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FDI from Developing and Transition Economies: Implications for Development

> CHAPTER IV DRIVERS AND DETERMINANTS



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## **CHAPTER IV**

## **DRIVERS AND DETERMINANTS**

Chapter III demonstrated that FDI by developing and transition economy TNCs has risen rapidly over the past two decades and now constitutes a sizeable share of global FDI flows. These outflows of investment are, however, concentrated both by country of origin and industry. Allowing for the caveat that this is still an emerging phenomenon, this chapter explains the how, why and where of FDI by developing countries and transition economies, using a recognized conceptual framework.

The conceptual framework examines how developing-country TNCs are able to acquire competitive advantages, including proprietary expertise and technology, which will allow them to operate in overseas environments and compete effectively with foreign firms. Many of these TNCs possess sophisticated and distinctive advantages which they have created and nurtured over many years. There are also complementarities between developed- and developing-country TNCs (especially Asian ones), for example in some electronics industries where developed-country TNCs retain R&D, product design, branding and sales of a product, but have disbursed production to contract manufacturers. Finally, a number of developing-country TNCs are able to benefit from home-country locational factors, including access to natural resources such as oil (often allied to State ownership) and access to cheap funds, which translate into significant advantages for these firms. The wider range of sources from which developingcountry TNCs derive their advantages requires an extension of the theory of transnational corporations, rather than warranting an alternative approach.

The question why TNCs are emerging from some developing countries and not others is discussed in terms of the investment development paths (IDP) of countries. The IDP theory argues that as countries become more industrialized or developed - with a parallel advance in their industrial and service sectors – their firms are likely to build up firm-specific advantages, and so are able to compete more effectively at the international level. Why FDI from developing and transition economies has increased in recent years is partly explained by this theory. However, there is some evidence of trend acceleration over the past decade, which seems to be largely due to the continuing impact of globalization on developing countries and their economies. The dynamics are complex, but within them the combination of competition and opportunity – interwoven with liberalization policies across the developing and developed regions – is particularly important. As developing economies become more open to international competition, their firms are increasingly forced to compete with TNCs from other countries in their home and foreign markets, and one of the means at their disposal is through FDI. The competition in turn can impel them to improve their operations by encouraging the development of firm-specific advantages, which enhance their capabilities to compete in foreign markets.

Finally, where developing-country TNCs locate overseas depends a great deal on their motives, in particular whether they are marketseeking, efficiency-seeking, resources-seeking or created/strategic-asset-seeking. Apart from opportunistic circumstances (e.g. in the case of privatizations), the location is also affected by contingent factors such as a firm's strategy, the industry or service and the position in the value chain of the investing firm.

This chapter is divided into two main parts. Section A provides a conceptual framework for investigating the competitive advantages of TNCs from developing and transition economies, as well as factors which drive them to internationalize, and their motives and strategies. Section B examines these issues empirically. The conceptual framework first discusses the established theory of TNCs and FDI (section A.1) before examining aspects of the theory that would explain the rise of TNCs in developing and transition economies (section A.2) and the nature of the advantages they possess (section A.3). The empirical analysis assesses the sources of TNCs' competitive advantages, which the theory suggests are essential to firms' internationalization (section B.1), the drivers which impel these TNCs to invest overseas (section B.2), and the motives which help determine their choice of host location (section B.3). Section C concludes.

#### A. Conceptual framework

#### 1. The theory of transnational corporations and foreign direct investment

The basic rationale for FDI by firms in a global market economy is to increase or protect their profitability and/or capital value. One of the ways in which TNCs are achieving this goal is by engaging in FDI, either to better exploit their existing competitive advantages or to safeguard, increase or add to these advantages. Economic and political drivers that trigger the internationalization of TNCs (or result in their further overseas expansion) can be wide ranging, but often include a small home market (relative to a company's operations or ambitions), competitive pressures (which are intensifying in an increasingly liberalizing world) and government policies aimed at encouraging foreign expansion. These drivers are likely to vary, with different impacts on companies, depending, for example, on their competitive situation, motives and choices.

Firms may be in a position to respond directly to these pressures or opportunities to internationalize by utilizing their competitive advantages, some of which may be firm- or ownership-specific.<sup>1</sup> The latter are necessary if internationalization is to take place through FDI and international production within a TNC system.<sup>2</sup> These advantages could be assets possessed by a firm (e.g. patents, a recognized brand or production process capabilities) or they could involve more efficient organization of these assets across a geographical space. Using either kind of advantage, this type of TNC strategy is referred to as "asset exploiting", and its choice of host country location is determined by one or more of three types of motive: to seek out new markets, to raise efficiency (cost reduction), and to source better quality or cheaper factor inputs, such as skilled labour, raw materials or good quality infrastructure.

In contrast to asset-exploiting TNC strategies, firms engaged in asset augmenting strategies may not possess competitive advantages, especially firm-specific ones, which allow them to respond to, or exploit effectively, the drivers mentioned above. In order to address this shortcoming, such firms may therefore be motivated to venture into international markets and exploit their limited competitive advantages in order to acquire "strategic" created assets such as technology, brands, distribution networks, R&D facilities and managerial competences (quite commonly through M&As). In a world economy characterized by high levels of international competition and rapid technological advance, any particular advantage can easily be eroded. Asset augmenting FDI<sup>3</sup> has therefore become more prevalent and it is undertaken by firms that have the necessary minimum complement of competitive advantages for acquiring assets and conducting operations in foreign locations. Furthermore, firms must develop organizational capabilities which facilitate the absorption<sup>4</sup> of learning in their internationalisation process. This is a dynamic process and implies that a significant aspect of firms' motives is to address asset imbalances. Asset augmentation is a part of the normal growth process of the firm; and globalisation has widened the potential sources available to companies (WIR00, Dunning 2004). Although asset augmenting strategies were recognized as important in the early 1990s, it was only in the early 2000s that they were systematically used to explain South-North FDI by developing-country TNCs (Moon and Roehl 2001).

TNCs may emphasize one or other of "asset exploiting" and "asset augmenting" strategies at any given moment, but they are not necessarily alternatives nor always independent of each other. It is quite common for these strategies to be combined in a number of ways; for example, a TNC might buy a firm to gain access to a market, which it then services by a combination of existing and acquired assets (IV.B.3, *WIR00*).

Internationalization either to exploit or augment assets does not necessarily result in FDI; firms can choose a number of other responses to the initial drivers. For example, in some cases it may be more profitable to produce domestically and export to overseas markets (thereby realizing scale economies, among other benefits). Even where overseas production becomes desirable, a firm might choose to license its advantages<sup>5</sup> to a foreign company, which then establishes production or service facilities and pays the firm (the licensor) a royalty. However, if the firm and its prospective licensee cannot agree on the value of the technology, the firm might decide to internalize the market for the technology and establish its own FDI production affiliate overseas. Similar issues prevail for asset augmenting internationalization.<sup>6</sup>

Once the decision to invest overseas has been made, the implementation of that decision – where the investment should be made, or when and on what scale – is not a simple matter, especially for a small or new TNC (typically one from a developing country). A valuable approach to the questions – where, when and how - is provided by a variant of the theory of the international firm, which stresses the importance of experiential learning (Johanson and Vahlne 1977, Blomstermo and Sharma 2003). This approach argues that the pace and form of internationalization by any firm is determined by the dynamic interplay between increasing foreign market commitments and the knowledge and experience gained therefrom, including learning feedback loops (see Macharzina et al. 2003). This critical insight can be applied in a number of ways to understand TNC internationalization processes, including for example, the use of small, successive steps to deepen involvement in a foreign economy; the tendency to expand into markets which are better known (e.g. geographically proximate regional ones);<sup>7</sup> and the importance of familiarity to explain how investments might be spread internationally (e.g. common cultural or linguistic roots might explain the concentration of Brazilian FDI in Portugal and Angola). Allied with the concepts of a firm's asset exploitation and internalization, this developmental approach offers a powerful way to analyse TNCs' choice of host country locations.<sup>8</sup> In addition, the specific choice of location will also depend on host country advantages or assets, such as the policy framework, business facilitation measures, business conditions and economic determinants (e.g. market size, natural resources and created assets) (*WIR98*). These host country advantages are important determinants of the international location pattern of FDI activity (Dunning 1998) (section IV.B.2).

The foregoing discussion of existing theory raises two interrelated questions about developing and transition economy TNCs, both concerning the nature of competitive advantages that they possess. The first question, addressed in subsection 2 below, uses the theory of the IDP, which is about how and when such advantages arise. It might also help explain the recent rapid increase of FDI by these TNCs. The second question, considered in subsection 3, concerns the nature of the advantages possessed by developing-country TNCs, especially the degree to which they are similar to, or different from, the competitive advantages of developedcountry TNCs.

#### 2. The investment development path and the emergence of TNCs from developing and transition economies

According to the IDP theory, the outward and inward FDI position of a country is systematically related to a country's level and structure of economic development. Along the IDP, outward FDI is expected to be undertaken only when a country has reached a certain minimum level of development, at which time ownership advantages may have evolved among firms in that country. The outward FDI pattern will therefore reflect the evolving nature of ownership advantages of domestic firms as well as changes in the advantages of the home economy vis-à-vis potential host economies.

The IDP theory suggests that countries tend to go through five stages (from "least developed" to "developed"), in which the propensity of being a net recipient to ultimately becoming a net source of FDI evolves (Dunning 1981, 1986, 2005, Dunning and Narula 1996, Dunning et al 1998).<sup>9</sup> In the first stage, there is likely to be very little inward and outward FDI. This is because, at this stage, there are very few country-level factors (i.e. location-specific advantages such as a sizeable market or clusters of development) that might attract inward FDI, with possible exceptions being assets such as natural resources. Local firms have not created or acquired many firm-specific advantages that might allow them to invest overseas. In the second stage, inward FDI starts to rise (because of the increase of per capita incomes and other location-specific assets), while outward FDI remains low or negligible (firms are still developing). At stage three, the rate of growth of inward FDI is expected to decline (as local firms become more competitive), and that of outward FDI to grow faster. In the fourth stage, a country's outward FDI stock should exceed or equal the stock of inward FDI. By this stage, most domestic firms are now capable of competing with foreign firms abroad as well as in their own market. Finally, at stage five, the net investment position of a country tends to fluctuate around zero, reflecting relatively similar magnitudes of the stocks of inward and outward FDI.

Beyond changes in the volume of inward and outward FDI along the IDP, the approach also predicts structural changes in the composition of such investment. Inbound FDI is first directed to low/medium knowledge-intensive or resourcebased industries; later they may move into the hightechnology-intensive industries, and/or more efficiency-seeking FDI takes place. Similarly, outward FDI first takes place in low-technology or resource-based industries and then in high valueadded activities. This process of structural upgrading driven by inward and outward FDI reflects growing national competitiveness.

This brief overview of the IDP theory is put to the test in figure IV.1, which correlates net outward investment (NOI) per capita with GDP per capita.<sup>10</sup> In the broadest sense the IDP holds: the poorest countries receive very little investment and are home to very few or no TNCs (stage 1, falling NOI per capita). As economies' GDP per capita rises they receive, as predicted, increasing amounts of inward FDI (stage 2, NOI per capita continues falling). This is followed by a point (midway in stage 3 in the figure) at which the NOI per capita curve takes an upward trajectory, as middle- to high-income developing countries become home to increasingly competitive TNCs which invest abroad at a mounting rate. Stage 4 depicts a point at which countries are fully developed, with

Figure IV.1. Relationship between net outward investment and GDP per capita, selected countries, 2004



Source: UNCTAD.

*Note*: A total of 135 countries were included in a regression equation, which postulated a relationship between the level of development and the net outward investment (NOI) position of countries (i.e. outward FDI stock less inward FDI stock). Only a small number of countries have been indicated in the figure, for illustrative purposes. The points on the bottom axis at which the stages are divided from each other were chosen to correspond with theoretical predictions of the relationship between the NOI and level of development, and in this sense are notional. These points dividing the stages are roughly \$2,500 (between stages 1 and 2), \$10,000 (between stages 2 at 3), \$25,000 (between stages 3 and 4), and \$36,000 (between stages 4 and 5).

outward investment exceeding inward investment (i.e. a positive NOI per capita). There are insufficient data points to test stage 5.

While this overview of the patterns of inward and outward FDI for countries at various levels of development supports the IDP theory, it is important to recognize the limitations of the concept (Dunning 2005, Liang 2006). First, in figure IV.1, countries at similar levels of development (GDP per capita) display dissimilar patterns of NOI per capita. This reflects different levels and patterns of industrial development, as well as the consequences of government policies (Lall 1997, Frischtak 1997, Chudnovsky and Lopez 2000, ECLAC 2006a) (box IV.1). In addition, contextual issues, especially location-specific aspects, are needed to explain countries' actual net investment position. For example, Singapore has a very negative NOI per capita for its level of development, which is the result of its strategic

position in South-East Asia that makes it a prime location for TNCs' regional headquarters, operations and services.

Second, many of the countries, such as Brazil, China, India, Mexico, South Africa and Turkey, which are home to leading TNCs and are investing significant amounts of FDI overseas (as analysed in chapter III) are at stages 1 and 2 of the IDP; they have therefore begun outward FDI earlier than might be expected on the basis of the IDP (the *net* outward investment position, as used in figure IV.1, disguises this trend a little because these countries also receive large amounts of inward FDI). Of course, GDP per capita may be a poor measure of development and other contextual issues can be used to understand why low- and middle- income countries are investing comparatively large amounts overseas.<sup>11</sup> However, this is a prima facie indication that many companies are conducting FDI earlier than might be expected.

#### Box IV.1 A tale of two continents: policy choices and industrial development in East and South-East Asia and Latin America

East and South East Asia and Latin America provide a useful contrast for showing how country and company responses and strategies have longer-term consequences, including for economic development and FDI.

Until about 1970, import substitution of manufactured goods and services, often behind protective barriers that insulated local firms from the international economy, was the primary development framework in most developing economies.

From the 1970s, this situation changed dramatically as each country and region reacted in a variety of ways to the rapidly globalizing world economy. Most East and South-East Asian governments were open to inward investment or other forms of involvement with developedcountry TNCs. As part of wider industrial policies, including trade and investment liberalization, they opted for export orientated industrialization. East Asian TNCs have emerged partly as a result of this process. They are represented in a wide range of industries, in many cases because of deliberate policy choices by the subregion's governments to diversify their industrial bases.

In contrast, Latin American economies and companies – which were more developed than

those in other parts of the developing world – have been squeezed hard. They lost ground to competitors, partly by continuing to pursue import substitution policies, which were not sustainable under the circumstances; they were also negatively affected by the international debt crisis that struck all Latin American economies. From the late 1980s, Latin American economies began to liberalize and switched to export-orientated policies, but faced with stiff international competition, many firms went bankrupt or were forced to downsize. This was considered a necessary process of the "survival of the fittest". At the top end, in goods such as capital machinery, pharmaceuticals, speciality chemicals and scientific instruments, firms lost ground to competitors, mostly developed-country TNCs; at the bottom end developing-country competitors, especially from China, took over their market shares in products such as footwear, garments and furniture. On the other hand, the demise of some local enterprises allowed a few ("the fittest") to prosper. Other Latin American TNCs have been able to retrench by specializing or intensifying their activities in manufactured goods based on natural resources, such as pulp and paper, petrochemicals and cement. Finally, a new group of companies has emerged as a result of privatizations, especially in infrastructural services such as telecommunications and utilities.

Source: UNCTAD.



Source: UNCTAD.

Note:

Argentina (1984-1991), India (1982-1991), Libyan Arab Jamahriya (1992-2003), Saudi Arabia (1980-1990, 1993-2004), Turkey (1984-1991), and United Arab Emirates (1993-2004). Growth rates for for one or both periods were not available or too volatile for meaningful calculations for the following countries: China, Nigeria, Russian Federation, Turkey and United Arab Emirates.

It is given some weight by figure IV.2, which shows that there was a marked increase in the growth rates of FDI flows in the period 1992-2004 compared to 1980-1991 in many countries, including Brazil, India, the Russian Federation, South Africa and Turkey.<sup>12</sup> For some economies, such as Hong Kong (China), the Republic of Korea and Singapore, the growth rates of FDI flows in 1992-2004 were not as high as the earlier period, but these countries started from a high base, since their TNCs had been involved in outward FDI for some time. Although the data should be treated with caution, there is some evidence to suggest that there has been a secular shift in the link between development stages and internationalization, so that TNCs from developing and transition economies are increasingly investing at an earlier stage in their country's (and their) development. A likely reason for this lies in the impact of globalization on countries and companies, especially through increased competition and opportunities (see section IV.B.2).

Finally, although TNCs from developing countries might now be investing overseas at an earlier stage than TNCs did in the past, they nevertheless need to pass some thresholds implied by the theory. In particular, as suggested earlier, they need to possess some firmspecific or other competitive advantages that facilitate their FDI. India, for example, is a poor country, but it has a significant number of companies with a strong industrial base (BCG 2006a), indicating that Indian TNCs possess some relevant ownership of created assets. Of course, these thresholds should be taken into consideration by governments and, in this respect, the IDP helps explain how inward and outward FDI can assist in improving a country's - and its TNCs' - competitiveness (box IV.2). On the other hand, the fact that Kuwait and the United Arab Emirates – countries with a limited industrial tradition - are at stage 3 of the IDP (i.e. on the upswing of the NOI per capita curve, as shown in figure IV.1), suggests that competitive advantages might also emerge from sources other than firm- specific factors.

## 3. Application of the theory to TNCs from developing and transition economies

Is there a case for a special theory for TNCs from developing and transition economies? Many authors have commented on how their characteristics differ from those of developedcountry TNCs,<sup>13</sup> and some have argued for alternative theories to explain their internationalization.<sup>14</sup> Compared to developedcountry TNCs at a similar stage of development many developing-country TNCs appear to be investing overseas at a very early stage. Furthermore, their sources of firm-specific or other competitive advantages seem to cover a wider range than the technological and expertise-based competencies that the prevailing theory has normally considered. Nonetheless, it is possible to nest a special theory<sup>15</sup> of developing-country TNCs within the general theory of TNCs and FDI discussed above by pinpointing the unique or distinctive advantages possessed by developingcountry firms. Table IV.1 does this by crosstabulating the broad types of competitive advantages that TNCs are seen to enjoy, as derived from the general theoretical and empirical literature, against the particular advantages that

#### Box IV.2 The use of inward and outward FDI to upgrade the competitiveness of countries

Essentially, countries may use both inward and outward FDI to upgrade the competitiveness of their indigenous resources and capabilities to facilitate structural change, thereby promoting dynamic comparative advantage. In both cases, foreign assets (resources, capabilities, access to markets, patents, trade marks, entrepreneurial skills and institutions) are bought, whether it be via *market, resource, efficiency or strategic asset* seeking FDI.

The IDP suggests that at low levels of economic development, both imports and inward FDI are likely to be the most favoured means of securing "created" assets. Exceptions may be capital-rich countries (e.g. the oil-rich States) that might have the liquid assets to acquire foreign firms. This is obviously one of the quickest ways to gain access to the "competitive advantage" of foreign firms; but unless it is to be a portfolio investment, the purchaser must have some other capabilities to manage the purchased firm effectively. In such cases, outward FDI is being used as a means of *augmenting* existing advantages.

Normally, however, in the early stages of the IDP, countries are likely to obtain created assets through inward FDI. First, these are directed to low/medium knowledge-intensive industries and/or resource-based sectors in which the host countries have or are developing a comparative advantage; later as countries move upwards along their IDPs, FDI is directed to higher technology-intensive sectors, and/or more efficiency-seeking FDI takes place.

Over time, through a variety of spillover effects, inward FDI acts as a competitive spur to domestic firms. Eventually, the most efficient of these will start to penetrate foreign markets (through exports, FDI or contractual agreements). Because of recent technological and communication advances and the pressures of globalization, this process is accelerating. Sometimes it is aided by governments, as in the Republic of Korea in the 1980s and 1990s, and Malaysia and China today.

The principle of comparative dynamic advantage suggests a continuing restructuring of economic activity as countries move upwards along their IDP. Both inward and outward FDI policies have a critical role to play in guiding or facilitating this process, as do other macroeconomic and micro-management policies.

Many firms today engage in a combination of the two types of FDI (asset-exploiting and asset- augmenting). In their development policies, countries may also opt for both inward and outward FDI. Finally, the geography of inward and outward FDI may differ just as much as that of trade. Certain companies might be in a favourable position to exploit or gain new assets via outward FDI, while others might best advance their competitive/comparative advantage by encouraging inward FDI from a different group of countries.

Source: UNCTAD.

developing and transition economy TNCs have been shown to possess in the specialized literature.<sup>16</sup> The latter are also categorized in the table by source of advantage (i.e. whether the advantage is firm-specific or stems from the homecountry environment or some aspect of the development process). Perhaps the most important feature that stands out when comparing table IV.1 with the salient industrial characteristics of developing-country TNCs discussed in chapter III, is that nearly all of the industries in which developing-country TNCs are concentrated (namely primary sector industries, financial, infrastructural and IT services, and manufacturing industries such as automobiles, electronics and garments) derive their principal<sup>17</sup> advantages from three segments in the table. These segments are "expertise and technology", "access to resources and activities" and "production and service capabilities".

Expertise and technology-based ownership advantages (segment 1 in table IV.1) are the most common basis for FDI by developed-country TNCs and are clearly also relevant to developingeconomy TNCs in a number of industries, including consumer electrical and electronic products (e.g. Haier and Hisense in China, Daewoo and Samsung in the Republic of Korea, Acer and Tatung in Taiwan Province of China, and Arcelik and Vestel in Turkey), food and beverages (e.g. Grupo Bimbo in Mexico, San Miguel in the Philippines, and Fraser and Neave in Singapore), heavy industries (e.g. Cemex in Mexico, Gerdau and Odebrecht in Brazil, Reliance in India and Sasol in South Africa) and transportation equipment (e.g. Embraer in Brazil, Tata Motors in India and Hyundai in the Republic of Korea). A few of these companies are able to compete with developed-country TNCs at the highest level, especially in consumer

		Sources of competitive advanta	iges	
Type of advantage	Firm-specific advantages	Advantages stemming from the home country environment	Advantages stemming from the development process or stage of development	
Ownership and access	<ul> <li>Segment 1. Expertise and technology</li> <li>Appropriate and specialized expertise and technology</li> </ul>	<ul> <li>Segment 2. Access to resources and activities</li> <li>Primary sector/natural resources, sometimes monopolized by State- owned enterprises</li> </ul>	<ul> <li>Segment 3. Relative advantages</li> <li>Growth poles in a developing country might give temporary relative size and ownership advantages over other developing country firms at home and abroad</li> </ul>	
	<ul> <li>Early adoption of new technologies (e.g. in areas such as infrastructure and telecommunications)</li> <li>Some advanced technology or expertise, stemming from sustained investment in R&amp;D and other resources</li> </ul>	<ul> <li>Clusters of knowledge and expertise (e.g. IT skills in Bangalore, India)</li> <li>Access to funds or alter- native forms of financing (e.g. from State banks and financial institutions, Islamic banks)</li> <li>Development of utilities and infrastructure</li> </ul>		
Products/services, production processes and value chain niches	<ul> <li>Segment 4. Production and service capabilities</li> <li>Efficient production of components and products</li> <li>Distribution and delivery capabilities</li> </ul>	Segment 5. Access to created assets • Production clusters, including associated factor inputs	<ul> <li>Segment 6. Market niches</li> <li>Products and services adapted for developing- country markets</li> <li>Cheap products</li> </ul>	
Networks and relationships	— — — — — — — — — — – – Segment 7. Business models	— — — — — — — — — — — — — — — — — — —	Segment 9. Intra-developing country relations • Intergovernmental initiatives	
	Development of networks     to exploit advantages	<ul> <li>Diaspora (e.g. overseas Chinese, Indians, Lebanese)</li> </ul>		
	<ul> <li>Stress on customer or supplier bases and relationshi</li> </ul>	ps		
Organizational Structure and business culture	Segment 10. Forms of governance	Segment 11. Cultural affinity	Segment 12. Institutional affinity	
	<ul> <li>Family firms</li> <li>State-owned, collectives</li> <li>Novel organizational architecture with greater use of networks</li> </ul>	<ul> <li>Cultural and historical associations with other countries</li> <li>Business culture and structures, governmen industry relations arisi from parallel stages or processes of developr</li> </ul>		

## Table IV.1. Types of advantages possessed by developing-country TNCs,<br/>by sources of advantage

Source: UNCTAD.

electronics. Indeed América Móvil (Mexico), Hon Hai Precision Industries (Taiwan Province of China) and High Tech Computer (Taiwan Province of China) occupied the top three positions in *Business Week's* 2006 global "Information Technology 100"; and there were 30 TNCs in the overall listing<sup>18</sup> from a number of developing and transition economies. However, they are concentrated in just four economies, Hong Kong (China) (mostly telecommunications), India (IT services), the Republic of Korea (electronics) and Taiwan Province of China (electronics).<sup>19</sup>

Most of the developing-country firms mentioned above have followed the internationalization path depicted by the theory, and become TNCs by generating ownership advantages which they can exploit overseas.<sup>20</sup> The primary driver of these industries and companies is likely to be competition (at home and abroad) in combination with relatively small domestic markets. Consequently, the main motives are market-seeking (whether regional, developed or developing markets will depend on the brand and quality of goods and services) and asset-seeking, to further improve competitive advantage.

Turning to advantages gained from *access* to home country resources and activities (segment 2 in table IV.1), the diversity of firms and industries is considerable (natural resources, natural-resourcederived manufacturing, infrastructure services, telecommunications, software and others) and home governments can exercise substantial influence (e.g. through industrial policies, competition policy and even ownership of assets). In a similar vein, many developed-country TNCs at least originally derived benefits from their home countries' natural and other resources or pockets of knowledge and expertise (e.g. Exxon and Microsoft in the United States, Norsk Hydro in Norway and BASF in Germany), but later diversified by industry and market as well as along the value chain, to ensure that their advantages were based on "internal" (i.e. ownership of technology and expertise at the firm, proprietary level), rather than "external" sources (the home country environment).<sup>21</sup> Developing and transition economy TNCs in natural resources, and related manufacturing activities, such as Petróleos de Venezuela, Petronas (oil, Malaysia), Gerdau (metal products, Brazil), PetroChina, Sappi (paper, South Africa), Saudi Basic Industries Corp. and Gazprom (natural gas, Russian Federation), are proceeding in a similar way to their developed country equivalents, but are at a relatively early stage in the process.<sup>22</sup> However in some industries, for instance Indian software consultancy firms such as TCS, Wipro and Infosys, the process has been more rapid, partly because of the nature of the industry, their strong global links with a highly competitive software industry and the backing of Indian conglomerates (e.g. TCS is part of the Tata Group).<sup>23</sup>

In infrastructure services (including utilities, transportation and ports) and telecommunications, as mentioned in chapter III, many developingcountry TNCs are competing directly with developed-country firms. This is because of early adoption of new technologies such as mobile telecommunications by developing-country firms (a latecomer advantage as discussed earlier), the recent extensive opening of the infrastructure sector in both developed and developing countries to private firms and the availability of investible funds. Thus, for example, as discussed in chapter III, there are now a number of developing-country TNCs in the telecommunications industry which are significant players in regional or global markets. These include América Móvil (Mexico), Bharti Airtel (India), China Mobile (Hong Kong (China)), MTN (South Africa), Orascom Telecom (Egypt), Singtel (Singapore) and VimpelCom (Russian Federation; box II.17) (see IV.B.3 for the internationalization motives of these companies). These and other developing-country firms are currently able to draw upon relatively cheap funds from State banks and other sources of finance that ultimately derive from high personal savings rates (East and South-East Asia), trade surpluses from manufacturing or service exports (East, South-East and South Asia) or high commodity prices (Latin America, Africa, West Asia and the CIS).<sup>24</sup>

Although many of the advantages of developing-country TNCs in natural resources and related industries, software services and infrastructural services depend on access to home country resources, each industry has different dynamics, as will be seen in section IV.B.3.<sup>25</sup> In addition to the nature of these industries, many TNCs in this segment are either State-owned or supported or family-controlled (segment 10), which might present financial and other advantages, such as the sharing of risk. For example, the Chinese State-owned Assets Supervision and Administration Commission (SASAC) supervises some 170 companies, many of them TNCs, in industries such as telecommunications, energy and automobiles (BCG 2006b). It supports these financially, but also manages them by, for example, triggering consolidations in an effort to improve their international competitiveness (see also "other" motives in subsection B.3 below). Family ownership also offers certain advantages, for example through cheap transfers of funds or higher levels of trust between family members (Yeung 1997, Tsui-Auch 2004).

*Production process capabilities* (segment 4). Other large companies identified in chapter III derive their advantages primarily from specialization in the production part of the value chain in industries such as electronics, automobile components, garments and footwear. Most of them are located in Asia (chapter III, section IV.A.2) and specialize in low-cost, high-quality manufacturing, mostly for sale to retailers or manufacturers. Many well-known developing country TNCs – especially in electronics - such as Acer and Tatung (Taiwan Province of China) and Daewoo and LG (Republic of Korea) began as such companies, but moved up along the value chain to create or buy technology, brands and other created assets, thus becoming similar to major developed-country TNCs. However, these industries lend themselves to deepniche specialization, whereby companies can produce particular components on a mass scale and realize profits through cost reduction.<sup>26</sup> This requires high standards of timeliness, delivery, distribution and quality, as well as technological prowess. Apart from a few larger contract manufacturers, the vast majority are relatively small companies or less well known (though they may be a part of larger groups); examples include DA Corporation (electronic components, Republic of Korea), HTC<sup>27</sup> (mobile phones, Taiwan Province of China), Integrated Microelectronics Inc. (contract manufacturer, the Philippines), Trinunggal Komara (garments, Indonesia), Varitronix (electronic displays, Hong Kong (China)) and Yue Yuen<sup>28</sup> (footwear, Taiwan Province of China). Their major drivers are competition and the need to keep down costs, hence the primacy of efficiencyseeking FDI (section IV.B.3.b). Most are still East or South-East Asian companies, but increasing numbers are emerging from other developing countries, such as India and Mexico. For example, Bharat Forge (India) is now the world's second largest producer of forgings for car-engines and chassis components. Its customers include most major automobile companies and it has affiliates in China, Germany, Sweden and the United Kingdom.<sup>29</sup>

Other sources of advantage. Some TNCs derive their primary source of advantage from the other nine segments, which may also be important for specific home and host countries. Although the primary sources of advantage for developingcountry TNCs might come from one particular segment (especially, 1, 2 and 4), most companies are likely to draw their advantages, and hence strategies, from more than one segment. Focusing on the latter point, box IV.3 provides a few examples which illustrate how developing-country TNCs harness and combine advantages from a number of sources. The deliberately diverse cases of Marcopolo, Hikma Pharmaceuticals, AIC, Olam and Acer exemplify the wide range of strategies that developing-country TNCs in almost any industry can adopt in their internationalization process, depending on the nature of their advantages. The use of networks and relationships,<sup>30</sup> organizational structures, the leveraging of cultural ties or institutional affinity and other heterogeneous sources of potential advantage are reflected in the cases discussed. Partly deriving from their "latecomer status" (hence not weighed down by "sunk costs") and willingness to adopt new technologies and ideas, developing-county TNCs have the opportunity, but must also think as outsiders and create or develop advantages in novel ways.

In sum, the industries in which developingcountry TNCs are clustered can be conceptually explained by the nature of the competitive advantages they possess (table IV.1). Their *principal* sources of advantage are in "expertise and technology", "access to home country

and "production and service resources" capabilities". These are within the realm of established theory and the types of advantages enjoyed by developed-country TNCs. However, the relative importance of these sources of advantages differs<sup>31</sup> between developing- and developedcountry TNCs. In particular, the former are more likely to possess competitive advantages gained from access to home country resources or production process capabilities (to be discussed empirically in IV.B.1). This explains their relative concentration in industries such as natural resources, natural-resource-related manufacturing, infrastructural services, software consultancy, electronics and garments. It also helps explain their proportionally greater focus on investing in other developing countries compared to developedcountry TNCs (chapter III). Moreover, looking beyond the numbers, the sources of advantage that developing-country TNCs utilize in their operations are diverse (ranging from cultural and institutional affinity between countries to alternative forms of governance). Importantly, these sources of advantage can be used jointly in various ways, leading to novel internationalization strategies. This requires the existing theory of FDI and TNCs as discussed in subsection 1 above, to be adapted and extended, a task already begun with the foregoing discussion.

### B. Competitive advantages, drivers and motives

Following on from the conceptual framework above, this section examines the available empirical evidence on the competitive advantages of developing-country TNCs, the drivers behind their internationalization and the primary motives influencing their locational choices, drawing on the literature as well as surveys being conducted by UNCTAD and partner institutions (box IV.4).

#### 1. Sources of competitive advantages

Because the surveys mentioned in box IV.4 were directed at executives in developing- country TNCs, this section deals with competitive advantages at the firm level (i.e. the types of advantages arising from the factors listed in the first substantive column of table IV.1). According

#### Box IV.3 A panorama of developing-country TNCs

Marcopolo is a Brazilian bus and coach manufacturer that possesses proprietary technology and expertise (segment 1 in table IV.1) which it has built up since it was established in 1949. Until the early 1990s, it had pursued a policy aimed at servicing regional and northern markets, including an investment in Portugal. Thereafter, it reorientated its strategy to service niche markets, especially in developing countries (segment 6 of table IV.1) and leveraged this strategy by means of institutional affinity (segment 12) and South-South intergovernmental initiatives (segment 9). This strategy has enabled it to sell buses in more than 80 countries, capture half of the Brazilian market and about 7% of the global market against strong competition from developedcountry TNCs. Its success is based on: (a) its flexible production system (segment 4) enabling it to make tailormade buses for clients – one of its strongest advantages); (b) focusing on the essentials -70% of its revenue is accounted for by bus body segments. Other parts of the bus are secured from parts makers and the chassis are bought from major producers such as Mercedes-Benz; (c) producing in low-cost locations that offer appropriate production clusters, such as Argentina, Mexico and South America, to keep prices affordable for developing- country customers; and (d) efforts in creating brand loyalty on the part of customers (segment 7).

Hikma Pharmaceuticals, a Jordanian company, was established in 1978 to offer Arab countries cheap, diverse, high-quality pharmaceuticals, and thus was regionally orientated from the beginning, predicated on cultural affinity and South-South ties (segments 11 and 9). Cost was a primary consideration (segment 6); in addition, the company relied on the relatively highly skilled Jordanian labour force (segment 2) and the technology was sourced from licensors in developed countries, especially Fujisawa (Japan) (now Astellas Pharma). It now enjoys a strong market position in West Asia and North Africa, and has expanded to other parts of Africa, Central Asia and Eastern Europe (a mix of segments 11 and 12), and, more recently, to the United States and parts of Europe. It currently manufactures in two other Arab countries and Portugal, and has R&D centres in Jordan and the United States, thereby using the locational advantages of countries and facilitating its move to possessing knowledge-based proprietary advantages (segment 1).

AIC Corporation was established in 1990 and is Malaysia's largest integrated semiconductor manufacturer, with sizeable FDI in Singapore, China and Thailand. Local entrepreneurs established it by drawing upon the existing skills base in Malaysia, since the very large level of FDI by developedcountry TNCs in electronics (including semiconductors) has meant that companies setting up in the country have access to a sizeable production cluster in this industry (segments 5 and 2). Most of the company's sales are to developing-country TNCs in Malaysia, East and South-East Asia and North America. For this it had to establish a distribution network, including the acquisition of a sales affiliate (in Singapore) from a developed-country TNC *before* any manufacturing took place. The company has developed strong manufacturing and service capabilities (segment 4) and is seeking to improve its proprietary knowledge and expertise (segment 1).

*Olam International* was established in 1989 in Singapore with a view to managing the supply of agricultural products and industrial raw materials, mostly in Africa (e.g. Nigeria, Ghana and Côte d'Ivoire) and South-East Asia (e.g. Indonesia and Viet Nam). The group has a very well-defined business model that stresses networks and relationships in 32 developing and transition economies, as well as some developed countries (segments 7 and 10). Because the company is fully integrated from the "farm gate" to the "factory gate" (including 115,000 suppliers) this results in cost advantages, a risk management capability, and expertise in services such as traceability, hygiene and organic certification and inventory management (segments 1 and 2).

Acer was established in Taiwan Province of China in 1976 and has since grown to become one of the top 10 branded makers of PCs and other IT products worldwide.<sup>a</sup> At inception it relied on what was by then a relatively well-advanced skills and production base in Taiwan Province of China (segments 2 and 5) to conduct R&D and develop software for computer games companies in developed countries. It soon turned also to the manufacturing of PCs under its own brand in the home economy and as a contract manufacturer for developed-country TNCs (segment 4). As its expertise and technologybased advantages increased (segment 1), it expanded into foreign markets (including through FDI), especially in North America, under its own brand name - which became well established, but at some cost to profitability. This led to a number of interrelated and ultimately successful innovations, including the shift to a network structure with high autonomy for strategic business units (later global business units) (segment 10); a partial move from acquisitions as an expansion strategy to partnerships with distributors and others (segment 7); and a greater focus on developing-country markets rather than those in developed countries (segment 6). This strategy of growing by focusing on South-South investment has also been used by other developing-country TNCs, including Cemex (cement, Mexico) and Kia (automobiles, Republic of Korea). More recently, Acer has partly shifted its focus back to developed countries.

Source: UNCTAD.

<sup>1</sup> The account of Acer is summarized from Mathews 2002, see also chapter III.

to the UNCTAD global survey, the most important firm advantage for TNCs as a whole (35% of responses) arises from production process capabilities. Networks and relationships are also very important (28% of responses). Ownership advantages such as expertise and technology are relatively less important for developing-country TNCs than for developed-country ones<sup>32</sup> (24% of responses). An effective organizational structure (13% of responses)<sup>33</sup> also provides a competitive advantage for a number of TNCs (see table IV.2). Overall, three-quarters of the competitive advantages referred to by developing country TNCs in the survey are not ownership advantages, in keeping with the analysis in section A.3.

Continuing with the UNCTAD global survey, developing-country TNCs in the secondary sector possess some ownership advantages (22% of responses in the sector) table IV.2 – reflecting capabilities of a limited number of firms in more advanced Asian and Latin American economies, such as Brazil, the Republic of Korea and Taiwan Province of China. Companies' technological base (including advanced technology, "technological savvy", R&D and design capabilities) is the ownership advantage most commonly mentioned, followed by expertise (e.g. experience, technical expertise and "expertise in turning around companies"). However production process advantages are significantly more important than ownership advantages for industries in this sector (38% of responses in the sector), while networks and relationships (especially business models in industries such as metal products, electronics and chemicals) are the second most important type of advantage (29% of responses). Finally, advantages related to organization structure are not insignificant (11% of responses).

In the primary sector, TNC advantages are also centred on the production process (42% of responses), but these are less important in the tertiary sector (including diversified companies). Interestingly, firms in both the primary and tertiary sectors indicate a higher reliance on ownership advantages than the secondary sector (25% and 27% of responses, respectively, compared to 22%), perhaps indicating the relative importance of expertise over technology for developing country TNCs. However, the gap between the sectors is not too great. More importantly, as implied by the analysis in section A.3, TNCs in all sectors rely on advantages related to networks and relationships and organizational culture, although there are differences between sectors. In particular, TNCs

in the secondary and tertiary sectors are more likely to rely on networks and relationships than firms in the primary sector (table IV.2).

At the industry level, the UNCTAD global survey suggests differences: firms' advantages in transportation equipment, electrical and electronics manufacturing or IT services are much more likely to be based on ownership of expertise and technology, while pharmaceutical companies rely more on effective networks, especially because many of them produce low-cost generic drugs or Pharmaceuticals under licence (such as Hikma pharmaceuticals from Jordan, as discussed earlier). Heavy industries, such as cement, and many services (construction, trade and logistics) generally have competitive advantages stemming from production process capabilities.

The Indian, Chinese and South African surveys reveal a similar pattern, but with nuances. For example, Indian TNCs are more likely to have advantages arising from expertise and technology (ownership, 30% of responses) and production processes (46% of responses), reflecting a lower involvement in the primary sector and a higher involvement in the secondary and tertiary sectors (especially IT services). In the South African survey TNCs were only asked about competitive advantages arising from ownership and production process capabilities, but did so in relation to the host regions in which they have invested. The responses are interesting. For example, the secondary sector TNCs investing in developed countries are much more likely to base their strategy on advantages based on ownership (58%) of responses) than if they are investing in developing countries (41% of responses for investments in Africa, 36% for South-South investments) (table IV.2). In the primary sector, production process capabilities are predominantly important, no matter where the investment; while the opposite mix of competitive advantages broadly prevails for South African TNCs in the tertiary sector. The Chinese survey indicates that production process are the main advantages of Chinese TNCs. This echoes China's role as a major global production base, but the relatively low selfassessment by the firms surveyed across different aspects of the value chain implies that they still see themselves as having, at most, an average level of competitiveness.<sup>34</sup> This suggests a powerful motive for created-asset-seeking by Chinese TNCs, especially in industries in which they face intense competitive pressures.

#### Box IV.4 Surveys of developing and transition economy TNCs

UNCTAD has cooperated with some international organizations and research institutes on interview surveys of TNCs from a number of major developing and transition economies.

UNCTAD's global survey of developingcountry TNCs, 2006 is a survey of developing country TNCs from around the world. Executives were asked about their firms' international operations, motivations, strategies and home-/hostcountry policies. A sample of 250 major developing-country TNCs was created. The number of companies selected for interview from each country was roughly proportional to the known population, but adjustment was made to ensure sufficient representation from all developing regions. The response rate so far has been 20% (50 companies). While the companies in the survey range from small to very large, 60% are large with global sales of over \$2 billion. About 40% are in the secondary sector, another 40% in the tertiary sector and the rest in the primary or diversified sector, broadly representative of the industrial concentrations of the TNCs from developing and transition economies identified in chapter III. All of the major TNC home economies, including Brazil, China, Hong Kong (China), India, Mexico, Singapore, the Republic of Korea, South Africa, Taiwan Province of China and Turkey are represented among the respondents. In terms of ownership, 80% of TNCs are public listed companies (plcs), 12% are privately owned and 8% State-owned. This survey is referred to as the "UNCTAD global survey" in this chapter.

Survey of Indian transnational corporations, 2006 (conducted through the UNCTAD project, Strategies and Preparedness for Trade and Globalization in India). This survey used a similar methodology to the UNCTAD global survey. A questionnaire for executive interviews was devised and tested and included detailed questions on motivations, strategy, competencies, impact and international experience. Teams conducted interviews in Delhi, Hyderabad and Mumbai. The response rate so far has been about 27% (40 companies). The surveyed TNCs range in size from very small (less than \$10 million revenues) to large (over \$1 billion). About 40% of respondents are in the secondary sector, 45% in the tertiary sector and most of the rest are diversified companies.

This is a reasonably representative sample of Indian TNCs, with respondents from key industries such as chemicals, pharmaceuticals, IT and infrastructural services. In terms of ownership, 56% are plcs, 33% privately owned and the remainder fall in the category of "other". This survey is referred to as the "India survey" in this chapter.

The EDGE Institute, survey of outward FDI from South Africa, 2006. This survey, covering a sample of 188 companies, included detailed questions on the parent TNC, as well as motivations, strategies and competencies in relation to investments in Africa, other developing countries and developed countries. The response rate so far has been 30% (57 companies). In terms of sectors and industries, the sample of respondents is broadly representative of South African TNCs, with 60%, 33% and 7% of firms, respectively, in the tertiary sector, secondary primary sectors. A broad range of industries is represented, including transportation, storage and communication, financial services, metals and metal products, and food, beverages and tobacco. In terms of ownership, 56% of companies are listed plcs, and the remainder are not listed. This survey is referred to as the "South Africa survey" in the chapter.

FIAS/MIGA/IFC/CCER survey on China's outward FDI, 2005. This survey interviewed 150 Chinese TNCs in eight major cities across the country. The questionnaire for these interviews included detailed questions of motivations, drivers, competencies, impact and policy. About 14% of surveyed TNCs employ over 10,000 workers; a little over 50% employ between 500 and 10,000; 25% employ between 100 and 500; and the remainder employ less than 100 people. About 56% of Chinese TNCs are in the secondary sector, followed by 33% in the tertiary sector and 11% in the primary sector. The main industries represented include, machinery and equipment, electrical and electronic manufacturing, garments and textiles, construction and trade. In terms of ownership, 49% of the TNCs were private, 34% State-owned, 6% collectives or cooperatives and the rest "other" (private listed companies in China are rare). This survey is referred to as the "China survey" in this chapter.

Source: UNCTAD.

*Note*: Because these surveys were conceived separately, the questions asked are comparable but not always equivalent. More importantly, since aspects of the methodologies differ, comparisons should be treated with caution. The questions asked in each survey, the methodology used and other relevant aspects are mentioned at relevant points in this chapter.

Type of advantage	Survey						
	Global <sup>a</sup>	India <sup>b</sup>	South Africa <sup>c</sup>				
Ownership and access to resources and assets	Primary: 25 Secondary: 22 Tertiary: 27 Diversified: 18 <i>All sectors</i> : 24	Primary: Secondary: 23 Tertiary: 31 <i>All sectors</i> : 30 <i>All sectors</i> : 45	Africa:Primary:25Secondary:41Tertiary:50All sectors:50	South-South: Primary: 33 Secondary: 36 Tertiary: 60 <i>All sectors</i> : 56	Developed: Primary: 33 Secondary: 58 Tertiary: 58		
Products/services, production processes and value chain niches	Primary: 42 Secondary: 38 Tertiary: 31 Diversified: 27 <i>All sectors</i> : 35	Primary: Secondary: 53 Tertiary: 41 <i>All sectors</i> : 46 <i>All sectors</i> : 55	Africa: Primary: 45 Secondary: 59 Tertiary: 50 All sectors: 50	South-South: Primary: 67 Secondary: 64 Tertiary: 40 <i>All sectors</i> : 44	Developed: Primary: 67 Secondary: 42 Tertiary: 42		
Networks and relationships	Primary: 17 Secondary: 29 Tertiary: 27 Diversified: 36 <i>All sectors</i> : 28	Primary: Secondary: 19 Tertiary: 22 <i>All sectors</i> : 20					
Organizational structure and business culture	Primary: 17 Secondary: 11 Tertiary: 14 Diversified: 18 <i>All sectors</i> : 13	Primary: Secondary: 7 Tertiary: 6 <i>All sectors</i> : 5					

#### Table IV.2 Types of competitive advantages of developing-country TNCs, by sector (Per cent)

Source: UNCTAD, based on surveys described in box IV.4.

<sup>a</sup> A total of 45 TNCs responded to a question asking them to indicate their three main competitive advantages. The percentage share of responses is given for each sector by type of advantage. For example, for the secondary sector's advantages the percentage of breakdown of responses was: 28% ownership-based, 36% production process capabilities, 7% networks and relationships and 14% organizational structure.

<sup>b</sup> A total of 40 Indian TNCs responded to a question asking them to indicate their three main competitive advantages. The percentage share of responses is given for each sector by type of advantage.

<sup>c</sup> South African TNCs responded to a question asking them to indicate the parent firm's most important asset to expand into (a) Africa (57 firms responded), (b) other developing markets (South-South FDI) (37 firms), and (c) developed markets (30 firms). The percentage share of responses is given for each sector by type of advantage. For example, the secondary sector's advantages in Africa are 42% ownership-based and 48% derived from production process capabilities. Because this was a closed question, firms did not respond on their network or organizational advantages.

Overall, allowing for variations between countries, while there is some evidence that the firm advantages of developing-country TNCs differ proportionally from those of developed-country TNCs (the advantages of the former are more likely to be related to production processes and networks and relationships), there is little to indicate that the essential nature of advantages are different. Irrespective of nuances in the nature of advantages possessed by developing-country TNCs, all TNCs face the same or similar competitive pressures in the global economy; moreover, many seek to take advantage of the same opportunities. There is thus a tendency towards convergence, which can result in similar patterns of behaviour and activity. An example of this tendency is the widespread corporate conformance to quality standards, which is especially important in this context because many developing-country TNCs are involved in manufacturing or servicing customer needs. The

global and Indian surveys show that nearly all of the TNCs surveyed possess some form of quality certification, most commonly one of the International Organization for Standardization (ISO) standards. All TNCs in the electrical, electronic and textiles and garments industries, for instance, were ISO certified.

The relative differences in some types of competitive advantages possessed by developingcountry TNCs (especially fewer ownership advantages), and the significantly higher reliance on other types (e.g. networks and relationships) reflects the subordinate position of many developing-country TNCs in global value chains and the international division of labour. The desire to move up the value chain and achieve parity can undoubtedly be a powerful driver for many of these TNCs.

#### 2. Drivers to internationalization

The main types of competitive advantages aside, developing-country TNCs range widely in terms of country origins, their level of maturity, position in the value chain and strategies (chapter III, sections IV.A). The implication of this diversity is that the drivers of internationalization manifest themselves in a wide variety of ways. As mentioned in section A, drivers are factors that trigger a company's internationalization or further expansion. There are a number of ways to classify them, one of which is in terms of "push" (home country), "pull" (host country), and "policy" factors (in both home and host countries).<sup>35</sup>

## a. Home country drivers (push factors)

Home country drivers, which refer to conditions that influence companies to move abroad, consist of four main types: market and trade conditions, costs of production (including constraints in factor inputs), local business conditions and home government policies. With regard to market push factors, many developing countries have a limited home market in terms of scale and opportunities to expand. The impact of this on a firm may be intensified by such factors as the existence of trade barriers in actual or potential markets (e.g. inducing companies to invest overseas to bypass those barriers), a lack of international linkages with customers in the target market or home-based industrial customers moving their production overseas.

Increases in *production costs* in the home economy, caused by rapid economic expansion or a scarcity of resources or inputs, are also a potentially significant driver. A common factor implicated in driving firms overseas is labour costs, but inflationary pressures can affect all factor inputs and therefore result in overseas investment. Home country business conditions, often in relation those in other countries, can trigger to internationalization in a variety of ways. Global and local competitive pressures appear most frequently as a driver and take many forms, for example competition with local firms or TNCs in the home market or competition with firms in overseas markets. Sometimes firms may pre-empt competitors by making the first move into a foreign market. Linked to this type of strategy is the broader one - already discussed in the context of asset augmentation - of using international

operations to restructure a company and its resources to help boost its competitiveness and performance (chapter V).

#### b. Host country drivers (pull factors)

Many host country drivers "pulling" TNCs to invest in particular economies mirror the drivers discussed for home countries above. Thus, market pull factors are likely to be the foremost determinants of FDI in particular host economies. Developed countries may be more attractive because of their large markets, which may be more accessible as a result of regional integration agreements, especially in North America and Europe. The danger that these regional groupings might become protectionist could also persuade developing-country TNCs to invest in the member economies. In the case of developing countries, markets that are large or growing will be the most attractive, but considerations of market size will, of course, depend on the type of product. Some product markets might be relatively large even in "small economies" (e.g. because of per capita incomes in the case of consumer goods).

Rising *costs* of production in home economies, as mentioned above, are a potentially major push factor for developing-country TNCs. Consequently, all else being equal, host countries with low costs of labour or other required resources are more likely to receive inward FDI. It is also likely that, if suitable factors are unavailable in a neighbouring country, proximity will have a strong influence and retain the FDI in the region. Apart from factor costs, TNCs also invest in host countries because of their resources; these refer to a wide variety of potential factor inputs, including natural resources, labour and infrastructure.

In addition to the above drivers, and associated with them, there are a number of factors or determinants which might influence a TNCs specific location decision, including the host government's policy framework, business facilitation activities and business conditions (WIR 1998, chapter IV). A particularly important determinant at this juncture in the history of the international economy is the specific opportunities resulting from host government liberalization and privatization policies. Regulations and inducements encouraging inward FDI and multilateral or bilateral trade, and investment treaties facilitating FDI can all be pull factors for TNCs. Many of these policies will apply equally to TNCs from developing or developed countries. However,

among those which might have a differential affect are agreements that deepen or widen regional cooperation in the developing world (e.g. ASEAN, various southern African groupings and MERCOSUR). These increase the likelihood of attracting inward flows by TNCs, though perhaps more from neighbouring developing countries. Privatization policies in developing regions might also differentially attract TNCs from neighbouring countries because of closer communication or familiarity. Thus there are a number of reasons why developing-country TNCs are more likely to locate in other developing countries than developed-country TNCs, as mentioned in chapter III.

## c. Empirical evidence on drivers (push and pull)

#### Market and trade conditions

Market-related factors come through very strongly in the surveys. In the case of India, the need to pursue customers for niche products (e.g. for IT services) and the lack of international linkages are very strong drivers.<sup>36</sup> For Chinese TNCs, the need to bypass trade barriers<sup>37</sup> (regarded as important by 36% of companies)<sup>38</sup> and the need to utilize domestic production capacity (40%), because the home market for their products is too small, are key drivers of internationalization. Trade barriers were also found to be a major driver pushing Latin American TNCs overseas (ECLAC 2006a).<sup>39</sup> Overdependence on the home market is also an issue for firms, and many TNCs from developing or transition economies in the surveys mention establishing facilities in other countries as a form of risk reduction.

#### Costs of production

Rising labour costs are a particular cause of anxiety for TNCs from East Asian and South-East Asian countries such as Malaysia, the Republic of Korea and Singapore (Schive and Chen 2004, Brooks and Mirza 2005) – and also from countries such as Mauritius, which has labour-intensive, export-orientated industries such as garments (Page and te Velde 2004). Crises or constraints in the home economy, for example where they lead to inflationary pressures, are reported to have been important drivers in countries such as Chile, India and Turkey during the 1990s (Caldaron 2006, Erdilek 2005, Banga 2006). However, interestingly, costs and resource constraints (other than raw materials) are less of an issue for China and India, two large and growing sources of FDI from the

developing world. Indian TNCs gave an average rating of 1.8 out of 5 (i.e. unimportant) to shortages/labour costs, while Chinese TNCs are much more concerned about FDI for risk reduction (26% of companies) than cost-related issues. Clearly, this is because both are very large countries with considerable reserves of labour – skilled and unskilled – and other resources. Their main resource scarcity is in raw materials (section IV.B.3).

#### **Business conditions**

Home country business circumstances, often in relation to those prevailing in other countries, can trigger internationalization, especially through competitive pressures on the developing-country firm. These drivers can include competition from low-cost producers, particularly the efficient East and South-East Asian manufacturers. This has also been found to be the case for some companies from Latin American and parts of Africa (ECLAC 2006a, Farrell et al., 2005, Gaulier et al. 2006). India is relatively immune to this pressure, so far, perhaps because of its higher degree of specialization in services and its abundant supply of low-cost labour. Most TNCs in the UNCTAD global survey<sup>40</sup> appear to be relatively unconcerned about low-cost foreign competition (5% of responses). Instead, competition from foreign and local companies in the home economy is regarded as a more important driver to internationalization. Competition from foreign TNCs, widely seen as an important driver behind China's rapid increase in outward FDI (Nolan 2001, Mirza 2005, Jurgens and Rehbehn 2006), can also sometimes result in pre-emptive internationalization, as when Embraer (Brazil) and Techint (Argentina) invested abroad in the 1990s, ahead of liberalization of their respective home industries (Goldstein and Toulon 2005). Domestic and global competition is a significant issue for developingcountry TNCs, especially when these TNCs are increasingly parts of global production networks in industries such as automobiles, electronics and garments (UNIDO 2004, McKinsey Global Institute 2003). A driver not directly related to competition is when a company is pushed overseas by *adverse* business conditions in their home country. These can stem from problems such as inadequate infrastructure or support services, undeveloped input or component industries, or labour issues. For example, in the South African survey, labour legislation was seen as an adverse condition limiting investment in the manufacturing sector in the home economy (possibly leading to outward FDI), while a few service firms were concerned about key suppliers. Another home country driver (also a host country one) that emerges strongly from the UNCTAD global survey is the ability of firms to replicate their business operations or models (an interesting source of advantage, as discussed in section A.3) in other developing countries, thereby encouraging South-South FDI.

In the UNCTAD global survey, 31% of the responses on major drivers of internationalization relate to *host country* business opportunities. Chief among these are the benefits arising from liberalization and privatization programmes. These drivers are mentioned by a number of Latin American TNCs in the survey, as well as by companies in consumer goods, metal products and transportation and communication (though the numbers are small in each category). South African TNCs,<sup>41</sup> often investing in nearby African countries, mention a number of important host country pull factors, including opportunities arising from privatization, low cost of entry and a "positive" reception to their investment.

The national and global business and economic environment, manifesting most critically in competition, as discussed above, but also in terms of opportunities, results in various strategic options. For example, many Chinese firms are pursuing a strategy to make themselves significant international players in response to intense global competition in their home economy. In addition to boosting competitiveness, internationalization is also regarded as a tool for the structural transformation of State-owned enterprises (SOEs) through the learning effects of operating in the international marketplace (Deng 2004).

## Government policies and the macroeconomic framework

Many developing-country TNCs, including those from China and India indicate the importance of home and, especially, host government policies in their decisions to go international. The Chinese TNCs surveyed regard home government policies as an important factor in their FDI;<sup>42</sup> while Indian firms consider regulations and incentives, appropriate competition and inward FDI policies of host governments as being important.<sup>43</sup> The importance of government policies is also underscored by respondents in the UNCTAD global survey (incentives are important) and, particularly, South African TNCs, which list a number of relevant policies that have determined their location choice. These include transparent governance, investment in infrastructure, property rights and minimal exchange-rate regulations. Other macroeconomic and political factors deemed important as push or pull factors by developingcountry TNCs include macroeconomic uncertainty in the home economy, strong currencies and political stability in host countries, and a common monetary area (e.g. the euro area).

In sum, the empirical evidence underlines four common drivers of internationalization by developing-country TNCs, three push factors and one pull factor. The factors pushing firms out of their home countries are the limited size of domestic markets, rising costs of production in the home economy and intense competition from both local and foreign firms. The main factor pulling TNCs into host countries is the opportunities arising from liberalization. Each of these drivers influences choice of location, in the context of firm competitive advantages, industry and strategies, but, overall, there is a tendency to locate in other developing countries. Looking at these drivers in turn, TNCs locating overseas because of limited home markets are likely to invest in neighbouring countries due to familiarity, or in other developing countries that have similar consumption patterns or institutions. Since rising costs in the home economy are largely associated with labour costs, FDI for this purpose is likely to seek out a developing country that offers cheaper labour. Pressures of competition prompt various strategic options, including cost-cutting (leading to a probable investment in a developing country) or an upgrading of capabilities (which could result in the acquisition of created assets in developed countries). Furthermore, while opportunities arising from liberalization are to be found in both developed and developing countries, many - for example the privatization of SOEs - are more common in the latter.

Finally, although the drivers suggest that developing-country TNCs are more likely to invest in developing countries than developed ones, the precise location of FDI also depends on the motives behind the investment decision.

#### 3. Motivations and strategies

Where do developing-country TNCs locate and why? The above discussion on drivers indicated the reasons why TNCs might internationalize and decide to invest abroad, by looking at both push (home country) and pull (host country) factors. The discussion also indicated the types of pull factors which influence the choice of host country location. But pull and push factors are not sufficient to explain the final choice of host locations: an understanding of TNCs' motives, strategies and context is needed.<sup>44</sup>

For example, competitive pressures might influence a company to invest overseas, but it can still choose to respond to this pressure in a variety of ways, including looking for new customers (market-seeking FDI, perhaps in middle-income developing economies); reducing its costs (efficiency-seeking FDI, perhaps in lower income developing countries); accessing key factor inputs (resources-seeking FDI, perhaps in a country with abundant raw materials); or acquiring new technologies to improve productivity (createdasset-seeking FDI, perhaps in developed economies), or a mix of these. The same driver that has an impact on different TNCs might well lead to radically different motives and strategies, resulting in divergent locations being chosen for FDI by each TNC.

The discussion below examines the different motives of FDI separately for the sake of clarity, but it is worth noting that in many cases motives might be mixed, complementary or evolutionary (box IV.5).

#### a. Market-seeking

Market-seeking FDI is by far the most common type of strategy for developing- country TNCs in their process of internationalization. This is confirmed by the UNCTAD global survey, with 51% of responses referring to market-seeking as the most significant motive for FDI,45 including TNCs from South Africa in developing host countries (70% of all responses),46 as well as Indian<sup>47</sup> and Chinese TNCs.<sup>48</sup> Market-seeking FDI is common in most industries, although there is some variation, depending on the source country. For example, from the survey results, marketseeking FDI from South Africa is most common in industries such as chemicals, food and beverages, finance, and transport and communication, largely because of local TNCs' specializations. One interesting aspect of developing-country TNCs is that their motives can differ systemically from those of developed-country TNCs in the same industry. For example, in oil, gas and extraction, whereas most developed-country TNCs in these industries are increasingly conducting FDI for resourceseeking reasons (to secure supplies for their home - or other developed - markets), many developingcountry counterparts are primarily investing overseas to open or secure markets, since they already have access to the raw materials.

Theory suggests that FDI in neighbouring countries (the region) will be a common feature of internationalization, especially at an early stage of a TNC's development, because of familiarity, ease of access, cross-border spillovers and similar factors. This pattern was observed for developingcountry TNCs as a whole in chapter III, and an extensive assessment of the literature<sup>49</sup> confirms that FDI in a nearby region is the most common location for *market-seeking* affiliates in the case of most developing source economies, whether from Latin America, Africa or East and South-East Asia.<sup>50</sup> However, proximity must be balanced against where companies' ultimate markets might be located. Thus, for TNCs from a few developing countries – chiefly China (in many manufacturing industries), India (especially in IT services), the Republic of Korea (involving advanced manufactures such as consumer electronics and cars) and the Russian Federation (natural resources) - this consideration results in relatively greater importance being given to developed-country markets than to developing-country markets.<sup>51</sup> Apart from the sheer size of developed-country markets, some affiliates are established to get around trade barriers or avoid high transport costs for bulky goods and, more commonly, to adapt products or services to the requirements of customers.

Finally, non-regional South-South investment is uncommon where the motive is market-seeking, apart from some investments by TNCs from a few more advanced or larger developing countries.<sup>52</sup> This is because there is neither the comfort of familiarity, nor the pull of the market. Nevertheless, there are some emerging South-South investment and trade corridors that are encouraged by market size (e.g. some Brazilian, Chinese, Indian and South African TNCs see opportunities in each other's relatively large markets, including collaboration with each other) and putative cultural and institutional similarity.<sup>53</sup> A body of literature on these corridors (e.g. in terms of developing Latin American-Asian and Asian-African linkages) is already emerging (Kaplinsky and Morris 2006, Naidu 2005, Rios-Morales and Brennan 2006, Goldstein and Toulan 2005).

#### b. Efficiency-seeking

Efficiency-seeking FDI is an important motive, but its prevalence varies considerably among developing-country TNCs, especially in

#### Box IV.5 Mixed, complementary and evolutionary FDI motives

*Mixed motives* are when companies invest for more than one reason simultaneously. A good example is Singapore Technologies Telemedia (STT), which was established in 1994. Its main industry is telecommunications, and since 2002 it has entered a number of markets, including Indonesia, the United Kingdom, the United States and a number of Latin American economies. It now has 14,000 employees worldwide and a presence in some 30 countries. Its primary reasons for internationalization are to gain global presence and strength, but it does not differentiate between different types of motives: it believes that, because of the nature of the industry, all its overseas affiliates are established to access local markets, secure strategic assets and create synergies (efficiencies) across national boundaries.

Complementary motives are when companies combine more than one motive or strategy to secure a particular goal. An example is provided by Integrated Microelectronics Inc (IMI) is a Philippines-based company established in 1980 as a contract manufacturer (now in electronics manufacturing services, EMS), with some 20,000 employees (5,000 overseas). Its customers are original equipment manufacturing (OEM) companies in the electronics industry for which it manufactures a range of products, including magnetic storage devices, auto-electronics and semiconductors. These customers - originating from many parts of the world – mostly require these parts for further assembly in East and South-East Asia. Consequently, in order to improve its competitive position vis-à-vis other companies, IMI's first overseas affiliate was acquired in the United States in 2005 to enhance its R&D capabilities and establish a United States engineering footprint. At about the same time it bought a Singapore-based affiliate (from a United States TNC), with manufacturing facilities in China and Singapore, to gain access to OEM customers in China's electronics market. Thus its entry into the United States and China were for complementary reasons – created-asset-seeking in the former, and to improve its competitive position in the electronics market in the latter.<sup>a</sup>

Evolutionary motives. Motives can evolve over time. Embraer, a Brazilian manufacturer of small commercial and military aircraft, was established in 1969 as an SOE, but was privatized in 1994 with 60% of shares owned by private Brazilian interests (though the Government retains a controlling "golden share"). It invested overseas prior to privatization (the United States in 1979, Europe in 1988) primarily to offer sales and technical support to customers in developedcountry markets. However, after 1994 – and especially in 1999 – it entered into a series of strategic alliances with European groups<sup>b</sup> such as EADS<sup>c</sup> and Thales (France) in order to gain technology (and for risk reduction by pooling resources), and later it made acquisitions to ensure brand recognition in specialist aerospace markets. In 2004 it established a manufacturing affiliate in China (in which it owns a 51% stake), which assembles final aircraft for the Chinese and regional market. With 90% of its global sales (75% in commercial aircraft) overseas, Embraer can be regarded as one of Brazil's (indeed Latin America's) few truly global players. During the course of its move from a national to a global player, its FDI motives have evolved from purely market-seeking, through created-asset-seeking and, increasingly, to efficiency-seeking. Of course, as a global TNC it combines all of these motives in its FDI strategies around the world.

Source: UNCTAD.

<sup>a</sup> This path has been previously trodden by many other companies. For example, in the 1990s, many electronic companies from the Republic of Korea, such as Daewoo, LG and Samsung, invested in integrated production networks across Europe, allowing them to simultaneously "satisfy" motives for markets (Europe), created assets (Western Europe) and efficiency (Eastern Europe) (McDermott 1991, Cherry 2001, Hwang 2003). In a similar vein, Hatem (2006, p. 26) gives more recent examples of greenfield affiliates established in 2003-2005 in new EU member countries by Hudong Zhonghua Shipbuilding (China), Hankook Tire (Republic of Korea), Asustek Computer (Taiwan Province of China) and many other East Asian TNCs, to link up with operations in other parts of Europe.

<sup>b</sup> These groups thereby gained 20% shares in Embraer.

<sup>c</sup> EADS is formally registered in the Netherlands, but its principal shareholders and operations are in France, Germany and Spain.

terms of their country or region of origin and industry. In the UNCTAD global survey, 22% of responses indicated this as a strategic motive. Most of the companies for which efficiency-seeking FDI is important are Asian and in three main industries, electrical and electronic products, garments and IT services. East Asian TNCs (e.g. those from Taiwan Province of China) mostly consider efficiency to mean low-cost labour. However, a close inspection of the survey results shows that for Indian TNCs, which consider this also as a relatively important motive,<sup>54</sup> efficiency means primarily the synergies to be gained through the international integration of production and service activities, rather than "low-cost" inputs.<sup>55</sup> Efficiency- seeking FDI is relatively unimportant for Chinese and South African TNCs (10% of responses for the latter), possibly because of continuing relatively low costs in their respective home economies. Where it does occur as a motive, it is mentioned mostly for electrical and electronics products and transportation, storage and communication services.<sup>56</sup>

Overall, from the surveys and the literature, TNCs for which efficiency-seeking FDI appears to be the most important come mainly Hong Kong (China), Malaysia, Mauritius, the Republic of Korea, Taiwan Province of China and, to a lesser extent, a group of TNCs from China and Singapore (Chen and Lin 2005, Cherry 2001, Kazmi 2006, Page and te Velde 2004, Lim 2005, Moon 2005, Zainal 2005). These are essentially companies that are part of global value chains in highly competitive – often labour-intensive – industries such as electronics and garments. In most countries from which these TNCs have emerged, labour costs have become relatively high, compelling these firms to move into successively lower cost locations. In many cases this has resulted in regional integrated production systems. This is illustrated by Samsung, which has production facilities all over South-East Asia (Giroud 2004, O' Neil 1998).

The international location of efficiencyseeking investments depends on the nature of the product and the particular type of global production network in which it is located (UNIDO 2004, Hines et al 2000, Schmitz 2005). There are two main types of such networks: buyer-driven and producerdriven. In the first type, large buyers control branding, marketing and access to final markets and strive to organize, coordinate and control the value chain in industries such as agro-industries, garments, footwear, furniture and toys (Gereffi and Memedovic 2003, Kaplinski et al. 2003). These industries are quite well spread in developing countries and generally do not need to be located close to related firms, such as suppliers, especially at the lower value added end of activities. In contrast, in producer-driven production networks, key companies own crucial technologies and other firm-specific advantages, and take responsibility for the productivity and quality of other firms in the network, especially suppliers. Typical industries include electronics and automobiles (Humphrey

and Memedovic 2003), and industry clusters are an important aspect of producer-driven global production networks. In both types of networks, developing-country TNCs are typically suppliers or intermediate producers, although a number – such as Daewoo, Acer, Tata Motors and Embraer, as mentioned in subsection A.3 – have become key players.

Because buyer-driven networks are less dependent on industry clusters, TNCs investing overseas for efficiency-seeking FDI in industries such as garments and footwear are able to invest in widely dispersed host countries, provided they are low-cost locations. Of course, initial FDI is often regional, as with garment and footwear producers from China, Hong Kong (China), Malaysia and Taiwan Province of China that invested in South-East Asian developing countries such as Cambodia and Viet Nam in the 1990s (Gereffi and Memedovic 2003, Mirza and Giroud 2004); and, similarly, Mauritian garment producers that invested in East Africa over the same period (Goldstein 2005a, Page and te Velde 2004). However because such industries are driven incessantly by competitive pressures, other costreducing factors, including national and international policies can affect the location choice quite markedly. Thus, for example, although there have been increasing Asian investments in the garments industry in many African countries for some time, a number of recent developed-country trade initiatives to encourage cheaper (duty-free) access<sup>57</sup> by firms based in African countries to their markets appear to have accelerated this trend. Companies from China and Taiwan Province of China have responded the most to these initiatives by investing in countries such as Lesotho, Malawi, Senegal and Swaziland (World Bank 2004, Page and te Velde 2004).58

In producer-driven global production networks such as automobiles and electronics close integration is important, with a considerable geographic clustering of firms. In the case of some types of electronic products, components and subassemblies are significant aspects of an intricately interconnected production process, with quality being paramount. Relatively close regional proximity is therefore an important consideration. A good example of such a process is the hard disk drive (HDD) industry in which global manufacturing is concentrated in a few countries such as Malaysia, Singapore and Thailand.<sup>59</sup> In such industries there is a tendency towards a deepening of production in their primary locations, where feasible, with a gradual widening of

production sites to nearby countries (in this case in South-East Asia and China, Bartels 2004). This widening process is driven by efficiency-seeking FDI. In the case of electronics, since a very large proportion of the *manufacturing* part of the industry is in East and South-East Asia, for most local TNCs regional investments are not only efficiency- seeking, they also keep them close to the customer.<sup>60</sup>

The geographical spread of developingcountry TNCs motivated by efficiency-seeking depends to a great extent on the industry. TNCs in producer-driven global production networks, such as electronics, will tend to invest in countries close to their home country, with some consideration of where their customers are located. Those in buyer-driven global production networks, such as garments, are more likely to invest in lowcost locations beyond those in neighbouring home countries.

#### c. Resource-seeking

Overall, resource-seeking FDI is rated to be of moderate significance in the UNCTAD global survey, with 13% of responses stressing its importance as a major motive for investing overseas. Its relative importance compared to other motives is supported by the surveys of South African (17% of responses) and Chinese TNCs.<sup>61</sup> The following discussion focuses on *naturalresource-seeking* FDI, which emerged as the most common element of resource-seeking FDI in the surveys.

FDI in natural resources can be undertaken either by companies which are themselves based in the primary sector, or by those from other sectors, usually natural-resource-related such as metal manufacturing. FDI by companies in the primary sector can be further divided into that by TNCs from China, India or other resource-poor countries, and that by TNCs from resource-rich developing countries. FDI to access natural resources is very important for Chinese and Indian TNCs, as well as those from a number of other developing countries, because the security of supply of raw materials is deemed essential for their rapidly growing economies.<sup>62</sup> Because of the strategic importance of securing supplies of resources for the home economy, a large proportion of developing-country TNCs engaged in these efforts are State-owned, such as the Chinese firms CNPC, CNOOC (chapter III), ONGC (India) and TPAO (Turkey). ONGC, for instance, was established in the 1950s to tap into India's own

reserves, but in the 1990s redefined its mission to explicitly secure foreign oil for Indian development as a prime goal. To achieve this goal it has established a series of oil and gas exploration, production and distribution projects overseas, many in cooperation with other developed- and developing-country firms. Because of the scale of resources it aims to secure, ONGC's operations are widely dispersed, including in Algeria, Brazil, Côte d'Ivoire, Cuba, the Islamic Republic of Iran, Kazakhstan, Nepal, Nigeria, Qatar, the Russian Federation,<sup>63</sup> Syrian Arab Republic, Sudan and Venezuela. The Turkish Petroleum Corporation's (TPAO) objectives have evolved in a similar way, but it seeks to secure oil and gas in a more limited region, primarily over a stretch reaching from the Turkic-speaking countries of Central Asia (e.g. Azerbaijan and Turkmenistan), through West Asia (e.g. Iraq and the Syrian Arab Republic) to oil-rich countries in North Africa (e.g. Algeria and the Libyan Arab Jamahiriya).

From the surveys, the resource-seeking motives of TNCs from countries poor in natural resources, such as China, India and Turkey, have led them to invest in locations determined not by regional proximity, but by the availability of assets. Thus, many developing-country companies in oil and gas are drawn to relatively untapped supplies in regions such as Central Asia, Africa and Eastern Russia. Indeed, a third of the 30 largest South-South M&As in the primary sector during the period 1995-2005 (UNCTAD database) were investments in crude petroleum and natural gas by TNCs such as China's CNOOC and India's ONGC. As international prices of raw materials and other commodities have been rising – increasingly driven by rapid economic growth in some developing countries – the competition for resources has intensified, especially in regions such as Africa, where Asian, North American, European and South African companies are vying for oil reserves, mines and other assets.<sup>66</sup> Because of this competition, some developing-country TNCs are extracting resources in countries beset with civil wars, ethnic unrest or other difficult conditions. For example, China National Petroleum Corporation (CNPC), ONGC and Petronas (Malaysia's national oil company), are heavily involved in oil exploration and production in the Sudan where a number of conflicts are raging (Patey 2006, ECOS 2006).<sup>65</sup>

TNCs from developing and transition economies *rich* in natural resources hail from many regions; but those from Latin America, the Russian Federation, South Africa and West Asia dominate this sector. In the case of Latin America – where many firms in natural resources have achieved TNC status - most FDI occurs for a mix of resourceseeking and market-seeking motives. The former motive is however usually less important. Most of their resource-seeking FDI has been South-South, depending on the availability of resources and opportunities. For example, Petrobras (Brazil) and ENAP (Chile), both oil and gas companies, have pursued policies of acquiring reserves in West Asia and Europe. In contrast South African TNCs in natural resource industries have pursued a strategy of *regional* expansion into other African countries (Daniel et al. 2004, Page and te Velde 2004). This has involved acquisitions throughout the continent by companies such as AngloGold, Illova Sugar, Impala Platinum, Metorex, Randgold Resources and Sasol. One of the main reasons is the many opportunities that have arisen because of privatizations of State-owned interests across Africa. Apart from Latin America, South Africa and Malaysia,<sup>66</sup> TNCs from other natural-resource-rich countries are less active in resource-seeking FDI.<sup>67</sup>

Finally, many manufacturing companies that depend heavily on raw materials for their products (e.g. furniture, metal and pulp and paper manufacturers) might also pursue resource-seeking FDI strategies directly, either by moving production to a foreign site where a crucial raw material is located or by extracting and importing the material to their home country plants. The Brazilian Stateowned TNC, CVRD, which is the largest global exporter of iron ore and pellets, embarked on a programme of exploration and production of iron ore in 2002 to ensure stable supplies for its worldscale operations (including recent investments in East Asia). It now has extensive operations in iron, manganese, copper and other minerals in the Americas, Africa, Asia and Europe (ECLAC 2006a). Hindalco, an Indian public limited company established in 1958, is smaller in scale, but it is a more typical example of resource- seeking investors in natural-resource-based industries. It operates a number of aluminium and copper smelting plants in Australia, the output from which is sold to Indian companies as well as exported to economies such as China, Saudi Arabia and Taiwan Province of China.

#### d. Created asset-seeking

At first sight, created-asset-seeking FDI is a relatively modest motive for developing- country TNCs in the survey. Only 14% of responses in the UNCTAD global survey indicated this as a significant current motive (compared to 51% for market-seeking FDI) for developing-country firms. The motive is given a particularly low level of importance by South African TNCs (3%), but this is because the question was aimed at FDI in developing host countries. It is also regarded as relatively unimportant, overall, by Indian TNCs (an average of 2.3 out of 5 in the survey). Chinese TNCs, on the other hand, regard created-asset-seeking as the second most important motive after market-seeking.<sup>68</sup> Its importance is highest in a relatively small number of industries (across all surveys) including electrical and electronics, chemicals and infrastructural services.

However, from the surveys, it is evident that very few affiliates are established purely to seek created assets, in marked contrast to market- or efficiency-seeking FDI.<sup>69</sup> Most are established for mixed reasons. In the case of Indian TNCs createdasset-seeking is closely correlated with marketseeking FDI,<sup>70</sup> especially in North America, Western Europe and East and South-East Asia. For example, Strides Arcolab is an Indian pharmaceutical company which was established in 1990 and currently has six overseas affiliates in Europe, the United States and Latin America,<sup>71</sup> all of which are market-seeking, including the first two (based in Brazil and the United States). However, its two most recently acquired affiliates – in Italy and Venezuela – were also motivated by the need to acquire created assets. Similar affiliates are being established for mixed motives by other Indian TNCs, especially in Europe. They include pharmaceutical producers such as Ranbaxy Laboratories and Dr Reddy's Laboratory, and software companies such as Infosys, Tata Consultancy Services (TCS) and Wipro.

One of the reasons why "pure" created-assetseeking FDI might be rare is because developingcountry firms seeking created assets must first master the capabilities to absorb them (section A.1). Companies such as Haier, Lenovo, TCL, Arcelik and Vestel (Chinese and Turkish companies in the electrical and electronics industry), for instance, all devoted a considerable part of their earlier manufacturing strategy to building up their firmspecific advantages (often in collaboration with foreign companies)<sup>72</sup>, including the ability to manage the acquisition of new assets. Given the need to develop this absorptive capacity prior to outward FDI, it is unlikely that created-assetseeking will be the primary motive for developingcountry TNCs. Rather, this motive will go hand in hand with asset exploitation motives, especially market-seeking and efficiency-seeking. Haier and Arcelik were motivated by the need to establish

consumer brands in foreign markets, to complement their manufacturing and engineering knowledge and expertise, so these were the types of created assets they purchased or developed. Arcelik bought appliance brands in Europe, while Haier promoted its own brand in the United States (along with extensive manufacturing and R&D facilities) (box V.1). Lenovo has taken a more difficult route. By acquiring IBM's computer division (box V.2) – which is a huge worldwide operation – it is simultaneously seeking to establish itself as a global brand, as well as gain technology and expertise to complement its existing firm-specific advantages in China. (Goldstein et al. 2006, Giroud 2005, Erdilek 2005).

These examples do not necessarily mean that created-asset-seeking inevitably leads to an orientation towards developed countries. For example, TCL's merger with Thomson in Europe resulted in it also gaining considerable production facilities in East and South-East Asia. In addition, many corporate opportunities – such as the deregulation of the telecommunications industry worldwide – have also led to sizeable numbers of South-South acquisitions of created assets (UNCTAD 2005g, Guislain and Qiang 2006). It is worth noting that companies seize these opportunities for mixed motives, market-seeking usually being the primary one. Similarly, in consumer products, markets are the most important factor, but created assets are often bought to maintain a portfolio of brands; many Latin American TNCs, for example Mexico's Grupo Bimbo, are expanding regionally on this basis.

#### e. Other motives

A small, but significant proportion of TNCs in the surveys identified a number of "other" motives in their decisions to invest abroad, the most common being strategic and political objectives pursued on behalf of their home governments and countries. In certain circumstances governments assign goals to their TNCs, especially if they are State-owned. However, the SOE status of a TNC is not in itself a basis for assuming that it is pursuing State-directed objectives,<sup>73</sup> especially when the high proportion of SOEs in developing and transition economies is largely symptomatic of these countries' stage of development and the particular activities, such as natural resources and infrastructural services, in which these companies are primarily involved. Indeed most are motivated by similar considerations to privately owned companies.<sup>74</sup> Having said this, two main types of strategic motives for FDI can be discerned.

The first motive, partly touched upon under resource-seeking FDI above, is where the State encourages its companies to secure a vital input, such as essential raw materials for the home economy. For example, both Chinese and Indian TNCs are investing in resource-rich countries, especially in oil and gas, for this purpose.<sup>75</sup> In the case of Chinese TNCs, the quest for secure supplies of a wide range of raw materials is complemented by a parallel and sustained Chinese diplomatic effort in Africa, Central Asia, Latin America and the Caribbean and West Asia.<sup>76</sup>

The second type of motive is more fundamental and is aimed at underpinning a country's development and industrial competitiveness, in view of the latecomer nature of developing countries (Lall 2004). Singapore, for example, has encouraged FDI by governmentlinked companies (GLCs), in the past in order to develop its knowledge infrastructure (Mirza 1986) and today to bolster its regional position (Yeung 2006). Similarly, China (among other countries) is encouraging the development of globally competitive TNCs to meet the challenge of late industrialization, including the latecomer position of its companies (Nolan 2001, Sutherland 2003, Deng 2004, Child and Rodriguez 2005, Lee 2005, Mirza 2005).

Apart from motives linked to home government strategic objectives, TNCs in the surveys mentioned a number of further motives, many of which can be "transformed" into one or other of the four main motives discussed earlier in this section. For example, some companies mentioned *risk reduction or "anti-cyclical hedging*" as a motive. It is possible to consider this motive as a type of market-seeking FDI inasmuch as the intention is to reduce reliance on one or a small number of markets or sources of revenue.

#### **C.** Conclusions

The rise of TNCs from developing and transition economies, with their growing role in the world economy over the past two decades, is a structural phenomenon closely associated with the systemic, wide-ranging transformation that globalization is causing in all economies. An evaluation of the level of developing-country FDI on the basis of the IDP theory indicates that, while some internationalization can be explained by normal development processes,<sup>77</sup> FDI from many countries is occurring much earlier (or to a greater degree) than expected from their level of development. The evidence suggests that this structural shift stems largely from intense international competition in a liberalizing world.

A number of significant drivers of internationalization by developing-country and transition-economy TNCs emerge from the empirical evidence from the surveys and other research. These include, the small size of the domestic market compared to TNCs' capabilities and ambitions; rising costs - usually of labour impelling firms to look for efficiencies overseas; intense competition from local firms and, especially, foreign TNCs in the home economy, leading to strategies to become more competitive; and overseas opportunities arising from liberalization in potential host economies (including the privatization of SOEs). The first two of these drivers can be regarded as normal consequences of development.

The latter two drivers – global competition in the home economy and opportunities overseas - are a direct consequence of developed and developing countries increasingly liberalizing their policies on investment (and other international activity) over the past two decades. In addition, two other factors are perhaps less prevalent, but important. First, the rapid growth of many large developing countries – particularly China and India -have caused their governments concern about the risks of running short of key resources and inputs for their economic expansion. This is reflected in strategic and political motives underlying some FDI by developing-country TNCs. Secondly, there has been an attitudinal or behavioural change among the TNCs discussed in this chapter. They have developed an international vision, with the increasing realization that they are operating in a global economy, not a domestic one. Taken together – the threat of global competition in the home economy, increased overseas opportunities, concerns over the availability of essential imports and TNCs' international vision - these drivers and factors explain in large part the structural shift towards earlier and greater FDI by developingcountry and transition-economy TNCs.

Firm-specific advantages possessed by TNCs from developing and transition economies are similar in kind to their developed-country counterparts, but differ in proportion. While the latter are most likely to possess advantages based on ownership of key assets, such as technologies, brands and other intellectual property, the empirical evidence shows that developing-country TNCs rely much more on advantages related to production process capabilities, networks and relationships, and organizational structure. There are, of course, significant variations by country, sector and industry. For example, TNCs in the secondary sector are most likely to possess and utilize advantages in production process capabilities and ownership of expertise and technology (in that order), with some reliance on advantages grounded in networks and relationships, and organizations. In contrast, for TNCs in the primary sector, production process advantages are preponderant, while in the tertiary sector, networks and relationships represent the main source of advantage. There is a tendency to convergence with developed-country TNCs, generally as economies become more developed (e.g. advantages of TNCs in the Republic of Korea lie increasingly in ownership of key technologies), but for the present a large diversity of advantages underly the internationalization of developing-country TNCs. Many of them enjoy non-firm-specific competitive advantages, for example deriving from access to natural resources and reservoirs of knowledge and expertise in their home country. These locationrelated advantages might be available to all firms based in an economy, but, as illustrated in subsection A.3, a number of developing-country TNCs are adept at combining various sources of advantage (including firm-specific ones) into a strong competitive edge.

Developing-country TNCs tend to invest in other developing countries, both within their region (i.e. neighbouring countries with which they are familiar) and in other developing countries (i.e. South-South FDI, for example because of similarities in consumer markets, technological prowess or institutions). There are, of course, variations to this pattern, arising from motives, industrial composition, TNC strategies and other factors. The empirical analysis shows that the most important motive for TNCs from developing and transition economies is market-seeking FDI, which primarily results in regional and intra-developingcountry FDI. Within this, there are differences in patterns of FDI depending on the industry of the TNC: for example, those in consumer goods and services tend to be regional and South-South orientated; electronic components are usually regionally focused (because of the location of *industrial* customers); IT services are often regional as well as orientated towards developed countries (again because of industrial customers): and oil and gas TNCs focus on regional markets and some developed countries (where their largest markets are located). Efficiency-seeking FDI is the second most important motive, but is more concentrated in TNCs from relatively more advanced developing countries (hence higher labour costs) and in some industries (e.g. electrical and electronics, and garments and textiles). Most FDI for this motive is in developing countries, with that in the electrical/electronics industry strongly regionally focused, and that in the garments industry more dispersed. Resource-seeking and created-assetseeking motives for FDI are less important for TNCs. Not unexpectedly, most resource-seeking FDI is in developing countries and much createdasset-seeking FDI is in developed countries.

TNCs from developing and transition economies are here to stay. They are not exotic and can be analysed using existing theory, extended to allow for wider sources of advantage than ownership of expertise, technology and other intellectual property. As developing-country TNCs expand overseas, they gain knowledge, which potentially benefits them in two ways. First, they learn from their experience and improve their ability to operate internationally. Second, they gain expertise and technology to enhance their firmspecific advantages, thereby improving their competitiveness and performance. This improved competitiveness has implications for home countries. By the same token, developing-country TNCs can have an impact on host economies in a number of ways, ranging from increasing financial resource flows and investment to upgrading technology and skills. The implications of FDI for TNCs, as well as the impact on host and host economies, are taken up in chapter V.

#### Notes

1 The terms "firm-specific advantage" and "ownershipspecific advantage" are often used interchangeably. Sometimes they are even treated as being equivalent to "competitive advantage". However, there are differences and nuances. In this chapter competitive advantages will be used to include both firm- specific advantages and non-firm-specific advantages. An example of a non-firm-specific competitive advantage is privileged access to natural resources in the home country; some other firms might also enjoy this privilege and therefore have an advantage over those that do not. Similarly, firm-specific advantages can involve both ownership and non-ownership advantages. Ownership advantages include assets such as patented technology or a recognized brand, while non-ownership advantages consist of a wider variety of assets, including efficient production process capabilities, networks and relationships, and organizational structure.

- <sup>2</sup> Hymer 1976; Kindleberger 1970; Dunning 1979, 1993, 1998, 2006; Caves 1982; Buckley 1990; Wernerfelt 1995; Cantwell and Narula 2003; Dunning and Lundan forthcoming. The notion of firm- and ownership-specific advantages is an application of the theory of industrial organizations; however the resource-based theory of the firm results in parallel conclusions, although the advantages here are expressed more in terms of valuable and unique resources possessed by the firm (e.g. entrepreneurial skills, engineering expertise, innovatory capacity) (Penrose 1959, Conner 1994, Deng 2004).
- <sup>3</sup> The notion of asset or competence augmentation is entirely consistent with resource-based theory because the view that all firms are constantly balancing resources in a bid to ensure the uniqueness of their capabilities, compared to other firms, is central to the original concept (Penrose 1959).
- <sup>4</sup> See Bartels 2005 on how developing-country TNCs can enhance their abilities to absorb new knowledge and technology.
- <sup>5</sup> As an example, franchising and management contracts are similar markets for knowledge and expertise.
- <sup>6</sup> The alternatives to FDI in this case include domestic creation of assets (e.g. through R&D), licensing and domestic utilization of knowledge from other firms (including foreign ones, an approach much used by Korean and Japanese firms in the past), and the setting up of joint ventures in the home economy with foreign TNCs.
- A superior knowledge of regional markets is a valuable advantage over investors from outside the region. Sometimes this can be the result of unexpected changes in regimes or policies, conferring even more relative advantage to countries and TNCs that are well positioned geographically, politically, culturally or institutionally. This has been the case for Russian firms in the CIS, Hong Kong (China) firms in China, and Turkish firms in Central Asia (Crane et al. 2005, Culpan and Akcaoglu 2004, Chen and Lin 2005, Demirbag et al. 1998, Erdilek 2005).
- <sup>8</sup> Indeed it has been used to provide considerable insight into the internationalization processes of companies such as Hyundai and Daewoo (Choi et al. 2003a, 2003b).
- <sup>9</sup> The principles of the IDP essentially reflect those of mainstream thinking of the determinants of TNC activity. However, the exact nature and trajectory of the IDP is strongly country-specific (see below).
- <sup>10</sup> NOI per capita uses FDI stock data. GDP per capita is used here as a general measure of economic development.
- <sup>11</sup> For example, many countries are "dual economies" with faster growing sectors alongside poorer performing ones.
- <sup>12</sup> Shifting the two periods in figure IV.1 by a few years so that they finish earlier or later, does not significantly affect this conclusion.
- Among others, Scheman 1973, Lecraw 1977, Wells, 1978, 1983, Lall 1983b, Buckley and Mirza 1988, Aggarwal and Agmon 1990, Yeung 1994, UNCTAD 1993, 1997, Mirza 2000, Moon and Roehl 2001, Mathews 2002 and 2006, Beausang 2003, Buckley 2004, Mortimore 2005a.
- <sup>14</sup> For example, Mathews 2002 proposed an alternative internationalisation framework for latecomer TNCs (mostly from developing countries), and Moon and Roehl 2001 suggested that a theory based on an

imbalance between a firm's resources and those it lacks (and hence tries to acquire internationally) would better explain FDI by developing country TNCs.

- <sup>15</sup> As opposed to an alternative theory or approach. In fact, most authors have opted for approaches which are, effectively, extensions or adaptations of the theoretical framework discussed in section A.1.
- <sup>16</sup> In addition to the literature mentioned in footnote 12 above, other sources include Oman 1986, Whitley 1999, Guillen 2000, Hwang 2003, Li 2003, Goldstein 2005a and 2005b, Chen (2003), Pradhan 2004, Williamson 2004, Dunning 2005, Freeman 2005, Naidu 2005 Goldstein and Toulan 2005, Roche 2005, Childe and Rodriguez 2005, Calderon 2005, OECD 2006, Financial Times, 28 April 2006, Liu and Buck 2006, Redding and Witt2006, Strange et al. 2006, Yeung 2006.
- <sup>17</sup> The fact that these segments are the principal, but not exclusive, sources of advantage is stressed, because any particular firm might draw various types of advantage from a number of sources (depicted in the segments of table IV.1). This can lead to a variety of strategies, as discussed later in this section.
- <sup>18</sup> Business Week 3 July 2006. The ranking was based on a weighted average of factors such as revenues, revenue growth, return on equity and profits.
- <sup>19</sup> See also "Korea: set to duel in digital TV", *Business Week online*, 7 June 2006. This does not preclude collaboration, for example in pooling resources for expensive manufacturing facilities such as those for liquid-crystal displays ("Sony and Samsung's big HDTV bet", *Business Week online*, 18 April 2006).
- <sup>20</sup> See, for example, Tsui-Auch (2003) who discusses the process of advantage-building by firms in Hong Kong (China), Singapore and Taiwan Province of China. Among others who have examined this process (including absorptive capacity) are Craig and Douglas 1997, Khanna and Palepu 2004, Frost and Zhou 2005, Kim 1997, Liu and Buck 2006, Moon 2005, Deng 2006, Pradhan 2004, Lane 2001, Wesson 1994 and Young and McDermott 1996.
- <sup>21</sup> See Holmström and Roberts on the issues determining the boundaries of the firm, including a discussion of the role of firm-specific ownership advantages and other relevant factors applied to the evolution of developed -country TNCs.
- <sup>22</sup> In a recent study, Marcel (2006) analyses the assets, "needs" and constraints of five developing-country TNCs in the oil and gas industry: Saudi Aramco, Sonatrech (Algeria), Kuwait Petroleum, ADNOC (Abu Dhabi) and the National Iranian Oil Company. Their assets are both home level factors (such as the reserves themselves, geography, State support and funds) and firm-specific factors (such as management processes and LNG (liquid natural gas) expertise). However, among their "needs" are factors that will help internalize advantages and make them proprietary. ADNOC, for example, needs "capacity to manage large projects", "marketing expertise" and "ownership of technology", among others.
- <sup>23</sup> See Khanna and Palepu (2004). In fact, the growth is so rapid that insufficient supply of engineering and IT graduates in Bangalore (McKinsey & Co. 2005) has led to firms, such as Infosys, setting up their own universities ("Drought forecast for India's technology reservoir", *Financial Times*, 5 May 2006).
- The *Economist* (2005), "the great thrift shift", September 24<sup>th</sup> and *Time* (2005), "Follow the money", December 5<sup>th</sup>, BCG 2006b. Another significant source of funds

in some countries is monies repatriated to the home country by migrant workers overseas.

- Of course, in most cases, the primary internationalization drivers in these industries are competition and the need to service foreign markets – hence market-seeking FDI. However, other drivers also come into play. For example, the privatization of companies in developed and developing countries has created overseas opportunities for many developing-country TNCs in infrastructural services.
- Further, Yeung 2006 argues that in addition to firms' strategies in global production networks, home base (locational) advantages are essential to understand the success of East and South-East Asian TNCs. By home base advantages he is referring to the mutually reinforcing benefits arising from a government's strategic industrial policy, a firm's production specialization strategies and "cluster economies". In essence this source of advantage is depicted by segment 5 in table IV.1.
- <sup>27</sup> "The hottest tech outfit you never heard of", *BusinessWeek online*, 18 April 2006.
- <sup>28</sup> Yue Yuen, in fact a very large company, is discussed in section IV.B.3, under efficiency-seeking FDI.
- <sup>29</sup> See Now for the Hard Part: A Survey of India, *The Economist*, 3 July 2006.
- <sup>30</sup> The significance of diasporas, such as the overseas Chinese, Indians or Latin Americans, as a source of competitive advantages for TNCs established by members of the same cultural or ethnic groups is an under-researched topic. Most work appears to have been conducted on Chinese diaspora (e.g. see Nyaw et al. 2001 and Yang 2005).
- <sup>31</sup> Partly because most developing-country TNCs are not yet "mature", though other factors are in play. See "Emerging Giants", *Business Week*, 31 July 2006.
- <sup>32</sup> The surveys were not able to compare developed- and developing-country TNCS directly, but the main importance of ownership advantages for developedcountry TNCs, especially those deriving from innovation-based technologies and expertise, is well documented in the literature (Cantwell and Moléro 2003, Dunning and Lundan forthcoming).
- <sup>33</sup> In addition, ownership advantages are more prevalent in tacit technology and expertise, and less in patents, brands and similar rights.
- <sup>34</sup> Chinese firms were asked to state their competitive advantages on a range of measures on a scale of 1 to 3; 142 firms responded and, apart from price/quality which scored 2.5, on average, advantages in all other potential measures (e.g. brand, technology, distribution channels) hovered just above 2 (i.e. they rated themselves as "average").
- <sup>35</sup> Facilitating factors are also mentioned in the literature but these are factors that benefit both developed and developing countries (for example advanced international communications or information and communications technology (ICT)). Examples include, technological developments, for example many firms, especially in East and South-East Asia, have adopted advanced ICT technology to improve supply chain management and ease communications with affiliates (Lorentz 2006); governance or corporate forms which enable easier or cheaper access to finance and other resources (Roche 2005) (see table IV.1); and partnerships and alliances (e.g. with developed-country TNCs in Latin America) (ECLAC 2006a).

- <sup>36</sup> Respondents from 36 firms replied to the question about home and host country drivers in their decisions to invest abroad, answering on a scale of 1 to 5 (5 being the most important). The results are reported in this section. The need to pursue customers was given an average importance rating of 3.9 out of 5 and the lack of trade linkages a rating of 3.4.
- <sup>37</sup> According to the survey the trade barrier issue is concentrated in a few industries, namely the electrical and electronics industry, machinery and textiles and garments, in all of which China has large trade surpluses.
- <sup>38</sup> Of the Chinese TNCs surveyed, 142 responded to the question on drivers. It asked companies to indicate whether a number of selected measures were important factors for propelling them to invest abroad.
- <sup>39</sup> Such barriers also played an important role in outward FDI by developing-country TNCs in the 1980s and 1990s (e.g. FDI by electronics and automobile companies from the Republic of Korea).
- <sup>40</sup> In the UNCTAD global survey, 44 TNCs responded to the question on drivers, which asked them to identify the three main reasons for their overseas operations. (The shares given are a percentage of the total responses by the firms.)
- <sup>41</sup> In response to a question asking for three positive reasons for investing in particular host countries, 56 South African TNCs (with 66 affiliates in selected developing host countries) replied. The reasons given, up to three for each affiliate, were then divided between reasons which could be regarded as drivers and those as motives. This subsection reports on the responses for drivers, and subsection B.3 below on those for motives.
- <sup>42</sup> Of the 140 Chinese TNCs surveyed, 42% responded to the question about which factors propelled them to invest abroad.
- <sup>43</sup> Regulations and incentives received an average rating of 3.6 out of 5 and competition/FDI policies 3.9.
- <sup>44</sup> Of course, drivers and motives are not entirely separable. For example, a driver such as a small home market normally results in the search for a foreign market.
- <sup>45</sup> TNCs in the UNCTAD global survey were asked to indicate the three main motives for their overseas operations, 44 companies responded and the percentages given are a share of the total responses (up to 3 per company) received.
- <sup>46</sup> For responses on motives received from South African TNCs, as discussed in this section, the percentages given are a share of total responses received from 66 affiliates of 57 TNCs. Note that all the host countries in the survey are developing countries.
- <sup>47</sup> In the Indian survey, 36 Indian firms responded to a question asking them to rate a number of motives for their overseas operations on a scale of 1 to 5, 5 being most important. Market-seeking received an average of 3.8 out 5, making it an important motive.
- <sup>48</sup> In the China survey, companies were asked to state whether a motive was important or not on a scale of 1 to 3. Of the 148 firms which responded to this question, 85% regarded marking-seeking as important or very important.
- <sup>49</sup> Among them, Asia Pacific Foundation of Canada 2005, Attapich and Uryos 2005, Beausang 2003, Bonaglia et al. 2006, Buckley et al. 2005, Caldaron 2006, UNCTAD 2005i, Crane et al. 2005, Culpan and Akcaoglu 2004, Akcaoglu and Aktas 2006, Chen and Lin 2005, Cherry 2001, Daniel et al. 2003, Deng 2004, ECLAC 2006a, Energy Economist 2005, Erdilek 2005,

Mirza 2005, Giroud 2005, Lee 2005, Lim 2005, Mkenda and Mkenda 2004, Miller 2005, Moon 2005, Mortimore 2005, Pananond 2006a, 2006b, Podmetina and Selioukova 2005, Pradhan and Abraham 2004, Pradhan 2003, UNCTAD 2005e, Rios-Morales and Brennan 2006, UNCTAD 2005g, Svetlicic 2005, WEF 2006, UNCTAD 2005f, Yean 2005, UNCTAD 2005b, Zainal 2005 and World Economic Forum 2006.

- <sup>50</sup> Including, Argentina, Brazil, Chile, Egypt, Hong Kong (China), Malaysia, Mexico, Singapore, South Africa, Thailand and Turkey, certainly in recent years. The 50 largest South-South M&As in the secondary and tertiary sectors in 1995-2004 (mostly market-seeking) were by TNCs from a small number of economies – Argentina, Brazil, Chile, China, Hong Kong (China), Malaysia, Mexico, the Republic of Korea, Singapore and South Africa – and nearly all of them were regional in orientation.
- 51 From the various surveys (and the literature), it seems that Chinese FDI in developed countries is occurring along trade patterns with the intention of better securing existing markets (including FDI in supporting services such as shipping, communication and trade), with the parallel motive of created-asset-seeking (see below) to enhance the competitiveness of Chinese TNCs visà-vis their developed-country counterparts. This is a strategy similar to that of Japanese and Korean manufacturing companies in the past (Levy 1988, Young et al 1996, O'Neil 1998, FIAS 2005, Childe and Rodriguez 2005). Indian TNCs are similarly expanding into developed markets, mainly in the services sector, in manufacturing such although some as pharmaceuticals.
- <sup>52</sup> In Malaysia, for instance, the Government's South-South policies have also played a role in improving companies' familiarity and knowledge of distant markets.
- <sup>53</sup> New Hope Group (China), an agribusiness TNC, recently invested in Viet Nam, arguing that because of the earlier transition from a planned to a market economy in China, it is able to understand and work in an environment where current equivalent changes are under way as in Viet Nam (Wei 2005).
- <sup>54</sup> With an average firm rating of 3.2 out of 5.
- <sup>55</sup> Though a small number of Indian companies also mention unskilled (low cost) labour-seeking as a motive, especially in IT services.
- <sup>56</sup> The latter is only reported by Chinese TNCs, and may be more akin to the integration efficiencies discussed earlier for Indian TNCs.
- <sup>57</sup> For example, the United States enacted the African Growth and Opportunity Act (AGOA) in 2000, and the EU has the Cotonou Agreement (which covers all sub-Saharan countries, as well as some other developing countries) and the Everything But Arms (EBA) initiative (covering African LDCs).
- <sup>58</sup> Having said this, the scale of operations, sunk costs and logistics cannot be ignored even in buyer-driven global production networks, with a strong tendency towards regional efficiency-seeking FDI under such circumstances. Yue Yuen, a Hong Kong (China)-based footwear manufacturer established in 1988, is a good case in point. It was the largest global supplier of footwear in 2004, accounting for 17% of the branded wholesale athletic and casual footwear market worldwide (its major customers include Adidas, Nike, Reebok, Rockport and Timberland). Because of the scale of its operations and a strategy of reducing costs through R&D and vertical integration in upstream material

supply, its efficiency-seeking FDI is in nearby countries such as China, Indonesia and Viet Nam (in which it is planning to extend operations over the next few years). It also has affiliates in Taiwan Province of China and the United States for R&D and co-design with partner firms and production facilities in Mexico, which combine new business development with a combination of efficiency- and market-seeking FDI (for the North American market).

- <sup>59</sup> Since a network of companies are involved in manufacturing the components which go into an HDD, any FDI for cost-efficiency reasons (or resourcesseeking) is likely to be regional (e.g. some subcontracting has shifted to the Philippines, which is nearby and has a skilled, but lower cost workforce) (McKendrick et al 2000). It is worth mentioning that the relevant developing-country TNCs are subcontractors or suppliers, such as the Malaysian firm Eng Technologi, which became an international investor after acquiring knowledge, skills and quality systems from working with developed-country TNCs (Rasiah, 2005).
- 60 For example, AU Optronics (AUO) was established in Taiwan Province of China in 2001 through a merger of the local firms, Acer Display Technology and Unipac Optoelectronics. It is the largest manufacturer worldwide of TFT LCD displays for products such as computer notebooks, monitors and televisions. Nearly all of its customers – whose production is eventually exported to the United States, Europe and Japan - are located nearby such as in China, Hong Kong (China), Japan, the Republic of Korea and Singapore. Consequently, most of its R&D is in Taiwan Province of China with efficiency-seeking manufacturing FDI also in nearby economies, preponderantly in China. In the case of another Taiwan Province of China company, Hon Hai Precision Ind. (also known as Foxconn), which was established in 1974 and which manufactures connectors, cables and enclosures for the PC industry, the largest efficiency-seeking affiliates are also in nearby countries such as China. However, because it also supplies smaller PC manufacturers and retailers that require a rapid response to meet demand in markets in North America and Europe, it has also recently established manufacturing affiliates in these developed regions. For efficiency reasons its affiliates are in countries such as the Czech Republic, Hungary, Ireland and Mexico.
- <sup>61</sup> It was regarded as an important motive by 40% of Chinese firms, but this is relatively low compared to market-seeking (85% of firms) and created-asset-seeking (51% of firms).
- <sup>62</sup> Taking a longer term perspective, this is a recurring theme. For example, in the 1970s and 1980s the Japanese Government and its TNCs, including *sogo shosha* (general trading companies), engaged in "resource diplomacy" because of the country's rapidly growing economy and concerns relating to securing supplies of raw materials and energy. As with Chinese and Indian TNCs, FDI occurred in both developing and developed countries, such as Canada and Australia (Ozawa 1980, Ross 1977, Yoshino and Lifson 1986).
- <sup>63</sup> On 26 May 2006, the *Financial Times* reported that the Russian Federation was reviewing the sale of exploration and production rights to oilfields in Sakhalin, one of which belongs to a consortium that includes India's ONGC.
- <sup>64</sup> See, for example, Christianson 2006 on recent large Chinese, United States and other Asian investments (and competition) in the oil industry in Africa.

- <sup>65</sup> Some developed-country TNCs are also present in the Sudan, including Talisman Energy (Canada) and Lundin Petroleum (Sweden). OMV (Austria), that was previously involved, has now withdrawn from the country.
- <sup>66</sup> In recent years, Malaysian companies such as Guthrie, Sime Darby, and Land & General have acquired farms, nurseries and timber tracts, mostly in nearby countries such as Indonesia.
- <sup>67</sup> For example, there is little Russian FDI in raw materials per se. The country's natural-resource-dependent TNCs tend to pursue a strategy of expanding into foreign markets by controlling downstream elements of the value chain. However, there is a limited amount of rawmaterials- related FDI in the CIS; and, more significantly, Norilsk Nickel (Russian Federation) is buying up natural resource assets in Australia and Africa.
- <sup>68</sup> Among Chinese TNCs, 51% regard created-assetseeking as an important motive for their FDI, compared to 85% for market-seeking. The equivalent figures for efficiency-seeking and resource-seeking FDI were 39% and 40% respectively.
- <sup>69</sup> For example, Kemwell Ltd is an Indian pharmaceuticals company established in 1980, which bought a Swedish company in 2006 for its technology and research staff. Kemwell does not have affiliates overseas for any other reasons. This is relatively rare and implies that outward FDI is not a primary route through which developingcountry TNCs acquire competitive advantages at an early stage in their development. Instead, they create or develop firm-specific advantages through R&D, licensing, joint ventures or other linkages with foreign firms in their domestic economies (as discussed in section A).
- <sup>70</sup> Firms were asked to indicate their three most important motives for each region.
- <sup>71</sup> In fact 3 of the 6 are in Latin America, making this a good example of South-South FDI.
- <sup>72</sup> Bartels 2005, Deng 2006, Pradhan and Abraham 2004, Goldstein et al. 2006, Erdilek 2005, Asia Pacific Foundation of Canada 2003, Deng 2006b, Deng forthcoming.
- <sup>73</sup> Indeed the State and State-owned TNCs can differ considerably on issues. For example, when the Indian Government tried to spin off ONGC's overseas arm (OVL), this State-owned oil and gas company disagreed publicly, sparking off an intense debate, at the end of which OVL remained a part of ONGC. *Business on line*, 7 October 2007. In the case of PDVSA (Venezuela) there has been a disagreement between the Government and the company. Since 2000, the State has been taking measures to reduce the company's autonomy, especially in terms of FDI Ramirez (2005).
- <sup>74</sup> "The New State Capitalists", *Newsweek*, 1 May 2006.
  <sup>75</sup> However, in the case of ONGC the main Indian TNC in the oil industry it is not clear whether the Indian Government has explicitly directed the company to pursue this course of action or whether it is following market signals.
- <sup>76</sup> Wang 2002, World Bank 2004, Naidu 2005, Patey 2006, Goldstein et al 2006, Taylor and Smith 2006.
- 77 As countries develop, their indigenous firms become more proficient by acquiring or creating advantages, which enables them to expand to foreign economies.