This thesis consists of four individual essays and an introductory chapter. While independent from each other, these essays share some common properties. They are all empirical and focus on the interaction between inflows of foreign direct investment (FDI) and host country characteristics. The primary focus of the thesis lies in how inflows of FDI affect developing and transition economies. Macro-level data are used in all essays.

The first essay analyses the FDI inflows that the transition economies of Eastern Europe have attracted and tries to find determinants of these inflows. The following two essays compare the effect of FDI between developing and developed economies. The second essay studies the relationship between corruption in the host country and the volume of FDI inflows. The third essay explores the effect of FDI inflows on host country economic growth. The fourth and final essay analyses the relationship between FDI and trade, focusing on the link between FDI flows and host country exports in eight East Asian economies.
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ANDREAS JOHNSON

Host Country Effects of Foreign Direct Investment

The Case of Developing and Transition Economies
Host country effects of foreign direct investment: The case of developing and transition economies
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As I have learned during the past years, writing a dissertation in economics is not only a stimulating but a very challenging undertaking and I have occasionally asked myself whether I would actually be able to complete this project. Now, when the goal finally has been reached, I would like to take this opportunity to express my gratitude to all the people who to some extent made this possible.

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Jönköping, December 2005

Andreas Johnson
Abstract

This thesis consists of four individual essays and an introductory chapter. While independent from each other, these essays share some common properties. They are all empirical and focus on the interaction between inflows of foreign direct investment (FDI) and host country characteristics. The primary focus of the thesis lies in how inflows of FDI affect developing and transition economies. Macro-level data are used in all essays.

The first essay analyses the FDI inflows that the transition economies of Eastern Europe have attracted and tries to find determinants of these inflows. The following two essays compare the effect of FDI between developing and developed economies. The second essay studies the relationship between corruption in the host country and the volume of FDI inflows. The third essay explores the effect of FDI inflows on host country economic growth. The fourth and final essay analyses the relationship between FDI and trade, focusing on the link between FDI flows and host country exports in eight East Asian economies.
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Chapter 1. 
Introduction and Summary of the Thesis

Andreas Johnson

1. Introduction

During the last 20 to 25 years, there has been a tremendous growth in global foreign direct investment (FDI). In 1980 the total stock of FDI equaled only 6.6 per cent of world GDP, while in 2003 the share had increased to close to 23 per cent, UNCTAD (2004). This dramatic development has taken place simultaneously with a substantial growth in international trade. The growth in international flows of goods and capital implies that geographically distant parts of the global economy are becoming increasingly interconnected as economic activity is extended across boundaries. FDI is an important factor in this process of globalisation in that it intensifies the interaction between states, regions and firms. Growing international flows of portfolio and direct investment, international trade, and information along with migration are all parts of the process. The large increase in the volume of FDI during the past two decades provides a strong incentive for research on this phenomenon.

FDI is closely linked to multinational enterprises (MNEs). It is the MNEs that generate FDI flows. An MNE is defined as a firm that controls or owns production assets located in more than one country. Generally, MNEs can be described as consisting of a parent and one or more affiliates owned and controlled by the parent. An MNE has established production activities (affiliates) in one or more host countries through FDI. Whether a particular firm should be classified as an MNE is not always obvious but depends ultimately on the concepts of ownership and control. For statistical purposes ownership is used as a criterion for FDI since ownership is possible to quantify. Direct investment is assumed to have occurred when an investor has acquired

Henceforth, ‘host country’ refers to a country that receives an inflow of FDI while ‘source country’ refers to a country that generates an outflow of FDI.
10 percent or more of the voting power of a firm located in a foreign economy\(^2\), IMF (2004a). FDI is different from portfolio investments since FDI is performed in order to incorporate the asset in the investing MNEs existing business activities as a part of firm strategy to maximise profits. FDI implies that the investing MNE achieves a significant degree of control over the asset. The asset itself in the form of a production, research or distribution facility is incorporated into the MNE intrafirm network of geographically separated affiliates. There are two main modes of foreign direct investment: greenfield and brownfield FDI. In the case of greenfield FDI, the MNE constructs new facilities in the host country. Brownfield FDI implies that the MNE or an affiliate of the MNE merges with or acquires an already existing firm in the host country resulting in a new MNE affiliate. Whether investment takes the form of greenfield or brownfield FDI has important implications for the effects of FDI on the host country. UNCTAD (2004) suggests that brownfield FDI in the form of mergers and acquisition dominates.

MNEs are integrated international production systems existing as a result of FDI. A single MNE can be involved in a large number of activities including investment, production of goods and services, distribution of goods, selling of goods to external customers, or within the MNE network, research and innovation. A driving force behind MNE operations is the possession of firm specific advantages allowing the MNE to operate profitably in foreign countries, Hymer (1960). It can be argued that MNE activities are fundamental for the globalisation process.\(^3\) MNEs are important participants in the process of globalisation as they interact with other promoters of globalisation including customers, suppliers, competing firms, international organisations and governments. This interaction gives rise to flows of goods, services, information and technology as well as human and physical capital. These flows generated by MNE activity serve to strengthen the links between the different parts of the global economy.

Protests against the globalisation process in general and MNEs and their activities in particular have been common in recent time, especially among young people. These protests have been fuelled by personalities such as Naomi Klein, (Klein, 2000). However, policy makers and governments have a much more positive view of MNEs and FDI. It is obvious that government attitudes toward FDI inflows have changed a lot since the end of the 1980s, resulting in substantial policy changes. UNCTAD (2004) presents data for changes in national regulations on FDI for the period 1991 to 2003. A simple calculation shows that close to 94 per cent of these changes liberalised the FDI regime. Many economies, particularly developing and transition economies, have designed incentive schemes in the form of tax holidays or exemptions from environmental standards to try to stimulate inflows of FDI. The transition

\(^2\)Lipsey (2003) provides a detailed description of how the definition of FDI has changed over time.

\(^3\)Bhagwati (2004) aptly defines the MNEs as ‘the B-52s of capitalism and of globalisation’.
Chapter 1. Introduction and Summary of the Thesis

Economies of Eastern Europe are competing vigorously for the attention of multinationals. But how beneficial are incentive schemes for FDI inflows? Mody and Wheeler (1992) argue that so-called location tournaments in the form of costly incentive programs provide little benefit.

To avoid implementing expensive and potentially harmful incentive schemes, it is important for policymakers in developing and transition economies to achieve more knowledge about the effects of FDI inflows and what host country factors determine the volume of inflows. Such knowledge should help decision makers adopting economic policies not only serving to attract FDI but maximizing the benefits and diminishing the potential disadvantages of the FDI inflows the host economy receives. This dissertation aims to provide knowledge about the nature of FDI that can help policymakers in host countries to take appropriate decisions.

The discussion indicates that there is a large number of interesting research questions regarding FDI. For example, what host country factors can explain the large volumes of FDI some host countries have been able to attract? Are there special host country conditions in developing and transition economies determining the size of FDI inflows? How is FDI related to the institutions in the host economy? For example, how is FDI affected by corruption in the host country? Can FDI inflows bring benefits such as an increase in the rate of economic growth? Are there any policies or incentive schemes which host country governments can implement to maximize the volume of FDI the country receives as well as the benefits of the inflow? What is the relationship between trade flows and flows of FDI? The studies in this thesis try to answer this type of questions.

This thesis analyses the following major research questions as regards FDI:

1. Host country determinants of FDI inflows
2. The relationship between host country corruption and FDI inflows
3. The effects of FDI inflows on host country economic growth
4. The relationship between FDI and exports

The dissertation investigates these four research questions empirically on the macro-level using aggregated data for FDI. The choice of research topics has been made in order to allow for the possibility of finding results that can provide advice to developing and transition economies about policies maximizing the benefits of FDI inflows.

This introductory chapter has the following outline: Section 2 describes the compilation and quality of FDI data. Section 3 provides an overview of global and regional trends in FDI flows with a focus on the post-war period. The
following section reviews the theories of FDI and the MNE. Section 5 provides an overview of host country effects from FDI. Finally, Section 6 provides an overview and summary of the four studies included in the thesis.

2. FDI data

This section provides an overview of FDI data. Section 2.1 describes the compilation and availability of FDI data and Section 2.2 discusses the quality of the data.

2.1 Compilation of FDI data and availability

How is FDI data compiled? Generally, there are two main alternatives for compiling FDI data: to use balance of payments statistics or to perform firm surveys. The balance of payments data measures FDI as the financial stake of a parent in a foreign affiliate. The advantage of balance of payments data is that they can be collected relatively easy for virtually all existing countries. Unlike balance of payments data, firm surveys focus on the actual operations of MNEs. As argued by Lipsey (2003), surveys provide a broad description of MNE activities and usually report data for balance sheets, employment, exports and R&D expenditures, among other things. The advantage of survey data is that it provides information about the characteristics of MNE parents and affiliates. Unfortunately, firm survey data is only available for a limited number of countries including the United States and Germany.

FDI data is reported as a stock or a flow value. As described in IMF (2004a), flows of FDI consist of equity capital, reinvested earnings and what is usually referred to as ‘other capital’. Equity capital represents the direct investor’s share purchases in enterprises in foreign countries. Reinvested earnings are profits which are retained and reinvested by affiliates. The ‘other capital’ category includes various forms of lending and borrowing between the parent and affiliates. Data for FDI flows are normally presented on a net basis, meaning that disinvestment has been taken into account. Stocks of FDI are similarly composed of equity capital, reinvested earnings and other capital. Inflows of FDI and the inward stock of FDI is a result of investment performed in the host country by foreign MNEs. Correspondingly, outflows of FDI and the outward stock of FDI represents investment in foreign countries performed by MNEs based in the source country. The value of FDI stocks is calculated using the book value in order to take into account the prices prevailing when the investment was made.

This thesis primarily analyses FDI in developing and transition economies. What about the availability of FDI data for these two country groups? For the developing economies, FDI data is generally not available before 1980.
Furthermore, FDI data is limited to country aggregates. Industry composition of FDI is not available. Data for bilateral flows of FDI are very scarce. For the case of the Eastern European transition economies, data availability problems are similar. An additional complication for this country group is that FDI data is unavailable before the start of the transition process, i.e. around 1990. For the first years of the 1990s, FDI data is only available for a limited number of the transition economies. FDI data exist from around 1970 for most developed economies. For the OECD economies, data for bilateral FDI flows are available as well as the industry composition of FDI.

What are the main sources of FDI data available to researchers? FDI data is collected and reported by several international organisations. IMF compiles and reports FDI data for the majority of the countries in the world. The data is based on balance of payments statistics and according to IMF (2004a) compiled from international transactions reporting systems and data from exchange control or investment control authorities.

UNCTAD prepares the annual publication of the *World Investment Report*. The report presents data for both flows and stocks of FDI as well as additional data such as the share of FDI in GDP. The report presents data for most countries. UNCTAD primarily tries to collect data directly from national official sources such as the central banks and statistical offices of individual economies. If this is not possible, data is complemented or obtained from the IMF or the OECD.

OECD reports FDI data for its member countries. The data is primarily based on balance of payments statistics as reported from the central banks and is presented in the *International Direct Investment Statistics Yearbook*. Data for bilateral flows of FDI is reported and there is some data for the distribution of FDI among industrial sectors in the OECD economies.

The World Bank includes FDI data among the so-called *World Development Indicators*. The data is primarily based on balance of payments data from the IMF and cover most countries.

There are also a number of regional organisations such as ASEAN and EBRD reporting data for particular geographical regions. The European Bank for Reconstruction and Development (EBRD) presents FDI data for the European transition economies in the annual publication *Transition Report*, see for example EBRD (2004). The FDI data is compiled on the basis of data from the IMF, data from central banks and EBRD’s own estimates and surveys.

### 2.2 The quality of FDI data

Is it possible to somehow evaluate the quality of FDI data? To begin with, do stocks and flows of FDI accurately represent the magnitude of FDI activity? As described in the previous section, the balance of payments FDI data only measures the financial stake of a parent in a foreign affiliate. However, the FDI data is nonetheless used as a proxy for MNE activity in empirical studies. Lipsey
(2003) reports that aggregate stocks of FDI tend to be fairly closely correlated with MNE employment and sales in the host country. Consequently, at least at an aggregate level, balance of payments FDI data can be used as a proxy for the magnitude of MNE activities in the host country. Still, balance of payments FDI data can never be more than an imperfect proxy for actual MNE operations.

How accurate is the balance of payments FDI data presented by the international organisations? In fact, it is very easy to prove the existence of inconsistencies in the reported data. By definition, the global inward and outward stocks of FDI should be of equal size. Table 1 compares inward and outward stocks of total FDI using data from UNCTAD (2004).

Table 1 Inward and outward global stocks of FDI, millions of USD

<table>
<thead>
<tr>
<th>Year</th>
<th>Inward FDI stock</th>
<th>Outward FDI stock</th>
<th>Ratio inward / outward FDI stock</th>
</tr>
</thead>
<tbody>
<tr>
<td>1980</td>
<td>692 714</td>
<td>559 629</td>
<td>1.24</td>
</tr>
<tr>
<td>1985</td>
<td>972 205</td>
<td>738 809</td>
<td>1.32</td>
</tr>
<tr>
<td>1990</td>
<td>1 950 303</td>
<td>1 758 216</td>
<td>1.11</td>
</tr>
<tr>
<td>1995</td>
<td>2 992 068</td>
<td>2 897 574</td>
<td>1.03</td>
</tr>
<tr>
<td>2000</td>
<td>6 089 884</td>
<td>5 983 342</td>
<td>1.02</td>
</tr>
<tr>
<td>2003</td>
<td>8 245 074</td>
<td>8 196 863</td>
<td>1.01</td>
</tr>
</tbody>
</table>


Table 1 reveals that the size of the inward and outward global stocks of FDI differs for all of the six years. The ratio between inward and outward FDI shows that the difference was particularly large during the 1980s. Since then, the discrepancy has decreased, and for the most recent years inward and outward stocks are approximately of the same size. This suggests that the measurement problems were substantial during the 1980s but that the situation has improved significantly over time. However, a closer look at the FDI data provided by UNCTAD (2004) reveals additional anomalies. There are cases where the estimate of the inward FDI stock for an economy is negative. The most problematic examples include Iraq, Libya, Sierra Leone and Suriname. The explanation is that for some countries the FDI stock is measured by cumulating FDI flows over a limited period of time. If disinvestment takes place during the period (foreign affiliates in the country are being closed down), the inward FDI stock at the end of the period is erroneously reported as negative. On the positive side, the number of suspicious observations is mostly limited to the four mentioned countries, and since these are among the world’s poorest economies, most other data is missing altogether or of questionable value anyway, excluding these countries from analysis.

A similar analysis of the international trade data reported in IMF (2004b) shows that the discrepancies between total exports and total imports are of a similar magnitude as the discrepancies in the FDI data.
Chapter 1. Introduction and Summary of the Thesis

What measures are taken by the organisations which report FDI data to ensure that data of the highest possible quality is presented? For the case of IMF, reporting countries are expected to follow the guidelines of the Balance of Payments Manual\(^5\), (IMF, 1993). While IMF provides clearly defined guidelines, this is not a guarantee that the reporting countries follow or are even able to follow these guidelines when providing the requested statistics. For example, some countries do not include reinvested earnings in their reported FDI data despite the fact that the IMF advocates this should be done. IMF and OECD (2003) present an extensive review of how reporting countries follow, and in some cases do not follow, the guidelines revealing that there are indeed problems of non-compliance. However, IMF and OECD (2003) also reports several examples of how FDI collection from reporting countries data has improved between 1997 and 2001 suggesting the problems are decreasing over time.

3. FDI trends

The aim of Section 3 is to provide an overview of the development of FDI flows, thereby illuminating the increasing importance of FDI for the global economy. Focus lies on the period from 1980. The section also provides a discussion of the collection and quality of FDI data.

3.1 The development of FDI between 1850 and 1945

The first appearance of activity that could be regarded as FDI started to appear in the mid or late nineteenth century. Wilkins (1988) argues that ‘1870-1914 was the initial era of the modern multinational enterprise’. Flows of financial capital in the form of British portfolio investments still dominated but in 1914 international production and MNEs were firmly established as parts of the global economy. Some of the MNEs which were active at this time include Cadbury, Nestlé and Unilever. The United Kingdom was by far the most important source country of FDI, being responsible for around 45 per cent of the global stock of FDI in 1914 while USA, France and Germany also were important direct investors, Dunning (1983). Sweden had also emerged as an international investor by the turn of the century, giving rise to companies such as L.M. Ericsson and SKF, Lundström (1986). Accordingly, almost all of the flows of FDI originated in industrialised economies. Whereas the industrialising economies generated large flows of FDI among themselves during the second half of the nineteenth century, as time passed an increasing share of FDI flowed to the non-industrialised economies. The most important motive for FDI

\(^5\)The same guidelines are used by the OECD.
during this period was resource seeking through MNE exploitation of natural resources or agricultural production, Dunning (1983). Resource-seeking and the existing colonial structure tended to direct FDI flows toward economies outside of Europe and North America. However, as argued by Wilkins (1988), the United States was in 1914 the single most important host country for FDI due to its large market, high tariffs and abundance of natural resources.

The First World War severed many of the interconnections in the global economy and destroyed large amounts of real capital including a substantial share of the European stock of FDI. However, during the inter-war period there was an increase in the global stock of FDI as well as an increase in the number of MNE subsidiaries. Still, the pre-war value of the global stock of FDI was not surpassed until the 1930s, Dunning (1983).

3.2 FDI during the post-war period

The Second World War caused another serious destruction of real capital but the end of the war resulted in a climate suitable for international business activities. The mid-1940s saw the creation of several important institutions such as the IMF, the World Bank, GATT and the Bretton Woods system resulting in a favourable economic environment where stable currencies helped to encourage international trade and production. The new military technologies which had been developed during the Second World War could now be used in society as a whole and gave rise to new business opportunities. The United States emerged as the dominant Western power after the war, both politically and economically, and replaced the United Kingdom as the most important source country of FDI. In 1960, the United States accounted for around 60 per cent of the developed economies outward stock of FDI, (Dunning, 1979). A process had also started where developing economies became less important as host countries for FDI. Whereas in 1938 close to two thirds of FDI flowed to the developing economies, in 1960 two thirds of global FDI flowed to the developed economies, Dunning et al. (1986).

The volume of FDI flows as well as trade flows increased strongly after the end of the Second World War. During the high-growth period of the 1960s, flows of FDI grew twice as quickly as global GNP and 40 per cent faster than world exports, Dicken (2003). The primary sector became less important as a destination for international investment and the decreasing importance of the developing economies as host countries for FDI continued. Instead, FDI increasingly tended to flow between the developed economies. Dunning (1979) points to the increasing diversity among the source countries of FDI during the 1970s. The share of the United States and the United Kingdom in the total outward stock decreased while countries such as West Germany and Japan became more important as source countries of FDI. The first small outward flows of FDI from the developing economies also started to appear during the early 1970s.
There were also changes in the distribution of FDI inflows among host industries. As the significance of the primary sector declined, the manufacturing industry emerged as the dominant host industry for FDI inflows. The growing importance of production of services also affected the destination of FDI and in the middle of the 1970s the share of FDI going to the service sector started to increase relative to manufacturing. This development has continued during the 1980s and 1990s (Dicken, 2003).

During the 1970s and the first half of the 1980s, trade and FDI grew on par, but growth in FDI took off in the second half of the 1980s, growing at an average annual rate of 28 per cent. These increases in flows of FDI and trade came hand in hand with a period of intensified globalisation and a growing importance of MNEs, Dicken (2003).

Table 2 describes the development of FDI stocks since 1980. The total inward stock of FDI grew by 1090 per cent between 1980 and 2003. During the period 1980 to 1990, the increase was 182 per cent while between 1990 and 2000 there was an even larger increase of 212 per cent. The stock of FDI has increased faster in the developed economies than in the developing economies.

| Table 2 Inward stocks of FDI, millions of USD |
|---------|------|------|------|------|------|------------------|
| World total | 692 714 | 1 950 303 | 2 992 068 | 6 089 884 | 8 245 074 | +1 090% |
| Developed countries | 390 740 | 1 399 509 | 2 035 799 | 4 011 686 | 5 701 633 | +1 359% |
| Developing countries | 301 794 | 547 965 | 916 697 | 1 939 926 | 2 280 171 | +655% |
| Least developed economies | 4 119 | 8 949 | 16 518 | 37 503 | 56 821 | +1 279% |
| Central and Eastern Europe | .. | 2 828 | 39 573 | 138 271 | 263 270 | - |

Source: UNCTAD (2004), Annex Table B.3
Notes:
“..” indicates that data are not available
a: Estimate
How can the increase in global FDI be explained? It is likely that the increase is a result of several different factors. UNCTAD (2004) shows that there has been a substantial liberalisation of FDI regimes since the beginning of the 1990s. The past decades have also seen a substantial decrease in transport and communication costs. It is possible that these changes have improved the conditions for MNE activities and thereby also increased the volume of FDI.

Table 3 shows how the total inward stock of FDI is distributed among different types of host economies. The developed economies account for the majority of the total stock. In 2003, more than 69 per cent of the world inward stock of FDI was located in the developed economies. The share of the total stock in the developing economies decreased substantially during the 1980s. In 2003 the share of the developing economies was around 28 per cent.

| Table 3 Percentage share of the total inward FDI stock |
|---------------------------------|----------|--------|--------|--------|--------|
| Developed economies            | 56.4    | 71.8  | 68.0  | 65.9  | 69.2  |
| Developing economies           | 43.6    | 28.2  | 30.6  | 31.9  | 27.7  |
| Least developed economies      | 0.6     | 0.5   | 0.6   | 0.6   | 0.7   |
| Central and Eastern Europe     | .       | 0.1   | 1.3   | 2.2   | 3.2   |

Source: Based on UNCTAD (2004), Annex Table B.3

The least developed economies include approximately 50 economies which the United Nations has classified as the poorest nations, such as Bangladesh and Ethiopia. This country group has attracted an extremely small share of the total stock of FDI, and the countries in this group are in great need of foreign capital inflows to restructure their economies. The flows of FDI have increased in absolute value, but Table 3 shows that the least developed economies have been unsuccessful in increasing their share of the total stock. Most of these economies experience high rates of corruption likely to reduce inflows of FDI. Extremely low income-levels also eliminate market-seeking where the aim is to serve demand in the local market as a motive for FDI in these economies. The second study of this dissertation analyses the effect of host country corruption on FDI inflows in both developed and developing economies.

The transition process in Eastern Europe started during the late 1980s and early 1990s and turned the region into a new destination for FDI. In 1990, the total inward stock of FDI in Central and Eastern Europe was well below 1 per cent of the global stock. Transition opened the region for activities of foreign firms and the inflows of FDI during the 1990s were substantial. Table 3 reveals that the region attracts a small but increasing share of the world total stock of FDI and is in a process of catching up. The first study of the thesis analyses and describes the magnitude of FDI flows into Central and Eastern Europe during transition in more detail.
Chapter 1. Introduction and Summary of the Thesis

It should also be instructive to study the size of FDI stocks in individual economies. Table 4 presents the inward and outward stocks of FDI for the ten most important host and source countries of FDI.

Table 4 The ten most important host and source countries of FDI, millions of USD and percentage share

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>USA</td>
<td>1 553 955</td>
<td>18.8 (32.2)</td>
<td>2 069 013</td>
<td>25.2 (32.2)</td>
</tr>
<tr>
<td>China*</td>
<td>876 519</td>
<td>10.6 (3.7)</td>
<td>1 128 584</td>
<td>13.8 (4.6)</td>
</tr>
<tr>
<td>UK</td>
<td>672 015</td>
<td>8.2 (4.6)</td>
<td>643 398</td>
<td>7.8 (4.3)</td>
</tr>
<tr>
<td>Germany</td>
<td>544 604</td>
<td>6.6 (6.0)</td>
<td>622 499</td>
<td>7.6 (6.0)</td>
</tr>
<tr>
<td>France</td>
<td>433 521</td>
<td>5.3 (4.3)</td>
<td>384 404</td>
<td>4.7 (1.2)</td>
</tr>
<tr>
<td>Netherlands</td>
<td>336 149</td>
<td>4.1 (1.2)</td>
<td>373 104</td>
<td>4.6 (3.7)</td>
</tr>
<tr>
<td>Canada</td>
<td>275 779</td>
<td>3.3 (2.2)</td>
<td>344 104</td>
<td>4.2 (0.8)</td>
</tr>
<tr>
<td>Spain</td>
<td>230 332</td>
<td>2.8 (1.9)</td>
<td>335 500</td>
<td>4.1 (13.5)</td>
</tr>
<tr>
<td>Ireland</td>
<td>193 442</td>
<td>2.3 (0.3)</td>
<td>307 855</td>
<td>3.8 (2.2)</td>
</tr>
<tr>
<td>Australia</td>
<td>174 240</td>
<td>2.1 (1.2)</td>
<td>238 877</td>
<td>2.9 (3.5)</td>
</tr>
<tr>
<td>Sum</td>
<td>5 290 556</td>
<td>64.1 (57.6)</td>
<td>6 447 338</td>
<td>78.7 (72.0)</td>
</tr>
</tbody>
</table>


Notes:
- a: including Hong Kong
- Data for Belgium and Luxembourg are missing, but it is likely that these economies should be included among the top ten host countries of FDI.

*The inward stock of FDI is the value of the foreign-owned assets in the host country while the outward stock of FDI is the value of assets abroad owned by firms in the source country.*
According to Table 4, the United States is the most important host country as well as source country of FDI. China has emerged as the second most important host country but also has a substantial outflow of FDI. Based on additional data from UNCTAD (2004), China accounts for around 38 per cent of the total inward stock of FDI in the developing economies and 43 per cent of the outward stock. An obvious explanation for the large inflows to China is the large domestic market but also the low labour costs. United Kingdom, Germany and France are among the most important economies for both inflows and outflows of FDI. Table 4 shows that economies attracting large inflows of FDI also tend to have large outflows, since the seven most important host countries for FDI are included in the ten most important source countries of FDI. This exemplifies the fact that many economies have both substantial inflows and outflows of FDI simultaneously. Furthermore, intra-industry FDI between pairs of countries is common, as claimed by Baldwin and Ottaviano (2001). Table 4 clearly shows how FDI tends to flow primarily between the developed economies. Section 4.3 argues that this can be explained by the dominance of horizontal FDI, where the production process is duplicated and located close to the local market. Horizontal FDI tends to arise between economies which are similar in size and endowments.

What about FDI in the developing economies? Table 5 presents the inward stock and inflow of FDI in 2003 for the five most important host countries among the developing economies.

<table>
<thead>
<tr>
<th>Economy</th>
<th>Inward FDI stock 2003</th>
<th>FDI inflow 2003</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>501 471 (22.0)</td>
<td>53 505 (31.1)</td>
</tr>
<tr>
<td>Hong Kong</td>
<td>375 048 (16.4)</td>
<td>13 561 (7.9)</td>
</tr>
<tr>
<td>Mexico</td>
<td>165 904 (7.3)</td>
<td>10 783 (6.3)</td>
</tr>
<tr>
<td>Singapore</td>
<td>147 299 (6.5)</td>
<td>11 409 (6.6)</td>
</tr>
<tr>
<td>Brazil</td>
<td>128 425 (5.6)</td>
<td>10 144 (5.9)</td>
</tr>
<tr>
<td>Sum</td>
<td>1 318 147 (57.8)</td>
<td>99 402 (57.8)</td>
</tr>
</tbody>
</table>

Source: Based on UNCTAD (2004)

The share of the total stock and inflow is given in parenthesis in order to describe the concentration of FDI in the developing economies. Table 5 reveals that the majority of FDI in the developing economies is concentrated to a limited number of host countries. Close to 60 per cent of the FDI stock was located in five economies. China and Hong Kong have attracted around 38 per cent of the total FDI stock. The inflows of FDI in 2003 generally followed the distribution of the stock. These observations indicate the size of FDI flows to developing countries reflect their progressive integration in the world economy. In essence, FDI is cross-border capital allocation in a world where the friction of capital movements is decreasing. The strong concentration of FDI implies that many of the less fortunate developing economies, including many of the
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African economies, only have been able to attract an extremely small volume of FDI. The small size and low income level in these economies is likely to neutralise market-seeking as a motive for FDI, reducing the inflows. The first study of the dissertation includes a discussion of host country determinants of FDI inflows.

Table 4 presents the ten most important source countries of FDI. Are these source countries also home countries to the majority of the largest MNEs? Table 6 tries to answer this question by depicting the distribution of the 100 largest non-financial MNEs (ranked by foreign assets) according to home country.

Table 6 The world’s 100 largest non-financial MNEs by home country in 1990 and 2002

<table>
<thead>
<tr>
<th>Country</th>
<th>Number of MNEs in 1990</th>
<th>Country</th>
<th>Number of MNEs in 2002</th>
</tr>
</thead>
<tbody>
<tr>
<td>USA</td>
<td>27</td>
<td>USA</td>
<td>27</td>
</tr>
<tr>
<td>France</td>
<td>14</td>
<td>France</td>
<td>14</td>
</tr>
<tr>
<td>Japan</td>
<td>12</td>
<td>Germany</td>
<td>13</td>
</tr>
<tr>
<td>UK</td>
<td>12</td>
<td>UK</td>
<td>12</td>
</tr>
<tr>
<td>Germany</td>
<td>9</td>
<td>Japan</td>
<td>7</td>
</tr>
<tr>
<td>Switzerland</td>
<td>6</td>
<td>Netherlands</td>
<td>5</td>
</tr>
<tr>
<td>Sweden</td>
<td>5</td>
<td>Switzerland</td>
<td>5</td>
</tr>
<tr>
<td>Netherlands</td>
<td>4</td>
<td>Canada</td>
<td>4</td>
</tr>
<tr>
<td>Italy</td>
<td>4</td>
<td>Italy</td>
<td>3</td>
</tr>
<tr>
<td>Canada</td>
<td>3</td>
<td>Spain</td>
<td>3</td>
</tr>
<tr>
<td>Australia</td>
<td>2</td>
<td>Australia</td>
<td>2</td>
</tr>
<tr>
<td>Belgium</td>
<td>2</td>
<td>Finland</td>
<td>2</td>
</tr>
<tr>
<td>Other</td>
<td>2</td>
<td>Other</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>102'</td>
<td></td>
<td>104'</td>
</tr>
</tbody>
</table>

Source: Based on UNCTAD (2004) Annex Table A.I.3
Notes:
a: Some of the MNEs are registered as having two home countries resulting in a total number of entries exceeding 100.

From Table 6 it is obvious that the top ten source countries of FDI also are home countries for the majority of the most important MNEs. For the year 2002, the United States, France, Germany and the United Kingdom were home countries to as many as 66 of the largest 100 MNEs. The EU was the home region for 55 of the largest MNEs. China had a substantial outflow of FDI but had only one MNE among the 100 largest in 2002. Generally, there are only small differences when comparing the distribution of MNEs between 1990 and 2002. The five most important home countries in 1990 are still in top for the year 2002. However, for some countries, such as Sweden, there are substantial differences. In 1990 there were five Swedish firms among the 100
largest (Volvo, Electrolux, SCA, SKF and Stora). In 2002, only Volvo remained on the 100-list.

An alternative measure of the importance of FDI for an economy is the stock of FDI as a share of GDP. Table 7 presents data for selected individual economies as well as country groups.

Table 7 Inward and outward stocks of FDI as share of GDP in 2003

<table>
<thead>
<tr>
<th>Individual economies / country groups</th>
<th>Inward stock of FDI as share of GDP in 2003</th>
<th>Outward stock of FDI as share of GDP in 2003</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual economies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Netherlands</td>
<td>65.6</td>
<td>75.0</td>
</tr>
<tr>
<td>Sweden</td>
<td>47.5</td>
<td>62.7</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>37.4</td>
<td>62.7</td>
</tr>
<tr>
<td>Germany</td>
<td>22.6</td>
<td>25.8</td>
</tr>
<tr>
<td>USA</td>
<td>14.1</td>
<td>18.8</td>
</tr>
<tr>
<td>Russia</td>
<td>12.1</td>
<td>11.9</td>
</tr>
<tr>
<td>Japan</td>
<td>2.1</td>
<td>7.8</td>
</tr>
<tr>
<td>Regions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>South East Asia</td>
<td>34.6</td>
<td>15.9</td>
</tr>
<tr>
<td>Western Europe</td>
<td>33.0</td>
<td>41.2</td>
</tr>
<tr>
<td>South America</td>
<td>30.4</td>
<td>10.5</td>
</tr>
<tr>
<td>Africa</td>
<td>25.3</td>
<td>6.6</td>
</tr>
<tr>
<td>Central and Eastern</td>
<td>23.7</td>
<td>6.0</td>
</tr>
<tr>
<td>Europe</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Country groups</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Developing economies</td>
<td>31.4</td>
<td>12.2</td>
</tr>
<tr>
<td>Least developed economies</td>
<td>24.5</td>
<td>2.7</td>
</tr>
<tr>
<td>Developed economies</td>
<td>20.7</td>
<td>26.4</td>
</tr>
<tr>
<td>Source: UNCTAD (2004), Annex Table B.6</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 7 clearly shows the large variations in the share of FDI stocks compared to GDP for individual economies. The extremely low inward share for Japan can be explained by its tendency to insulate itself from the activities of foreign firms. USA also has a low inward share. The large size of this economy tends to diminish the influence of foreign firms. The low share for Russia can be explained by the slow transition process and remaining obstacles for foreign investors. For smaller and more open economies such as Sweden or the Netherlands, both inward and outward stocks of FDI constitute a much larger share of GDP.

Turning to the country groups, the inward share for the developing economies is surprisingly high. An explanation can be that since these economies often are quite small as measured by GDP, MNEs tend to be dominant in these economies. The large share for South East Asia is partly explained by large inflows to China.
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The share for the developed economies is most likely decreased by the small shares of Japan and the USA. The figure for the economies of Central and Eastern Europe is in line with the developed economies. The low outward share for the developing economies and Eastern Europe can be explained by the fact that these economies so far only have managed to give rise to a very limited number of MNEs.

Since there are variations in FDI as a share of GDP which are not always obvious how to explain, it might be instructive to complement the description with an alternative measure of the importance of FDI for a host country. Table 8, therefore, presents inward stocks of FDI per capita for the year 2002.

Table 8 Inward and outward stocks of FDI per capita, USD

<table>
<thead>
<tr>
<th>Individual economies / regions</th>
<th>Inward stock of FDI per capita 2002</th>
<th>Outward stock of FDI per capita 2002</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual economies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Netherlands</td>
<td>19 603</td>
<td>21 575</td>
</tr>
<tr>
<td>Sweden</td>
<td>13 218</td>
<td>16 177</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>9 594</td>
<td>15 557</td>
</tr>
<tr>
<td>Germany</td>
<td>6 446</td>
<td>7 515</td>
</tr>
<tr>
<td>USA</td>
<td>5 220</td>
<td>6 381</td>
</tr>
<tr>
<td>Japan</td>
<td>615</td>
<td>2 393</td>
</tr>
<tr>
<td>Russia</td>
<td>357</td>
<td>331</td>
</tr>
<tr>
<td>Regions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EU-15¹</td>
<td>7 228</td>
<td>8 947</td>
</tr>
<tr>
<td>Central Eastern Europe⁶</td>
<td>1 974</td>
<td>107</td>
</tr>
<tr>
<td>South America⁰</td>
<td>737</td>
<td>280</td>
</tr>
<tr>
<td>South East Asia⁰</td>
<td>371</td>
<td>152</td>
</tr>
<tr>
<td>CIS⁰</td>
<td>302</td>
<td>179</td>
</tr>
<tr>
<td>Africa¹</td>
<td>188</td>
<td>44</td>
</tr>
</tbody>
</table>


Notes:

a: Excluding Belgium and Luxembourg.
b: Includes Czech republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovakia and Slovenia.
c: Excluding Suriname.
d: Includes Afghanistan, Bangladesh, Bhutan, China, India, Indonesia, North Korea, South Korea, Lao, Malaysia, Maldives, Mongolia, Myanmar, Nepal, Pakistan, Philippines, Singapore, Sri Lanka, Thailand and Vietnam.
e: Includes Armenia, Azerbaijan, Belarus, Georgia, Kazakstan, Kyrgyz Republic, Moldova, Russia, Tajikistan, Ukraine and Uzbekistan.
f: Based on data for 51 countries.

The data for individual economies in Table 8 suggest that small, developed economies such as the Netherlands or Sweden have large inward and outward
stocks of FDI. Japan again stands out with a very low per capita stock of inward FDI but a much larger outward stock. Studying the data for regions it is obvious that an economy’s level of income has a large effect on the amount of FDI inflows it receives. The FDI stock per capita for African economies is below three per cent of the stocks attracted by the EU-15 countries. The small outward flows from the Eastern European and African economies reinforce the earlier argument that transition and developing economies only have fostered a limited number of MNEs. The investment development path theory described in Section 4.2 provides an explanation for the small outflow of FDI from most developing economies based on the country’s development level.

As described in Section 3.1, during the end of the nineteenth century a large share of FDI flows was directed to the primary sector in the developing economies. Data for FDI stocks by industrial sector are scarce, but Table 9 describes the recent industry composition of the inward stock of FDI for nine OECD countries.

Table 9 Inward FDI stock as percentage of total FDI stock by industrial sector

<table>
<thead>
<tr>
<th>Country</th>
<th>Primary sector</th>
<th>Secondary sector</th>
<th>Tertiary sector</th>
</tr>
</thead>
<tbody>
<tr>
<td>France</td>
<td>6.4 4.3 0.2</td>
<td>37.5 35.7 19.7</td>
<td>56.1 60.1 80.2</td>
</tr>
<tr>
<td>Germany</td>
<td>0.1 0.5 0.2</td>
<td>36.4 23.4 11.5</td>
<td>63.4 76.1 88.4</td>
</tr>
<tr>
<td>Italy</td>
<td>3.5 3.1 2.9</td>
<td>38.2 38.5 39.8</td>
<td>58.3 58.5 57.2</td>
</tr>
<tr>
<td>Mexico</td>
<td>2.6 2.4 0.2</td>
<td>63.7 46.9 34.3</td>
<td>50.8 0.2 0.2</td>
</tr>
<tr>
<td>Netherl.</td>
<td>0.2 3.9 1.3</td>
<td>55.5 33.2 44.3</td>
<td>55.3 65.5 0.2</td>
</tr>
<tr>
<td>Norway</td>
<td>49.0 39.4 29.1</td>
<td>10.6 10.9 20.3</td>
<td>40.4 49.8 50.6</td>
</tr>
<tr>
<td>Sweden</td>
<td>42.4 65.6 34.4</td>
<td>57.6 34.4 0.2</td>
<td></td>
</tr>
<tr>
<td>UK</td>
<td>23.1 11.6 11.8</td>
<td>36.1 31.5 25.1</td>
<td>40.8 46.6 63.3</td>
</tr>
<tr>
<td>USA</td>
<td>13.5 3.2 2.2</td>
<td>39.0 45.1 35.7</td>
<td>47.5 51.7 62.1</td>
</tr>
</tbody>
</table>

Source: Based on data from OECD (2005)
Notes:
“..” indicates that data are not available

Table 9 shows how the importance of the primary sector as a destination for FDI has decreased between 1990 and 2001, indicating natural resource seeking is becoming relatively less important. Only Norway and the United Kingdom had substantial shares of their total inward FDI stocks in the primary sector in 2001. The importance of the primary sector for these economies can be explained by their large oil production. In 2003, Norway accounted for 4.1 per cent of the world total production of crude oil and the United Kingdom produced 3.0 per cent, EIA (2005). Table 9 indicates that the secondary sector also has lost much of its importance. Instead, the service sector has increased the share of total FDI inflows during the period, possibly as a result of the growing importance of this sector for the global economy. A growing service sector can explain the importance of horizontal FDI discussed in Section 4.3. In 2001, the tertiary sector had attracted more than 50 per cent of the total inward stock of FDI.
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What are the most important characteristics of FDI which have been described in Section 3? First and foremost, there has been a large increase in global FDI flows but the increase has been uneven. Since 1980 an increasing share of the total stock of FDI is located in developed economies. Most of the developing economies have received very small inflows of FDI. The economies in Eastern Europe (excluding most of the former Soviet republics) have attracted substantial FDI inflows since the process of transition started but are still far behind the developed economies. Instead, most FDI at present flows between developed economies with similar structure. Furthermore, FDI not only tends to flow between similar economies but between the same industries. The tertiary sector has become increasingly important for FDI inflows.

4. Theories of FDI: a chronological overview

There exists no general theory that can explain the existence of MNEs and FDI. When considering the large number of motives an individual firm can have to perform FDI, the fact that there is no general theory of FDI is not surprising. In the same way that there is no general theory explaining all trade flows, neither is there a general theory able to explain all flows of FDI. As a result of this, the FDI-literature is diverse and spans over several different disciplines including international economics, economic geography, international business as well as management. There exist several studies providing overviews of FDI theories, see for example, Agarwal (1980), Cantwell (1991), Meyer (1998) and Markusen (2002). Whereas this thesis primarily focuses on developing and transition economies, most of the theories described in this section can be applied to all types of economies.

4.1 Early theories of FDI

The theories of FDI have emerged during the post-war period. The process of globalisation took a new start after the Second World War. The increasing importance of MNEs and FDI during the 1950s and 1960s created an incentive for researchers to find theories able to explain the behaviour of MNEs and the existence of international production. The early theories could only explain a limited share of the total FDI flows. The theories were also inadequate in that they failed to realise that FDI is not only a capital flow but constitutes a package including other components such as management and technology transfer.

Consequently, some of the attempts to develop a theory of FDI failed to incorporate the fundamental difference between portfolio and direct investment. An example is the so-called capital markets approach (Aliber, 1970). The idea was to use already existing theories for flows of portfolio
investment to explain flows of FDI. FDI was treated as portfolio investment and consequently FDI should flow to locations where the financial return on investment was highest.

However, the theory of FDI is really a theory of the MNE. During the 1960s, researchers started to focus more explicitly on MNEs and their activities. Vernon (1966) applied the idea of the product life cycle to international trade in order to explain the existence of international production as well as trade. According to Vernon, as a product moves through the product-life cycle, the characteristics of the product change. These changes imply that the optimal location for production of the product also changes over time. The basic idea is that the high level of income and demand in the U.S. results in an environment conducive for innovation. The product-life cycle begins when innovations are transformed into actual products. Increasing competition eventually forces production to move from the U.S. to lower income economies in order to reduce production costs. As the standardisation of the product and its production process intensifies and the product moves into the mature stage of its life cycle, production in high and average income economies comes to an end as a result of ever fiercer competition. The demand for the product is instead satisfied through exports from low income, developing economies to the rest of the world.

Vernon (1966) was a contribution since it could explain some of the outflows of FDI from the U.S. during the 1950s and 1960s. It was also the first theory treating trade and direct investment as two dynamic alternatives to serve demand in a foreign market. Unfortunately, the theory fails to explain most of the flows of direct investment observed today. The large flows of FDI between developed economies described in Section 3 cannot be explained by Vernon’s theory. The focus on innovations also makes the theory difficult to apply to outflows of FDI from industries which are not innovative.

4.2 Firm-specific advantages and the OLI paradigm

The theory of firm-specific advantages developed by Stephen Hymer emerged approximately at the same time as Vernon’s theory. Hymer’s dissertation from 1960 (Hymer, 1960) contributed the foundation necessary for the so-called eclectic paradigm that has had a large impact on FDI theories. The theory of firm-specific advantages was the first theory treating international production explicitly, and the first focusing on the MNE itself.

To Hymer, firms operating in a foreign country are at a disadvantage compared to the domestic firms. The disadvantage is a result of operating in a foreign environment. The domestic firms are assumed to have lower costs of operation since they are more familiar with local conditions such as legislation, business culture, language and so on. A foreign firm must therefore have an offsetting, firm-specific advantage allowing it to compete with domestic firms. Firm-specific advantages include superior technology, brand name, managerial
skills and scale economies. Firm-specific advantages have to be excludable for a substantial time period in order to provide the possessing firm with a long-term advantage.

A weakness of the concept of firm-specific advantages is that it had little to say regarding the actual decision about FDI. This void was filled by John Dunning, who developed the idea of firm-specific advantages further, resulting in the so-called OLI paradigm of FDI, also known as the eclectic theory of FDI. The paradigm was presented in Dunning (1977). The contribution of the OLI paradigm is that it provides a framework for a discussion of the motives for FDI. It also allows for a discussion of the choice of an MNE between licensing, exports and FDI in order to serve a foreign market. This choice is determined by ownership advantages, location advantages and internalisation advantages, thus the acronym OLI.

Ownership advantages are based on the concept of firm-specific advantages. To cancel out the disadvantage of operating in a foreign country, a firm must possess an ownership advantage. The ownership advantage comes in the form of an asset reducing the firm’s production cost and allows it to compete with domestic firms in the foreign economy despite the information disadvantage. Ownership advantages come in the form of assets such as patents, management or technology. In order to provide an ownership advantage, the possessing firm has to be able to exclude competing firms from using the asset. To create conditions for FDI, ownership advantages also have to be transferable to a foreign country and possible to use simultaneously in more than one location, to create conditions for FDI.

Location advantages determine how attractive a location is for production. A strong location advantage reduces a firm’s production costs in that location. Location advantages can never be transferred to another location but can be used by more than one firm simultaneously. For example, a supply of cheap labour can provide a location advantage for several labour-intensive firms. If the home country provides the strongest location advantage to the firm, FDI does not take place. Instead, production is located in the home country, and the output is exported in order to meet demand in the foreign economy.

The existence or non-existence of an internalisation advantage determines how the MNE chooses to use its ownership advantage. Existence of an internalisation advantage implies that the firm’s most efficient alternative of using an ownership advantage is through exports or FDI. If an internalisation advantage is missing, it is more profitable for the firm to exploit its ownership advantage through selling the right of its use to another firm through licensing. Existence or non-existence of an internalisation advantage determines an MNEs choice between own production and licensing of the production to an external firm.

While possession of an ownership advantage is a prerequisite for a firm to be able to serve demand in a foreign market, it is the existence of location and
internalisation advantages that determines how the foreign market is served. Table 10 clarifies the alternatives.

Table 10 OLI advantages and MNE channels for serving a foreign market

<table>
<thead>
<tr>
<th>Channel for serving foreign market</th>
<th>Ownership advantage</th>
<th>Internalisation advantage</th>
<th>Location advantage in foreign country</th>
</tr>
</thead>
<tbody>
<tr>
<td>FDI</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Exports</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Licensing</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

Source: Dunning (1981)

FDI only occurs when the MNE possesses both an ownership and an internalisation advantage and the foreign country has a location advantage. For the case where the MNE lacks an internalisation advantage, production is licensed to local firms in the foreign market. If the MNE’s home country has the strongest location advantage, the MNE uses exports to serve the foreign market. The OLI paradigm can, therefore, also be used as a framework for a discussion about the relationship between FDI and trade. The closing study of the thesis analyses this relationship in more detail.

Dunning (1981, 1986) use the framework of the OLI paradigm as a base for the investment development path (IDP) theory. The idea of the IDP-theory is that there is a U-shaped relationship between the level of an economy’s development and the net outward flows of FDI. In the first low income stage, FDI inflows are small and outflows are zero or close to zero. Domestic firms have not yet acquired ownership advantages and therefore have no prospects for investing abroad whereas location advantages are too weak to attract inward FDI inflows. Economies where significant improvement of the location advantages take place (for example, an improvement of the educational level), enter the second stage. Inflows of FDI increase substantially while outward FDI remains very small, resulting in an increasingly negative net outward FDI position. During the third stage, net outward flows are still negative but increasing. There are two possible causes for this. The first possibility is that outward investment is constant and inward investment is falling. Alternatively, the outflows of FDI are rising faster than the inflows due to eroded ownership advantages of the foreign investors or as a result of domestic firms developing ownership advantages, generating outflows of FDI. During the fourth stage, the outward flows of FDI surpasses the inflows of FDI, implying domestic firms have developed strong ownership advantages.

Empirical applications of the IDP-theory include Barry et al. (2003), who analyse inward and outward FDI flows for Ireland. They find that the growing inflows and subsequent outflows of FDI are consistent with the IDP-theory. The theory can be applied to the presentation of FDI data in Section 3.2. Most
developing economies are still in the first low income stage, explaining the extremely small inward stocks of FDI per capita for Africa and Asia presented in Table 8. On the other hand, Table 4 shows China has attracted large inflows of FDI but also has a substantial outward stock of FDI, suggesting China is currently in the third stage.

4.3 FDI and the new trade theory

The new trade theory developed in response to the failure of classical trade theories of incorporating concepts observed in actual flows of international trade such as intra-industry trade. The contribution of the new trade theory was that it allowed the construction of general equilibrium trade models which could include increasing returns to scale, imperfect competition and product differentiation, see Helpman and Krugman (1985). The new trade theory, therefore, provided models more in line with actual observations of the economy.

A weakness of the early contributions to the new trade theory was that they failed to incorporate MNEs and FDI. The dominant assumption in the new trade theory of single-plant national firms limited the usefulness of these models for explaining FDI. In fact, international production was often ruled out. Markusen (1995) provides a critical view of the inability of these early models to explain the existence of MNEs. However, during the 1980s and 1990s, James Markusen and other researchers have modified the new trade models to allow for inclusion of MNEs and FDI.

An important contribution of new trade theory models incorporating MNEs is that they can be used to analyse a firm’s decision between FDI and exports. Why does a firm decide to serve a foreign market through foreign production rather than exports? The decision revolves around the so-called proximity-concentration trade-off, where MNEs compare trade costs to the costs of producing at several locations. The advantage of producing in a single location to achieve scale economies is compared to the reduction in trade cost achieved when production takes place at several locations close to the local market. The proximity-concentration tradeoff has resulted in the idea of two primary forms of FDI, horizontal and vertical. The distinction between these forms has been fundamental for modeling MNEs and FDI, Markusen (2002). Horizontal FDI means that an MNE replicates the same activities in several different geographical locations, whereas vertical FDI implies that an MNE locates production stages according to factor costs. MNEs existing as a result of horizontal and vertical FDI are classified as horizontal and vertical MNEs, respectively.

Vertical and horizontal FDI have different motives. Horizontal FDI occurs when the motive of the MNE is primarily market-seeking and the firm wants to satisfy foreign market demand by local production. In this case there exists a foreign market with a demand that the MNE wants to serve by producing close
to the market. A reason for this might be that it is necessary to adapt the product to the preferences of local customers. Higher trade costs in the form of tariffs tend to increase the incentive for horizontal FDI.

An MNE performing vertical FDI has primarily an efficiency-seeking motive, that is, the MNE exploits differences in factor costs between geographical locations. The MNE decomposes the production process geographically into separate stages according to factor intensity. For example, the labour-intensive stage of production should be located where labour costs are low. Similarly, a capital-intensive stage should be located where the cost of capital is low. Vertical FDI can be seen as a special version of the spatial product cycle model described in Andersson and Johansson (1984).

The distinction between vertical and horizontal FDI can be related to two of the research questions of the thesis, namely the determinants of FDI inflows and the relationship between FDI and trade. If FDI inflows to a host country are dominated by horizontal FDI having a market-seeking motive, the size of host country GDP should be an important determinant of FDI. The opening study of this dissertation analyses the inflows of FDI to the transition economies in Eastern Europe and finds that market-seeking FDI tends to dominate in the more successful economies. The fourth study analyses the relationship between FDI and trade. Horizontal FDI suggests that FDI and trade are substitutes whereas vertical FDI suggests a complementary relationship.

The focus on a horizontal / vertical distinction of FDI and MNEs has strongly dominated trade theory models incorporating FDI. Two of the earliest models of vertical and horizontal MNEs are presented in Helpman (1984) and Markusen (1984), respectively. Helpman (1984) is a general equilibrium model based on differences in factor endowments, where vertical MNEs locate production according to factor intensities, whereas Markusen (1984) presents a horizontal model of MNEs, where FDI is driven by firm-level scale economies.

The 1990s saw an increasing number of trade models incorporating international production and MNEs. Modeling efforts were still based on the distinction between horizontal and vertical FDI since these were believed to be the main forms of FDI. Markusen (2002) provides an overview of how new trade theory models have incorporated MNEs and foreign direct investment, with a focus on general equilibrium models, but some examples of this type of studies might be instructive. Brainard (1993) presents a two-sector, two-country general equilibrium model, where firms choose between exports and foreign investment. The choice is determined by the tradeoff between proximity to the market and scale economies at the plant level providing advantages to concentrating production in one country. In the model, national firms can co-exist with MNEs in equilibrium. Brainard (1997) is an econometric study of MNEs. Using bilateral data for 27 economies with affiliate activity with the U.S., she finds that higher transport costs and foreign trade barriers result in an increase in FDI, providing support for a horizontal model of FDI. Markusen
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and Venables (1998) develop a two-country general equilibrium model where both national and multinational firms arise endogenously. Simulation results imply MNEs become more important when countries are similar in size and relative endowments. The simulations also indicate that MNEs tend to arise when firm-level scale economies and tariff or transport costs are large relative to plant-level scale economies confirming the results found by Brainard (1993). Most models find support for horizontal rather than vertical FDI. Table 9 shows that FDI in the service sector is increasing. This could be one of the explanations for the dominance of horizontal FDI since investments in the service sector by nature are horizontal. In order to be able to provide the service to the final consumer, production has to be located close to the consumer.

The framework of these general equilibrium models of FDI can also be used for studies not primarily aimed at analysing the form FDI takes. An example is Markusen and Zhang (1999), who investigate which host country characteristics that attract FDI and why developing economies only receive small inflows of FDI despite being labour abundant. Markusen and Zhang construct a general equilibrium model based on a high income country and a country abundant in unskilled labour. Simulation indicates that small economies receive less FDI per capita than larger ones and their lack of skilled labour can be an explanation for the small inflows of FDI.

4.4 Knowledge-capital and complex FDI forms

The classification of FDI into a horizontal and a vertical form has recently been extended by the introduction of the concept of knowledge-capital which has added more realism to the strict distinction between horizontal and vertical FDI. According to Markusen (1995), MNE firm-specific advantages are primarily based on knowledge-capital, consisting of intangible assets such as patents, human capital (skilled engineers, for example), trademarks or brand name. Markusen (1995) points to the significance of knowledge-capital for MNEs and claims it is this fact that primarily provides MNEs with an opportunity for international production. Markusen argues that MNEs tend to have large R&D expenditures and technically advanced products suggesting knowledge-capital is important. Knowledge-based assets share characteristics giving rise to FDI. Firstly, it is easy and inexpensive to transfer knowledge-based assets to new geographical locations. Secondly, knowledge has a joint character. It can create a flow of services at several production facilities without affecting its productivity.

Markusen (1995) argues that the importance of knowledge for MNEs has implications for the choice between licensing and foreign production. The character of knowledge means it can be copied at low cost by a potential licensee that instead starts its own business. Therefore, licensing increases the risk of the MNE losing its firm-specific advantage through technology spillovers, which explains why an MNE prefers to internalise and choose FDI.
According to this reasoning, the growing importance of knowledge for MNE activities can be an important explanation for the surge in global FDI during the last decades as described in Section 3. MNE dependence on knowledge-capital provides a strong incentive for internalising ownership-advantages resulting in larger volumes of FDI.

To encompass the importance of knowledge, models have been constructed in an attempt to formalise the idea of a knowledge-capital based MNE, see Markusen et al. (1996) and Markusen (1997). The two-country, two-goods, two sectors, models presented in these papers allow combinations of vertical and horizontal MNEs as well as national firms to arise endogenously. Carr et al. (2001) construct a model that can be used for empirical testing of the theory of a knowledge-based MNE. The model incorporates both horizontal and vertical motives for FDI, and econometric testing supports the idea that MNEs are characterised by knowledge-based assets.

Markusen and Maskus (2002) use a general equilibrium framework to determine the importance of horizontal, vertical and knowledge-capital models of MNEs. Computer simulations are performed to test the three alternative models of FDI. Simulation along with estimation of the models based on data for U.S. FDI provides strong support for the horizontal model and rejects the vertical model. The results suggest FDI is most likely to take place between countries similar both in relative endowments and size. This can explain the conclusion from Section 3.2 that most FDI currently flows between the developed economies as described in Table 4. Markusen and Maskus (2002) also provide strong support for knowledge-capital FDI but cannot distinguish it from the horizontal model of FDI.

How does the distinction between vertical and horizontal MNEs fit the form of MNEs actually observed? While studies such as Markusen and Maskus (2002) suggest horizontal MNEs and FDI tend to dominate, empirical studies using detailed firm-level data indicate the existence of more complex forms of FDI. Feinberg and Keane (2005) argue that actual MNE forms seldom can be classified as purely vertical or horizontal. Using firm-level data for U.S. MNEs with affiliates in Canada, they find that only 31 per cent of the firms in the dataset could be classified as purely vertical or horizontal. Similarly, Hanson et al. (2001), using detailed data on U.S. MNEs, conclude that the actual choice of strategies done by MNEs is too varied to fit into the distinction between horizontal and vertical FDI.

These empirical observations indicating the existence of more complex forms of FDI have recently resulted in FDI models where MNEs are not strictly defined as being vertical, horizontal or based on knowledge capital. Yeaple (2003) presents a three-country model where MNEs follow so-called ‘complex integration strategies’. In the model, MNEs perform FDI in order both to minimise transport costs and take advantage of differences in factor costs simultaneously. Consequently, MNEs are integrated both vertically and horizontally. The model shows how complex integration strategies result in a
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... complicated structure of FDI determined by complementarities between host countries.

Ekholm et al. (2004) model export-platform FDI as an additional form of FDI providing a further example of a complex MNE integration strategy. Ekholm et al. define export-platform FDI as MNE production in a host economy when the output is sold in third markets and not in the parent or host country market. The objective of the MNE is to create an export-platform in the host economy. Ekholm et al. argue that export-platform FDI cannot be classified as either horizontal or vertical FDI since it shares characteristics of both forms of FDI. Ekholm et al. construct a three-country model with two high-cost countries and one low-cost country. Export-platform FDI occurs when a firm in a large high-cost country constructs a plant in the low-cost country in order to supply the other high-cost country. Numerical simulations of the model are performed in order to find conditions resulting in export-platform FDI. The likelihood for this form of FDI is determined by the interaction of shipping costs and cost advantages between the three countries. What about empirical observations of export-platform FDI? Ireland is an example of a host country that has received substantial inflows of export-platform FDI. Barry and Bradley (1997) argue that foreign firms perform FDI in Ireland to produce for export rather than to satisfy local demand. FDI inflows to Ireland have been dominated by U.S. MNEs strongly focused on exporting their output to the rest of the EU.

5. Host country effects of FDI inflows

This thesis focuses on the effect of FDI on host countries and the relationship between FDI and host country conditions. The aim of this section is to provide an overview of some of the effects that FDI inflows can have on a host country. Examples include positive effects such as improved access to export markets, creation of tax revenues and improvement of the balance of payments. However, FDI inflows can also have detrimental effects. An MNE may have a negative effect on competition and possibly force local firms out of business. Another fear is that MNE activities can result in environmental degradation. This section limits itself to a discussion of spillovers, employment effects and institutions since these topics are related to the research questions of the thesis. Lipsey (2002) presents a thorough overview of host country effects of FDI.
5.1 Technology spillovers from FDI

The potential for technology spillovers from FDI is a positive externality of FDI that host countries hope to benefit from. Blomström and Kokko (2003) suggest the possibility of technology spillover is one of the major reasons host country governments try to attract FDI inflows. What is the theoretical underpinning for technology spillovers through FDI? As described in Section 4.4, Markusen (1995) claims that the MNEs of today are characterised as being knowledge-intensive in the sense of having high R&D expenditures and technically advanced products. Earlier we described Hymer’s idea that an MNE needs a firm-specific advantage in order to operate profitably in a foreign market. Based on the importance of knowledge capital for MNEs, superior technology is likely to be a common firm-specific advantage. If the MNE fails to internalise all of the returns to its technology, it gives rise to a positive externality. The question to be asked is how and to what extent superior MNE technology can spillover to domestic firms.

Spillovers can be voluntary or involuntary. Javorcik (2004) argues that for backward linkages, where an MNE interacts with a domestic supplier, the MNE has an interest in a spillover taking place in order to allow the supplier to provide the MNE with a high quality input. Involuntary spillovers occur when domestic firms are able to appropriate information regarding the MNE technology. Reverse engineering or hiring of MNE employees can provide domestic firms with this information as suggested by Blomström et al. (2000). Glass and Saggi (1998) analyse how the quality of technology transferred from a developed to a developing country through FDI is linked to innovation and imitation. The model suggests the interesting possibility that, for large technology gaps, imitation can, in fact, make technology transfer through FDI more attractive for firms in the developed country. The process of imitation improves the technological level allowing for FDI in production of higher quality goods.

When technology spillovers do take place, they are believed to have the potential to improve the productivity of domestic firms and thereby stimulate economic growth. This alleged productivity-enhancing ability of direct investments has stimulated a considerable amount of empirical research using micro-level data such as Haddad and Harrison (1993) and Aitken and Harrison (1999). Empirical results have been mixed so far, however. The relation between FDI and economic growth has also been analysed on the macro-level, see for example Borensztein et al. (1998). The third paper of this thesis includes a more detailed discussion of spillovers from FDI and analyses the relationship between FDI inflows and host country economic growth on the macro level.
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5.2 Employment effects

A fear among workers and labour unions is that investments abroad by source country firms may result in that production facilities are closed-down and that workers are made redundant in the source country. This fear is normally based on the idea of domestic production being shifted abroad in order to take advantage of lower labour costs. The discussion of host country employment effects can therefore not be separated from a discussion of employment effects in the source country.

Ekholm (2004) provides a helpful discussion of employment effects of FDI flows. It is likely that vertical FDI results in shifts of production from source to host country in order to take advantage of differences in factor prices. However, since the aim of vertical FDI is to minimise production costs, the competitiveness of the MNE should improve. Improved competitiveness implies larger market shares and a potential for expanded activities and increased demand for labour. The net total effect on host country labour demand is, therefore, determined by these two effects. The relative demand for skilled labour in the source country should increase since production requiring lower skills is shifted abroad.

For the case of horizontal FDI, there is a shift of production activities due to replacement of exports with host country production. Also in this case there will be a negative effect on labour demand in the source country due to the decrease in export production along with a positive effect due to an expansion of total activities.

Brainard and Riker (1997) study the effects of foreign expansion on parent employment. They find that affiliate expansion from a high wage country into other high wage countries has a negative effect on parent employment. However, expansion from a high wage into a low wage country has a positive effect on parent employment due to complementary activities. Braconier and Ekholm (2000) find weak evidence that expansion into high wage countries has a negative effect on Swedish parent employment, while Konings and Murphy (2001) find little evidence for shifts of employment between high and low wage countries.

Employment effects of FDI cannot be studied separately from the relationship between FDI and trade. The effect on source country export production is determined by the relationship between FDI and exports. FDI and exports can be either complements or substitutes. Baldwin and Ottaviano (2001) present a model showing how trade and FDI can be complements. The most straightforward alternative is that production of goods for export is simply replaced by local production in the host country. However, it is possible that the foreign production will create a demand for goods produced by the parent MNE or other firms in the source country. These exports can, therefore, potentially give rise to increased production in the source country implying positive effects on employment. These effects might not necessarily arise in the
same industry. The total effect on the source country labour market of FDI outflows, therefore, depends on whether FDI and exports (trade) are complements or substitutes.

There has been considerable empirical research trying to determine the exact relationship between FDI and trade. Some of the early studies, such as Horst (1972), found that FDI was a substitute for trade. However, evidence now leans toward a complementary relationship; see for example Lipsey and Weiss (1984) and Brenton et al. (1999). The fourth study of the dissertation studies the relationship between FDI and trade in East Asia.

FDI inflows are also likely to affect host country wages. Do MNEs pay higher wages than domestic firms? MNEs are often accused of exploiting workers in developing economies. Still, there is strong evidence from empirical studies of foreign-owned firms paying higher wages than domestic firms, see for example Blomström (1983). However, evidence of an effect on the average wage level is more limited, but Lipsey (2002) points to a positive effect from FDI activity.

5.3 FDI inflows and host country institutions

According to North (1990), the function of institutions is to reduce transaction costs. This is achieved through putting constraints on the behaviour of economic agents to avoid opportunistic behaviour. What is the link between institutions and FDI? The quality of a country’s institutions affects the willingness of foreign firms to start operations in the country. Earlier research has shown how poor host country institutions indeed tend to diminish inflows of FDI. Recently, research having an institutional perspective has developed an interest in analysing the relationship between FDI and the existence of corruption in host countries, see for example Ades and Di Tella (1999) and Wei (2000). Providing a clear cut definition of corruption is difficult. The second study of this thesis uses the concept of bureaucratic corruption in order to describe a corrupt behaviour among government officials causing increased costs for MNE operations. The study argues that the existence of bureaucratic corruption in many developing economies is a result of underdeveloped market economy institutions.

Earlier empirical studies, such as Wei (2000), have found that host country corruption reduces the inflow of FDI. The problem of host country corruption from the perspective of an MNE is that it increases the costs which the MNE has for conducting business. Therefore, corruption would tend to deter MNEs from investing and diminishes inflows of FDI in accordance with the results in Wei (2000). The second study of the thesis finds that corruption reduces FDI inflows to developing economies.

However, is it possible that an MNE performing FDI in a host country can affect the severity of corruption? North (1990) claims that organisations in the form of firms or political parties can affect institutions. An MNE
contemplating investment in a host country results in a bargaining situation between the MNE and the host country government. The negotiation of investment deals is, therefore, a possible channel through which MNEs can affect host country institutions. The MNE could demand that the legal framework is improved in order to decrease the severity of corruption. It might also be the case that a legal framework is in place but enforcement of the framework is lacking.

How could an MNE affect institutions after it has entered the host country? If an MNE increases its productive activities in the host country, it will achieve a growing influence on the economy. The MNE might, therefore, be more and more reluctant to accept corrupt behaviour. MNE interaction with local firms might influence the behaviour of these firms and also make them question existing business practices. The second study of the dissertation includes a more thorough discussion of these issues. So far, very little research on the ability of FDI to affect host country institutions has been performed.

6. Outline of the thesis

The thesis consists of an introductory chapter followed by four studies, all of which are primarily empirical. In order to provide readers with an overview of the thesis, this section presents summaries of the included studies. The first study tries to find determinants of FDI inflows to the transition economies in Eastern Europe. The second study analyses how host country corruption affects the volume of FDI inflows. The following two studies investigate how FDI inflows affect host countries. The third paper examines whether FDI has a positive effect on the rate of economic growth in host countries, whereas the fourth and final paper analyses the relationship between FDI and exports using East Asia as the region of study.

6.1 FDI inflows into the transition economies of Eastern Europe: magnitude and determinants

There exist a substantial number of studies of determinants of FDI inflows. A majority of these studies has focused on developed or developing economies. However, the transition process in Eastern Europe has created a very interesting setting for research on the effect of host country conditions on FDI inflows. Capital inflows have been vital for the transition economies in order to restructure formerly state-owned firms and replace incumbent management. Based on the importance of FDI for these economies, the first study of the dissertation has chosen Eastern Europe as a case for analysing determinants of FDI.
The chapter describes how the start of the transition from a system based on command economy to a system based on market economy in the early 1990s resulted in a dramatic policy change. The old system had prohibited foreign involvement in the domestic economy and the new system encouraged actively foreign investments. At the start of the transition process, the stock of FDI in the region was minimal, but the paper describes how the restructuring of the transition economies and the creation of legal frameworks allowing for capital inflows have resulted in large flows of FDI to Eastern Europe. The paper separates the transition economies into CEE (Central and Eastern Europe) and CIS (Commonwealth of Independent States) economies. The CEE group consists of the more advanced transition economies (such as Hungary and Poland), while the CIS group consists of former Soviet republics. The paper shows that the CEE group of economies has received approximately five times as much FDI per capita as the CIS group. There are also major differences in the amount of FDI inflows individual economies have managed to attract, particularly in the CIS group. The paper proceeds to explain these differences.

The study distinguishes between ‘traditional’ determinants based on the motive for FDI and ‘transition-specific’ determinants related to the special conditions resulting from the transition process such as privatisation. The paper uses panel data for 25 transition economies during the period 1993 to 2003 and extends earlier research by including data for the CIS economies, which have been largely ignored in empirical studies of FDI.

Separating the total dataset into a CEE and a CIS sub-sample, the empirical analysis contributes to earlier research by the finding that market-seeking FDI, where the motive for FDI is to satisfy the local demand for goods, is important for the CEE group but not for the CIS group. Resource-seeking investment in order to exploit natural resources cannot explain the large FDI inflows to the CEE economies but is important for the distribution of FDI among the CIS economies. The analysis only finds weak evidence for efficiency-seeking FDI with the objective of minimising production costs. Regarding the transition-specific variables, the effects of these variables on FDI inflows should be independent of the type of FDI, and the analysis indeed shows that these variables affect FDI inflows both to the CEE and the CIS economies. Successful progress in transition is particularly important.

6.2 Bureaucratic corruption, MNEs and FDI

The second study investigates the effect of host country corruption on the volume of FDI inflows. The aim of the study is to analyse the relationship between MNE operations in the form of FDI inflows and host country bureaucratic corruption. The paper contributes to the limited empirical research performed in this area. An MNE contemplating foreign direct investment must take the host country institutional framework into account since it affects the expected costs of operations. The developed economies have so far been more
successful than the developing and transition economies in building institutional frameworks. The existence of wide-spread corruption in many of the developing economies might be the most obvious consequence of weak market economy institutions. The paper argues that a lack of market economy institutions in the host country provide opportunities and incentives for bureaucratic corruption and increase transaction costs and uncertainty. Corruption should deter MNEs from investing in the host country since it decreases the expected profitability of FDI.

The study contributes to earlier research on the relationship between corruption and FDI inflows by developing a model describing how interaction between foreign MNEs and host country bureaucrats can result in corruption. The model shows how corruption causes an increase in the MNE cost of operating in the host country and, therefore, reduces the expected profitability of FDI. Consequently, corruption in the host country reduces the volume of FDI inflows. The model also provides some suggestions of host country policies which could reduce the severity of corruption.

The empirical part of the paper tries to verify the model’s conclusion that corruption deters MNE activity by curbing the inflow of FDI. Using panel data for 99 economies during the period 1996 to 2002, the paper is able to show that host country corruption has a significant negative effect on FDI inflows. Furthermore, the results indicate host country corruption has a negative effect on FDI inflows to developing economies but not to developed economies. A possible explanation for this is that the nature of corruption in developing economies implies a higher uncertainty. Decentralised corruption in developing economies could result in a need for the MNE to pay bribes to several bureaucrats or government agencies before it can ensure access to the government service.

6.3 The effects of FDI inflows on host country economic growth

Do inflows of FDI tend to increase economic growth in the host country? Theoretically, it is easy to argue that inflows of FDI should have a positive effect on economic growth. However, the results of earlier studies of the relationship between FDI and economic growth are mixed, providing a strong incentive for further empirical studies. Therefore, the aim of the third study is to analyse how FDI inflows affect host country economic growth. This aim provides several interesting research questions. For example, are there differences in the growth-enhancing effect of FDI between different types of economies? Is there a host country threshold level of technology that needs to be reached in order for FDI inflows to have a positive effect on economic growth in developing economies? Are there other host country characteristics which are important for the potential of FDI to affect the rate of economic growth?
The paper discusses and models the effects of FDI inflows on host country economic growth. Based on this discussion the paper argues that technology spillovers provide the strongest potential for FDI to enhance host country economic growth. The model is able to show that when foreign MNEs have a technology advantage over domestic firms, MNE entry in the form of FDI has the potential to result in a positive externality based on a spillover of technology from the MNE to domestic firms. The productivity of these firms is thereby improved, resulting in a potential increase in the rate of economic growth.

The empirical analysis attempts to verify whether FDI inflows indeed enhance economic growth. The paper investigates whether there are differences in the growth enhancing effect of FDI between developed and developing host economies using both cross section and panel data regressions on a dataset of 90 countries during the period 1980 to 2002. The paper contributes to earlier empirical research by the finding that FDI inflows have a positive effect on host country economic growth in developing but not in developed economies. The latter finding may reflect that in a mature market economy there is no difference between domestic and transborder investments and acquisitions.

6.4 FDI and exports: the case of the high performing East Asian economies

The fourth and final study analyses the relationship between FDI and exports. This is a very interesting research topic since the theoretical framework allows flows of FDI and trade to be either complements or substitutes depending on the form that FDI takes. For example, market-seeking FDI can function as a substitute for MNE exports but it is also possible that investment in a host country leads to an increase in the trade of intermediate goods used in production.

The study has chosen East Asia as the region of study and argues that East Asia is particularly interesting due to the fundamental importance FDI and trade has had for the successful economic development during recent time.

The paper focuses on the eight ‘high-performing’ economies China, Hong Kong, Indonesia, Korea, Malaysia, Singapore, Taiwan and Thailand. The paper describes the increasing importance of FDI and trade for these economies during the past decades. There have been large increases in both FDI inflows and trade flows. The empirical part of the paper analyses the relationship between inflows and outflows of FDI and exports. Individual time series regressions for each of the eight economies as well as panel data analysis using data for the period 1980 to 2003 indicates that FDI inflows tend to have a positive effect on host country exports. A possible explanation for this relationship can be export platform FDI. According to this strategy, MNEs invest in the host country in order to export the output to third countries. The results for the relationship between FDI outflows and exports are mixed,
indicating that outflows of FDI can function as both a complement and substitute for exports.
References


Brainard, S.L. (1993), A simple theory of multinational corporations and trade with a trade-off between proximity and concentration, NBER
Chapter 1. Introduction and Summary of the Thesis


direct investment, IIIS Discussion Paper No. 50, Dublin, Institute for
International Integration Studies.
Feinberg, S.E. and Keane, M.P. (2005), Accounting for the growth of MNC-
based trade using a structural model of U.S. MNCs., University of
Maryland, manuscript.
Glass, A.J. and Saggi, K. (1998), International technology transfer and the
Haddad, M. and Harrison, A. (1993) Are there positive spillovers from direct
foreign investment? Evidence from panel data for Morocco, *journal of
Hanson, G.H., Mataloni, R.J. and Slaughter, M.J. (2001), Expansion
Helpman, E. (1984), A simple theory of international trade with
multinational corporations, *Journal of Political Economy*, 92(3), 451-
471.
Cambridge, Mass.: The MIT Press.
Horst, T. (1972), The industrial composition of US exports and subsidiary
Hymer, S.H. (1960), The International Operations of National Firms, PhD
Monetary Fund, Washington, International Monetary Fund.
IMF and OECD (2003), *Foreign Direct Investment Statistics: How Countries
Measure FDI*, Washington, International Monetary Fund.
IMF (2004a), Foreign Direct Investment, Trends, Data availability,
IMF (2004b), *Direction of Trade Statistics Yearbook*, Washington,
International Monetary Fund.
Javorcik, B. (2004), Does foreign direct investment increase the productivity
of domestic firms? In search of spillovers through backward linkages,
*American Economic Review*, 94(3).
Konings, J., and Murphy, A. (2001), Do multinational enterprises substitute
parent jobs for foreign ones? Evidence from European firm-level panel
data, CEPR Working Paper No. 2972, London, Centre for Economic
Policy Research.
Lipsey, R.E. (2002), Home and host country effects of FDI, NBER Working
Paper No. 9293, Cambridge, Mass.: National Bureau of Economic
Research.


Chapter 2. 
FDI Inflows to the Transition Economies in Eastern Europe: Magnitude and Determinants*

Andreas Johnson

Abstract
This paper shows that there are large differences in the volume of FDI that individual European transition economies have attracted and tries to find determinants that can explain this distribution of FDI, using panel data. This paper makes a distinction between ‘traditional’ determinants based on the motive for FDI and ‘transition-specific’ determinants. The empirical analysis contributes to earlier research by separating the transition economies into two groups, CEE and CIS countries. The CEE group consists of countries with a much higher GDP per capita than the CIS group, and this is reflected in the observation that the FDI flows to the CEE are primarily driven by a market-seeking motive while resource-seeking investment can explain the distribution of FDI among the CIS economies. This paper also concludes that transition performance and the choice of primary privatisation method are important in explaining FDI inflows to the transition economies. The analysis only finds weak evidence for efficiency-seeking FDI into the region.

Keywords: foreign direct investment, Eastern Europe, transition, privatisation
JEL classification: F21, F23, P21

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Chapter 3.
Bureaucratic Corruption, MNEs and FDI

Tobias Dahlström and Andreas Johnson

Abstract
This paper adds to the limited number of studies analysing the relationship between host country corruption and FDI inflows. A model describes the incentives foreign MNEs and host country bureaucrats have for engaging in corruption and shows how corruption increases the MNE costs of operations in the host country. The model predicts that the costs caused by corruption reduce FDI inflows. Regression analysis using panel data finds that host country corruption has a significant negative effect on FDI inflows to developing economies but not for developed economies.

Keywords: corruption, foreign direct investment, multinational enterprises
JEL classification: F21, F23, D73
Chapter 4.
The Effects of FDI Inflows on Host Country Economic Growth

Andreas Johnson

Abstract
This paper discusses and models the potential of FDI inflows to affect host country economic growth. The paper argues that FDI should have a positive effect on economic growth as a result of technology spillovers and physical capital inflows. Performing both cross-section and panel data analysis on a dataset covering 90 countries during the period 1980 to 2002, the empirical part of the paper finds indications that FDI inflows enhance economic growth in developing economies but not in developed economies.

Keywords: foreign direct investment, economic growth, developing economies, developed economies

JEL classification: F21, F23, O40
Chapter 5. FDI and Exports: the Case of the High Performing East Asian Economies

Andreas Johnson

Abstract
The paper investigates the flows of FDI and trade in eight high performing East Asian economies with a focus on the relationship between FDI and host country exports. The development and importance of FDI and trade for the region is described. The empirical part of the paper examines the relationship between FDI and host country exports, using data for the period 1980 to 2003. Time series regressions for individual economies as well as panel data estimation indicate that FDI inflows have a significant and positive effect on host country exports, suggesting that export-platform FDI may be important for the East Asian economies. No clear link between outflows of FDI and exports was found, allowing FDI outflows to function as both a complement and a substitute for source country exports. Granger causality tests find indications of FDI inflows causing exports, providing further evidence that the export-platform FDI strategy applies for the East Asian economies.

Keywords: foreign direct investment, East Asia, international trade, exports
JEL classification: F21, F23, F14
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