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Research Report

Crossing the borders: The structure of transnational corporate activities

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Crossing the Borders: The Structure of Transnational Corporate Activities

Ingrid Amann

Niels Anger

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ABSTRACT

This study analyzes the structure of cross-border corporate activities, assessing the development and strategies of multinational corporations on various levels. We present the development of transnational corporations and analyze strategies associated with border-crossing investments, such as Resource Seeking, Market Seeking, Efficiency and Asset Seeking. We find that the significance of transnational corporations that are not only active in foreign trade, but also produce goods and offer services beyond their national boundaries, has increased dramatically – the value of total assets of foreign affiliates has expanded at a much higher rate than international trade.

The primary channel of transnational corporate activities is Foreign Direct Investment (FDI). While FDI still mainly originates from industrialized countries, companies from "emerging nations" such as China, Malaysia, Brazil or South Africa have entered the stage as major international players. Regarding the sectoral structure of FDI, an even stronger trend than in foreign trade is evident towards the tertiary (services) sector, whereas the primary and secondary sector face a decreasing share. This trend especially involves financial services and trading corporations.

The strategies of multinational enterprises can also benefit developing countries in terms of investment flows, employment creation and infrastructure. Moreover, technologies transferred through cross-border firm activity can provide a basis for long-term economic development. Corporate networks can bear large growth potential, since the enormous knowledge and know-how channeled through foreign subsidiaries may spill over the host country. We find that about 80 percent of all investment flows associated with technology transfer takes place within an international corporative conglomerate – transnational corporations thus exercise a crucial role in transferring technologies.

Complementary to our analysis, we discuss international investment agreements as an institutional framework for transnational firm activities and present Corporate Social Responsibility as a relatively new strategic field of multinational enterprises.

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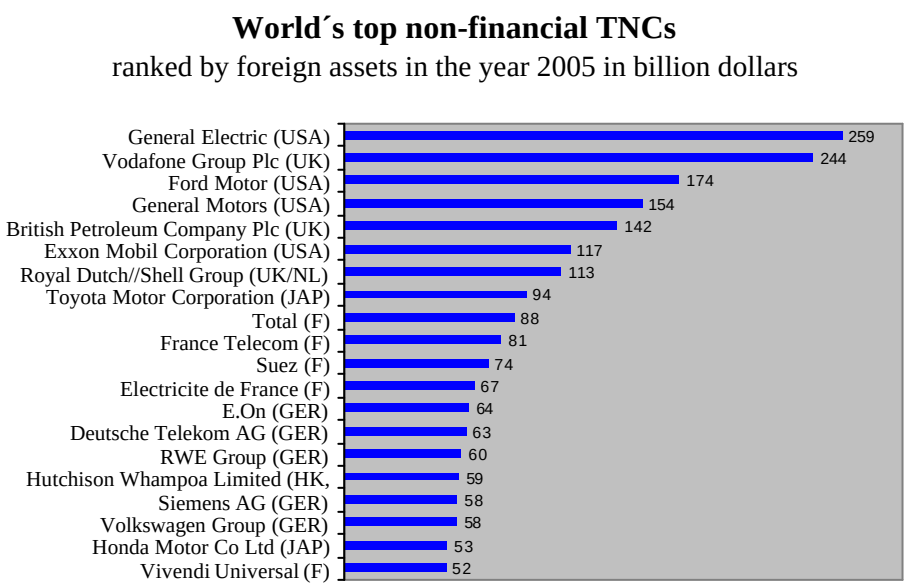
1 Introduction

In the wake of globalization, the significance of corporations that are not only active in foreign trade, but also produce goods and offer services beyond their national boundaries (multinational or transnational corporations, TNCs) has increased dramatically. While in the early nineties there were about 7,000 TNCs, today about 70,000 parent companies and 690,000 associated foreign subsidiaries produce and market goods world-wide, conduct research and development and co-operate with host countries' businesses or other foreign corporations (UNCTAD, 2005a). The value of total assets of foreign affiliates in the year 2004 is being estimated at 36 trillion US dollars (UNCTAD, 2005a). It has expanded at a much higher rate than international trade, by now exceeding world exports of goods and services by far. Moreover, about two thirds of the international flow of goods are attributable to foreign subsidiaries, one third consisting of intra-corporate trade alone, i.e. trade between parent companies and subsidiaries, as well as among the latter.

Figure 1: The world's largest corporations



Source: UNCTAD(2005a).

The present study analyzes the structure of cross-border corporate activities, assessing the development and strategies of multinational corporations on various levels. The paper is structured as follows: In section 2, we present the development of transnational corporations. In section 3, we analyze strategies associated with border-crossing investments. Section 4 presents the channels of TNC activities, while section 5 analyzes at the impacts of international corporate behavior. In section 6 we present international investment agreements as a framework for TNC activities. Section 7 assesses the implications of transnational Corporate Social Responsibility. In section 8, we conclude.

2 Development of Transnational Corporations

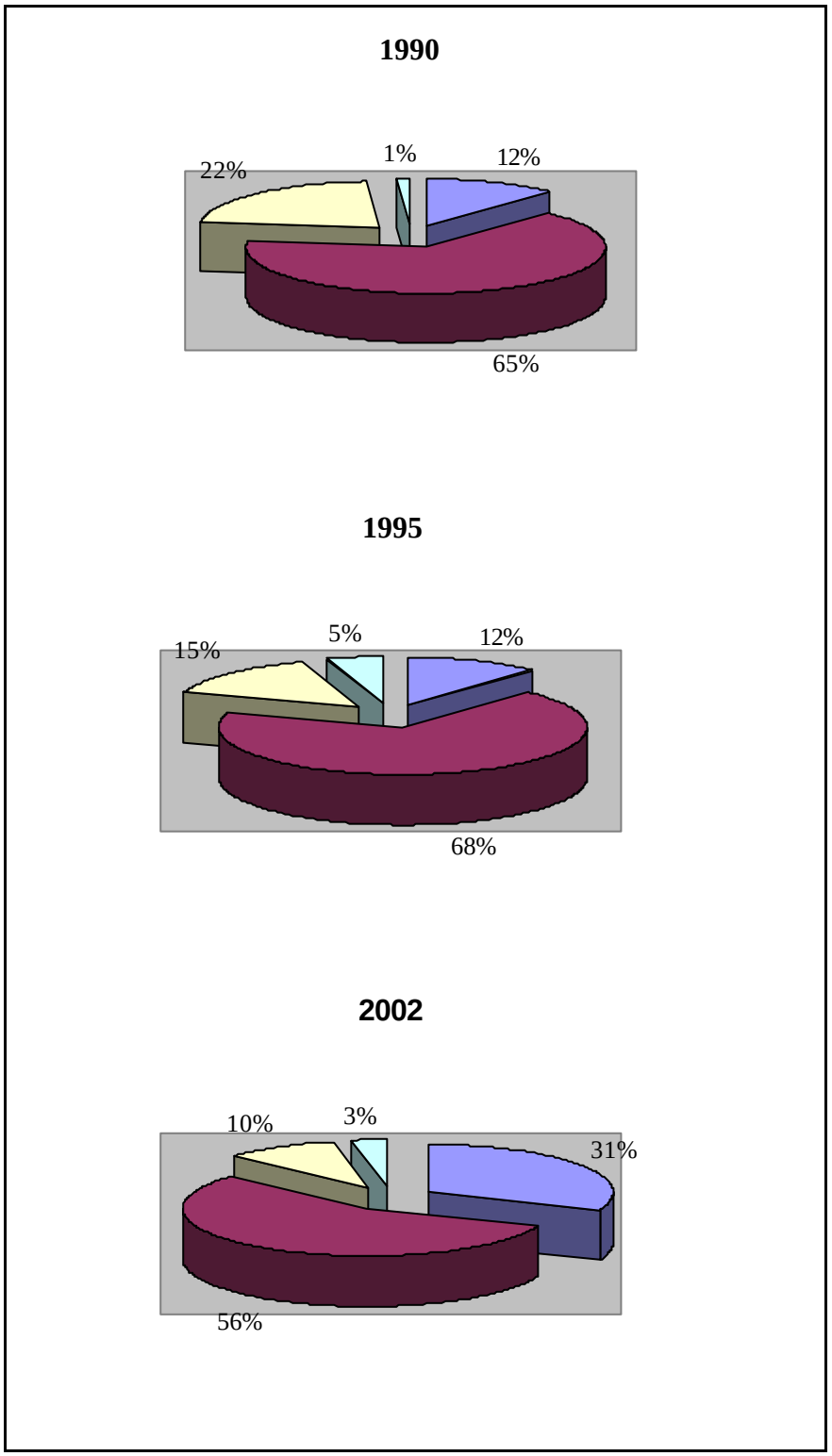
Regarding the form of multinational corporate expansion, mergers and acquisitions have become predominant, as opposed to founding companies abroad ("greenfield investment"). For example, the takeover by the British telecommunications group Vodafone of its German competitor Mannesmann in 2000, made it the second largest transnational corporation in the world, measured in terms of foreign capital assets outside of the financial sector (see Figure 1). In the following year, however, the continuous and progressive increase in trans-border mergers and acquisitions met its first interruption. Also in 2001, real trading worldwide lessened in volume for the first time since 1982. Nevertheless, these developments should not be interpreted as "the end of globalization" – they rather constitute a cyclical letdown. It is also expected that greenfield investment will increase over the next years and will soon play a role of at least equal importance to mergers and acquisitions (M&As). A survey by UNCTAD shows that more than 50 percent of three groups of respondents combined expect M&As to be the primary vehicle for FDI until 2006, while greenfield investment is expected by most Investment Promotion Agencies to play a bigger role (UNCTAD, 2005).

Notwithstanding mega corporations such as Exxon Mobil, General Motors or DaimlerChrysler, whose corporate value surpasses the GDP of such countries as Peru or Hungary, small and medium-sized enterprises (SMEs) account for far greater numbers in the TNC landscape. Multinational SMEs thereby tend to invest in neighboring

countries and prefer entrepreneurial cooperation and joint ventures with foreign partners, rather than greenfield investment. Certainly, it is rather difficult for these enterprises to operate across borders: In addition to higher information costs, SMEs also face clear disadvantages concerning the all-important financial sphere as compared with large corporations.

The sectoral composition of the Top-100 TNCs worldwide has drastically changed over the past 15 years. Figure 2 shows that while in 1990 only twelve of the Top-100 were TNCs from the services sector, this number changed dramatically between 1995 and 2002, increasing by 150 percent to 31 of the Top-100. A transition leaving behind the primary and secondary sectors and favoring the tertiary sector is clearly indicated. This, for one, reflects the economic reality of services – the tertiary sector in developed countries made up 72 percent of GDP in 2001. Another factor is that services in the past were often not tradable, i.e., they had to be produced at the time and place they were consumed. Services also did not lend themselves easily to setting up shop abroad. TNCs and their foreign subsidiaries contributed to changing this by increasing the export and foreign investment potential of services. Within the services sector, primarily the electricity, water, telecommunications and business services branches are growing extraordinarily fast. Between 1990 and 2002, the value of foreign direct investment (FDI) in energy generation grew fourteen-fold, in telecommunications and transport sixteen-fold, and in business services nine-fold (UNCTAD, 2004a).

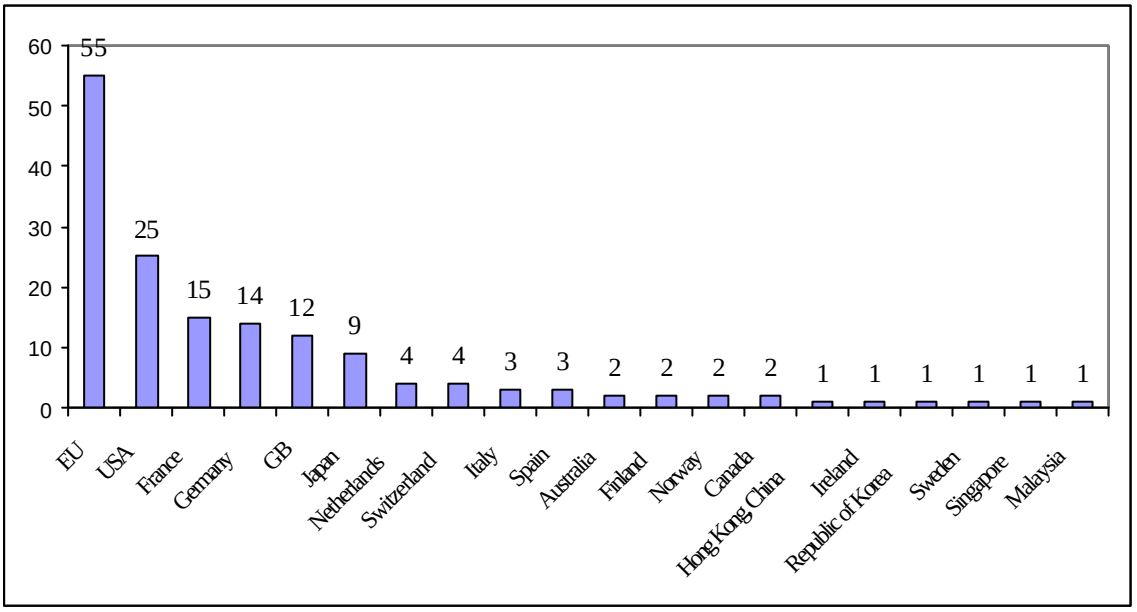
Figure 2: Sectoral distribution of the Top-100 TNCs



Source: UNCTAD (1991), UNCTAD (2004).

The *countries of origin* of almost all of the Top-100 TNCs are industrialized (see Figure 3); merely four of the Top 100 stem from developing countries. Close to 90 percent of these worldwide largest corporations are located in the so-called triad (USA, EU, Japan), with the EU being home to the majority, followed by the USA, then Japan. The subsidiaries of the Top-TNCs are for the most part also located in industrialized nations, again especially in the EU, where more than half of all subsidiary companies have been established.

Figure 3: Geographic origin of the Top-100 TNCs (percent)



Source: UNCTAD (2005a)

Explanatory note: The sum is greater than 100 since three TNCs are listed with two countries and recorded accordingly. These firms are DaimlerChrysler, Royal Dutch/Shell Group and Unilever.

Although TNCs from developing countries hardly play a role among the Top 100 thus far, recent developments indicate that they are gradually gaining in significance. Already in 2003, they had a share of 7 percent in foreign direct investment, which is deemed as the primary tool of multinational business activities (see below). [1]

[1] For a comprehensive introduction to cross-border corporate activities see Koopmann and Franzmeyer (2003).

3 Strategies of Transnational Corporations

The globalization strategies of TNCs can be differentiated into four categories:

- Resource seeking,
- Market seeking,
- Efficiency seeking,
- Asset seeking.

The exploration of natural resources aimed at covering demand for commodities (*resource seeking*) is the "classical" investment motive for internationally active corporations. It remains significant, although to a less dominating extent.

The primary motive of multinational corporations to invest is the penetration of foreign markets, i.e. the securing and expanding of sales abroad (*market seeking*). This motive is all the more important, the larger the respective market is. China, India and several large Latin American countries are therefore preferred regions for sales-oriented FDI in developing countries. Market-seeking investment strategies have also been driven by liberal import regulations between smaller countries in an economically thriving region. For this reason, in the nineties, Belgium, Ireland, New Zealand and the Netherlands registered the largest FDI shares as compared to the domestic product of all OECD host countries.

Growing in importance are efficiency strategies, for which lowering costs is a decisive aspect of the strategy (*efficiency seeking*). Western investors, for example, exploit low wages in Central and Eastern European countries relative to those in their home countries (valued at current exchange rates) by producing low-cost intermediate inputs for their respective production process or by providing final assembly and subsequent export. Moreover, labor-cost advantages are increasingly realized in conjunction with size advantages or economies of scale in production. Ever more frequently, multinational corporations therefore operate production facilities abroad, specializing in particular processes and producing either for the world market as a whole, for large, mainly regional segments of the world market, or for the company's, or corporate network's own demand. One example is the assembly of color TV sets in the north of

Mexico, near the US-American border, run by American and Japanese corporations. With respect to these products, Mexico is currently the worldwide export leader. Low wages, tariff and tax exemptions, substantial cost reductions by means of high output rates and advantages arising from local clustering of similar types of businesses (advantages from agglomeration) are crucial to this development.

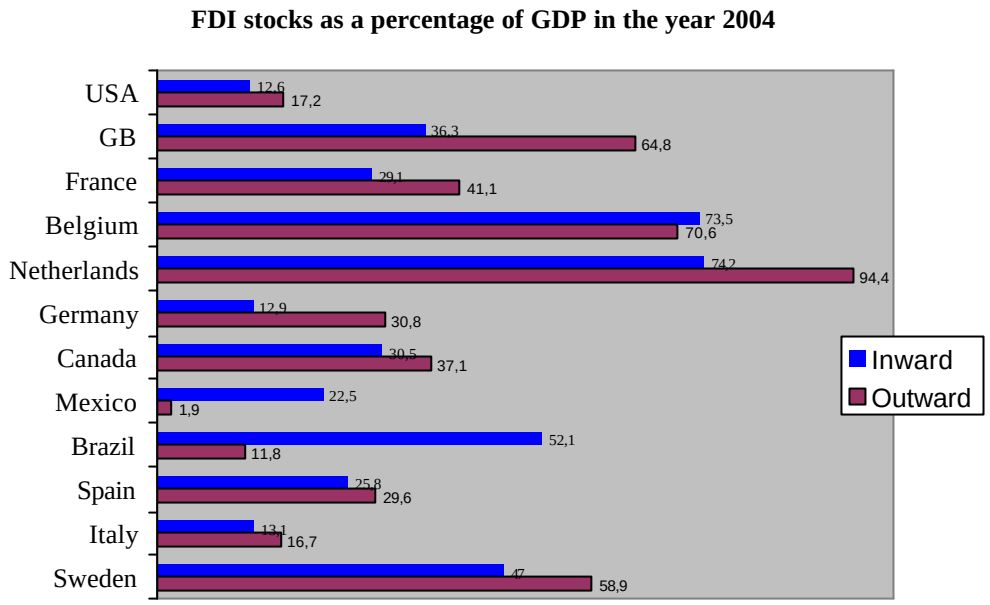
Asset seeking, which in addition to efficiency strategies constitutes the "new" globalization trend for corporations – termed "networking strategies" – is becoming more and more important. Here, the objective is to increase the value of a corporation by exploiting strategic assets from abroad. Specifically, this involves access to foreign knowledge resources (knowledge seeking), in particular to locally confined, ‚tacit' knowledge, which is not internationally tradable, but only transmitted at the workplace through personal contact. Besides production, multinational corporations therefore engage increasingly in research and development abroad, often co-operating with local scientific institutions, such as universities, which provide the expertise pertaining to the area of interest. In many cases, realizing R&D abroad is a prerequisite for effective appropriation or absorption of foreign knowledge.

4 Channels of Transnational Corporate Activities

4.1 Foreign Direct Investment

The primary tool of multinational business activities is cross-border FDI. In contrast to other forms of foreign investment, such as investment in foreign stocks (portfolio investment), FDI is undertaken with the intention of securing a managing interest in the newly founded or acquired foreign business. Worldwide, FDI has been growing faster than international trade flows: between 1980 and 2001, the global stock of FDI abroad grew four times as fast as the export of goods and three times faster than the international exchange of services. Figure 4 shows the value of inward and outward FDI, in relation to the GDP of major economies, for the year 2004.

Figure 4: Global capital



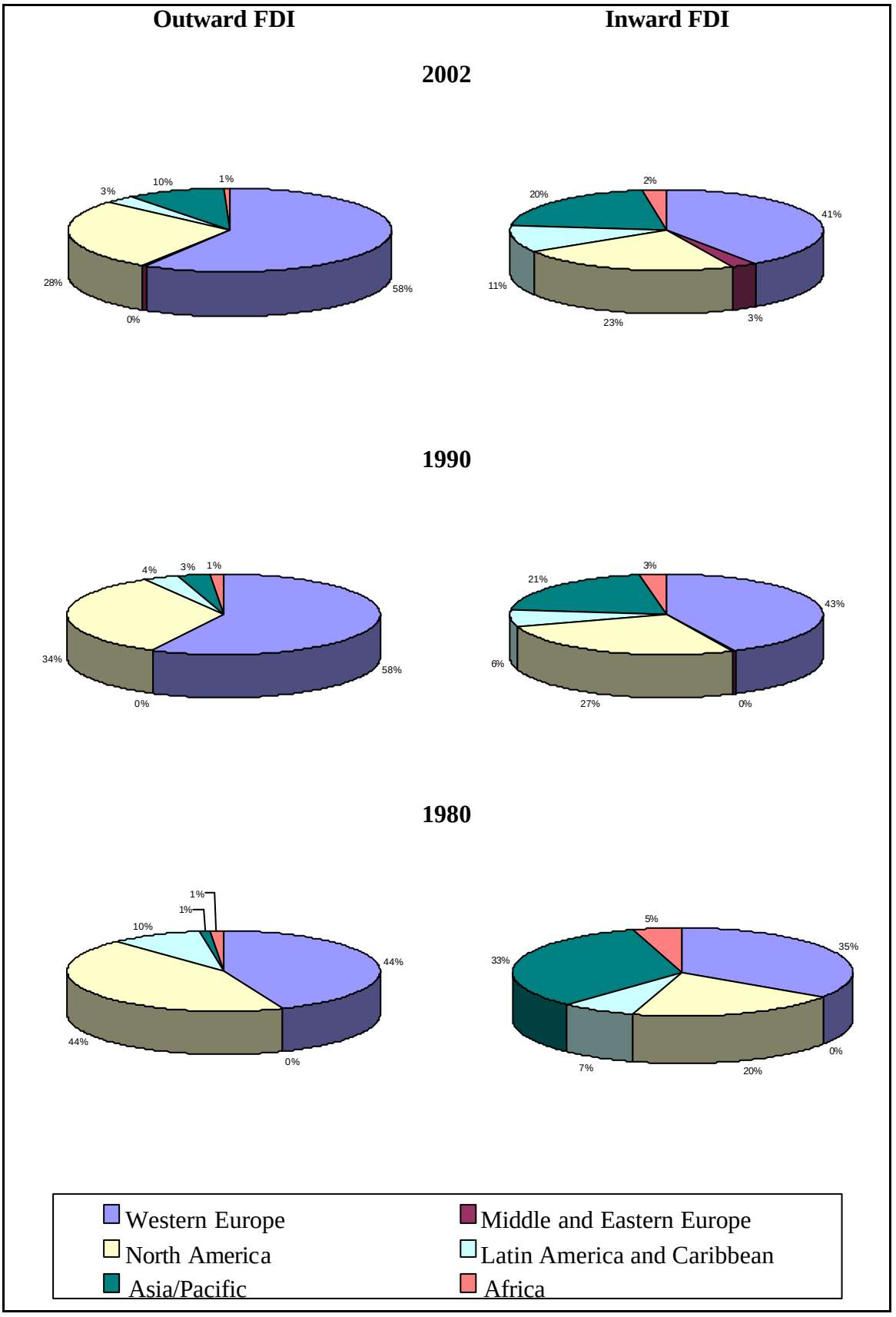
Source: UNCTAD (2004a)

Foreign direct investment still mainly originates from industrialized countries. However, companies from "emerging nations" such as China, Hong Kong, Taiwan, Malaysia, Singapore, South Korea, Brazil, Mexico and South Africa have entered the stage as major international players. Also, while most inward FDI has occurred industrialized countries, their share of total inward FDI has declined since 1990 from three quarters to two thirds. In turn, developing and emerging countries have increasingly attracted foreign direct investment. By restructuring their economies, in particular China and the countries of Central and Eastern Europe have gained in significance as investment locations during recent years. In doing so, China has meanwhile surpassed traditional recipient countries such as Brazil or Mexico.

Figure 5, which illustrates the *regional distribution* of FDI for selected years, highlights diverging developments among the industrialized nations, especially between Western Europe and North America. While in Europe the gap has been widening with respect to inward versus outward FDI, the corresponding stock values have been increasingly balanced out in North America. From 1980 to 2002, the Western European share of outward FDI worldwide rose from 45 to 59 percent, whereas the share dropped from 46 to 28 percent in North America. In terms of the FDI received, shares remained fairly stable, i.e., around 40 percent in Western Europe and 25 percent in North America.

As regards direct investment in and from Latin America, a remarkable development is becoming evident. While in 1980, Latin America's share of total outward FDI outweighed its share of investments gained at around 50 billion US dollars, this relationship was quite significantly reversed in the following years (UN Information Service, 2003). This, however, is not only due to growth in direct investment received (increased from seven to eleven percent), but also to the digressing trend of FDI made abroad (decreased from ten to three percent).

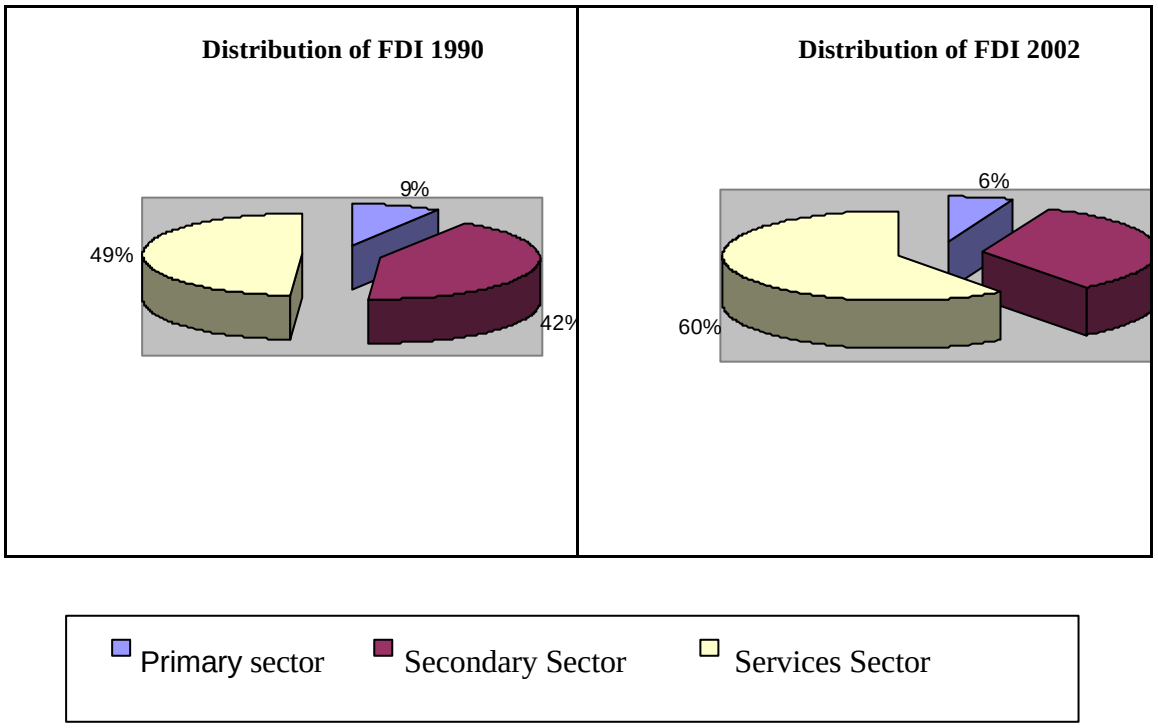
Figure 5: Regional distribution of FDI: Share of overall stock at year-end



Source: UNCTAD (2004a), own calculations.

Regarding the *sectoral structure* of FDI, an even stronger trend than in foreign trade is evident towards the tertiary sector (services). This trend especially involves financial services and trading corporations, whereas the primary sector (commodities) continues to shrink, and the secondary sector (manufacturing) is also cast with a smaller share (see Figure 6). Within the industrial sector, FDI is still comparably dynamic, especially when taking into account knowledge-intensive branches such as the chemical, pharmaceutical, automotive, electronics and data processing industries (UNCTAD, 2004a).

Figure 6: Sectoral distribution of FDI



Source: UNCTAD (2004a)

The shift towards services is also evidenced in cross-border mergers and acquisitions: While in the eighties, 40 percent of mergers and acquisitions took place in the services sector, this share amounted to already 60 percent in 2004. Moreover, the strategy of TNCs to seek access to new markets by M&As (rather than by greenfield investment) is much more prevalent in the services sector than in other sectors (UNCTAD, 2005a).

Industrialized countries dominate FDI in services. However, while several decades ago most of all direct investment in this area still originated from the USA, it is now more evenly distributed, as both the EU and Japan have become significant sources of investment. Notwithstanding the generally low importance of FDI in services on the part of developing countries, the development from 1 percent in 1990 to 10 percent in the year 2002 is noteworthy (UNCTAD, 2004a).

In the receiving country, FDI in services tends to create less jobs per dollar invested than investment in the secondary sector. Yet, on average, employees are trained and paid more in foreign services subsidiaries than in manufacturing affiliates.

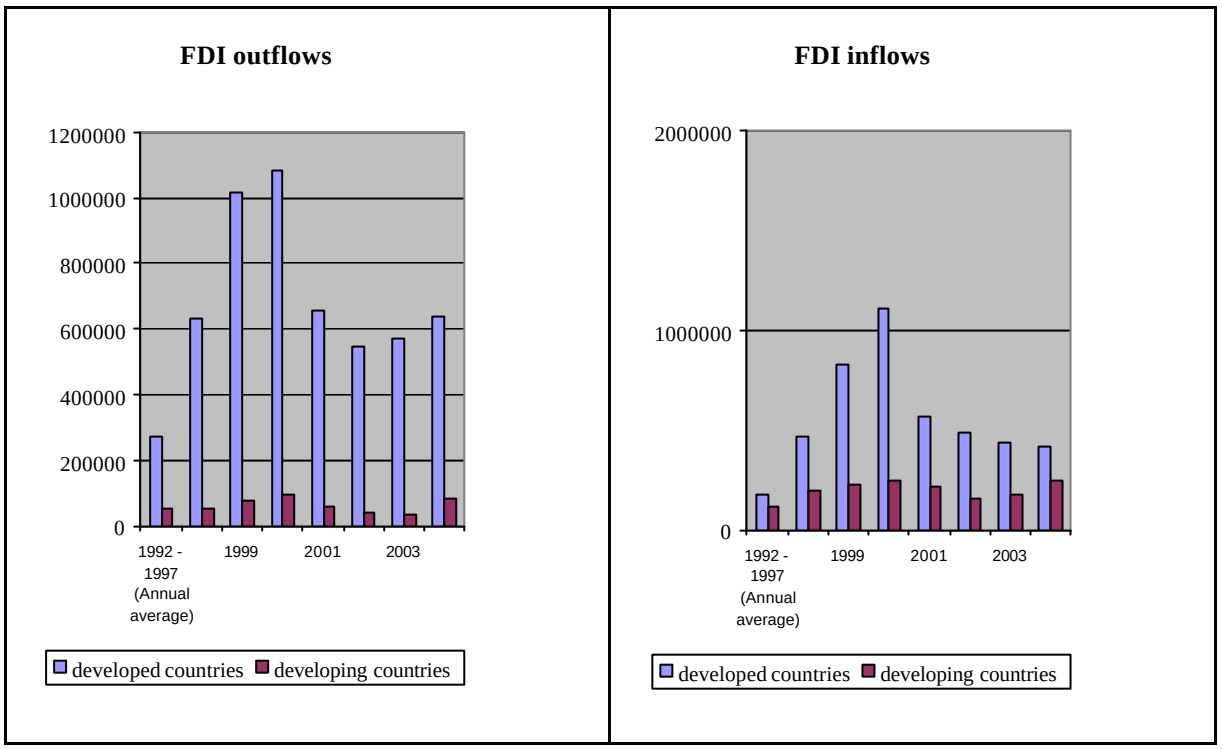
The services sector is less globalised than the secondary sector, despite its fervent growth. Not all services can be digitalized and separated from the pertinent activities in order to be outsourced abroad. In many services, proximity to the markets and direct contact with clients is more valuable than the potential utility gained from international diffusion of labor. It is FDI in the services sector that may help to overcome these barriers of internationalization.

FDI is also an indicator of a location's attractiveness and quality. Nevertheless, it would be incorrect to conclude from an excess of FDI outflow over inflow that a location has major deficiencies. Direct investment abroad, after all, may contribute to the securing of exports. The scaffolding of export activities, i.e. the provision of sales closer to the customer and service channels abroad, are a major motive for FDI.

In both industrialized and developing countries, direct investment made and received peaked in the year 2000. After that, FDI outflows were decreasing for two and three years in industrialized and developing countries respectively, before increasing again. Regarding FDI inflows, the trend in industrialized countries has clearly continued downward since the year 2000, whereas in developing countries inflows are rising again since 2002 (see Figure 7). Within developing countries, for Latin America and the Caribbean we observe a peak of FDI flows in 1999, before inflows and outflows are decreasing until 2002 and 2003, respectively. At present both outflows and inflows are rising again. However, Africa and South-, East- and South-East Asia do not show this clear trend downwards; in fact, since 1999, no clear trend is observable (see Figure 8). For the triad, direct investment received peaked in 2000 (in the EU and the USA) and

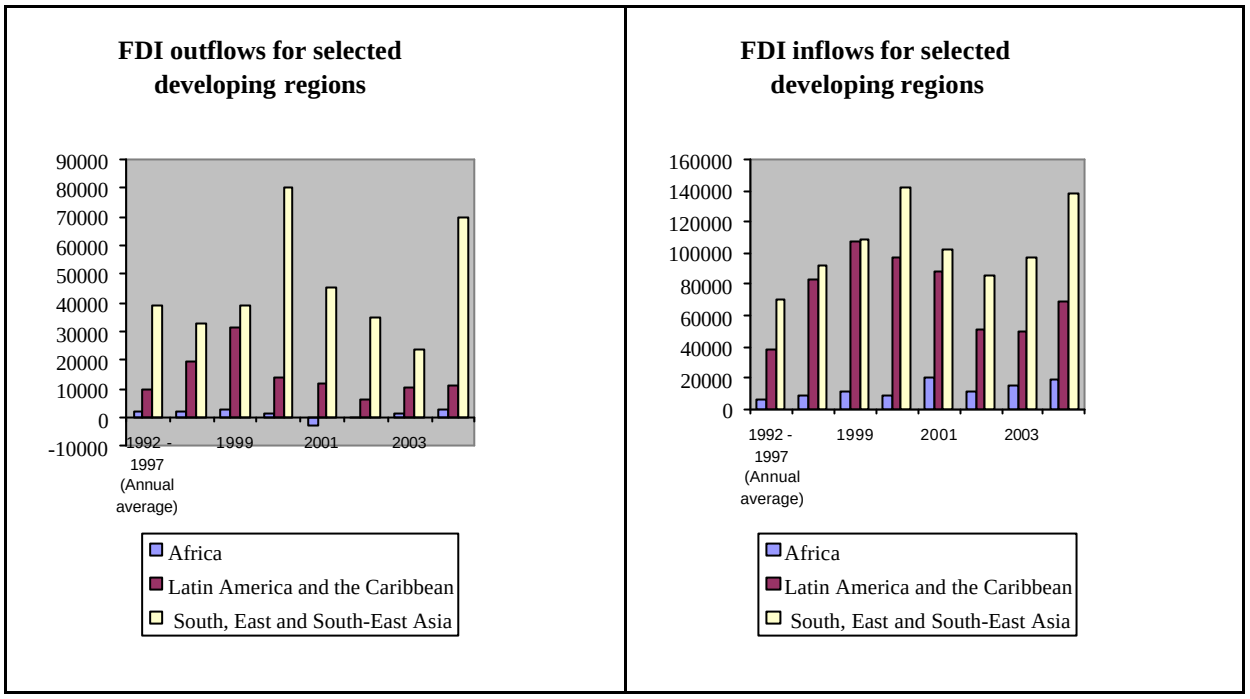
2001 (Japan) and has dropped since then, with the exception of an increase in the EU in 2002 and in the USA in 2004 (see Figure 9).

Figure 7: FDI for developing and industrialized countries (million US$)



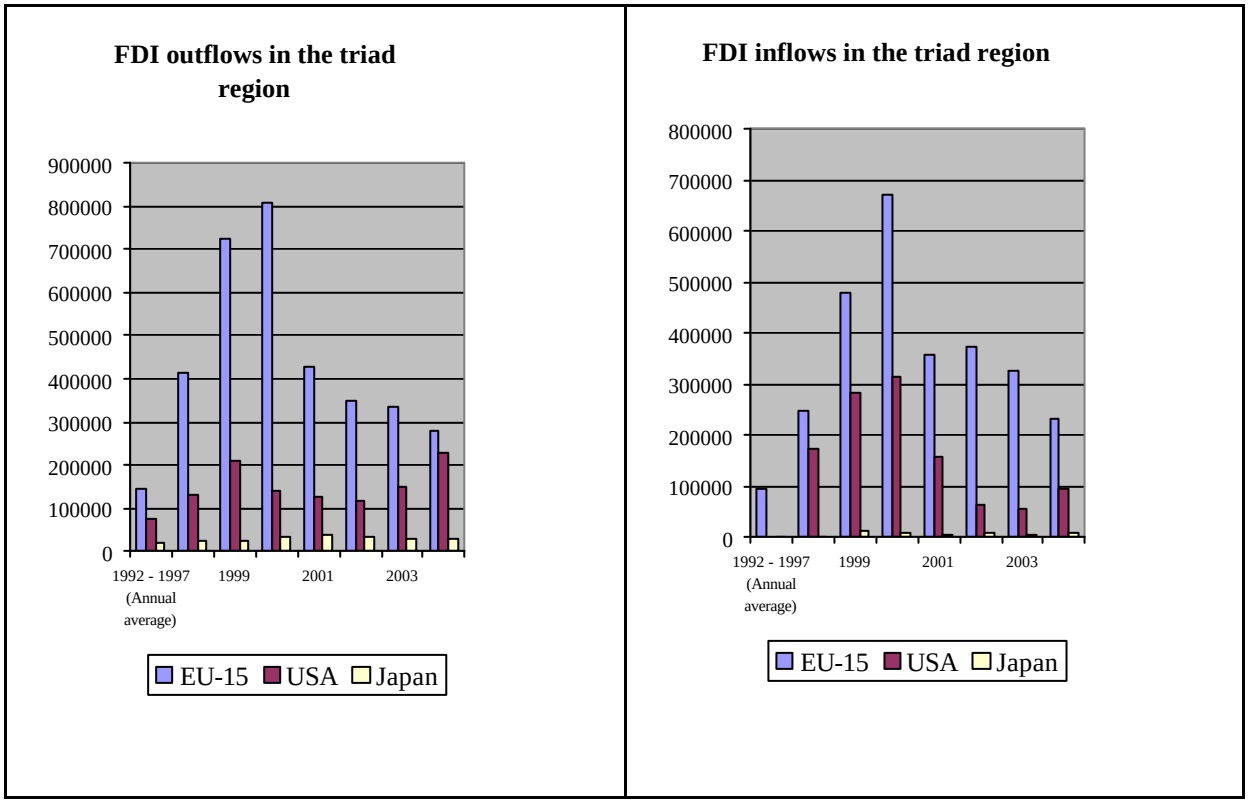
Source: UNCTAD (2005a)

Figure 8: FDI for selected developing regions (million US$)



Source: UNCTAD (2005a)

Figure 9: FDI in the Triad region (million US$)



Source: UNCTAD (2005a)

The most recent developments of worldwide FDI inflows feature an increase of 29 percent in the year 2005 compared to the previous year. In industrialized countries, FDI inflows in 2005 rose by an estimated 38 percent after having declined for four years in a row. In developing countries, inflows in 2005 rose by 13 percent. Following the increase of 41 percent in 2004, FDI is now at its highest level ever in developing countries. Extensive surveys of large TNCs, international experts, and organizations for the promotion of FDI show, moreover, that direct investment will continue its positive development throughout the coming years (UNCTAD, 2005, 2006).

An involvement in FDI carries inherent risk in various respects. A systemic risk exists if the host country's economy, due to a lack of a comprehensive legal framework, cannot be considered institutionally sound. Furthermore, unforeseeable problems may arise from direct investment in politically or socially unstable regions ("country risk"). Finally, the dependency of returns on foreign investment on exchange rates, and therefore on the respective currency's stability, poses another definitive risk to direct investment ("currency risk") (UNCTAD, 1998a, 1999, 2001, 2002).

4.2 Research and Development

Research and development (R&D) is a central area of operations for a company, and is particularly relevant for its strategic progress. This is indicated on an aggregated level by empirical studies, which suggest a positive correlation between R&D and economic growth (UNCTAD, 2005a). At the same time, however, this area represents one of the least internationalized operative units of TNCs.

The internationalization of R&D was – in the past – mainly advanced by industrialized nations. The transfer of R&D to developing countries, on the other hand, mostly served the purpose of adapting processes or products to local specifications. Today's R&D is being increasingly internationalized towards the developing world, with certain advantages becoming more significant for TNCs, such as competent research staff abroad, low-cost R&D and quicker developmental time for new technologies. The importance of R&D transfer for developing countries is however emphasizing the internationally still passive role of these regions – also reflected by R&D expenditure data.

Global expenditures for R&D have been steadily increasing for years. Between 1991 and 2002, they grew worldwide from 438 billion US dollars to 677 billion US dollars – an increase of more than 50 percent. Yet these expenditures are widely contained to only several countries worldwide: in the year 2002, 86 percent of global R&D expenditures were concentrated in the top ten countries in this respect. With the exception of China and South Korea, still eight out of these ten countries are members of the industrialized world.

Two motives can be mentioned that drive the allocation and expansion of multinational firms' R&D activities abroad: New markets can be tapped by exploiting knowledge leads of the home country and by accessing technological expertise abroad. Often, however, the decision to conduct R&D at a location abroad is at first simply a side effect of the establishment of production and marketing sites. As already noted above, the majority of direct investment from industrialized countries is connected to M&A activities, and less frequently to establishing firms via greenfield investment. For mergers and acquisitions, however, R&D potentials of target firms generally constitute a merely subordinate motive.

Tapping new markets and adapting processes

If demand preferences vary between countries, firms wishing to be present on foreign markets must either adapt their products to the regional conditions or develop special products. Such adjustments usually also require R&D activities in the target market. Some foreign customers even expect suppliers to maintain development activities in close proximity, in order to be able to react quickly to new requirements. Moreover, the local presence of more high-profile corporate levels, such as R&D, increases the prominence and acceptance of the multinational firms in the regional market. In addition, new products are often first established through so-called lead markets in particular countries or regions. In such cases, not only does supply develop for the first time worldwide, but also an original demand with high potential for growth. At the same time, usage patterns, norms and standards become established, which will later dominate internationally. Examples for such lead markets are the USA for the internet and numerous pharmaceutical products, and Europe in mobile telecommunications and automotive technology. Competitors in these markets must conduct R&D in order to

identify and influence trends in development – often in connection with scrutinising customers at the very location.

Accessing technological expertise

The transfer of knowledge between research institutions and universities and firms is, despite the advances of telecommunications technology, more easily achieved if the people involved are in the same vicinity. In that case, for one, the so-called local external effects of R&D will surface. Also, co-operation between agents of innovation processes causes fewer transaction costs if they are located close to each other. TNCs therefore often install so-called listening posts in high-tech regions to survey the technological development in research institutions and that of competitors, which can be expanded to own research centers if required.

The significance of these two main motives for the internationalization of R&D in TNCs differs between the phases of research (acquiring new scientific knowledge without immediate external application) and development (use of scientific knowledge for the development of new products, services or processes). Most TNCs aim at a market-driven internationalization, where research is still entirely conducted in the home country but development may already accomplished in the host country (Belitz, 2006).

5 Impacts of Transnational Corporate Activities

5.1 Effects on Host Countries

For developing countries, corporate networks can bear great potential for growth, since the enormous knowledge and know-how channeled through the foreign subsidiaries may spread over the host country (spillover effect). Such technological transfer is being enabled by the dramatic progress in information and communication technologies. Furthermore, companies hosted in the countries of South East Asia or Latin America have encountered, for the most part, a high degree of dedication among the population. Even though multinational corporations may primarily obtain low-wage components of

their products from operating in branches of developing countries, such as in the electronics, food, glass and plastics industries, they nevertheless offer many, and in comparison to the local industry, well paid jobs, including social benefits.

In general, multinationals' business activity in developing countries provides a good basis for these countries' development goals in the worldwide economic context. Moreover, by reaching more advanced stages of development, an increasing number of local firms become emancipated and seek a license or partnership agreement, in order to take over manufacturing or services operations from the former direct investor.

The positive impulses for employment and income at a local level have led to multinationals being courted by third world countries. Yet there are still companies of the industrialized world, e.g. in the chemical industry or metals production, which bear heavily on exploitation of environmental resources and take advantage of low environmental standards in developing nations in order to minimize investment costs. In addition, some investors seek out undemocratic and disenfranchising regimes, in order to prey on cheap labor.

Such misconduct regarding social standards is, however, not a necessary component of multinationals' expansion. Empirical studies rather support a different viewpoint. Nations which have established only a low level of social regulation receive rather less FDI, whereas countries with relatively high social standards are endowed with greater investment, not to the least extent for this reason (Busse, 2003).

Furthermore, multinational corporations that have already gained experience in dealing with stricter environmental regulation in their home countries can potentially provide a substantial transfer of "clean" technologies and environment technological know-how to developing countries. Environmental standards, such as the ISO 14001, which is used to certify companies' environmental performance (e.g. in waste management), have the potential to be met with increasing acceptance in developing countries as well. We will analyze cross-border environmental management in greater detail in section 7.

FDI policies by host countries

With respect to FDI, national policies play a key role when it comes to increasing benefits from it and assuaging the concerns about it. Those policies have to be seen in the broader context of the determinants of FDI, among which economic factors predominate. Policies are decisive in preventing FDI from entering a country. But once an enabling FDI regulatory framework is in place, the economic factors become dominant. At any level, the way FDI is approached and communicated in a host country will moderate a location's attractiveness and, thus, influences the scope and extent of positive development effects obtainable from FDI, clearly also with a focus towards avoiding its potential drawbacks.

Figure 10 summarizes key host country determinants and relates them to strategies of multinational corporations (as laid out in section 3) in the context of economic determinants.

Figure 10: Host country determinants and motives of TNCs

Type of FDI classified by strategies of TNCs	Principal economic determinants in host countries
Market-seeking	• Market size and per capita income • Market growth • Access to regional and global markets • Country-specific consumer preferences • Structure of markets
Resource/ asset-seeking	• Raw materials • Low-cost unskilled labour • Skilled labour • Technological, innovatory and other created assets (e.g. brand names), including as embodied in individuals, firms and clusters • Physical infrastructures (ports, roads, power, telecommunication)
Efficiency-seeking	• Cost of resources and assets listed under B, adjusted for productivity for labour resources • Other input costs, e.g. transport and communication costs to/from and within host economy and costs of other intermediate products • Membership of a regional integration agreement conducive to the establishment of regional corporate networks

Source: UNCTAD (2003)

In general, via sound macro management, stable and non-discriminatory rules on business entry and exit, by promoting competition, building human capital, supporting innovation and multiple complementary ways developed countries have moved towards "market friendly" business environments. Still, among even the most market oriented countries, subsidization intended to attract foreign investors are commonly in place. This practice ranges from sophisticated promotion techniques as well as large grants and subsidies to targeting particularly valuable investments.

Developing countries, much in the same way though at an oftentimes necessarily smaller scale, are also seeking to attract FDI and increase its potential benefits. Thus they, too, are moving towards market friendly policies. However, since their market structures are weaker and their development needs more pressing, this road is not nearly unambiguous. Accordingly, there will be greater concern among these countries addressing the need for maintaining viable options for national policy, ideally generating policy instruments to best suit their special needs.

Here, three objectives will form the particular focus of our discussion – attracting FDI, benefiting more from it and addressing concerns about TNCs. Thereby no attempt will be made to draw rigid lines between the areas of concern, such that some objectives and measures are necessarily going to overlap.

Countries have different options as to how to approach desirable FDI. One strategy is to liberalize the conditions for market entry of foreign investors, basically relying on the overall benefits to arise. In such a manner, FDI inflows can be sought in general, without directing efforts towards any particular kinds of investment, as may be the case when specifically seeking certain technologies to be financed. On the other hand, FDI can be pursued more selectively, focusing on particular activities, technologies or investors. Of course, in practice, measures are often used together—by leaving most activities open to foreign investors, creating a better investment climate generally and putting special effort into bringing in particularly desirable investment.

From the investors' perspective, the economic attractiveness of a country depends primarily on its advantages as a location for investors of various types. Market-seeking investors look for large and growing markets. Resource-seeking ones look for ample

natural resources. And efficiency-seeking ones look for a competitive and efficient base for export production.

More general factors affect all prospective host economies, of which the most important may be considered to be political stability, a sound macroeconomic framework, welcoming attitudes to foreign investment, adequate skills, low business transaction costs, good infrastructure.

The strategies employed by national governments seeking to attract FDI can be identified as follows:

- Reducing obstacles to FDI by removing restrictions on market entry, as well as on the operations of foreign affiliates. The key issues here are how investment is to be defined for liberalizing entry or offering protection (direct and portfolio capital flows may be treated differently) and what kind of control should be exercised over FDI admission and establishment.
- Improving standards of treatment of foreign investors by ensuring non-discriminatory treatment vis-à-vis domestic or other foreign investors. The key issue here is what degree of inclusive treatment should be granted to foreign affiliates once they are established in a host country.
- Protecting foreign investors through commitments regarding adequate compensation in the event of nationalization or expropriation, on dispute settlement and on guarantees on the transfer of funds. Here there several key issues; one is how far the right to expropriate or nationalize extends (especially to what extent certain regulatory actions of governments constitute takings of foreign property). Another is the acceptability of the kind of dispute settlement mechanisms available to foreign investors and countries. The third issue is what restrictions, if any, are acceptable on the ability of governments to introduce capital controls to protect the national economy.
- Promoting FDI inflows through communication and infrastructure aimed enhancing the country's image, for example through providing information on investment opportunities, offering location-specific incentives, facilitating FDI by institutional and administrative improvements and making post-investment

services available. In some cases, home countries may also play a role, not only the host countries themselves. The key issues here relate to the use of financial, fiscal or other incentives (including regulatory concessions) and the actions that home countries can take to encourage FDI flows to developing countries.

Obviously, in terms of general trends, countries seek to reduce obstacles, create investor-friendly settings and promote FDI. Yet at he same time, there will be quite some heterogeneity as to which policy (mix) applies in any given case. This is due to differences in location and the respective advantages, but also related to the cost of some measures being much higher than others. Finally, governments will simply differ in their perceptions of how best to attract FDI (UNCTAD, 2003).

Ensuring FDI through favorable policies may not in itself ensure the thriving potential of a host country. After all, while setting up the necessary conditions, free markets do not provide a guarantee with respect to subsequent foreign investment to transfer enough new technology or to transfer it effectively and at the depth desired by a host country. Therefore, by building local capabilities, using local suppliers and upgrading local skills, technological capabilities and infrastructure, policy impact is limited to paving ways that enhance the development outcome. The main policies and measures can be summarized as follows:

- Increasing the contribution of foreign affiliates in a host country through mandatory measures. In order to promote overall leverage of a host economy, various target activities such as increasing exports, training local workers or transferring technology can be formulated based on mandatory prescriptions. The key issue here is one of defining and establishing such performance requirements, including their monitoring and guidance.
- Increasing the contribution of foreign affiliates in a host country by encouraging them to act in a desired way. The key issue here, as in attracting FDI, is using incentives to influence the behavior of foreign affiliates. (Incentives may be tied to performance requirements.) Of particular importance are strategies aimed at the transfer of technology by foreign affiliates to domestic firms, preferably to take shape in forms of building local R&D capacity. Countries have learned that

> TNCs' foreign affiliate activities can be influenced in ways beneficial to the host country benefits only if they strengthen their capabilities. That is, new technologies will fail to be established in host economy as long as the skill base is inadequate or domestic suppliers and competitors are not equipped to meet TNC needs. Equally, export activity can grow only if the quality of infrastructure is sufficient.

First and foremost, a government's responsibility will be in the area of local capacity building, thereby drawing on foreign affiliates and their parent firms in this effort. In addition, the role of home countries may be in supporting and communicating this process through various measures of their own. Indeed, even TNCs, as part of an integrated strategy that may well feed back into their own interests, should not be denied an active role in the overall effort of increasing their measurably positive impacts on host economies (UNCTAD, 2003).

5.2 Technology Transfer

Technologies are generally distinguished into embodied (specialized tools, full-fledged production plants) and free technologies (patents, licenses). The label Technology Transfer characterizes the dissemination of technologies and technological knowledge, typically resulting from research and development efforts, for application to the production process. Through such economic and technological cooperation, the technological capabilities of receiving countries (specifically developing countries) can be enhanced. Central to technology transfer is the objective of putting receiving countries in the position to integrate innovations more effectively and at a higher rate, as well as to engage in innovative activities themselves. It appears that only then the migration of experts, constituting a steady outflow of scientific know-how, can be ebbed.

Technology transfer can be created through firms' investment decisions, establishment of production plants in a foreign country, sales of patent rights or migration of experts with specialized knowledge. Technology transfer takes place among industrialized countries, between industrialized and developing countries, among universities, places of research, companies, and within as well as between multinationals. About 80 percent

of all investment flows associated with technology transfer takes place within a transnational corporative conglomerate, e.g. between parent and subsidiary. TNCs thus exercise a crucial role in technology transfer.

Technology transfers may be assessed according to the technology balance of payments. This balance includes payment flows between countries associated with both the acquisition and sale of scientific or technological knowledge. The balance of technological payments thus reflects both the capability of the country to divest its technology abroad, as well as its utilization of foreign technologies. Worldwide payments for technology transfer have more than quintupled, from 12 billion US-dollars in 1983, to 65 billion in 1999. The volume of payments for transferred technological services has also risen in Germany, tripling between 1991 and 2002 (Kleinert, 2001, Gehrke, 2004).

In the 1990s, technology transfers first began to be funded as part of national programs.[2] On the international level, at present the majority of technology transfers takes place between industrialized countries and not, as often assumed, from industrialized to developing nations: Industrialized countries have a 98 percent share in receipts and an 88 percent share in payments related to technology transfer (Kleinert, 2001). Besides added transfers from developed to developing regions, it may well be expected that technology transfer increases from developing regions both to the industrialized world as well as to other developing countries.

In Figure 11, technology transfers of selected countries are compiled. As the figure shows, technological performance varies highly among regions. In Belgium, Austria, Germany and Hungary, the average technological payments exceed 1 percent of GDP, with Ireland even recording 8.5 percent. In contrast, the share of technology transfer in percent of GDP is quite low in countries such as New Zealand, Mexico und Australia. Regarding the technological balance of payments, Figure 12 shows that only six EU member states (Great Britain, Belgium, Denmark, Czech Republic, France and Finland) are net exporters, Germany on the other hand is a net importer of technologies (UNCTAD, 2005a).

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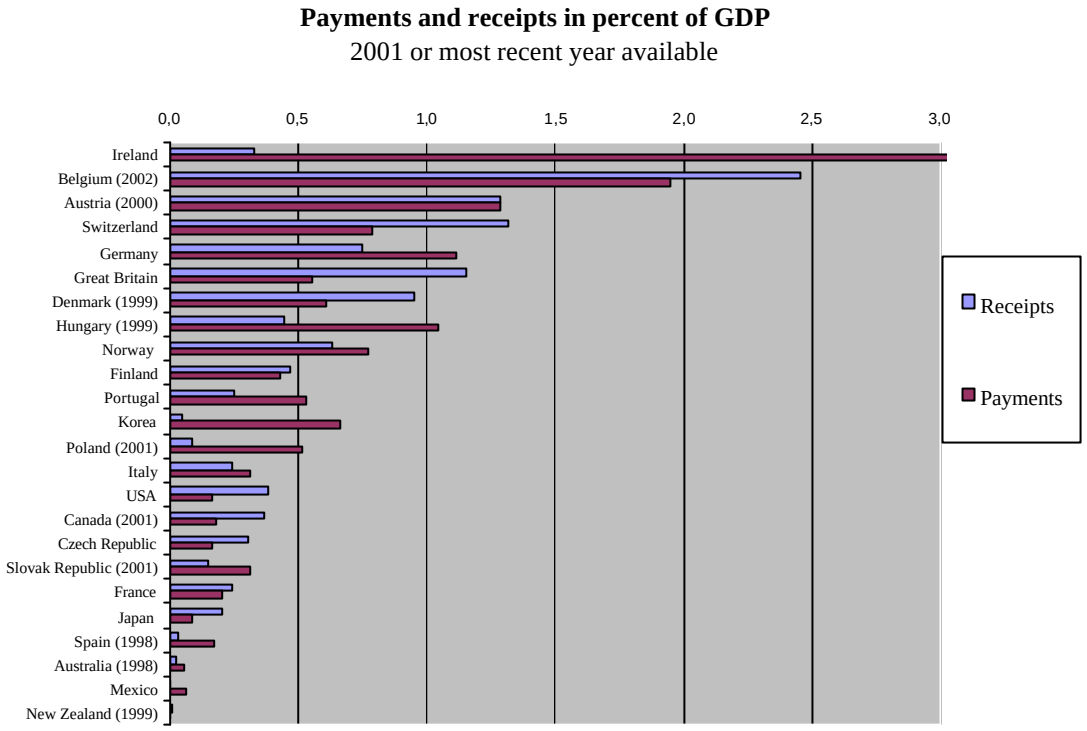
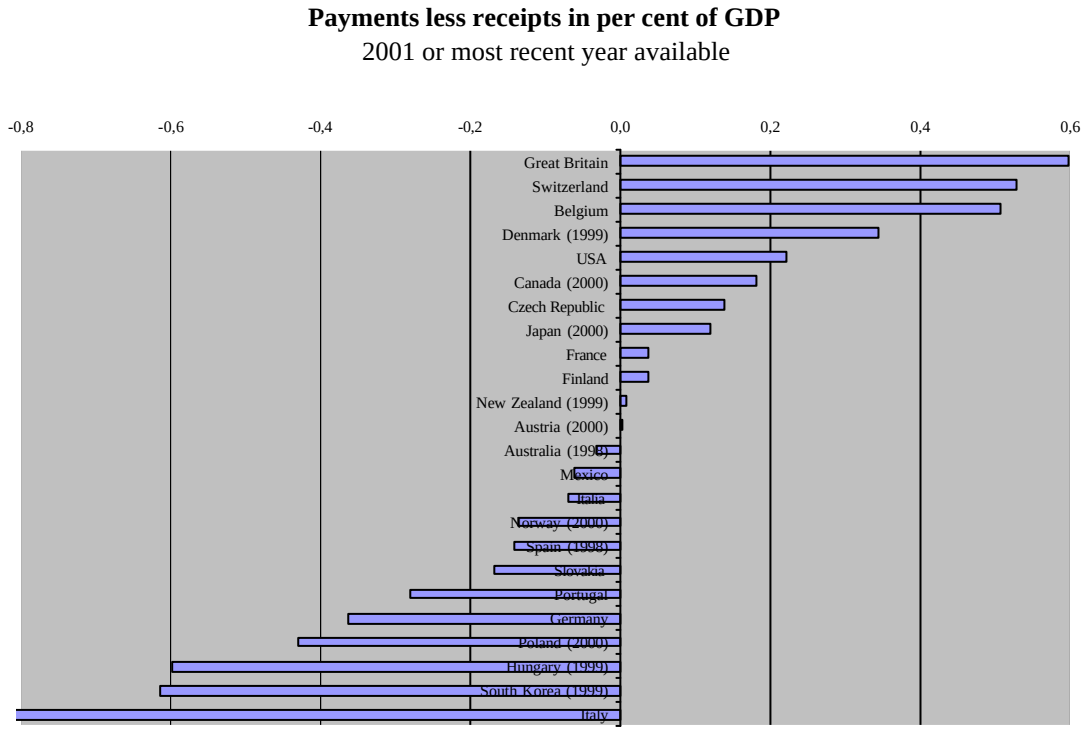
2 An example is the EU Council's disclaimer 1999/172/EG from January 25, 1999 about a specific program for research, technological development and demonstration in the field of "Promotion of Innovation and SMEs Participation" (1998-2002) [Administrative Sheet L64, 12.3.1999].

Figure 11: Technology transfer of selected countries



Source: OECD (2003).

Figure 12: Technological balance of payments of selected countries



Source: OECD (2003).

5.3 Ambiguous impacts

Along with positive economic effects, the diffusion of TNCs may also cause negative effects, particularly in host countries, e.g. the problem of "transfer pricing". In this case, the prices of delivered goods traded between a single TNC's subsidiaries are intentionally manipulated, in order to possibly raise revenue where revenue or profit is taxed the least. This problem affects primarily third-world countries in which control instances are underdeveloped (OECD, 2002).

TNCs may furthermore negatively affect competition in the host country by crowding out local firms. The extent of this problem, however, is largely determined by pre-existing conditions in the host country, such as the degree of economic development or the institutional framework.

6 International Investment Agreements

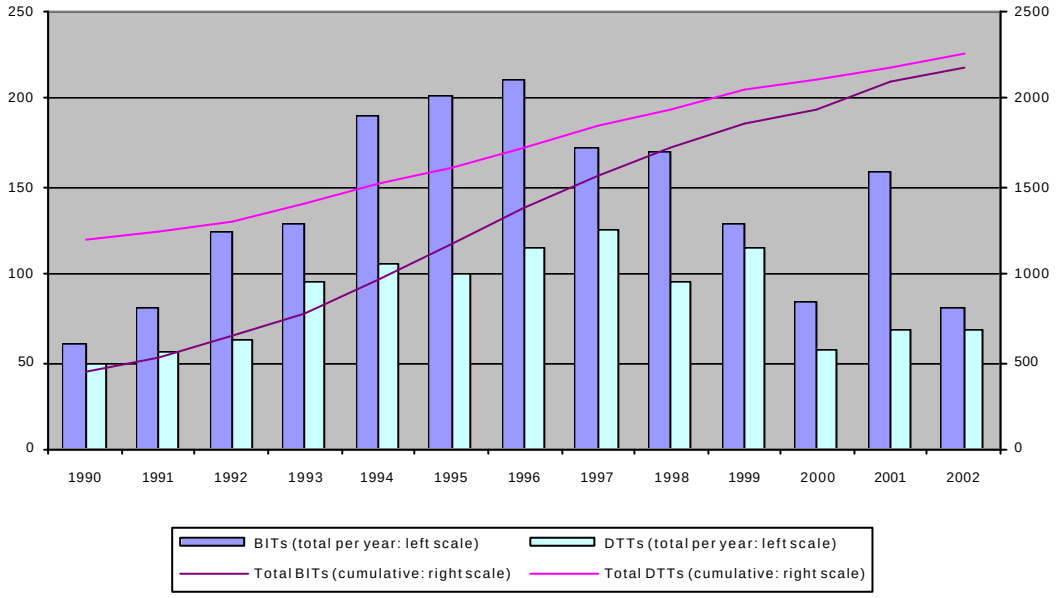
International investment agreements (IIAs) represent multifaceted investment rules, ranging from voluntary to binding agreements. While some IIAs address only specific aspects of FDI policies, others address investment policies in general, including policies that affect both domestic and foreign investors. There are also IIAs that cover most or all important elements of an FDI framework, ranging from admission and establishment, to standards of treatment to dispute settlement mechanisms. In history, the bilateral level proved to be most productive in terms of producing investment rules, focusing first on protection and then on liberalization. The first instruments of choice were treaties for the protection and promotion of foreign investment, so-called bilateral investment treaties (BITs).

6.1 Types of investment agreements

6.1.1 Bilateral investment agreements

BITs serve to address specific issues not touched upon in any more general treaty framework between two countries. Since 1959, when the first BIT was signed between Germany and Pakistan, more countries have followed suit. Figure 13 shows that this happened at an increasing rate, with 2,181 in 2002 as compared to 385 in 1989. Indeed, since the second half of the 1990s, their number almost doubled.

Figure 13: Number of BITs and DTTS concluded between 1990 and 2002



Source: UNCTAD (2003)

Now encompassing 176 countries, more BITs are being signed between developing countries as well as between developing countries and economies in transition, reflecting the emergence of firms from these countries as foreign investors. Notwithstanding the fact that of the BITs in force today, Table 1 shows that more than 45% do not include developed countries, they are the most widely used international agreement for protecting FDI. As to worldwide FDI, roughly 7% took place in countries party to a BIT, 88% of which where party to an agreement for the avoidance of double

taxation (DTT). In terms of FDI in developing and CEE countries, these figures reached 27% and 64%, respectively.

Table 1: Regional coverage of FDI by BITs and DTTs in the year 2000

	Proportion of outward stock protected	
Home countries	BITs	DTTs
United States		
Total outward FDI stock	6	96
Stock in developing countries and CEE	19	87
EU		
Total outward FDI stock	9	93
Stock in developing countries and CEE	73	73
Japan		
Total outward FDI stock	7	89
Stock in developing countries and CEE	26	61
World		
Total outward FDI stock	7	88
Stock in developing countries and CEE	27	64

Source: UNCTAD (2003)

Considering their prevalence, what has been the impact of BITs on FDI flows? An aggregate statistical analysis does not reveal a significant independent impact of BITs in determining FDI flows (UNCTAD 1998a). At best, BITs play a minor role in influencing global FDI flows and explaining differences in their size among countries. Aggregate results do not mean, however, that BITs cannot play a role in specific circumstances and for specific countries. For example, they could signal that a host country's attitude towards FDI has changed and its investment climate is improving; also it may be approached as an invitation to seek investment insurance schemes. Overall, investors appear to regard BITs as part of a good investment framework.

6.1.2 Multilateral investment agreements

Internationally led efforts to create a comprehensive multilateral framework for FDI were generally not well received, whether binding or non-binding as those undertaken occasionally in the postwar period. Of the later attempts, most prominently the United Nations Code of Conduct on Transnational Corporations (in the late 1970s and 1980s) and a Multilateral Agreement on Investment by the OECD (in the late 1990s), neither succeeded as well in establishing reliable and lasting constellations. Nevertheless, as of 1992 the World Bank Guidelines on the Treatment of Foreign Direct Investment, a nonbinding instrument, set down certain standards of treatment for investors which to date are seen to have reached a satisfying level of international consensus (UNCTAD, 2003).

6.2 Goals and structure of investment agreements

A number of IIAs incorporate the objective of development into their set of their basic aims, purposes or principles, as a part of their preambular statements or as specific declaratory clauses articulating general principles. For example, the Preamble to the GATS Agreement (which covers FDI in services) includes among its objectives "the expansion of [services] trade under conditions of transparency and progressive liberalization and as a means of promoting the economic growth of all trading partners and the development of developing countries". It also expresses a desire for the "early achievement of progressively higher levels of liberalization of trade in services through successive rounds of multilateral negotiations aimed at promoting the interests of all participants on a mutually advantageous basis and at securing an overall balance of rights and obligations, while giving due respect to national policy objectives".

Moreover, the desire is expressed "to facilitate the increasing participation of developing countries in trade in services and the expansion of their service exports including, inter alia, through the strengthening of their domestic services capacity and its efficiency and competitiveness". The main advantage of such provisions is that they may assist in the interpretation of other substantive obligations, permitting adoption of the most development friendly interpretation. This in turn feeds into the promotion of flexibility and the right to regulate by ensuring that the objective of development is

implied in all obligations and exceptions thereof. And, what is more, it informs the standard for assessing the legitimacy of governmental action under an agreement.

Through means of emphasizing and/or arranging for special and differential treatment of developing country parties, the structure of agreements can be thought of as promoting or stabilizing certain development concerns. This entails differences in the extent of obligations undertaken by developed and developing country parties, with the latter assuming less onerous obligations, either on a temporary or permanent basis, that are also non-reciprocal. This is achieved in a number of ways.

Agreements may distinguish between developed and developing countries, with different obligations for both. MIGA, for example, restricts its investment insurance to investment in developing countries only, listed in an annex to the MIGA Convention. Differences may be introduced at distinct stages and degrees of participation by developing country parties, with laxer requirements at the accession stage, for example, or flexible status options (i.e. association as compared to full commitment to treaty obligations).

In seeking commitment from the signing parties, different options exist. In the procedure known as the "negative list" approach, countries agree on a series of general commitments and then list individually all those areas to which these commitments do not apply. For example, the NAFTA parties have agreed to grant the right of establishment; at the same time, each of the parties lists those activities to which this right does not apply. To all other activities, it applies. This approach, per definition, is capable mostly of producing an inventory of all non-conforming measures. One consequence also seems to be that the status quo tends to be preserved under this type of agreement. In the other procedure, the (GATS-type) "positive list" approach, countries list commitments they agree to make, and the conditions they attach to them. For example, regarding the scope of the GATS, the parties list all activities concerning, for example, commercial presence, and the conditions under which relevant activities are to be subject to the agreement (such as that only a certain number of foreign affiliates can be established in a particular industry). The implication is that the same provisions do not apply to all other activities—that is, they remain "unbound". Experience has shown that this approach is generally regarded as more development friendly than the negative

list approach, owing to the fact that countries can selectively make commitments and determine the conditions under which these apply – thus making available a mechanism essentially suited to retain control.

Therefore, though in theory both approaches should arrive at the same result, the negative list approach tends to involve greater liberalization. Yet, even a positive list approach can lead to liberalization, since negotiations put pressure on countries to assume higher and broader commitments, particularly since those negotiations are bilateral. As a consequence, regardless of the approach taken, when scheduling their commitments countries will often make use of various mechanisms suited for flexible interpretation later on. After all, once a commitment has been made, it becomes virtually impossible to reverse it (UNCTAD, 2003).

6.3 Implementation of investment agreements

The process of implementing IIAs can also take a shape suitable to flexibly address development as its organizing principle. Here, two approaches will be highlighted, i.e the legal character, mechanisms and effects of an agreement as well as supporting measures and technical assistance.

The formulation of an agreement as legally binding or voluntary naturally affects the intensity of particular obligations. Indeed, it is possible to have a mix of binding commitments and non-binding "best effort" provisions in one agreement. Thus, development-oriented provisions could be either legally binding or hortatory, depending on the extent to which the parties are willing to undertake commitments in this area. Evidently, "best effort" development provisions are of considerably less value to developing countries than legally binding ones.

The asymmetries between developed and developing country parties to IIAs can be effectively handled by commitments devoted to the scheduling and performance of assistance to the developing and especially LDC parties. A leading example is the technology transfer aimed at LDCs as agreed upon by developed country parties to the TRIPS Agreement.

Developed country commitments of this kind are ideally complemented by technical assistance through relevant international organizations. The latter play a significant role

given the limited capacity of many developing countries, and especially the LDCs, to undertake most of the required steps to be taken. This also involves assistance to developing countries to attract FDI and benefit more from it (UNCTAD, 2003).

7 Transnational Corporate Social Responsibility

Looking at the private sector one striking development of the past twenty years has been in the area of its newly defined role with respect to both the state as well as civil society. Globalization, deregulation, privatization and a redrawing of the lines between state and market have changed the basis on which private enterprise is expected to contribute to the public good. In much the same manner, companies' contribution to civil society has evolved from privately governed patterns of goodwill to the more inclusive drive for institutionalizing socially responsible practices in corporate business as a whole.

7.1 The concept of Corporate Social Responsibility

Against this background, Corporate Social Responsibility (CSR) has been widely received as the crucial management approach to ensuring improvements on the scale of businesses' social impact and long-term viability. CSR, despite its broad applicability, thus implying a multitude of perspectives, can be usefully defined as: "Being socially responsible means not only fulfilling legal expectations, but also going beyond compliance and investing more into human capital, the environment and relations with stakeholders" (European Commission, 2001).

At once recognizing and implementing this dynamic are high profile companies, thus highlighting the leadership implications of public commitment to standards, community investment, continuous improvement, stakeholder engagement and corporate reporting on social and environmental performance.

This has not gone unnoticed by policy makers, prompting different responses on various levels. At the national level the UK Department for Trade and Industry now has delegated responsibilities to the Minister for Corporate Social Responsibility. At the European level, obviously the European year of CSR 2005 has to be mentioned. And

finally, on the international level, the UN Global Compact is bringing together companies and UN agencies to address Corporate Social Responsibility (UNIDO, 2002).

7.2 Transnational Corporate Social Responsibility

Whereas traditionally CSR has been coined to guide the business practice of transnational companies rooted in developed countries, as more and more companies from developing and transition economies turn abroad, their behavior too will be evaluated against the standards emerging in this context.

This is evidenced by a number of developing-country TNCs actively incorporating CSR policies into their business strategies, with some of them even outperforming their western competitors. This is especially indicative of the fact that while adherence to various CSR principles may require additional resources, it can also generate important advantages. This holds not only for host countries, but also for investing firms and their home economies.

However, in terms of conceptual progress necessitated by the increasing adoption of CSR, little uniformity has been reached. As the OECD states, it should be seen as a set of policies often voluntarily adopted by an enterprise in order to reinforce the enterprise's ability "to comply with the law and with other societal expectations that might not be written down in law books" (OECD, 2005). Most fundamentally, socially responsible business practice means refraining from doing harm. This principle applies to several main areas considered under the umbrella of CSR, particularly environmental protection, human rights and labour practices (UNCTAD, 2006).

Abstaining from harmful activities is not only concerned with ethical implications of corporate performance. Indeed, it is a mainstay of CSR as a sound management practice to pursue a rigorous cost accounting approach in order to underscore the long term contribution of costs at first associated with its implementation.

This can most easily be seen in the case of TNCs investing in "high-risk zones", where the regulatory framework is weak or absent. It is here that CSR behavior becomes essential. Given the volatility of governance possibly leading to adverse, sometimes

catastrophic, social consequences for the host community, failure to adopt socially responsible practice may result in serious challenges to the integrity of the TNC.

This is to say risk assessment procedures are to check against the effects of weak governance by adhering to CSR approaches to corporate policy-making and decision-taking. This includes, for example, conforming with international CSR instruments and obeying national laws, ensuring that their management pays closer attention to auditing and other regulatory requirements, refraining from improper involvement in local politics, avoiding corruption and speaking out about any wrongdoing.

In the following, we focus on cross-border environmental management as one dimension of transnational Corporate Social Responsibility (Hansen, 1999).

7.3 Transnational environmental management

The business approach of TNCs in developing countries has been scrutinized by various normative instances at the global level, as well as within international organizations in the OECD and in the WTO. However, there remains a pertinent need to gain a better understanding of the broader societal implications of TNC business interests in developing countries. In this respect, the environmental management practices adopted by foreign investors provide a valuable template as to the effects of FDI on host countries. Though a well institutionalized practice at the (developed country) national and plant levels, little is known of whether and how firms are organizing environmental dimensions as they become internationalized. Accordingly, 'cross border environmental management' is the field of inquiry proposing to capture this international aspect of environmental management (Hansen and Ruud, 1996, Hansen, 1998). The concept refers to those TNC environmental management practices that concern foreign activities, whether of equity or non-equity nature.

The increasing internationalization of production - taking various forms – has brought about a passionate debate concerning possible undermining of countries' efforts to achieve sustainable development, i.e. that TNCs are relocating polluting production to developing countries, that TNCs are transferring environmentally inferior technologies and practices to their foreign subsidiaries and that TNC subsidiaries are marketing products banned or severely restricted in their home countries (Ives, 1985, Castleman, 1985). It may, however, on the contrary be argued that TNCs are essential prerequisites

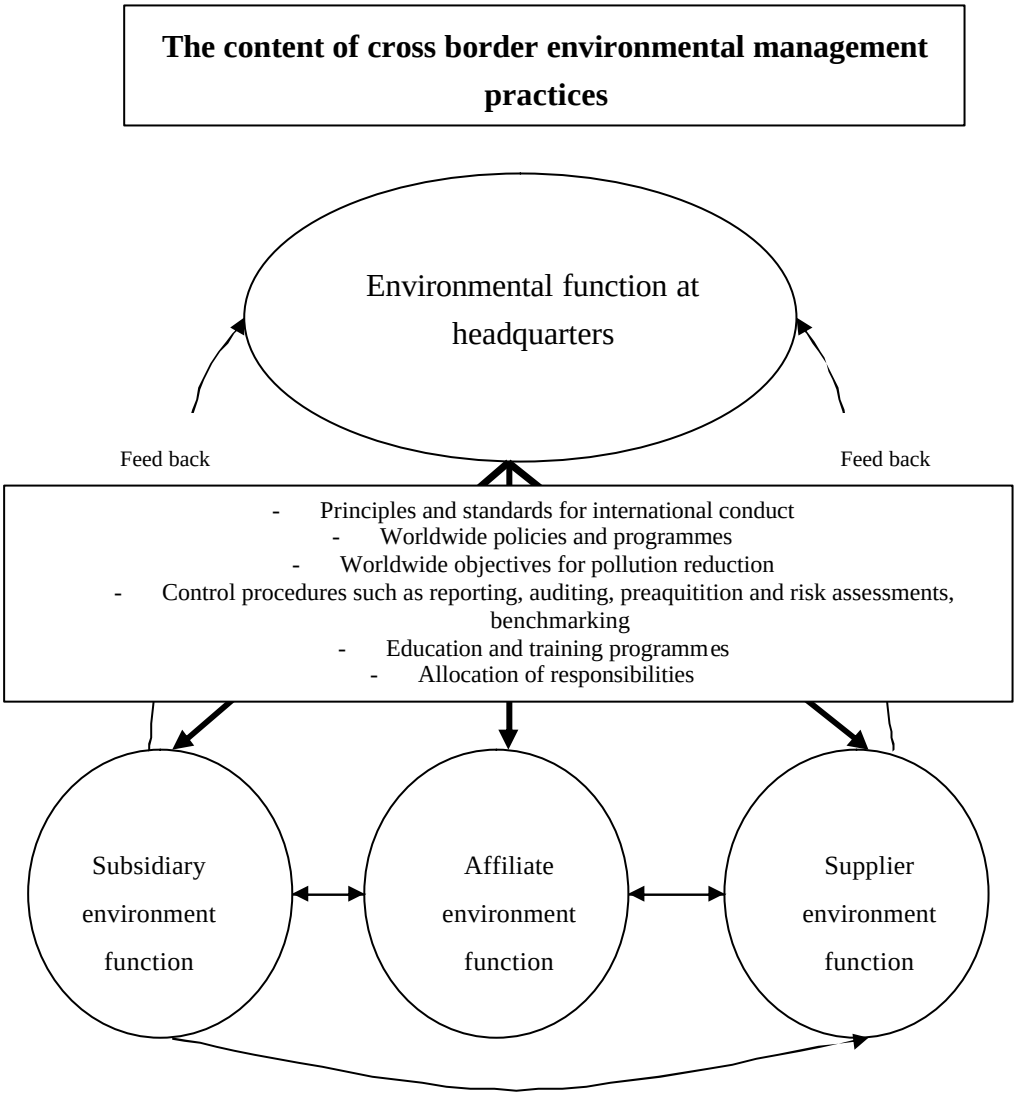
to sustainable development, for instance by facilitating the transfer of cleaner technologies and environmental know-how from North to South (Wescot, 1991, Wallace, 1996).

7.3.1 Dimensions of transnational environmental management

Although the environmental dimensions of practices taking place via foreign affiliates take different shape, a cross border environmental management system will typically have at least five elements. First, it will consist of some general principles for the environmental activities of the entire corporation. These overall principles are typically stated in the corporate mission or as it is sometimes labeled, 'the environmental policy statement'. These policy statements may set out overall targets and objectives for the environmental conduct of foreign affiliates. The targets and objectives could for instance be that the company will comply with regulations of host countries, that all affiliates will meet company standards, or that the company strives to become an environmental leader in all locations. Second, more specific policies and programs that are applicable throughout the corporation may accompany the general principles of the policy statement. These policies and programs will typically exist in areas that the company assign particular importance, e.g. energy conservation, waste-minimization or air pollution. Sometimes specific targets for reduction of pollution emissions or consumption of raw materials will be stated in such policies. Third, a cross border environmental management system will consist of various procedures for monitoring and controlling whether the environmental conduct of the foreign affiliates are operating in accordance with regulation and standards outlined by headquarters. This can take the form of pre-acquisition assessments, environmental reporting procedures or auditing procedures. In recent years, transnational corporations have increasingly implemented computerized and companywide accounting and reporting databases. The information collected through these systems can be used in the strategic planning of environmental investment throughout the corporation. The databases enable headquarters to get an overview of the corporation's total impact on various types of pollution, to benchmark different units against each other, and keep track of - on a daily, weekly, monthly or yearly basis - developments on environmental dimensions. Fourth, the company may have training, education and information exchange programs and activities aimed at

providing environmental guidance and facilitate a high level of awareness and competence at all levels of the corporation. Finally, a cross border environmental management system may be embedded in a formal organization, where responsibilities and functions are delineated and allocated between entities and persons. Sometimes a cross border environmental management system will be rather rudimentary; at other instances it may become very elaborate. Sometimes it will include 100% controlled subsidiaries only, at other times it will include non-controlled affiliates and even suppliers and subcontractors. Finally, the degree of formalization of a cross border environmental management system can vary significantly; from highly informal and ad hoc based procedures to a closely integrated system with detailed manuals specifying procedures and principles for conduct (Hansen, 1999). Figure 14 presents the contents of transnational environmental management activities.

Figure 14: Contents of cross-border environmental management



Source: Hansen (1999)

7.3.2 Determinants of transnational environmental management

In the following it will be of interest how TNCs can be affected by forces associated with regulation, markets, industry and company, and we will examine in more detail in what way these influences may particularly affect cross border environmental management practices in TNCs.

There is widespread agreement that environmental management is driven by *regulation*. This factor seems particularly important in countries such as the US, where the risks of huge fines and penalties appear to encourage corporate self-policing (UNCTAD, 1993). The question to what extent this applies to cross border environmental management practices as well should be based on a distinction between the influences of international regulation, home country regulation and host country regulation:

Clearly, international environmental law is the institution directly exerting regulatory pressures on cross border environmental management. The latter could thus, in the simplest case, be shaped by mirroring the provisions outlined by international law requiring TNCs to observe certain standards in their international operations. However, taking the existing international legal framework into account, this factor seems negligible in that there are only few international regulations constraining the environmental practices of foreign investors. Exceptions are the Montreal Protocol, which prohibits companies from relocating CFC production to developing countries, and the NAFTA agreement which prohibits companies to relocate for environmental reasons.

TNC home countries may assume the responsibility of addressing the foreign environmental practices of their TNCs, thus potentially complementing the low level of implementation on the international level. This, however, is rarely the case due to likely collisions with already established regulatory practices, such as the GATT or other trade agreements as well as bilateral investment agreements. Nevertheless, in the US, strides have been made with respect to making US environmental standards apply to US production facilities abroad, most recently in connection with the NAFTA negotiations. Although no direct legislative action has resulted, it has been established that US companies can be held liable for accidents at non-US production facilities at US courts. A different home country approach is practiced in certain European countries, where

listed companies are required to report on foreign subsidiaries' environmental performance as part of their financial statement.

Unfortunately, statutory standards existing in most developing countries are frequently only weakly implemented (Hadlock, 1994, Gladwin, 1987). This is not a problem specific to environmental regulation, but rather one of general scale related to a lack of financial resources, trained personnel and equipment, poor infrastructure, and problems of coordination between different jurisdictions. Given these overriding issues, foreign investors and local operators alike will, based on a cost minimization rationale, have an incentive to exploit the nominal or de facto differences in environmental regulation. TNCs may from this perspective, due to their greater bargaining power vis-à-vis host governments, be in an even better position than local companies when it comes to exploiting weak regulatory provisions (Gladwin, 1987).

Economic intuition states that *market forces* will reward those companies that can produce at the lowest cost and offer the most competitive price at a given level of quality. This suggests that market forces in the longer run will reward those companies that have the lowest environmental costs. In the case of TNCs, this implies that the companies that can best exploit environmental advantages of the various locations in which they operate will be more profitable. Thus, the expectation will be that companies will opt for local adaptation in order to enhance competitiveness. However, in recent years some business economists have argued that market forces may bring about favorable environmental outcomes under certain circumstances (BCSD, 1992, Porter et al, 1995). Different sets of favorable circumstances are discussed in connection to emerging 'green markets' and the quality orientation of the value chain.

Since markets, in line with rising environmental concerns and subsequent overt challenges to environmentally negligent activities, can be seen to increasingly value environmental favorable behavior, they may at some level be found to reward high environmental performance. But is this also the case in regard to environmental performance in international operations? An answer to this question, in order to be feasible, must distinguish between different types of markets. Here, three types of markets will be discussed, namely consumer and spot markets, markets controlled by large customers, and financial markets.

An important consideration goes against the traditionally held assumption about the role of green sentiments in the market. In taking market pressures into account, it is more likely for environmentally favorable behavior to be encouraged by a strong quality and just-in-time orientation than to result from a conscious effort by environmentally concerned consumers, customers and financiers. Thus, a focus on quality and timely delivery and a focus on environmental improvements may be two closely related objectives. Porter has argued that many aspects of a quality orientation may actually save resources, make production leaner and reduce waste, thus improving environmental performance (Porter et al, 1995). Certainly, it can be hypothesized that industries with a strong quality orientation can adopt environmental management relatively more easily than can industries without. In line with this, Clark (1993) suggests - based on a study of environmental practices in Australian mining TNCs - that quality and reliability in terms of delivery are heavily dependent on the technological and managerial sophistication of production and that high environmental performance is an essential ingredient in such technological and managerial sophistication. Conversely, Clark argues that close price competition and lack of quality focus in a market may encourage companies to ignore environmental dimensions.

Finally, a third category of forces set to affect the scope and content of cross border environmental management practices are those arising from a particular *industry* a TNC operates in. Fro example, an industry's level of concentration and collaboration may significantly affect the environmental performance - including the cross border performance – of its firms.

Compared to the above discussed market forces, industry forces such as the levels of collaboration, concentration and collusion will frequently be of a non-market nature, in that they are associated with the suspension of the market rather than the workings of the market. Under highly competitive market conditions, it will be difficult for individual companies to command a control over prices in order to offset environmental investment. In such industries, it is probable that companies will compete on environmental laxity (Murphy and Oye, 1998) and in the case of cross border environmental management, opt for local adaptation. Conversely, in industries with few dominating firms having a high degree of market control - oligopolistic industries -

industry may implement high standards worldwide and support the international harmonization of environmental regulations at a high level, partly because they are positioned to offset the costs of meeting these standards by raising prices, partly because high environmental industry standards may create a significant barrier to entry for newcomers to the industry. Therefore, high standards in cross border environmental practices are more likely to be found in concentrated industries of few dominating firms than in fragmented industries with many small firms.

Industry members may at some point decide to collaborate and form environmental associations or agree on guidelines to direct efforts at appropriate practices. Frequently, this collaboration will take place with respect to (little regulated) environmental dimensions of international production. In analogy to the collusion argument above, here too restricting market entry for new comers, especially new comers from developing countries, may be considered the underlying principle. However, it may also work towards deflecting binding and possibly more stringent regulation eventually initiated by governments at some later stage (Gleckman, 1992). Notwithstanding, the motives need not be self-centered, but instead could rather reflect insight into the alliance with social expectations of society and promote the goal of the industry's credibility and legitimacy. Finally, the establishment of environmental industry associations can be the result of a need among environmental professionals in an industry to have fora to discuss their particular managerial challenges, and the formulation of guidelines can reflect an industry’s need for benchmarks and standards that can be utilized to organize environmental activities and evaluate environmental performance.

The focus on forces exogenously shaping TNCs’ environmental orientation is a sensible approach to address phenomena of broader management practices. However, eventually the allocation of time, resources and technology to environmental measures in international operations rest on a decision of the company. Thus, the regulatory, market and industry forces discussed may essentially be seen as constraints and incentives against which companies assess and implement their environmental management strategy. The perception of the strategic options available will vary significantly

between companies, even among companies otherwise facing similar constraints and incentives. In the following we address *company-specific* forces leading up to environmental management decisions driving TNCs' cross border activities. Five factors are here considered to be of major significance, namely the nature of the firm's production technology, its environmental history in the home country, size, international management strategy, and the degree of ownership control it exerts over its foreign affiliate.

Depending on the goods or services produced and the kind of processes and technologies installed the environmental challenges faced by a firm will differ.. The firms operating in high risk areas and/or facing potentially major environmental impacts can be expected to be strongly inclined to adopt cross border environmental practices. This reasoning is reflected the 1993 UNCTAD study of cross border environmental management in 169 of the world's largest TNCs (UNCTAD, 1993). The study team found that the TNCs with the largest potential environmental problems – typically firms in the chemical and extractive industries – were significantly more inclined to adopt cross border environmental controls than were TNCs involved in low risk production. This is due to the impact a potentially disastrous event at the foreign affiliate, given a sufficiently large scale, will have on the parent company – a lasting example is the case of Union Carbide, the firm responsible for the Bhopal disaster.

TNCs, at least the way their behavior is conceptualized in conventional theories of FDI, invest in order to exploit ownership advantages that are not available in the host market (Dunning, 1988). As these advantages frequently are developed in countries with relatively tough environmental regulations, environmental procedures are likely to be tightly integrated in overall production processes and thus difficult to decouple. Consequently, companies may stand to avoid anything but the transfer of the same environmental technologies and processes already in use as part of its of its home country operations. As argued by one observer, "fixed and sunk cost may make it cheaper to use environmentally friendly technologies that have been developed for domestic plants elsewhere than to redesign them for laxer standards" (Raucher, 1997). In general, a company's particular history and organizational buildup is set to shape its cross border environmental management practices. This 'path dependence' is indicated by a 1993 study by UNCTAD (UNCTAD, 1993) where a strong correlation between TNC's cross border practices and their home country was found.

Due to the technologies and managerial practices involved, cross border environmental management practices will in part be determined by the size of the company in question. The largest TNCs can more easily offset the cost of environmental investment and obtain scale advantages. Conversely, in SME TNCs, a formalized cross border environmental management system is less likely to be found; even financial and quality reporting and control may in SME TNCs take place in a highly informal manner. In this respect, the 1993 survey by UNCTAD already cited before found a very strong correlation between company size measured in annual sales and the scope and content of cross border environmental management practices (Hansen, 1999).

As an overview, Table 2 summarizes the discussed determinants of transnational environmental management.

Table 2: Summary of determinants of transnational environmental management

	Reasons for local adaptation and fragmentation of environmental management	**Reasons for cross border integration of environmental management**
Regulatory forces	• Absence of regulatory standards • Weak enforcement of regulation • Absence of environmental infrastructures • Restrictive FDI regulation	• Building trust with host country regulators • Anticipation of future host country and international regulations • Crating first mover advantages • Fencing off rent seeking regulators
Market forces	• Weak environmental screening by other market agents • High level of price competition • Low quality orientation	• Green consumerism • Potential consumer backlash • Environmental screening by major customers and financial institutions • High quality orientation • Export to environmentally leading markets
Industry forces	• Fragmented industry with many small firms • Weak intra-industry collaboration	• Concentrated industry with few dominating firms • Strong industry collaboration on the environment • Strong professional cultures of excellence within industry
Company specific forces	• Low environmental risks • Little previous experience with international production • Low multinational asset specificity • Stand alone operations • Small owner share	• Environmental high risk production technology • Long experience with international production • Large sunk costs in the development of cleaner technology and management practice • High multinational asset specificity • Global management strategy • Majority ownership

Source: Hansen (1999)

8 Conclusions

The present study analyzed the structure of cross-border corporate activities, assessing the development and strategies of multinational corporations on various levels. We presented the development of transnational corporations as well as strategies associated with border-crossing investments. Moreover, channels of TNC activities were analyzed and the impacts of such corporate behavior assessed. As a framework for TNC activities, international investment agreements were discussed. Finally, we investigated transnational Corporate Social Responsibility as a relatively new cross-border corporate activity.

The primary channel of transnational corporate activities is Foreign Direct Investment (FDI). While FDI still mainly originates from industrialized countries, companies from "emerging nations" such as China, Malaysia, Brazil or South Africa have entered the stage as major international players. Regarding the sectoral structure of FDI, an even stronger trend than in foreign trade is evident towards the tertiary (services) sector, whereas the primary and secondary sector face a decreasing share. This trend especially involves financial services and trading corporations.

The strategies of multinational enterprises can also benefit developing countries in terms of investment flows, employment creation and infrastructure. Moreover, technologies transferred through cross-border firm activity can provide a basis for long-term economic development. Corporate networks can bear large growth potential, since the enormous knowledge and know-how channeled through foreign subsidiaries may spill over the host country. We find that about 80 percent of all investment flows associated with technology transfer takes place within an international corporative conglomerate – transnational corporations thus exercise a crucial role in transferring technologies.

Cross-border corporate activities have become an important pillar of the international division of labor. The speed of development of this branch of globalization reflects the large potential benefits from an international corporate engagement. Combined with possible spillovers to developing countries, the dynamics of transnational corporate operations will become one of the dominant driving forces of future economic development.

9 References

BCSD - The Business Council for Sustainable Development (1992)

Changing Course. A Global Business Perspective on Development and the Environment. Massachusetts, MIT Press.

Belitz, H. (2006)

Forschung und Entwicklung in multinationalen Unternehmen 2005, Studien zum deutschen Innovationssystem 6-2006, German Federal Ministry of Education and Research (BMBF). Available at: http://www.bmbf.de/pub/sdi-06-06.pdf

Busse, M. (2003)

Do Transnational Corporations Care About Labor Standards?, Journal of Developing Areas 36, 49-68.

Castleman, B.I. (1985)

The Double Standard in Industrial Hazards, in: Jane Ives (ed), The Export of Hazard: Trans national Corporations and Environmental Control Issues, Boston: Routledge and Kegan Paul.

Clark, G. (1993)

Global Competition and the Environmental Performance of Australian Mineral Companies. Is the "Race to the Bottom" inevitable?" International Environmental Affairs no.3, 147 -172.

Dunning, J.H. (1988)

The eclectic paradigm of international production", Journal of International Business Studies, XIX, 1-31.

European Commission (2001)

Promoting a European Framework for Corporate Social Responsibility. Brussels, Commission of the European Communities.

Gehrke, B. and H. Legler (2004)

Technologische Dienstleistungen in der Zahlungsbilanz, Studien zum deutschen Innovationssystem 19-2004, German Federal Ministry of Education and Research (BMBF). Available at:

http://www.technologische-leistungsfaehigkeit.de/pub/technologische_dienstleistungen_tlf.pdf

Gladwin, T. (1987)

Environment and Development and Multinational Enterprises, in: C. Pearson, ed., Multinational Corporations, Environment and the Third World, Duke University Press.

Gleckman, H. (1992)

Transnational Corporations and Sustainable Development: Reflections from inside the debate, Internal memo from DESD

Hadlock, C.R. (1994)

Multinational Corporations and the Transfer of Environmental Technology to Developing Countries, in International Environmental Affairs, Vol 6, no 2

Hansen, M.W. (1999)

Cross border environmental management in transnational corporations. An analytical framework. Report as part of UNCTAD/CBS Project: Cross Border Environmental Management in Transnational Corporations.

Hansen, M.W. (1998)

Transnational corporations in sustainable development: An appraisal of the environmental implications of FDI in developing countries, CPH: CBS

Hansen, M.W., A. Ruud (1996)

Managing the environment across borders, Paper presented to the American Academy of Management Annual Meeting in Cincinatty

Ives, J.H. (1985)

The Export of Hazard. Transnational Corporations and Environmental Control Issues. London: Routledge and Kegan Paul

Kleinert, J. (2001)

The Role of Multinational Enterprises in Globalization: An Empirical Overview. Kiel Working Paper 1069, Kiel Institute of World Economics. Available at: http://www.uni-kiel.de/ifw/pub/kap/2001/kap1069.pdf

Koopmann, G. and F. Franzmeyer (2003)

Weltwirtschaft und internationale Arbeitsteilung, in: Bundeszentrale für politische Bildung (ed.): Informationen zur politischen Bildung (Sonderheft Globalisierung), No. 280.

Murphy, Dale M. and Kenneth A. Oye (1998)

Comparative regulatory advantage: Firm state relations in the global economy, Paper presented at ISA Conference in Minniapolis, March 1998.

OECD (2005)

International Investment Perspectives. Paris, OECD.

OECD (2003)

Technology balance of payments. Available at:

http://www1.oecd.org/publications/e-book/92-2003-04-1-7294/C.5.4.htm

OECD (2002)

Transfer pricing: Keeping it at arm's length, OECD Observer April 2002, Centre for Tax Policy and Administration. Available at:

http://www.oecdobserver.org/news/fullstory.php/aid/670/Transfer_pricing:_Keeping_it_at_arms_length.html

Porter, M.E. and Claas van der Linde (1995)

Green and Competetive. Harvard Business Review, September-October 1995.

UN Information Service (2003)

Developed countries dominate world FDI stock. Available at: http://www.unis.unvienna.org/unis/pressrels/2003/tad1950.html

UNCTAD (2006)

UNCTAD Investment Brief Number 1/2006. Available at:

http://www.unctad.org/en/docs/webiteiia20061_en.pdf

UNCTAD (2005)

Prospects for Foreign Direct Investment and the Strategies of Transnational Corporations 2005-2008. Available at:

http://www.unctad.org/en/docs/iteiit20057exec_en.pdf

UNCTAD (2005a)

World Investment Report 2005. Available at:

http://www.unctad.org/Templates/WebFlyer.asp?intItemID=3489&lang=1

UNCTAD (2004)

FDI country profiles. Available at:

http://www.unctad.org/Templates/Page.asp?intItemID=3198&lang=1

UNCTAD (2004a)

World Investment Report 2004. Available at:

http://www.unctad.org/Templates/WebFlyer.asp?intItemID=3235&lang=1

UNCTAD (2003)

World Investment Report 2003. Available at:

http://www.unctad.org/Templates/WebFlyer.asp?intItemID=2979&lang=1

UNCTAD (2002)

World Investment Report 2002. Available at:

http://www.unctad.org/Templates/WebFlyer.asp?intItemID=2477&lang=1

UNCTAD (2001)

World Investment Report 2001. Available at:

http://www.unctad.org/Templates/WebFlyer.asp?intItemID=2434&lang=1

UNCTAD (2000)

International Investment Agreements: Flexibility for Development. UNCTAD Series on issues in international investment agreements (Geneva and New York: United Nations), United Nations publication, Sales No. E.00.II.D.6

UNCTAD (1999)

World Investment Report 1999. Available at:

http://www.unctad.org/Templates/WebFlyer.asp?intItemID=1991&lang=1

UNCTAD (1998)

Bilateral Investment Treaties in the Mid-1990s, New York and Geneva: United Nations, United Nations publication, Sales No. E.98.II.D.8

UNCTAD (1998a)

World Investment Report 1998. Available at:

http://www.unctad.org/Templates/WebFlyer.asp?intItemID=2426&lang=1

UNCTAD (1993)

Environmental Management in Transnational Corporations, N.Y: United Nations

UNCTAD (1991)

The Top 100 TNCs, ranked by foreign assets, 1990. Available at:

http://www.unctad.org/sections/dite_dir/docs/T10090.pdf

UNIDO (2002)

Corporate Social Responsibility: Implications for Small and Medium Enterprises in Developing Countries.

Wallace, David (1996)

Sustainable industrialization, London: Earthscan

Wescot (1991)

Environmental assistance: A quid pro quo for transnational corporations and developing countries, Spectrum paper, Massachusetts: Arthur D. Little

World Bank (2003)

World Development Indicators, Washington, D.C.: World Bank