the market, with loose abrasives forming under 5 per cent of the market.

Freedonia, a U.S.-based research group, estimated that the global demand for abrasives would grow at 6 per cent annually, reaching \$45 billion in 2015.* The largest gains were expected in countries such as China, India and Thailand. China overtook the United States as the largest market for abrasives during 2005—2010, and was expected to account for half of total global demand in 2015. Adjacent figure provides an overview of application areas.

Abrasives consumed in durable goods manufacturing accounted for more than 70 per cent of total demand in 2010. The transportation equipment market was expected to post the strongest gains through 2015, due to a pickup in motor vehicle output and strong growth in global aerospace manufacturing.



Saint-Gobain (France) and 3M (United States) were the two largest producers of abrasive products in 2010. But, the market is highly fragmented, with small and mid-sized producers that focus on specific applications, customers and products accounting for much of the industry output. Table below provides an overview:

Company	Sales (US\$)	Bonded	Thin-Wheels	Coated	Super	Grains
Saint-Gobain	2,100	*	*	*	*	*
3M	800		*	*	*	*
Tyrolit	562	*	*		*	
Bosch	215		*	*		
CUMI	210	*	*	*	*	*
Winterthur	198	*			*	
Mirka	174			*		
VSM	126			*		*

*Data from "World Abrasives to 2015" Freedonia Group, www.freedoniagroup.com/World-Abrasives.html, accessed April 12, 2013.

Source: Compiled by authors using company documents

EXHIBIT 6: HOFSTEDE'S CULTURE SCORES FOR SELECT COUNTRIES

Country	Power distance	Uncertainty avoidance	Individualism	Masculinity	Long-term Orientation
United States	40	62	91	46	29
Germany	35	65	67	66	31
Finland	33	59	63	26	41
China	80	40	20	66	118
India	77	40	48	56	61

Explanations of the Culture Dimensions

- **Power distance** is defined as the extent to which the less powerful members of institutions and organizations within a country expect and accept that power is distributed unequally.
- **Uncertainty avoidance** is defined as the extent to which the members of a culture feel threatened by ambiguous or unknown situations and have created beliefs and institutions to avoid these.
- Individualism is defined as the degree of interdependence a society maintains among its members.
- **Masculinity** is defined as the extent to which the society will be driven by competition, achievement and success, with success being defined by the "winner" or "best-in-the-field." A low score on the dimension means that the dominant values in society are caring for others and quality of life.
- Long-term orientation is defined as the extent to which a society shows a pragmatic future-oriented perspective rather than a conventional historical short-term point of view.

Source: Adapted from http://geert-hofstede.com/india.html, accessed March 28, 2012.