New Kids on the Block: Multinationals from Transforming Economies

Carl F. Fey
Associate Professor
Institute of International Business
Stockholm School of Economics
Box 6501
11383 Stockholm, Sweden
Tel. (46-8)-736-9450
Carl.Fey@hhs.se
and
Associate Dean of Research
Stockholm School of Economics Russia

Amar K.J.R. Nayak
Associate Professor
Xavier Institute of Management
Bhubaneswar, India

Changqi Wu
Professor and Associate Dean
Department of Strategic Management
Guanghua School of Management
Peking University
Beijing, China

Note 1: This paper is part of the project the Strategic Audit of Russia project which is co-ordinate by the Russian Government's Center for Strategic Research in an effort to develop an understanding about helpful strategies for long-term business development in Russia. Financial supports from the Center for Strategic Research, Russia and from the National Science Foundation of China (70532005) for this project are gratefully appreciated.

Note 2: The authors gratefully acknowledge the research assistance of Hao Cui,Yu Li, Natalia Kourchakova, and Veronika Kerdey and comments from Charles Dhanaraj.

Note 3: This paper is a draft. Please do not quote without written author permission.

Note 4: We are still in the process of obtaining releases from companies for some of the material reported in this study. Thus, please do not quote or distribute further.

New Kids on the Block: Multinationals from Transforming Economies

Abstract

Traditionally, few were worried about Chinese, Indian, or Russian companies becoming important global players. However, now companies from transforming economies are starting to do just this and emerge as significant global competitors. It is high time to pay attention to these new kids on the block as serious competitors. This paper seeks to help with this task by investigating the internationalization of firms from China, India, and Russia and developing an understanding of what firms from transforming economies should do to increase their chances of success. The paper also shows that they internationalize for different reasons, using different mode ordering, and by initially entering different countries than their western counterparts and thus conventional FDI theory needs to be modified when applied to transforming economy firms. The paper develops the Five M framework to guide managers and academics in their understanding of the internationalization of these firms. With the help of vivid examples from 18 mini case studies, this paper investigates the motivations, markets, modes, methods and management practices which have allowed these firms to be successful.

New Kids on the Block: Multinationals from Transforming Economies

Historically, transforming economies like China, India, and Russia have been thought of as locations for inward foreign direct investment (IFDI) but not as important sources of outward foreign direct investment (OFDI). Indeed, China, India, and Russia have traditionally only been locations for Western multinational corporations (MNCs) to go to have products which they developed in the West produced inexpensively to be sold under their Western-MNC brand names throughout the world. Increasingly, MNCs have also been interested in selling their products and services in the transforming economies due to their large populations. Large firms from these transforming economies have normally had plenty to do adapting to their emerging markets and expanding throughout their large countries. Further, these local players have normally lacked well-known global brands, quality products and services needed to be successful abroad, and the competences needed to develop these important assets. As a result, traditionally, few were worried about Chinese, Indian, or Russian companies creating well-recognized global brands and becoming important global players. However, now companies from transforming economies are starting to do just this. Thus, it is high time to pay attention to these new kids on the block as serious competitors.

China's Huawei is an example of the emerging multinationals from transforming economies which we are talking about. Huawei, which produces telecom network equipment, has recently had much international success and managed to woo 31 of the world's top 50 phone operators to be its clients. It has done this by developing solid technology at low prices via its ability to hire engineers at 20% of Western rates and have them work 130% as many hours each week. Huawei operated in over 100 countries by

2006 despite it being only a largely domestic firm in 2001. This has resulted in 68% of Huawei's 2006 sales of 8.6 billion dollars being international. Many similar examples exist in Russia, India, and China.

OFDI from developing economies and countries in transition has increased rapidly in recent years from $147 billion in 1990 to over $1 trillion in 2004. However, OFDI from transforming economies is very small when considered in per capital terms compared to more developed economies and thus there is still substantial room for growth. Further, one can see that transforming economies which have increased their OFDI have also had an improved economic situation[1]. The rapid growth in international expansion of firms from transforming economies at this point in time is not co-incidental. The rise of outsourcing, improved information technologies, increasingly fluid international capital markets, the drive for focus, and globalization all contribute to the global value chain being cut into every-finer slices. This change makes it easier than it used to be for companies from transforming economies to get a foothold abroad despite narrow capabilities by capturing just one small slice of the value chain internationally and growing from there. One no longer has to be able to do everything.

While today it is just a few leading companies from transforming economies which are starting to be significant global players, there are armies of more firms at home which are preparing to soon try to make significant moves abroad in diverse industries. As a result, it is critical to understand these new emerging multinational companies from transforming economies and what differentiates the successful from the unsuccessful ones. Building on the internationalization efforts of 18 firms from China, India, and Russia, this article develops the Five M Framework to help us better understand these important new kids on the block. Such an understanding is critical for firms from the transforming economies to understand how they can successfully internationalize, for developed-country MNCs to know how to best respond to this new threat, and for academics to reflect if extant internationalization theory sufficiently explains the internationalization of firms from transforming economies.

The central explanation for FDI (which has focused on FDI from developed counties) is Dunning's OLI theory[2] which suggests that the key advantages of FDI are ownership advantages, location advantages, and internalization advantages. While OLI works quite well for explaining actions of MNCs from developed economies, OLI theory runs into some problems in explaining the actions of firms from transforming economies[3]. One problem is that conventional FDI theory suggests firms engage in FDI to leverage firm specific advantages (ownership advantages) which often relate to leveraging intangible assets abroad[4]. However, in many respects firms from transforming economies have ownership disadvantages not ownership advantages. For example most firms from transforming economies lack brand names which are well-known internationally and in fact often have a negative image associated with them due to being from a transforming economy. Further, when they began their internationalization journeys most lagged behind Western rivals in technology.

A second problem that conventional OLI theory runs into is that firms from transforming economies (emerging multinationals) rarely expand abroad to gain access to location advantages (e.g., inexpensive labor costs--normally lower at home). Thus, there is a need to take a closer look at emerging MNCs internationalization efforts in order to resolve this disparity between extant FDI theory and the practice of emerging MNCs.

The classic internationalization literature such as the Uppsala Model[5] suggests that firms internationalize in a step-wise fashion by incrementally increasing their commitments to foreign markets as they gradually acquire, integrate, and are able to use knowledge about foreign markets. For example, it is suggested that firms often start international activity by doing unsolicited exports, pursuing exports systematically via agents, and opening overseas sales subsidiaries, before acquiring a factory abroad, and finally building a Greenfield factory abroad. Our research shows that firms from transforming economies often leapfrog some of these steps and, for example, start with acquiring a factory abroad or being born global whereby they start significant international activity from day one. As a result, it appears that how firms progress through modes also needs to be rethought for MNCs from transforming economies. Given these and other inconsistencies between theory and practice relating to outward FDI from transforming economies, it appears great need exists to investigate why and how firms from these economies are internationalizing. This article begins to look into these important questions.

METHODOLOGY

In an effort to develop an understanding about the internationalization of firms from transforming economies our study includes firms from China, India, and Russia.. We studied six leading firms in each country (18 mini case studies in all). In each country we selected three industries which were among most active industries in terms of internationalization and selected two firms from each industry to facilitate some comparison but still allow enough variation to make some generalizations. In China we looked at firms from the television, telecom network infrastructure, and machine tool industries. In India we looked at firms from information technology, pharmaceuticals, and metals industries. Finally, in Russia we looked at metals, information technology, and high-tech industries. Our study aimed to select firms which were among the most active internationally. Target firms also had to be in operation at least four years and have over 500 employees.

Our research utilizes a comparative mini-case study approach. First, we collected information about the case study firms from the press, company reports (if available), and company websites. Then we conducted at least two interviews with senior managers at each case study company. Our methodology was guided by Yin's and Eisenhardt's recommendations [6] for conducting effective case study research including interview method, typing out the interviews within 24 hours, translating the interviews within 48 hours, and using 2 interviewers in each interview session. English, Russian, or Chinese was used for interview depending on the fluency of the corporate executives being interviewed. The interviews were conducted during November 2006-May 2007.

Our study was inductive. As the interviews progressed it became clear that the most important factors which describe a firm's internationalization can be summarized in five Ms—motivations, markets, modes. methods, and management (described below). Thus, each case was analyzed using our Five M Framework.

RESULTS: THE FIVE Ms IN ACTION

Our research has uncovered that five Ms help to understand important aspects of the internationalization of firms from transforming economies. Our five M framework includes:

Motivations-Why do firms want to venture abroad?

Modes-What entry modes have firms adopted?

Markets-What type of markets have they gone to and in what order?

Management- What management practices facilitate effective internationalization?

Methods-What strategies help firms internationalize?

Tables 1-3 briefly describe the basic characteristics of the firms in our study.

---------------------------------- Insert Tables 1-3 about here -------------------------------

Below we discuss each of these five M's.

MOTIVATIONS

Motivations considers why firms want to venture abroad. The FDI literature is rich with explanations of the determinants or motivators for FDI. As mentioned above, perhaps the most classic explanation for FDI is Dunning's eclectic paradigm[7] which suggests that there are three rationales for internationalization—Ownership, Location, and Internationalization. However, these explanations appear insufficient to fully explain the internationalization actions of firms from transforming economies.

Knowledge seeking[8], new market seeking[9], and efficiency seeking[10] have all been extensively studied in the literature as important motives for firms to internationalize. In knowledge seeking, issues like learning best practices, efforts to gain market knowledge, actions to develop social and business networks, and the applicability of unique home country capabilities are looked at. In market seeking, issues like market size, following the clients, and entering adjacent markets have been looked at. Finally, in efficiency seeking, cheaper resources like labor and raw materials, lower tariffs, tax incentives from the home government, and worldwide production synergies have been considered. The reasons the firms in our study chose to internationalize were somewhat different than those traditionally suggested by firms from developed economies. Five reasons drove our case study firms abroad. They were: to obtain technology, to acquire well-known brands, to diversify risk, to get larger, and to obtain needed raw materials.

Obtaining Technology and Brands

The state-owned Dalian Machine Tool Group (DMTG), provides a good example of a company which internationalized primarily to obtain technology and brand name. In 2002 DMTG acquired the 100 year old Ingersoll Production Systems based in Illinois, USA that was well-known for its technology and strong brands. As Liu Kexin, who has worked for DMTG for over 50 years and now serves as senior advisor stated:

> *It is important to understand that we bought Ingersoll for technology and brand…We saw great possibility to use their technology for sales especially in China, but also elsewhere in the world. We also realized for international activities having a brand like theirs would help us. Beyond the real benefits the company would provide us, it would also give us a positive image in China to have acquired a foreign company*.

In 2002 when DMTG purchased Ingersoll, China's automobile industry was just taking off. The automobile industry had high demands on machine tools in terms of the quality and technical sophistication. DMTG realized that without improved technology they would have trouble to service the lucrative Chinese automobile industry. They could have tried to develop the technology themselves, but this would take years and then it would be hard to displace established suppliers. Thus, they decided to look abroad to purchase technology and Ingersoll emerged as a target because of its strong brand, technology leadership, high value-added focus, and financial troubles due to the US machine tool business downturn (easier to acquire cheaply. Associating the Ingersoll brand with DMTG also helped improve the image of all of DMTG not only the Ingersoll products both internationally and in China.

Diversifying Risks

Many of the firms we studied also decided to go abroad to diversify risk. Transforming economies are rather risky places for businesses with rapidly changing environments and sometimes unexpected actions. As a result the possibility of going abroad to diversify the risk of being only in one risky market was an attractive option for many firms. This was one rational that spurred the Chinese TV producer Konka to go abroad as well as the Indian firm Ranbaxy and the Russian firm Sitronics.

Getting Larger

Other companies such as the Russian steel giant Severstal, the Russian IT company Sitronics, and the Indian pharmaceutical company Ranbaxy went abroad simply because they wanted to get larger. For example, Sitronics already had about 15% of the entire Russian microelectronics market that was only about US$ 1 Billion. Thus, they really needed to go abroad to grow. It is worth pointing out that not all industries are the same and thus firms need to consider how important economies of scale and other benefits of internationalizing are for a particular industry. As Andrey Laprev, head of strategic planning at Severstal said, "*the top 3 producers of cars produce 40% of the world's cars and the top 3 producers of steel produce 12% of the world's steel. In such industries, there is no option but to be a global player.*" Severstal has expanded abroad rapidly in recent years and now produces 38% of its annual output of 17,000,000 tons of steel outside of Russia--primarily in Italy, Spain, France, and the US where they have made large acquisitions.

Obtaining Raw Materials

The drive to obtain needed raw materials also pushed firms like the Russian aluminum company Rusal to go abroad. In 2003 Rusal developed the goal to produce 5 million tons of primary aluminum by 2013. To achieve this, Rusal needed to obtain additional Bauxite supply, so acquired 20% of a bauxite mine in Quinsley, Australia. Rusal has also made other international investments such as acquiring an aluminum plant in Nigeria in 2006 and a cathode plant in China in 2005. Then in February 2007 Rusal merged with Sual and the alumina assets of Glencore to create the world's largest aluminum and alumina producer. Rusal (owned by Oleg Deripaska) owns 66% of the resulting entity (United Company Rusal) and thus some call it an acquisition. The resulting company will employ more than 100,000 people in 17 countries and produce 12.5% of global aluminum and 16% of global alumina.

MODES

Modes considers what entry modes firms adopt. The classic internationalization literature such as the Uppsala Model (Johansson and Valhne, 1977) suggest that firms normally internationalize in a step-wise fashion incrementally increasing their commitments to foreign markets as they gradually acquire, integrate, and are able to use knowledge about foreign markets. Our research shows that firms from transforming economies are very willing to leapfrog some of these steps to, for example, start with acquiring a factory abroad or being born global. The Russian company Transas is an interesting example. Transas makes naval navigation systems for large ships with electronic maps that are updated for errors daily (this is important for insurance purposes). Transas' innovation was to do this all electronically with mobile communication instead of using a paper-based system that had been used previously. Transas is one of the world leaders in this market leveraging Russia' strong software skills and a good idea to be first to market in this interesting nitch market which allowed them to grow rapidly. Transas was basically born global. Almost from day one in 1990 it had a sales subsidiary in the UK and the majority of it sales abroad. Internationalization continued rapidly to where today Transas has about 1000 employees globally with subsidiaries or representative offices in about 100 countries. Already by 1997 all companies in the Transas group were ISO certified and by 1998 they had a significant training program under way. By 2006 sales had grown to over 100 million euros. Recently Transas has expanded into air navigation systems. They are also strong in both air and naval training simulators.

In the IT services sector, companies have graduated from an offshore delivery model to a global delivery model (a method of operation where software development activities are undertaken partly with the client, partly on shore, partly near shore, and partly off shore). In short, through this parameter we look into the modes of entry used and the ordering and pace at which these modes have been adopted. Further, some firms from transforming economies such as Transas mentioned above are acting internationally from their very inception such that they might be called born global firms.

Many companies in our study also do not seem to consider the mode of entry as an isolated item or even make a choice in an explicit rational way. Instead, firms seemed willing to take on higher-involvement modes early on if the overall investment proposal looked attractive or vice versa. .

The speed of change is very rapid in transforming economies and thus almost uniformly acquiring foreign manufacturing operations was seen as more interesting than starting greenfield operations as time was considered to be of the essence. Also, key motivations were to acquire technology, obtain a well-known brand, buy market share, or learn and these goals would be much harder to achieve via greenfields.

MARKETS

Markets considers what type of markets emerging MNCs have gone to and in what order they have chosen to enter different markets. Given the challenges of product and process technology and the negative reputation affects associated with being from the margins of the world economy, the markets (or at least the ordering) which emerging MNCs choose to enter as they venture abroad may be different from those chosen by MNCs from developed countries as has been explained through the international product life cycle theory[11]. Markets also considers the extent emerging market MNCs choose markets that have smaller cultural, institutional, and geographic distance[12] and what other criteria affect their decisions -lower tariff rates, cheaper resources, larger market size, easier acquisition possibilities, less competition, etc.

Since most transforming economies are very dynamic and have weak institutions which constitute what Khanna, Krishna, Palepu, and Sinha[13] call institutional voids, MNCs from developed countries normally find it difficult to operate there. Many of the operating practices Western MNCs (from here on referred to as MNCs) use are built around the existence of well-developed market institutions and a more stable environment. For example, MNCs from developed countries are used to using market research firms to provide detailed insights into consumer preferences to help them design their products. Those MNCs are also used to a well-functioning banking sector to provide suppliers, distributors, and customers with loans. Having logistics companies for product distribution is also built into many MNCs' strategies. The above and other institutions are often poorly-developed in transforming economies causing problems for MNCs. However, firms from transforming economies have developed in environments with institutional voids and thus have been designed/developed strategies to deal with such conditions which provides them a competitive advantage in such environments compared to Western MNCs. As a result, it is often beneficial for firms from transforming economies to initially expand into other transforming economies (ideally those where competition is less and which are geographically, culturally, and institutionally similar to the emerging MNCs home market) where MNCs are most vulnerable. This allows emerging market MNCs to develop some international business skills before trying to take on highly competitive and demanding developed markets that are also more different than their home markets. Some examples help to illustrate the above.

The Chinese telecommunication equipment company Huawei provides a good example of the above. They had basically no international activity in 1999 and only minor international activity until 2002. In 2002 they had sales of only 2.7 Billion dollars, but by 2006 they had rapidly expanded to sales of 11 Billion dollars with 65% foreign sales and 31 of the world's top 50 telecommunications operators were their clients. Hauwei had also developed to be #3 in the CIS with 14% of the market, #1 in China with 22% of the market, #2 in South Africa with 25% of the market, #4 in Asia Pacific with 7.7% of the market, and #3 in Latin America with 10% of the market. How did Huawei achieve this success? Part of the secret to Hauwei's success is that they learned from Chinese history and followed Mao's military strategy that it is best to take rural areas first and encircle the cities and then move into them. In their business Huawei found this to mean to focus on rural areas first and even more importantly to start internationalizing by entering developing or transforming economies like the former CIS which tended to be more ignored by other MNCs, have less competition, and good growth potential.

Many other companies in our study have found success by following similar strategies of starting internationalization by entering other transforming economies. For example, the Chinese TV company Skyworth first entered Turkey, Malaysia and Mexico and set up manufacturing facilities and distribution channels. It then used these facilities as regional bases to penetrate into Central and East Europe, Southeast Asia, and Latin America more broadly with good success.

However, markets is more than what countries a company operates in. It also includes what type of product market a firm works in. MNCs from transforming economies normally have to enter foreign markets initially in lower end segments or with bulk products. However, one aspect that differentiates the successful and the unsuccessful companies is that the successful ones normally have a continual focus on trying to move up to more value-added products and services. A good example of this is the Russian aluminum company Rusal which today has grown to be the largest

Aluminum company in the world. Rusal initially entered international markets via selling to international metals exchanges like the London metals exchange. However, over recent years they have had an increasing focus on specialized alloys, which today have grown to represent 30% of their sales with a goal of accounting for 50% of sales by 2010.

Firms from transforming economies normally also have the best chances at successful internationalization when they focus on small niche markets. The Russian firm PCMP is a great example of this. Previously the firm engaged in all aspects of semiconductor production and producing a wide variety of products using silicon. However, they did not have enough financial or managerial resources for this broad focus especially when going abroad. Thus, they decided to focus just on producing solar sells and try to be a global player in this small niche and have succeeded quite well. Sales increased nine times of the last five years.

METHODS

Previous research has shown that it is challenging for firms to expand abroad and the success rate is low[14]. Thus, choosing the correct methods or strategies is critical. The methods parameter identifies the operational practices or strategies firms from transforming economies have used in their internationalization process. We will discuss the most important methods or strategies identified in our research below.

Combat Negative Image

Perhaps the largest challenge that many of the companies we interviewed faced when starting to work abroad was that they found it hard to combat a negative image today often associated with labels like "made in Russia", "made in China", or "made in India." Someday such labels may be prestigious signs of quality, but today they have negative perceptions. More importantly, companies from transforming economies found it difficult to develop an image that was significantly better than their country's image even if in fact their company objectively deserved a better image. For example, Yang Guohe, president of the IB division of the Chinese television manufacturer Konka said:

> *A key problem for us is that foreigners often do not differentiate us from other Chinese TV manufacturers. They have some experience with one manufacturer and they assume we are all the same in terms of product quality, how we work, etc. However, in fact we are quite different….To solve this problem I think it would be very helpful if there was an industry organization or government organization which controlled that there was a minimum quality which TVs had to meet before they could be exported*

Fortunately, firms in our study have identified several strategies which have proved helpful in decreasing this image problem. Probably the most useful strategy which several firms used was to show that a firm was very quality focused and obtain international quality certificates like ISO 9000. By associating the firm with an international quality standard, firms tried to associate themselves with high quality, rather than average quality, products. Rusal, Severstal, Transas, PCMP, Konka, Wipro, Infosys, DMTG, ZTE, Huawei and DMTG are among the firms that followed this strategy. As Dalian Machine Tool Group's senior advisor Liu Kexin said,

> *Our key to success has been a focus on quality. We say quality is our life. Chinese companies have an image problem with foreign companies and focusing on quality has helped us overcome this. Especially useful for us was getting ISO9000 certified. Then people knew we were focused on quality and good with it which helped our image….Without quality our products will have no value.*

Indeed, Mr. Banerjee, vice president of Wipro, recalls how difficult it was in the beginning of their international efforts when they had no recognized brand and a negative perception due to being an Indian company. Making an extreme focus on quality a key selling proposition helped Wipro overcome this negative perception. They have obtained increasingly challenging quality certificates such as ISO, ACI, CMM, Six Sigma, and even LEAN certification (the first company worldwide to obtain LEAN). With the help of demonstrated quality, Wipro has grown from its humble beginnings to employ 80,000 people providing integrated business technology and process IT solutions using a global delivery platform across 30 countries. Wipro's international sales have rapidly increased to constitute 77% of its 3.2 billion USD in sales with 500 million dollars in profit in 2006.

One of Wipro's early international projects was a project for Transco a British utility company. They were required to deliver the project in a very short time and deliver it live. Wipro did not know much about the utility services or regulatory framework in the UK and this was an important component for success and quality of their work. They worked very hard to acquire needed knowledge, cut no corners, and focused on quality. The successful project resulted in a story in the British journal *Utility Week* which served as a major break to help Wipro sell many projects to other utility companies in Britain and around the world.

Another strategy which several firms in our study used was using consulting firms to improve international perception and reality. For example, the Chinese firm Huawei used this strategy with great success. Indeed, in recent years Huawei, led by CEO Ren, has paid much attention to focusing on creating a more efficient organization through working with leading consulting firms: IBM for product development and supply chain, Hay Group for HRM, PWC for Financial Management, FhG for Quality Control, and Mercer for Organization transformation. As an example of benefits Huawei obtained from this, IBM pointed out Huawei's lack of an accurate and forward-looking assessment of customer's needs, too much redundancy, insufficient co-ordination between departments, too much dependence on people rather than procedures, poor project planning, etc. Together with IBM, Huawei has been working on improving in these areas which has resulted in improved efficiency.

Finally, several companies we studied have come to appreciate that seeing is believing and as a result have gone to great effort and considerable cost to bring potential and existing clients to see their factories to combat the negative country of image problem. Among others, the Indian drug companies like Ranbaxy and Dr. Reddy's pointed out the usefulness of this strategy.

Acquire Foreign Brands and Technology

Co-branding products with foreign firms or even purchasing foreign firms to be able to use their brand names has also proved to be helpful. For example, Dalian Machine Tool Group purchased the American company Ingersoll primarily to obtain its technology and brand name. As described in detail in the motivations section, this purchase allowed DMTG to increase the image of its entire portfolio of products (not only those it marketed under the Ingersoll brand) both at home and abroad as foreign companies had a perception that any Chinese firm which could purchase a US firm must have much to offer and be serious about quality. The acquired technology itself was also useful especially in facilitating DMTG's successful expansion into the quality/technology-focused automobile industry.

Grow Quickly to Have International Sales be a Reasonable Part of International Activity to Get Employee Attention

All firms indicated that the first steps of internationalization were the most difficult and that after acquiring some international experience it got much easier. Employee attention is one of the items that is in shortest supply in companies and keeping attention is difficult since humans like to see quick results or lose interest. Thus, when international sales of a company account for only 2% of sales and much effort is needed to grow them, it is hard to attract employee attention. Thus, several companies mentioned the importance of quickly growing to the point where approximately 15% of sales are international such that employees realize this is an important part of company activity and worth paying attention to. For example, a senior manager at Huawei recalled how when Huawei started its international activity, many employees doubted if it could be successful abroad. Many employees just saw people working with international operations as causing problems saying please help me with this, and it took much time and initially produced only small sales. However, top management was convinced that Huawei had to focus on international sales to grow and kept on pushing it and soon international sales grew. Once international sales got to be about 15% most employees were convinced that international sales were important and worth focusing energy on and they served to fuel company growth.

Important Not to Make Many Mistakes, But More Important to Learn

Many firms spend considerable time trying to avoid making mistakes and this is important. However, some of the successful firms in our study have realized that while trying to avoid mistakes is important, even more important is making sure that the entire firm learns from mistakes which are made such that the firm makes each mistake only once. For example, if it is learned that it is very important in some countries to write in an employment contract "current work tasks include" and not just "work tasks include" such that they can be changed, it is important that the entire global organization learn from this and not only the Swedish subsidiary who learned this by writing a contract the wrong way. Our research also highlighted that while it is important to learn from foreign markets, it is also important not to forget why your firm has been successful at home and just copy what one sees abroad. Indeed, it is normally difficult to beat local firms at their own game or out xerox Xerox.

Our research highlights that it is critical that firms develop formal and informal systems to ensure that such learnings are not only learned by the individuals involved in the particular decision, but by the entire firm. And, it is important to note that more learnings than many would think are useful not only in the country of operation but also in other countries. For example, a senior manager at the Indian Pharmaceutical company Ranbaxy indicated that one of his key learnings from Ranbaxy's internationalization experience was that for success it was important to develop systems and processes such that maximal learning for the entire organization occurred from international activities and that conditions for entrepreneurship were present such that new things were continually tried and learning occurred out of these activities.

Likewise, Liu Kexin, senior advisor at China's Dalian Machine Tool Group indicated that:

> An important reason for our international activities being successful is that we went in with an attitude that we were there to learn. That does not mean that we have to agree that everything done at a foreign acquired or partner company is the best way and that we should copy it.

> It means we should evaluate it. Also remember that negative learning is also learning. It also means that we want to be sure that not just one person, but the entire firm learns what one person sees works or does not work well abroad. We need formal and informal systems to make this learning happen….However, we also need to remember that at the end of the day leaning happens when people interact and thus we must arrange much interaction.

Invest in R&D

Most firms from transforming economies find themselves at a technological disadvantage compared to their western counterparts. While this has long been realized as a key disadvantage (especially when competing internationally), for many years this was accepted by most firms as a situation which unfortunately could not be changed. However, increasingly firms from transforming economies are realizing that it is possible for firms from them to compete with leading western firms even when it comes to technology. Transforming economy MNCs have realized that they can hire key technical personnel much cheaper than in the West (often for as little as 20% of the cost) and that their employees are normally prepared to work more than their western counterparts. Further, while in some cases it is hard to find enough experienced management, there is an abundance of highly skilled technical personnel in Russia, China, and India who are eager to find an organizational culture which will allow themselves to fully unleash their creativity and potential. Thus, a dollar spent on R&D in transforming economies can go a long way and allow firms from transforming economies step by step to catch up to their western counterparts. The Russian IT&T firm Sitronics, for example, believes that one of its keys to success is having about 45% of its 10,000 employees working in R&D. In addition, transforming economy companies like the Indian pharmaceutical companies Dr. Reddy's and Ranbaxy and Chinese telecommunication network equipment producers

ZTE and Huawei are realizing that they can save money by having most of their R&D at home, but still gain important benefits by having small research centers in some other leading technology countries around the world to help stay abreast of the latest trends.

The Shenzhen-based Chinese telecom network equipment company ZTE provides a good example of how Chinese companies can compete with leading international companies also in R&D. For a number of years ZTE has been having over 35% of its 30,000 employees involved in R&D which is more than most of its international competitors and as mentioned above and they get more out of each R&D dollar than most foreign firms. To stay abreast global trends, ZTE has small research centers in China, India, Pakistan, US, Sweden, and France. As a result, ZTE is quickly closing the technology gap with leading international companies which is one reason that international sales in 2006 accounted for 44% of ZTE's 3.0 Billion dollars in sales (up from almost no international sales in 2001 and 35% in 2005) and helped produce 130 million dollars in profit. Now with much improved technology and extended global presence, ZTE is a serious threat to be reckoned with.

Other Important Methods

In addition to the above methods, the emerging multinationals adopted several other strategies to help in their internationalization efforts like basing operations in free economic zones, being near international best practice to succeed, benchmarking foreign companies at home to learn, and using consultants and lawyers to get information when entering a new country. In addition, Russian firms also all uniformly mentioned the trouble with getting back VAT on exported products (which by law should clearly happen). They mentioned the importance of developing a good system for dealing with this including appropriate capital planning and hiring a good lawyer to sue the government (well-documented cases of this type were normally won by companies).

MANAGEMENT

The management dimension considers what management practices facilitate effective internationalization. Below we discuss key management issues which emerged.

Pay Attention to Cultural Differences and Adapt Management Practices

Many companies we studied highlighted the importance of paying attention to cultural differences for a firm to be successful abroad. Further, many firms in our study suggested that when working abroad management practices need to be adapted. Severstal, a large Russian Steel company with increasing international ambitions and ownership of assets abroad is a good example believing that one reason they have been successful abroad while other firms have struggled is that they have recognized the need to adapt management and organization practices across countries to the local environment and conditions. For example, Severstal indicates that it has no desire to have the same organizational culture in all countries where they operate. Severstal has also discovered that it is best to let most decisions be made on the ground where the subsidiary is operating to allow for quick informed decisions rather than trying to have extensive control and involvement from headquarters as was their initial tendency. However, of course business plans are carefully reviewed and in most subsidiaries the CEO is local and the COO is an expatriate from Severstal as well as sometimes the CFO and a few other employees.

Staff for International Success

One of the key challenges to working abroad is accurately evaluating who to hire. Our research shows that firms make more mistakes when hiring abroad due to cultural differences and thus it is beneficial to pay more attention than normal to international hiring. The Russian programming firm IBS, like other firms in our study, have come to the conclusion that when working abroad the ideal solution is to try to hire Russian immigrants as management and programmers. However, for sales employees they have met with best results with native locals who are best accepted locally. Many firms have found it desirable to have at least one home country employee (Chinese, Indian, or Russian) at each subsidiary to facilitate cross-cultural understanding and also help integrate the subsidiary with the rest of the firm (e.g., provide introductions to people with information at headquarters).

Our study also highlights that it is beneficial to employ at least one expatriate at headquarters to help internationalize the mindset of employees, increase international understanding, and challenge conventional wisdom. Severstal followed this approach and it helped to internationalize the atmosphere and thinking avoiding tunnel vision. For example, the expatriate technical director Gregory Mayson has been very useful for introducing some new ways of thinking about various technical issues. The Russian company Transas has also benefited early on from having an expat in its top management team from the early days of the company. Russian management indicated this played an important role in challenging some Russian ideas and making them think more internationally. Sarthak Raycaudhury, Ranbaxy's general manager of organizational development and training indicates that when firms go abroad it is people from different cultures not abstract markets which you interact with. As a result, learning how to deal with people from different cultures and starting to be able to think in more varied ways is critical. Raycaudhury indicates that Ranbaxy has significantly improved in dealing with these and other challenges which are important for their internationalization efforts by having two regional directors of foreign origin to challenge conventional Indian wisdom and develop a more global mindset in the company.

Have and Articulate a Clear Vision to go International

Our research suggests that it is helpful for a firm's international activities if top management develops and clearly articulates a vision to start working abroad. The Indian company Ranbaxy is a good example of the usefulness of a clear vision of being international. Ranbaxy is a leading India pharmaceutical company that was established in 1961 and started internationalization in 1977. However, Ranbaxy first made serious progress in going international only when their CEO Dr. Parvinder Singh expressed a strong clear vision for Ranbaxy to become a research-based international company and not just a trader. Singh linked internationalization with Ranbaxy's long-term success and indicated that short-term losses in international operations might be necessary to secure big long-term success. This clear vision and continual commitment from top management galvanized employees behind the company's international efforts and along with a focus on R&D has allowed the company to rapidly grow and prosper. Today

Ranbaxy has manufacturing facilities in 9 countries, on the ground presence in 49 countries, and products available in over 125 countries. It manufactures a wide range of generic medicines and more recently some branded formulations as it works to move up the value added curve.

Interact Much with Subsidiaries

Another important finding from our research is that too many foreign subsidiaries are not integrated enough into their entire organization such that they can fully benefit from what the MNC knows and provide learnings to the rest of the MNC. It has also been pointed out that integrating acquired foreign firms into a transforming economy firm is not easy. Focus should not just be on the acquisition/wedding but also on the marriage/ post-merger integration. To facilitate integration and maximum learning, it is critical that significant communication occurs between the subsidiary and headquarters and that frequent visits of personnel from headquarters to the subsidiaries and vice versa occur. Top management also has a very important role to play here in setting an example and acting like they want others to not only initially after forming or acquiring the subsidiary, but on a continual basis. For example, a senior manager at India's Tata steel company indicated that increasing the amount of interaction they had with their international subsidiaries had been of significant help to their operations.

Help Employees Get International Experience, Skills, and Mindset

Many of the companies in our study highlighted that a key bottleneck in their internationalization efforts was not talented management, but talented management who had international understanding/experience. As a result, a number of firms in our study have developed some useful strategies to try to deal with this. The Chinese company Huawei has developed an international leadership competency model with the help of the Hay Group which shows exactly what competencies their employees need to develop to be successful internationally and development and training initiatives are being formed with this in mind. Likewise, the Chinese company Skyworth undertook its internationalization only after 3 international venture capital companies acquired large block of stocks in Skyworth. The venture capital companies brought with them management competence and international knowledge as well as the international recognition needed for expanding the business internationally.

The experience of Russia's leading computer programming company IBS also provides some useful insight into ways to help create an international mindset. As IBS's president Anatoly Karachinsky said:

> We recognize the importance of an international mindset, experience, and skills for our business' success. We also want to be sure to retain people who want international opportunities. While we have much interaction with foreign clients, most of our employees are based in Russia. Thus, we have now developed a program where we will help our employees to get international experience.

CONCLUSIONS

Traditionally, few have worried about firms from transforming economies becoming significant global players and expanding around the world and being significant challengers to Western MNCs. After all, these new kids on the block from transforming economies lacked well-known global brands, quality products and services, advanced technology, experienced managers, and other assets traditionally thought needed to be successful abroad as well as the competence traditionally thought needed to develop these important assets. However, this article shows that it is high time to pay attention to these new kids on the block as serious competitors and, depending on the origin of your firm learn how to be one or compete against them especially since there are armies of firms at home waiting to copy the few leading companies from transforming economies which have so far started to be significant global players.

This paper has investigated the internationalization of firms from the transforming economies of China, India, and Russia and showed that they internationalize for different reasons, using different mode ordering, and by initially entering different types of countries than their western counterparts. The study also investigated the methods and management practices which have allowed these firms to be successful. Thus, this article has shown that conventional FDI theory needs to be modified when applied to firms from transforming economies and the paper has developed the Five M framework to guide managers and academics in their understanding of the internationalization of firms from transforming economies.

Several key differences emerge from this study between the way firms from developed economies and those from transforming economies normally internationalize. Emerging multinationals tended to internationalize much faster and often skipped some modes in the normal Uppsala model progression from low commitment to high commitment modes. Also, unlike most of their western counterparts emerging multinationals normally did not expand to gain access to inexpensive resources (e.g., inexpensive labor) or to gain access to additional markets to sell products to. Instead, it was issues such as acquiring respected brands and modern technology which were often key drivers. Emerging multinationals normally internationalized to improve their position in their home market rather than to access other markets. Internationalization is challenging for any firm, but emerging multinationals in most cases face especially large hurdles. The greatest challenge was finding ways to overcome the problem of a negative country image. A strong focus on quality as shown by getting international quality certificates is one useful way to help address this challenge. Unlike firms from developed countries, emerging multinationals normally found it easier to do business in other developing countries since they were better able to deal with these challenging environments than their western counterparts. Finally, firms from the transforming economies in our study were starting with what by western standards was an extreme lack of international experience and foreign language skills. As a result, paying significant attention to recruiting for and developing these skills proved especially important for emerging multinationals in our study.

While there are certainly some differences, it is the similarities, rather than the differences, across industries and the three transforming economies of China, India, and Russia which we studied that were most striking suggesting that there are good possibilities for firms from these transforming economies to learn from each other's experiences. Certainly this study is only an exploratory first step to investigating the internationalization of companies from the transforming economies of China, India, and Russia. However, we believe that it is an important first step with the benefit of including experience from three important transforming economies in some depth. No study can serve all purposes. The purpose of this study was to make a broad overview of key issues. Building on the many issues this broad study has identified, future studies are urged to focus on more narrow aspects of the internationalization process of transforming economy firms in more detail.

Table 1: Summary of Russian Companies

	Rusal	Severstal	IBS	Sitronics	Transas	PCMP
# of employees	110,000	150,000	4000	10,000	>1000	1450
Sales for 2006	$6.7 billion	US$12.5 billion	$575 million	$7.59 billion	$109 million	$ 50 million
% sales abroad	81%	60%	7-8%	50%	50%	80%
Profit 2006	$8,2 Bil	US$3.0 bil	Profitable	US$1.6 bil	Profitable	Profitable
# of foreign countries where working	50	About 50	About 10	25 (export to 60)	100	65% Europe 35% Asia
# of countries w/ manufacturing abroad	13	3	3	3	0	0
List of countries where working abroad	Australia, Guinea, Nigeria, etc.	USA, Italy, France, etc.	USA 50% of sales, some Europe, Ukraine programmers, UK, etc.	16, Mainly CIS, also Czech, Greece, USA**.**	100 countries: USA, UK, Germany, Sweden, China, etc.	Sell all over the world, but all activity done from HQ
Year founded	2000	1993	1992	1993	1990	1954,2000 private
Year started to work abroad	2000	2000/much 2004	2000	2001	1992	1990
# employees abroad	>5000	About 30	About 200	n/a	250	0
# of Russians abroad	n/a	10	90	n/a	<30 + immigrant	0
# foreigners at HQ	A few	A few	0	0	1	0
Ownership structure	Private	Publicly listed NY, London, R	Private	Private	Private	Private
Brief Description of the company's activity	The largest aluminum company in the world, only top 3 which is privately held	One of the world's top six steel producers, owns Rouge (USA) retirement 71%Italy Lucchini	IBS is Russia's leading programming company. Much offshore programming	Key Regional ITT Co, part large Rus Systema group, Telecom/ electronics solutions, software, equipment	Software, hardware-integrated solutions, electronic navigation for shipping and aviation	Solar cell production for solar energy panels---accounts for 15% of the total world production
Website	rusal.com	Severstal.ru	www.ibs.ru	www.sistema.ru/	Transas.com	www.pcmp.ru

Table 2: Summary of Chinese Companies

	SMTCL	DMTG	ZTE	HUAWEI	Skyworth	KONKA
# of employees	18,368	N/A	30,811	61,000	20,000+	21,100
2006 Sales	$1.04 Bill	$1.2 Bill	$3.0 Bill	$8.6 Bill	$1.67 bill	1.7 Bill
Sales growth 2005 to 2006	22%	23%	7%	45%	20%	11%
%sales abroad	10%	30%	44%	65%	10%	26.83%
Profit 2006	$17 Mill	$77 Mill	$140 Mill	N/A	$273 Mill	$13 Mill
# of foreign countries where working	1 sub + 33 overseas sales agents	4 subs + export to many	20 +	100 (6 R&D centers)	20+	5 subs + Sales to 100 from HQ
# of countries w/ manufact. abroad	1 Germany	2--USA + Germany	India, Pakistan, Tajikistan, Nigeria	India, Russia, Brazil,	Turkey, Malaysia, Mexico	Contract factories in 5-don't own
Countries where working abroad	German (manufacturing)	America (manufacturing) German Italy	Most of world	Russia, Africa, now most of world	Central & East Europe, South & East Asia, Latin America	US, HK, Slovakia, Indonesia, Thailand, Mexico, etc
Year founded	1949	1948	1985	1988	1988	1980
Year first year started to work abroad	Export before 1984	M&A 2002, export from 1990	2000	1999-Bagalore R&D center in 1999	1998	1996
# employees abroad	N/A	N/A	N/A	N/A	N/A	N/A
# of Chinese abroad	N/A	N/A	N/A	N/A	N/A	N/A
# foreigners at HQ	N/A	N/A	About 100	N/A	N/A	N/A
Ownership structure of firm	State owned	State owned	32% state, 0.013 TMT, Tradable shares 68%	Privately Owned by management and many employees	Public, traded on HK Stock exchange	Public, traded on HK Stock exchange
Brief Description of the company's activity	Machine tool production and sales; complex systems	Machine tool production and sales; complex systems	Telecom network equipment manufacturing&sales	Telecom network equipment manufacturing&sales	TVs and other home electronic appliances	TVs and other home electronic appliances
Website	www.smtcl.com	www.dmtg.com	zte.com.cn	huawei.com	skyworth.com	www.konka.com

Table 3: Summary of Indian Company Characteristics

	Infosys Tech	Wipro Tech	Ranbaxy	Dr. Reddy's	Nalco	Tata Steel
# of employees	70,000	80,000	10,500	7,000	10,000	41,794
Sales for 2006	$2.8 billion	$3.2 billion	$1.3 billion	$ 0.54 billion	$1.1 billion	$5 billion
Sales growth 05 to 06	33%	34%	50%	24%	20%	30%
% sales abroad	98 %	77%	80%	83%	60%	37%
Net Profit 2006	$ 0.56 billion	$ 0.5 billion	$0.019 Billion	$ 0.042 billion	$0.35 billion	$0.85 billion
# countries w/ subsidiaries	~ 30	~30	~50	~35	~12	~25
# countries w manufacturing abroad	global delivery model	global delivery model	9	2	0	8
Countries where working abroad	America, Europe, Asia, etc	America, Europe, Asia, etc	America, Europe, Asia, Africa, etc	America, Europe, Asia, Africa, etc	America, Gulf, Asia, China, Europe	America, Europe, Asia, Africa, etc
Year firm founded	1981	1981	1961	1984	1981	1907
Year started to work abroad	1987	1985	1977	1986	1987	1940s export, 99 manufact
# employees abroad	11,000	15,000	3,000	1,200	0	3,612
# Indians abroad	8,000*	11,000*	1500	75	0	44
# foreigners at HQ	--	--	~ 50	--	--	--
Ownership structure	Private	Private-chairman +fam 80%	Private	Private	Public	Private
Brief Description of the company's activity	programming	programming	pharmaceuticals	Pharmaceuticals	Aluminum	Steel
Website	Infosys.com	Wipro.com	Ranbaxy.com	Dr.reddys.com	Nalcoindia.com	Tatasteel..com

NOTES

[1] G.M. Grossman & F. Helpman, "Product Development and International Trade. *Journal of Political Economy,"* 97 (1989): 1261-83. and W. Hejazi & A.E. Safarian. The Complementarity Between US Foreign Direct Investment Stock and Trade. *Atlantic Economic Journal,* 29 (2001): 437.
[2] J. H. Dunning. *The Eclectic Theory of the MNC (*London: Allen & Unwin, 1981).
[3] It is worth pointing out that some previous work has tried to explained why MNCs from developing countries invest in other countries. For example, see Louis Wells, "The internationalization of firms from developing countries", in T. Agmon and C. Kinleberger (Eds.) *Multinationals From Small Countries* (Cambridge, MA, USA: MIT Press, 1977). However, there has been little focus on the larger internationalization efforts we are starting to see some firms from transforming economies undertake as they expand to developing and developed countries around the globe.
[4] J. H. Dunning, Multinationals, Technology, and Competitiveness (London: Allen & Urwin: 1988) and E. Hymer. The International Operations of National Firms: A Study of Direct Investment (Cambridge, MA: MIT Pres, 1976).
[5] J. Johansson & J.-E.Valhne, "The Internationalization Process of Firm—A Model of Knowledge Development and Increasing Foreign Commitments, *Journal of International Business Studies,* 8/1 (1977): 25-32.
[6] K. Eisenhardt, "Building Theories From Case Study Research," *Academy of Management Review,* 14/4 (1989): 532 – 550. and R.K.Yin, *Case Study Research: Design and Methods.* (Newbury Park, CA: Sage, 1989).
[7] Dunning 1981 op. cit.
[8] See Dunning 1988 op. cit. and A.E. Rugman & A. Verbeke, "Location and Competitiveness," In A.M. Rugman & T. Brewer, Eds., *The Oxford Handbook of International Business* (*N*ew York: Oxford University Press, 2001).
[9] See R. Vernon, "International Investment and International Trade in the Product Cycle," *Quarterly Journal of Economics,* 80 (1966): 190-207. and B. Park & K. Lee. "Comparative Analysis of Foreign Direct Investment in China: Firms from South Korea, Hong Kong, and the United States in Shandong Province," *Journal of the Asian Pacific Economy,* 8/1 (2003): 57-84.
[10] Vernon 1966 op. cit. and P. Walkenhorst, "Economic Transition and the Sectorial Patterns of Foreign Direct Investment," *Emerging Markets Finance and Trade,* 40/2 (2004): 5-26.
[11] Vernon 1966 op. cit.
[12] P. Ghemawat. "Tool kit: Distance Still Matters--The Hard Reality of Global Expansion," *Harvard Business Review,* 79/8 (2001): 137-147.
[13] T. Khanna, K. Palepu, & J. Sinha "Strategies That Fit Emerging Markets," *Harvard Business Review,* 83/3 (2005): 63-76.