

FOREIGN DIRECT INVESTMENT - GROWTH NEXUS: A REVIEW OF THE RECENT LITERATURE

OZTURK, Ilhan*

Abstract

This paper reviews the literature dealing with the effects of FDI on Growth. Numerous empirical studies have been conducted to investigate whether growth is influenced by FDI. The overall evidence is best characterized as mixed as the results are regarding to the importance of labor costs, openness, investment climate, countries considered (developed vs developing) and fiscal incentives. However, free trade zones, trade regime, the human capital base in the host country, financial market regulations, banking system, infrastructure quality, tax incentives, market size, regional integration arrangements and economic/political stability are very important determinant for FDI that creates a positive impact on overall economic growth. In summary, consensus has been reached among academia and practitioners that FDI tends to have significant effect on economic growth through multiple channels such as capital formation, technology transfer and spillover, human capital (knowledge and skill) enhancement, and so on.

Key words: FDI, Economic Growth

JEL Classification: F39, O40

I. Introduction

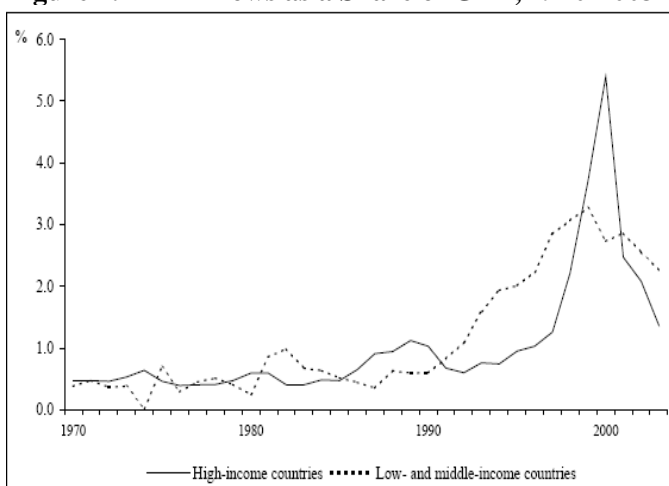
During the fluctuations of capital flows in the 1990s, foreign direct investment (FDI) was the main source of flows to developing countries. Contrary to other capital flows, FDI is less volatile and does not show a pro-cyclical behaviour. It has therefore become the “favourite capital inflows” for developing countries. The FDI increased rapidly during the late 1980s and the 1990s in almost every region of the world revitalizing the long and contentious debate about the costs and benefits of FDI inflows. On one hand many would argue that, given appropriate policies and a basic level of development, FDI can play a key role in the process of creating a

* Faculty of Economics and Administrative Sciences, Cag University, 33800, Mersin, Turkey. Email: ilhanozturk@cag.edu.tr

better economic environment. On the other hand potential drawbacks do exist, including a deterioration of the balance of payments as profits are repatriated and negative impacts on competition in national markets. At present, the consensus view seems to be that there is a positive association between FDI inflows and growth provided receiving countries have reached a minimum level of educational, technological and/or infrastructure development.

As mentioned by Busse and Groizard (2005), the enormous increase in FDI flows across countries is one of the clearest signs of the globalisation of the world economy over the past 20 years. Total FDI flows increased from some US \$55 billion in 1985 to US \$1,511 billion before falling back to US \$573 billion in 2003 (World Bank 2005). Even as a share of Gross Domestic Product (GDP), we do observe an enormous increase in the significance of FDI. In high-income countries, this share increased from some 0.5 to 1.0 per cent in the 1980s to more than 5 per cent in 2000 and then declined to 1.4 per cent in 2003 (Figure 1). While the increase in FDI inflows was less drastic in low- and middle-income countries, the percentage of FDI in GDP remained at more than 2 per cent after the year 2000, indicating a slightly higher significance of FDI flows in developing countries in the most recent period.

Figure 1. FDI Inflows as a Share of GDP, 1970-2003



Source: Busse and Groizard (2005)

In summary, consensus has been reached among academia and practitioners that FDI tends to have significant effect on economic growth through multiple channels such as capital formation, technology transfer and spillover, human capital (knowledge and skill) enhancement, and so on. The rest of the paper is organized as follows: Section II describes the theory. Section III reports the literature survey, and the last section is the conclusion.

2. Theory

The relationship between FDI and economic growth has motivated a voluminous empirical literature focusing on both developed and developing countries. Several studies find a clear positive link, while others do not. Research that focuses on data from only less developed countries (LDC's) has tended to find a clear positive relationship, while studies that have ignored this distinction, or have focused on data from only developed countries (DC's), have found no growth benefit for the recipient country. Neoclassical models of growth as well as endogenous growth models provide the basis for most of the empirical work on the FDI-growth relationship. The relationship has been studied by explaining four main channels: (i) determinants of growth, (ii) determinants of FDI, (iii) role of multinational firms in host countries, and (iv) direction of causality between the two variables (Chowdhury and Mavrotas, 2005).

According to the neoclassical growth theory, economic growth generally comes from two sources: factor accumulation and total factor productivity (TFP) growth (Felipe, 1997). Of these two sources, the empirical literature usually focuses more on studying the growth of factor inputs than the growth in TFP. This is due to the fact that factor growth is easier to quantify and analyze while difficulties abound in the measurement of TFP growth due to the lack of appropriate econometric modeling techniques as well as unavailability of appropriate data.

As opposed to the limited contribution that the neoclassical growth theory accredits to FDI, the endogenous growth literature points out that, FDI can not only contribute to economic growth through capital formation and technology transfers (Blomstrom et al., 1996; Borensztein et al., 1995) but also do so through the

augmentation of the level of knowledge through labor training and skill acquisition (de Mello 1997, 1999).

In the framework of endogenous growth models, several channels are at work. More precisely, three main channels can be detected through which FDI affects growth. First, FDI increases capital accumulation in the receiving country by introducing new inputs and technologies (Dunning, 1993; Blomstrom et al., 1996; Borensztein et al. 1998). Second, it raises the level of knowledge and skills in the host country through labor and manager training (de Mello, 1996, 1999). Third, FDI increases competition in the host country industry by overcoming entry barriers and reducing the market power of existing firms.

As mentioned by Chowdhury and Mavrotas (2005), a large number of empirical studies on the role of FDI in host countries suggest that FDI is an important source of capital, complements domestic private investment, is usually associated with new job opportunities and enhancement of technology transfer and spillover, human capital (knowledge and skill) enhancement, and boosts overall economic growth in host countries¹. On the other hand, a number of firm-level studies do not lend support for the view that FDI promotes economic growth².

Concerning developing countries, macro-empirical work on the FDI-growth relationship has shown that—subject to a number of crucial factors, such as the trade regime, the human capital base in the host country, financial market regulations, banking system and

¹ See de Mello (1997, 1999) for a comprehensive survey of the nexus between FDI and growth as well as for further evidence on the FDI-growth relationship, Mody and Murshid (2002) for a recent assessment of the relationship between domestic investment and FDI, Asiedu (2002), Chakrabarti (2001) and Tsai (1994) on the determinants of FDI, Blomstrom and Kokko (1998) for a critical review of the role of FDI in technology transfer, and Asiedu (2003) for an excellent discussion of the relationship between policy reforms and FDI in the case of Africa.

² See Carkovic and Levine (2003) and the references therein. Hanson (2001) has found weak evidence that FDI generates positive spillovers for host countries. See Gorg and Greenaway (2004) for the comprehensive discussion at the firm level.

the degree of openness in the economy—FDI has a positive impact on overall economic growth³.

More recently, a series of papers have been published that examined the linkages between the effectiveness and regulations of financial markets, FDI and growth. In essence, Hermes and Lensink (2003), Durham (2004) and Alfaro et al. (2004) all find that countries with better financial systems and financial market regulations can exploit FDI more efficiently and achieve a higher growth rate. These studies argue that countries need not only a sound banking system, but also a functioning financial market to allow entrepreneurs to obtain credit to start a new business or expand an existing one. The emerging literature on FDI stipulates that FDI's positive impact on growth depends on local conditions and absorptive capacities. Essential among these capacities is financial development. These results imply that countries should reform their domestic financial system before working on attracting FDI. Vast literature on the determinants of FDI in developing countries clearly indicates the importance of infrastructure, skills, macroeconomic stability and sound institutions for attracting FDI flows⁴.

During the last decade, a number of interesting studies of the role of foreign direct investment in stimulating economic growth has appeared. In the survey of de Mello (1997), two main channels through which FDI may be growth enhancing are listed. First, FDI can encourage the adoption of new technology in the production process through capital spillovers. Second, FDI may stimulate knowledge transfers, both in terms of labour training and skill acquisition and by introducing alternative management practices and better organizational arrangements. A survey by OECD (2002) underpins these observations and documents that 11 out of 14 studies

³ See Balasubramanyam et al. (1996, 1999) and Borensztein et al. (1998), and Nair-Reichert and Weinhold (2001) for a critical assessment of the empirical literature. See Aitken and Harrison (1999) and Harrison (1994) regarding recent assessments for the micro studies at the firm level that examine the impact of FDI on growth in developing countries.

⁴ See Borghesi and Giovannetti (2003) for the role of institutions in attracting FDI.

have found FDI to contribute positively to income growth and factor productivity. According to de Mello (1997) and OECD (2002), FDI affects growth is likely to depend on the economic and technological conditions in the host country. In particular, it seems that developing countries have to reach a certain level of development, in education and/or infrastructure, before they are able to capture potential benefits associated with FDI. Therefore, FDI seems to have more limited growth impact in technologically less advanced countries. The main result of OECD survey (2002) is that there seems to be a strong relationship between FDI and growth. Although this relationship is highly heterogeneous across countries generally agree that FDI, on average, has an impact on growth in the Granger-causal sense.

While the literature has heeded the importance of FDI to growth and development, it also realizes that economic growth could be an important factor in attracting FDI flows. The importance of economic growth to attracting FDI is closely linked to the fact that FDI tends to be an important component of investing firms' strategic decisions.

As indicated in several empirical studies⁵, according to the market size hypothesis, the markets with large population size and/or rapid economic growths (as measured by real GDP per capita or its growth) tend to give multinational firms more opportunities to generate greater sales and profits and thus become more attractive to their investments. Wheeler and Mody (1992) have tried to determine the relative importance of these two explanatory variables and found that market size is more important for developed countries, while per capita GDP for developing countries.

Next to the direct increase of capital formation of the recipient economy, FDI may also help increasing growth by introducing new technologies, such as new production processes and techniques, managerial skills, ideas, and new varieties of capital goods. In the new growth literature the importance of technological change for economic growth has been emphasised (Grossman and

⁵ Wang and Swain (1995); Moore (1993); Schneider and Frey (1985); Bajorubio and Rivero (1994); Frey (1984); Billet (1991); Horisaka (1993); and Eaton & Tamamura (1994).

Helpman, 1991; Barro and Sala-i-Martin, 1995). The growth rate of less developed countries (LDCs) is perceived to be highly dependent on the extent to which these countries can adopt and implement new technologies available in developed countries (DCs). By adapting new technologies and ideas (i.e. technological diffusion) they may catch up to the levels of technology in DCs. One important channel through which adoption and implementation of new technologies and ideas by LDCs may take place is FDI. The new technologies they introduce in these countries may spillover from subsidiaries of multinationals to domestic firms (Findlay, 1978). The use of new technologies may be important in contributing to higher productivity of capital and labour in the host country. The spillover may take place through demonstration and/or imitation (domestic firms imitate new technologies of foreign firms), competition (entrance of foreign firms leads to pressure on domestic firms to adjust their activities and to introduce new technologies), linkages (spillovers through transactions between multinationals and domestic firms), and/or training (domestic firms upgrade the skills of their employees to enable them to work with the new technologies) (Kinoshita, 1998; Sjöholm, 1999a).

The next question is what conditions in the host country are important to maximise the technology spillovers discussed above? In the literature it has been emphasised by some that the spillover effect can only be successful given certain characteristics of the environment in the host country. These characteristics together determine the absorption capacity of technology spillovers of the host country. Thus, FDI can only contribute to economic growth through spillovers when there is a sufficient absorptive capacity in the host country. Several country studies have been carried out, providing diverging results on the role of FDI spillovers with respect to stimulating economic growth. These studies deal with the productivity effects of FDI spillovers on firms or plants using micro level data. Whereas positive effects from spillovers have been found for, e.g. Mexico (Blomström and Persson, 1983; Blomström and Wolff, 1994; Kokko, 1994), Uruguay (Kokko et al., 1996) and Indonesia (Sjöholm, 1999b), no spillovers were traced in studies for Morocco (Haddad and Harrison, 1993) and Venezuela (Aitken and

Harrison, 1999). These diverging results may underline the crucial role of certain host country characteristics necessary to let FDI contribute positively to economic growth through spillovers. They emphasise the difference in absorptive capacity between countries to adopt FDI.

Some authors argue that the adoption of new technologies and management skills requires inputs from the labour force. High-level capital goods need to be combined with labour that is able to understand and work with the new technology. Therefore, technological spillover is possible only when there is a certain minimum, or ‘threshold’ level of human capital available in the host country (Borensztein, et al., 1998). This suggests that FDI and human capital are complementary in the process of technological diffusion. Other authors argue that the process of technological spillovers may be more efficient in the presence of well-functioning markets. Under these circumstances, the environment in which FDI operates ensures competition and reduces market distortions, enhancing the exchange of knowledge among firms (Bhagwati, 1978; Ozawa, 1992; Balasubramanyam, et al., 1996).

Some authors stress that the establishment of property rights – in particular intellectual property rights – is crucial to attract high technology FDI (Smarzynska, 1999). If intellectual property rights are only weakly protected in a country, foreign firms will undertake low technology investments, which reduces the opportunities for spillover effects and improvements of productivity of domestic firms.

3. Literature survey of empirical studies

Many empirical contributions have tried to explain the relationship between FDI and growth (see Table 1). A detailed literature survey on the effects of FDI on growth has been outlined in this section. As it can be seen in the most of these studies, FDI has positive effect on growth.

Table 1. FDI and Growth: Literature Survey

Studies	Sample	Period	Effects of FDI on Growth
Blomström (1986)	Mexico		<i>Positive</i>
Saltz (1992)	68 developing countries	1970-80	<i>Negative</i>
De Gregorio (1992)	12 Latin American Countries	1950-85	<i>Positive and significant correlation between FDI and growth.</i>
Fry (1993)	16 developing countries (5 East Asian economies)	1966-88	<i>Positive for overall sample</i>
Kokko (1994)	Mexico		<i>Positive</i>
Blomström, Kokko and Zejan (1994)	Uruguay		<i>Positive</i>
Blomström, Lipsey and Zejan (1994)	78 developing countries	1960-85	<i>Positive</i>
Borenztein et al. (1995, 1998)	69 developing countries	1970-89	<i>FDI exerts a positive effect on growth only when a minimum level of human capital exists.</i>
Balasubramanyam et al. (1996, 1999)	46 developing countries	1970-85	<i>Positive for overall sample</i>
Mody and Wang (1997)	7 Chinese coastal regions	1985-89	<i>Positive</i>
Oloffsdotter (1998)	50 developing countries	1980-90	<i>Positive</i>
Nyatepe-Coo (1998)	South East (4) Latin America (4)	1963-92	<i>Positive</i>

	Sub-Saharan Africa (4)		
Bosworth and Collins (1999)	58 developing countries (18 emerging markets)	1978-95	<i>Positive through impact on TFP</i>
De Mello (1999)	32 countries (15 OECD and 17 non-OECD)	1970-90	<i>Not strong: Positive for OECD, but negative effect for non-OECD</i>
Sjoholmn (1999a)	Indonesia	1980-91	<i>Positive</i>
Soto (2000)	44 developing countries	1986-97	<i>Positive</i>
Bende-Nabende et al. (2000)	Asia Pacific Region (5 countries)	1970-94	<i>FDI has positive effect for three out of five countries. FDI has negative effect on growth for singapore and Thailand.</i>
UNCTAD (2000)	100 LDC	1970-95	<i>Positive</i>
Bengoa (2000)	18 Latin American countries	1972-1997	<i>Positive and significant correlation between FDI and Growth if exists a minimum threshold of development associated with "social capability"</i>
Alfaro et al. (2001)	Different samples 39 countries mixed 41 developed c. 49 developing	Three periods 1981-97 1977-97 1970-95	<i>Positive</i>

	c.		
Nair-Reichert and Weinhold (2001)	24 developing countries	1971-95	<i>Significant and positive</i>
Ericsson and Irandoust (2001)	Sweeden, Norway, Denmark, Finland		<i>Causal relationship only for Sweeden</i>
Hanson (2001)			<i>Positive but weak</i>
Lensink and Morrissey (2001)	115 countries	1975-98	<i>Positive</i>
Reisen and Soto (2001)	44 countries	1986-97	<i>Positive</i>
Carkovic and Levine (2002, 2005)	72 countries	1960-1995	<i>No effect</i>
Chakraborty and Basu (2002)	India	1974-96	<i>Causality runs from real GDP to FDI. FDI in India is labor displacing</i>
Campos and Kinoshita (2002)	25 transitional economies	1990-98	<i>positive</i>
Wang (2002)	12 Asian economies	1987-97	<i>Positive</i>
Bazzoni et al. (2002)	11 MED countries	1970-99	<i>Positive</i>
Liu et al. (2002)	China	1981-97	<i>Positive</i>
Basu et al. (2003)	23 developing countries		<i>Positive but depends on trade openness</i>
Kumar and Pradhan (2002)	107 developing countries	1980-99	<i>Panel data estimations in a production function framework suggest a positive effect of FDI on growth. However, tests of causality find that in a majority of cases the direction of causation is not pronounced and in a substantial</i>

			<i>number of cases the direction of causation actually runs from growth to FDI</i>
Choe (2003)	80 countries	1971-95	<i>Positive but weak</i>
Hermes and Lensink (2003)	67 developing countries	1970-95	<i>Positive for 37 countries (Latin America and Asia region), for all others no effect</i>
Omran and Bolbol (2003)	17 Arab countries	1975-99	<i>Positive</i>
Alfaro (2003)	47 countries	1981-99	<i>FDI exerts an ambiguous effect on growth. FDI in the primary sector, however, tend to have a negative effect on growth, while investment in manufacturing a positive one. Evidence from the service sector is ambiguous.</i>
Mencinger (2003)	8 transition countries	1994-2001	<i>Robust negative causal relationship between FDI and growth</i>
Alfaro et al. (2004)	Different samples 71 countries	1975-95	<i>Positive</i>
Nath (2004)	10 transition economies of CEE	1990-2000	<i>Positive</i>
Hansen and Rand (2004)	31 developing countries	1970-2000	<i>Positive</i>
Basu and Guariglia (2005)	119 countries	1970-99	<i>Positive</i>
Nath (2005)	13 economies of CEE and CEEB	1990-2003	<i>In the presence of trade, FDI does not have any significant effect on growth</i>
Kang and Du (2005)	20 OECD countries	1981-2000	<i>No significant effect</i>
Chowdhury	Chile,	1969-	<i>GDP causes FDI in Chile and not</i>

and Mavrotas (2005)	Malaysia, Thailand	2000	<i>vice versa. There is a bi-directional causality between GDP and FDI in Malaysia and Thailand</i>
Li and Liu (2005)	84 countries	1970-99	<i>Positive</i>
Busse and Groizard (2005)	82 countries	1975-2003	<i>Effect depends on regulations and institutional framework</i>
Darrat et al. (2005)	6 MENA and 17 CEE countries	1979-2002	<i>The effect of FDI inflow on economic growth is generally negative or statistically insignificant in MENA and non-EU accession CEE countries. However, it is positive in the case of EU accession countries of the CEE region.</i>
Bacic et al. (2005)	11 transition economies	1994-2002	<i>Insignificant and mixed results</i>
Karbasi et al. (2005)	42 countries	1971-2000	<i>Positive effect. The contribution of FDI on economic growth is enhanced by its positive interaction with human capital and sound macroeconomic policies and institutional stability.</i>
Lensink and Morrissey (2006)	87 countries	1975-97	<i>Positive</i>

4. Conclusion

This paper provides an extensive survey of the literature on FDI and Growth, examining both the theory that underlies the work in this area and the results of empirical studies published since 1986. Overall, a larger number of studies appear to favour the conventional assumption that FDI has positive effect on growth. The consensus has been reached among academia and practitioners that FDI tends to have significant effect on economic growth through multiple channels such as capital formation, technology transfer and spillover, human capital (knowledge and skill) enhancement, and so on.

A number of policy implications emerge from the study. For instance, results suggest that the country's capacity to progress on economic growth will depend on its policies to promote FDI. The most efficient way to attract FDI is to focus on straighten the deficiencies on the following areas; such as free trade zones, trade regime, tax incentives, the human capital base in the host country, financial market regulations, banking system (financial system), infrastructure quality, tax incentives, market size, regional integration arrangements and economic/political stability.

References

- Aitken, B.J., and A.E. Harrison (1999) "Do Domestic Firms Benefit from Direct Foreign Investment? Evidence from Venezuela", *American Economic Review*, Vol.89, No.3, pp.605-18.
- Alfaro, L., Chanda, A., Kalemli-Ozcan, S. and Sayek, S. (2001). "FDI and Economic Growth: The Role of Local Financial Markets", Harvard Business School. Working Paper 01-083
- Alfaro, L., (2003) "Foreign Direct Investment and Growth: Does the Sector Matter?." Harvard Business School. Available at: <http://www.people.hbs.edu/lalfaro/fdisectorial.pdf>
- Alfaro, L., Chanda, A., Kalemli-Ozcan, S. and Sayek, S. (2004). "FDI and economic growth: The role of local financial markets", *Journal of International Economics*, 64, 89-112.
- Asiedu, E. (2002). "On the Determinants of Foreign Direct Investment to Developing Countries: Is Africa Different?". *World Development*, 30 (1): 107-19.
- Asiedu, E. (2003). "Policy Reform and Foreign Direct Investment to Africa: Absolute Progress but Relative Decline". Lawrence, KS: Department of Economics, University of Kansas. Mimeo.
- Bacic, K., Racic, K., and Ahec-Sonje, A. (2005) "The Effects of FDI on Recipient Countries in Central and Eastern Europe, Hamburg Institute of International Economics, available at: http://www.hwua.de/etc/EI_WS_050916/Bacic_Racic_Sonje.pdf
- Bajo-Rubio, O. and Sosvilla-Rivero, S., (1994). "An Econometric Analysis of Foreign Direct Investment in Spain", *Southern Economic Journal*, No. 61, pp. 104-20
- Balasubramanyam, V.N., Salisu, M. and Sapsford, D. (1996). "Foreign Direct Investment and Growth in EP and IS Countries", *Economic Journal*, 106, 92-105.

- Balasubramanyam, V. N., M. Salisu, and D. Sapsford (1999). 'Foreign Direct Investment as an Engine of Growth'. *Journal of International Trade and Economic Development*, 8: 27-40.
- Barro, R.J., and X. Sala-I-Martin, (1995), *Economic Growth*, Cambridge MA: McGraw-Hill.
- Basu, P., Chakraborty, C. and Reagle, D. (2003)" "Liberalization, FDI, and Growth in Developing Countries: A Panel Cointegration Approach", *Economic Inquiry*, 41, 510-516.
- Basu, P., and Guariglia, A., (2005)" "Foreign Direct Investment, Inequality and Growth" Research Paper Series 2005/41, The University of Nottingham.
- Bazzoni, S., Giani, G., and Nicolas F., (2002)" "The FDI-Growth Nexus in the Mediterranean Economies, Regional Development: Reality or Myth. Selected Papers from ERF's Ninth Annual Conference. Available at <http://www.erf.org.eg/9th%20annual%20conf/9th%20PDF%20Background/Trade/T-B%20Nicolas.PDF>
- Bende-Nabende, A., Ford, J.L., Sen, S. and Slater J., (2000), Long-run dynamics of FDI and its spillovers onto output: Evidence from the Asia-Pacific Economic Cooperation region, University of Birmingham Department of Economics Discussion Paper 00-10.
- Bengoa, M. (2000). "Inversión directa extranjera y crecimiento económico: una explicación empírica con datos de panel en países en desarrollo", XIV meeting of Asepelt, June.
- Bhagwati, J.N. (1978). "Anatomy and Consequences of Exchange Rate Regimes", *Studies in International Economic Relations*, 10, New York: NBER.
- Billet, B., (1991). *Investment Behavior of Multinational Corporations in Developing Areas*, New Brunswick, N.J., Transaction Publishers.
- Blomström, M., Persson, H., (1983). "Foreign investment and spillover efficiency in an underdeveloped economy: evidence from the Mexican manufacturing industry", *World Development*, 11 (6), pp.493-502.
- Blomstrom, M., (1986)" "Foreign Direct Investment and Productive Efficiency: The Case of Mexico", *Journal of Industrial Economics*, Vol. 15, 97-110.
- Blomström, M., Lipsey, R.E. and Zejan, M. (1994). "What explains developing country growth", NBER Working Paper No. 4132.
- Blomström, M., Kokko, A., and M. Zejan (1994). "Host Country Competition and Technology Transfer by Multinationals." *Weltwirtschaftliches Archiv*, 130, 521-533.

- Blomström, M., and E.N. Wolff (1994). "Multinational Corporations and Productivity Convergence in Mexico", in: W. Baumol, R. Nelson, and E.N. Wolff (eds.), Oxford: Oxford University Press.
- Blomstrom M., Lipsey, R.E and Zejan, M., (1996). Is Fixed Investment the Key to Economic Growth?, *Quarterly Journal of Economics*, No. 111, pp. 269-276.
- Blomstrom, M., and A. Kokko (1998). "Multinational Corporations and Spillovers". *Journal of Economic Surveys*, 12: 247-77.
- Borensztein, E., De Gregorio, J., and Lee, J.W., (1995). How Does Foreign Direct Investment Affect Economic Growth?, NBER Working Paper 5057.
- Borensztein, E., De Gregorio, J. and Lee, J.-W. (1998). "How does foreign direct investment affect economic growth", *Journal of International Economics*, 45, 115-135.
- Borghesi, S. and Giovannetti, G. (2003). "The role of institutional set-up in the success of FDI: do countries attracting FDI grow at higher rates?", Preliminary draft, October 2003
- Bosworth, Barry P. and Susan M. Collins, (1999). "Capital Flows to Developing Economies: Implications for Saving and Investment," Brookings Papers on Economic Activity:1, Brookings Institution, p. 143-69.
- Busse, M. and Groizard, J.L. (2005). "FDI, Regulations and Growth", available at: <http://webs.uvigo.es/vijjpe/pdf/BUSSEGRIZARD.pdf>
- Campos, N. F. and Kinoshita, Y. (2002). "Foreign Direct Investment as Technology Transferred: Some Panel Evidence from the Transition Economies." William Davidson Working Paper Number 438.
- Carkovic, M. and Levine, R. (2002). "Does Foreign Direct Investment Accelerate Economic Growth", University of Minnesota, Working Paper.
- Carkovic, Maria and Ross Levine (2005). Does Foreign Direct Investment Accelerate Economic Growth?, in Theodore Moran, Edward Graham and Magnus Blomström (eds.), *Does Foreign Direct Investment Promote Development?*, Washington, DC: Institute for International Economics, pp. 195-220.
- Chakrabarti, A. (2001). "The Determinants of Foreign Direct Investment: Sensitivity Analysis of Cross-Country Regressions", *Kyklos*, 54, pp. 89-114.
- Chakraborty, C., and Basu, P., (2002). Foreign Direct Investment and growth in India: a cointegration approach, *Applied Economics* No. 34, pp. 1061-1073.
- Chowdhury, A., and Mavrotas, G., (2005). FDI and Growth: A Causal Relationship, United Nations University, WIDER, Research Paper No:2005/25.

- Choe, J.I. (2003). "Do foreign direct investment and gross domestic investment promote economic growth?", *Review of Development Economics*, 7, 44-57.
- Darrat, A. F., Kherfi, S., and Soliman, S., (2005). FDI and Economic Growth in CEE and MENA Countries: A Tale of Two Regions, Economic Research Forum, 12th Annual Conference, 19th-21st December 2005, Cairo, Egypt.
- De Gregorio, J. (1992). "Economic growth in Latin American". *Journal of Development Economics* 39, pp. 59-83.
- De Mello, L.R., (1996). "Foreign direct investment, international knowledge transfers, endogenous growth: time series evidence", Department of Economics, University of Kent, U.K.
- De Mello, L.R. (1997). "Foreign Direct Investment in Developing Countries and Growth: A Selective Survey", *Journal of Development Studies*, 34,1-34.
- De Mello, L.R. (1999). "Foreign direct investment-led growth: Evidence from time series and panel data", *Oxford Economic Papers*, 51, 133-151.
- Dunning, J.H., (1993). "Multinational enterprises and the global economy", Addison-Wesley Publishing Company, Reading, U.K.
- Durham, B., (2004). Absorptive Capacity and the Effects of Foreign Direct Investment and Equity Foreign Portfolio Investment on Economic Growth, *European Economic Review*, Vol. 48, No. 2, pp. 285-306.
- Eaton, J. and Tamamura, A., (1994). Bilateralism and Regionalism in Japanese and US Trade and Direct Foreign Investment Patterns, National Bureau of Economic Research Working Paper No. 4758, Cambridge, Mass.
- Ericsson, J., and Irandoust, M., (2001). On the Causality between Foreign Direct Investment and Output: A Comparative Study, *The International Trade Journal*, Volume 15 No. 1.
- Felipe, J., (1997). Total Factor Productivity Growth in East Asia: A Critical Survey, Economics and Development Research Center Report Series No. 65, Asian Development Bank
- Findlay, R. (1978). "Relative Backwardness, Direct Foreign Investment and the Transfer of Technology: A Simple Dynamic Model", *Quarterly Journal of Economics*, Vol.92, No.1, pp.1-16.
- Frey, B., (1984). *International Political Economics*, Oxford: Basil Blackwell.
- Fry, M. J. (1993), *Foreign Direct Investment in Southeast Asia Differential Impacts*, Institute of Southeast Asian Studies, Singapore.
- Gorg, H., and D. Greenaway (2004). 'Much Ado about Nothing? Do Domestic Firms Really Benefit from Foreign Direct Investment?'. *World Bank Research Observer*, 19: 171-97.
- Grossman, G.M., and E. Helpman (1991). *Innovation and Growth in the Global Economy*, Cambridge MA: MIT Press.

- Haddad, M., and A. Harrison (1993). Are There Positive Spillovers from Direct Foreign Investment? Evidence from Panel Data for Morocco, *Journal of Development Economics*, Vol.42, No.1, pp.51-74.
- Hansen, H., and Rand, J., (2004). On the Causal Links Between FDI and Growth in Developing Countries, Development Economics Research Group (DERG), University of Copenhagen, December.
- Hanson, G. (2001). Should Countries Promote Foreign Direct Investment?, UNCTAD: G-24 Discussion Paper Series No. 9. Geneva: UNCTAD.
- Harrison, A. (1994). "The Role of Multinationals in Economic Development", *The Columbia Journal of World Business*, Winter.
- Hermes, N., and Lensink, R., (2003), Foreign direct Investment, Financial Development and Economic Growth, *The Journal of Development Studies*, Vol 40, No.1, 142-163.
- Horisaka, K., (1993). Japan's Economic Relations with Latin America, Japan, the United States and Latin America, London, Macmillan.
- Karbasi, A., Mohamadi, E., and Ghofrani, S., (2005). "Impact of Foreign Direct Investment and Trade on Economic", Economic Research Forum, 12th Annual Conference, 19th-21st December 2005, Cairo, Egypt.
- Kang, Y. and Du, J., (2005). Foreign direct Investment and Growth: Empirical Analyses on Twenty OECD Countries. Available at <http://www.ssc.uwo.ca/economics/undergraduate/400E-001/draftpapers/DuKang.pdf>
- Kinoshita, Y. (1998). Technology Spillovers Through Foreign Direct Investment, unpublished working paper, Prague: CERGE-EI.
- Kokko, A. (1994). "Technology, Market Characteristics, and Spillovers", *Journal of Development Economics*, Vol.43, No.2, pp.279-93.
- Kokko, A., R. Tansini, and M. Zejan, (1996). Local Technological Capability and Spillovers from FDI in the Uruguyan Manufacturing Sector, *Journal of Development Studies*, Vol. 34, 602-11.
- Kumar, N. and Pradhan, J.P., (2002). "Foreign direct investment, externalities and economic growth in developing countries: some empirical explorations and implications for WTO negotiations and investment", RIS Discussion Papers, No: 27/2002
- Lensink, R. and Morrissey, O. (2001). Foreign Direct Investment: Flows, Volatility and Growth in Developing Countries, SOM research report 01E16, Groningen: SOM Research School, University of Groningen.
- Lensink, R., and Morrissey, O. (2006). Foreign Direct Investment: Flows, Volatility, and the Impact on Growth, *Review of International Economics*, 14(3), 478-493.

- Li, Xiaoying and Xiaming Liu, (2005). Foreign Direct Investment and Economic Growth: An Increasingly Endogenous Relationship, *World Development*, Vol. 33, No. 3, pp. 393-407.
- Liu, X., Burridge, P. and Sinclair, P.J.N., (2002). Relationships between economic growth, foreign direct investment and trade: Evidence from China, *Applied Economics* No. 34, pp. 1433-1440.
- Mencinger, J., (2003), "Does Foreign Direct Investment Always Enhance Economic Growth?", *Kyklos*, 56(4), pp. 491-509.
- Mody, A. and Wang, F.Y. (1997) 'Explaining Industrial Growth in Coastal China: Economic Reforms and What Else?'. *World Bank Economic Review* 11, 293-325.
- Mody, A. and A. Murshid (2002). "Growing Up with Capital Flows", IMF Working Paper WP/02/75, IMF: Washington DC.
- Moore, M., (1993), Determinants of German Manufacturing Direct Investment: 1980- 1988, *Weltwirtschaftliches Archiv*, Vol. 129 pp. 120-137
- Nair-Reichert, U. and Weinhold, D. (2001). "Causality Tests for Cross-Country Panels: A New Look on FDI and Economic Growth in Developing Countries", *Oxford Bulletin of Economics and Statistics*, 63, 153-171.
- Nath, K. Hiranya, (2004). Trade, Foreign Direct Investment and Growth: Evidence from Transition Economies, 51st Annual North American Meetings of the Regional Science Association International.
- Nath, K. Hiranya, (2005), Trade, Foreign Direct Investment and Growth: Evidence from Transition Economies, 80th Annual Conference of the Western Economic Association International, June 2005.
- Nyatepe-Coo, A., (1998). Foreign Direct Investment and Economic Growth in Selected LDCs, 1963-1992, Handbook on the Globalization of the World Economy Chapter 4 edited by Amnon Levy-Livermore, pp. 87-100, Edward Elgar Publishing Inc., Massachusetts, 1998.
- OECD (2002). "Foreign direct investment for development: Maximising benefits, minimizing costs", OECD publishing, Paris.
- Olofsdotter, K., (1998). Foreign Direct Investment, Country Capabilities and Economic Growth, *Weltwirtschaftliches Archiv*, 134(3), 534-47.
- Omran, M., and Bolbol, A., (2003). Foreign Direct Investment, Financial Development and Economic Growth: Evidence from Arab Countries, *Rev. Middle East Econ. Fin.*, December 2003, Vol. 1, No. 3, 231-249
- Ozawa, T. (1992). Cross-Investments between Japan and the EC: Income Similarity, Technological Congruity and Economies of Scope, in: J. Cantwell (ed.),
- Reisen H and M. Soto, (2001). Which Types of Capital Inflows Foster Developing-Country Growth? *International Finance*, V. 4 n. 1, 1-14.

Saltz, I. (1992). "The Negative Correlation between Foreign Direct Investment and Economic Growth in the Third World: Theory and Evidence," *Rivista Internazionale di Scienze Economiche e Commerciali* Vol. 39, pp. 617-633, July.

Schneider F., and Frey, B., (1985). Economic and Political Determinants of Foreign Direct Investment, *World Development* Vol. 13 No. 2, pp. 161-175

Sjöholm, F. (1999a). "Productivity Growth in Indonesia: The Role of Regional Characteristics and Direct Foreign Investment", *Economic Development and Cultural Change*, Vol.47, No.3, pp.559-84.

Sjöholm, F., (1999b). "Technology gap, competition, and spillovers from FDI: evidence from establishment data". *Journal of Development Studies*, 36 (1), 53-73.

Smarzynska, B.K. (1999). Composition of Foreign Direct Investment and Protection of Intellectual Property Rights in Transition Economies, unpublished working paper, New Haven: Yale University.

Soto, M., (2000). Capital Flows and Growth in Developing Countries: Recent Empirical Evidence, No 160, OECD Development Centre Working Papers.

Tsai, P. (1994). "Determinants of Foreign Direct Investment and Its Impact on Economic Growth", *Journal of Economic Development*, 19, pp. 137-63.

Unctad, (2000). Capital flows and growth in Africa, New York and Geneva, UN

Wang, M., (2002). Manufacturing FDI and Economic Growth: Evidence from Asian Economies, Department of Economics, University of Oregon mimeo.

Wang, Z., and Swain, N., (1995). "The Determinants of Foreign Direct Investment in Transforming Economies: Empirical Evidence from Hungary and China", *Weltwirtschaftliches Archiv*, Vol. 129, pp. 359-381 .

Wheeler, D. and Mody, A. (1992). "International Investment Location Decisions: The Case of US Firms", *Journal of International Economics*, Vol. 33, No. 1/2, pp. 57-76.

World Bank (2005). World Development Indicators, Data on CD-ROM, World Bank: Washington, DC.