Assessment of User Needs Regarding Foreign Direct Investment

Prepared by the European Central Bank
ASSESSMENT OF USER NEEDS REGARDING
FOREIGN DIRECT INVESTMENT

Introduction

1. As a follow-up to the discussions held in the WG-ES meeting of 3-4 May 2005, the ECB External Statistics Division (S/ETS) has launched investigations on the economic literature on balance of payments (b.o.p.) and international investment position (i.i.p.) statistics analysing direct investment transactions and/or positions. This investigation has involved (i) a consultation of ECB users, and (ii) a study of the existing literature on the b.o.p. and i.i.p. involving foreign direct investment (FDI). This memo summarises the main findings of these investigations.

2. Section 1 focuses on the main uses of FDI data identified through this process. The consultation of ECB users also referred to their expectations regarding possible changes in FDI statistics, the outcome of which is summarised under Section 2. The annex provides a detailed list of the identified references in the economic literature, classified according to their main focus.

Main uses of b.o.p./i.i.p. statistics involving FDI

Traditional interpretation focusing on the impact of FDI on growth, employment and productivity

3. ECB users in several business areas¹ focus mainly on this type of FDI, and would welcome the possibility of performing such studies excluding “transit flows” having no impact on the local economy. A study by ECB staff members (De Santis and al., 2004) excludes figures from the Netherlands and

¹ The ECB business areas consulted were Monetary Policy Stance Division, External Developments Division (both DG-Economics), Multilateral, Asia and Western Hemisphere Division, EU Neighbouring Regions Division (both DG-International and European Relations), Financial Research Division (DG-Research), Market Operations Analysis Division (DG-Market Operations), Financial Stability Division and Financial Supervision Division (both D-Financial Stability and Supervision). Not all answers have been received yet.
Luxembourg, arguing that “The seemingly disproportionate share of the Netherlands and Luxembourg in euro area FDI may be related to methodological issues regarding the classification of the data (according to data from the Thomson Merger and Acquisition (M&A) database for 2001 based on ultimate source and target country, Germany and France both account for 31% of the stock of euro area FDI in the US (based on cumulated M&A), the Netherlands for 25% and Luxembourg for only 2%. Thus, it is clear that Luxembourg ought to be excluded from the sample as the data classification method changes the picture dramatically, while for the Netherlands the decision whether or not to exclude it is far from obvious and should be considered as an empirical question). Both countries may act as hubs for FDI resulting from a highly developed and sophisticated financial sector combined with favourable fiscal policies for firms. In addition, we do not have sufficient data for all of the explanatory variables for Luxembourg, therefore, this country was excluded from the empirical analysis. With regard to the Netherlands, it might be appropriate during econometric analysis to check the robustness of the results by at first including, and then excluding, this country from the sample.” A few other analysts, in particular Lipsey (2001), explicitly refer to the analytical problem raised by SPEs and transit flows.

4. A vast majority of the literature devoted to foreign direct investment focuses on its **impact for economic growth, employment and productivity** for the receiving economy in the context of increasing globalisation. An interesting finding, although based for the time being on only a subset of the identified documentation, is that this literature focuses to a large extent on annual data. One exception to this has been found in a study by the European Commission on euro area FDI\(^2\), where a comparison between FDI and domestic investment is performed on the basis of quarterly data.

5. It may also be noted that a few authors identify further limitations of FDI statistics, e.g. that they include mergers and acquisitions, which involve a change in ownership, but no new investment in the country (De Mooij and Ederveen, 2001), or that FDI transactions exclude local investment by affiliates resident in a given country. The analysis of trends in aggregated FDI data sometimes requires the study of country level data, as published by a few countries (e.g. the US and Germany). These drawbacks do not seem, however, to raise significant difficulties for the analysis of the data.

**Other uses**

6. The study confirms the important role of **the monetary analysis through the balance of payments**, especially in the ECB. The involved business area has stressed that (i) transit flows should not be excluded from the core accounts of the b.o.p., but also that (ii) the role of FDI in such an analysis is limited. Indeed, the public documentation identified in this field includes very few references to direct investment, and focuses rather on the instrument breakdown (equity, debt securities…) of the transactions.

7. Some studies refer to **the relationship between foreign exchange and balance of payments** transactions. Some of them make specific references to FDI flows (e.g. the IMF Working Paper 190),

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\(^2\) Quarterly report on the euro area, Q4-2004, page 35.
while others focus rather on the instruments involved. However, in general, the conclusions regarding monetary analysis seem to apply, i.e. that such studies should not exclude transit flows (which may give rise to FX transactions), and that FDI does not seem to play a key role in such analyses either.

8. Many studies refer to the determinants of FDI, although a number of them give few indications of what FDI is thought to mean. Among them, some focus on the relationship between FDI and tax policy, e.g. R. Gropp and K. Kostial, “FDI and corporate tax revenue: tax harmonisation or competition” (2001), stating that “Corporate tax policies pursued by one country can affect other countries in different ways. If a country's domestic tax burden is high relative to other countries, the tax base may shift to countries with a less burdensome tax regime, implying outward flows of FDI. Countries can compete to attract inward investment flows as well. Taxes may also play a major role in firms' decisions about where to declare profits. In fact, anecdotal evidence suggests that multinationals spend considerable resources on transfer pricing and other tax-planning techniques involving cross-border transactions to minimize tax liabilities”.

While some of these studies focus on how tax policy could attract FDI (understood as a source of economic activity and employment), others focus on the tax receipts related to the attraction of foreign investment, in which case all FDI including transit flows need to be considered.

9. Some studies also concentrate on the policy of multinational groups, e.g. Desai, Foley and Hines (2003), and Békés (2005) on the basis of firm level data, partly derived from the FDI reporting of some countries (only “manufacturing FDI” in the second case). While such studies may benefit from full information about inter-company linkages, including SPEs, the detailed data on each company of the involve groups allow for an appropriate treatment of SPEs for the researchers’ specific purposes.

**Expectations regarding possible changes in the FDI statistics**

10. While the study of the existing literature provides information on the current situation, contacts with ECB users have shed light on their expectations regarding possible improvements to be made to the data.

11. One concern expressed by several of the involved business areas refers to the possible loss of information which the exclusion of SPEs/transit flows might entail. While some suggested a separate identification of these flows within the current FDI data, others proposed to provide information on transit flows on a supplementary basis.

12. A second issue refers to the possible effect of excluding SPEs or transit flows on the data quality, as it is understood that the identification of the flows to be excluded would not be straightforward.

**Conclusions**

13. This study confirms the variety of uses of b.o.p./i.i.p. and FDI statistics, but highlights the major role of the analysis of FDI in relation with growth, productivity and employment, both in economic literature and among ECB users, and acknowledges the distortions implied by SPEs/transit flows in this respect. A partial investigation of the corresponding literature suggests that annual data may be sufficient to answer this need, but this would require further investigation.
14. Users stress their interest in good quality, comparable data across countries/economies. Clear and symmetrical criteria should consistently be applied by b.o.p./i.i.p. compilers.

15. A further conclusion is the need for a full coverage of all transactions for monetary (and probably foreign exchange) analysis, although the need for an identification of FDI as a functional category in such analysis is found to be limited.

16. Subject to costs considerations, going beyond the scope of this note, the availability of information on transit/SPEs flows would also have some value in the eyes of ECB users, and would allow to explain some economic developments, such as budgetary developments in countries hosting such SPEs.
Annex 1: economic literature (identified so far) devoted to the analysis of direct investment transactions and/or positions

Studies focusing on the relationship between direct investment and local economic growth, productivity, trade and employment


✓ European Commission, Directorate General for Economic and Financial Affairs, “Quarterly report on the euro area (IV 2004)” - see “focus: FDI in EMU”, Q4-2004

http://wwwunctad.org/Templates/webflyer.asp?docid=5700&intItemID=1634&lang=1&print=1

✓ Extract of the page of the World Bank’s web-site devoted to “the impact of foreign direct investment”

“Attracting foreign direct investment (FDI) has become a key component of national development strategies for many countries. FDI is seen by many as essential for jump-starting economic growth through its bolstering of domestic capital, productivity and employment.

Just as FDI can take numerous forms and enter into various sectors of an economy, its effects can also vary considerably. While many highlight FDI’s positive effects, others criticize FDI for “crowding out” domestic investment and lowering certain regulatory standards. The effects of FDI can sometimes barely be perceived, while other times they can be absolutely transformative. While the impact and magnitude of FDI is dependent on many conditions, properly developed and implemented policies can help maximize the positive potential of FDI.

The most important effect of FDI is its contribution to the growth of the economy as a whole. FDI also often has an impact on a country’s trade policy and imports and exports, sometimes drastically affecting its trade balance. Some have praised FDI for increasing labor standards and skills upon entry, while others have criticized it for exploiting labor standards and seeking out cheap labour. FDI can also be an important transporter of new technologies and innovative ideas. These new technologies are especially effective when they spill over into the domestic economy through linkages between domestic firms and the foreign investor. When local firms possess sufficient absorptive capacity to capture these spillovers, the positive impact of FDI is maximized. Likewise, when FDI contributes to improving infrastructure, skills and the general business climate, it often leads to new FDI inflows and increased positive impacts.”3

✓ Assaf Razin and Efraim Sadka, Transparency, Specialization and FDI, Working Paper 1161. Center for Economic Studies, University of Munich, Germany, March 2004

3 The references identified under this bullet point are those found under the link http://rru.worldbank.org/PapersLinks/ReadingList.aspx?topicid=5
The paper develops a model that emphasizes the role of host-country transparency and source-country industry specialization in explaining the determinants of foreign direct investment (FDI) and foreign portfolio investment (FPI) flows. The paper compares the benefits for the host-country from receiving FDI inflows instead of FPI inflows. The authors demonstrate how transparency and industry specialization affect bilateral FDI flows from source to host countries, highlighting the more positive impact of FDI versus FPI.4


http://www.nottingham.ac.uk/economics/credit/research/papers/cp.01.06.pdf

This paper presents a framework for measuring the volatility of foreign direct investment (FDI) and its impact on growth. FDI affects growth positively by decreasing the costs of research and development (R&D) through stimulating innovation. However, volatile FDI flows could deter innovation due to uncertainty of R&D costs. (PDF, 115KB)

Nagesh Kumar and Jaya Prakash Pradhan, Foreign Direct Investment, Externalities and Economic Growth in Developing Countries: Some Empirical Explorations and Implications for WTO Negotiations on Investment, RIS Discussion Paper 27. Research and Information System for the Non-aligned and Other Developing Countries, New Delhi, April 2002

http://www.ris.org.in/dp27_pap.pdf

This paper examines the relationships between foreign direct investment (FDI), domestic investment and growth. The authors suggest a positive correlation between FDI and growth. However, the direction of causality between the two is ambiguous, since positive growth also leads to increased FDI. The authors also found a dynamic relationship between FDI and domestic investment. FDI at first "crowds out" domestic investment but later results in increased domestic investment as the country's business climate improves.


The paper summarizes recent findings regarding foreign direct investment (FDI), particularly regarding its determinants and its correlation with growth. The author finds considerable evidence to support the positive link between FDI and positive domestic spillovers.

Laura Alfaro, Foreign Direct Investment and Growth: Does the Sector Matter?, Harvard Business School, Boston, April 2003

http://www.people.hbs.edu/lalfaro/fdisectorial.pdf

This paper examines the effects of foreign direct investment (FDI) at the sectoral level. The author uses empirical analysis to determine whether FDI has different effects on a country’s growth depending on the sector. The paper concludes that the effects of FDI on growth vary considerably by sector, whether primary, manufacturing, or services. While FDI in the primary sector has a negative effect on growth, FDI in the manufacturing sector has a positive effect on growth.


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4 Texts in italics refer to abstracts as found from the corresponding source.
Part 3 of this Asian Development Bank annual publication discusses the many impacts of foreign direct investment (FDI) on Asian economies. The publication contains a wealth of data and cases studies, concluding that FDI accompanied by proper development strategies can play an essential role in a country's economic growth and development. (PDF, 1.86MB)

**Foreign Direct Investment, Economic Freedom and Growth: New Evidence from Latin-America**

  
  This paper looks at the relationship between economic freedom, foreign direct investment (FDI) and growth. Using a data sample from 18 Latin American countries, the authors find that FDI is positively correlated with economic growth in host countries. The authors note that this impact is maximized when economic freedom and sufficient social capacity is present in the host country to benefit from FDI.

**Foreign Direct Investment in China: Effects on Growth and Economic Performance**

  
  This paper looks at the huge increase in foreign direct investment (FDI) into China since 1990. Looking at the Chinese provinces that have received the greatest investment, the authors see whether FDI's effect on growth has gone beyond just capital accumulation. They conclude that FDI has significantly contributed to economic growth in China. (PDF, 91KB)

- Rashmi Banga, The Differential Impact of Japanese and U.S. Foreign Direct Investments on Exports of Indian Manufacturing, Department of Economics, Jesus and Mary College, Delhi, 2002
  
  This paper reviews the literature on the relationship between foreign direct investment (FDI) and exports. It then examines the effects of FDI on India's exports and finds that FDI has had a significant effect on the export-intensity of industries in India. However, the author concludes that while U.S. FDI has had a positive and significant effect on the export-intensity of industries in non-traditional exports, Japanese investments have not had the same effect.

  
  This report focuses on the European Union and examines the role of multinational enterprises and global production networks in economic activity, and implications for the design of trade policies. The findings show that a substantial share of rents from restrictive trade policies are transferred to foreign firms.

- Kyoji Fukao, Hikari Ishido, Keiko Ito, Vertical Intra-Industry Trade and Foreign Direct Investment in East Asia, Discussion Paper Series 434. The Institute of Economic Research, Hitotsubashi University, Tokyo, January 2003
  
  This paper begins with an overview of the major characteristics of economic development and integration in East Asia. It conducts a detailed investigation of trade at the commodity level in East Asia and the Unites States. The paper concludes that foreign direct investment (FDI) has played a significant role in the increase of intra-industry trade in vertically differentiated products. (PDF, 928KB)

  
  Part II of the two-part series "Regional Integration in East Asia: Challenges and Opportunities," this paper analyzes the pattern of East Asia's trade and foreign direct investment (FDI) from a global perspective, with a focus on the linkages between trade and FDI. The analysis is done as part of a larger objective to recognize future policy options for maximizing the benefits of global economic integration. Accompanying liberalization with structured reforms is suggested as key to maximizing the impact of FDI.
Bartlomiej Kaminski and Beata K. Smarzynska, Foreign Direct Investment and Integration into Global Production and Distribution Networks: The Case of Poland, World Bank, Washington, D.C., July 2001

This paper reviews the experience of Poland in integrating into global production chains, and the way in which this process has affected the relationship between foreign direct investment (FDI) and exports. It reviews issues in measuring intra-industry trade and examines data and information related to the Polish experience. The authors conclude that Poland's FDI and exports will continue to demonstrate an increasingly positive relationship.

Evguenia Bessonova, Konstantin Kozlov, Ksenia Yudaeva, Trade Liberalization, Foreign Direct Investment, and Productivity of Russian Firms, Paper prepared for the CEFIR conference on Negotiating Russia's WTO Accession: Strategic Lessons from Multilateral Trade Liberalization and Club Enlargement, Moscow, September 2003

This paper focuses on how foreign direct investment (FDI) and trade liberalization affect Russian firms. The authors contend that FDI not only increases domestic competition but also access to inputs, resulting in increased domestic productivity. The authors use firm-level data to measure changes in total factor productivity as a consequence of the increased FDI and imports. (PDF, 753KB)

FDI in Least-Developed Countries at a Glance, United Nations Conference on Trade and Development (UNCTAD), New York, 2001

The first section of this book provides an overview of developments in regulatory environments and recent trends in foreign direct investment (FDI) to the 49 least-developed countries - mostly in Africa. The second section presents country profiles of each of these countries, including information on the volume and significance of FDI; breakdown of FDI by source country, industry and mode of entry; FDI flows as a percentage of gross fixed capital formation; data on the largest foreign affiliates and their operations in least-developed countries; and information on developments in the international legal framework. (PDF, 10MB)


This paper reviews definitions and measures of globalization and its relationship with trade theory. Analyzing how national capacities will determine the relationship between globalization, foreign direct investment (FDI) and employment, the author says that no general conclusions can be made about the correlation between FDI and domestic employment skills. However, when adequate absorptive capacities are present, FDI was seen to have a positive impact on domestic employment. (PDF, 253KB)


This paper explores the hypothesis that increased globalization and foreign direct investment (FDI) will raise levels of child employment due to more incentives to lower costs and increase competitiveness. The authors argue that economic theory goes against this popular hypothesis. Examining data and evidence, the authors find that countries that are more open to trade and have higher levels of FDI display a lower incidence of child labor. (PDF, 885KB)


This paper examines the theory and empirical evidence on how multinational corporations (MNCs) and foreign direct investment (FDI) affect the supply and demand for skills in host countries. Using data from both developed and developing nations, the author finds a strong positive correlation between skill upgrading and the presence of local affiliates of U.S. MNCs. (PDF, 250KB)
Arturo Ramos, Foreign Direct Investment as a Catalyst for Human Capital Accumulation, Submitted in Fulfilment of the MALD Thesis Requirement, Fletcher School, Tufts University, Boston, April 2001

This paper uses evidence and a theoretical framework to demonstrate that foreign direct investment (FDI) leads to higher rates of human capital accumulation. Key to the authors argument are two main mechanisms: the signaling of future growth processes, and a factor of accelerated technological change over time. (PDF, 194KB)

Ishak Yussof and Rahmah Ismail, Human Resource Competitiveness and Inflow of Foreign Direct Investment to the ASEAN Region, Asia-Pacific Development Journal 9 (1): pp. 89-107, June 2002

This paper examines the relationship between human resource competitiveness and foreign direct investment (FDI) flows to Malaysia, Thailand, Indonesia and the Philippines. It provides an overview of the main determinants of FDI in general and reviews individual experiences in the four countries. The authors conclude that inward FDI has been a decisive source of knowledge transfer in technology, management skills, and international linkages for these countries. (PDF, 59KB)

Ben Ferrett, Intra- and Inter-Firm Technology Transfer in an International Oligopoly, Research Paper 49. Leverhulme Centre for Globalization, University of Nottingham, 2003

This paper analyzes the sources of advantage many foreign-owned firms have in productivity. The author examines the relationship between foreign direct investment (FDI) inflows and outflows and national "productivity distributions" across firms in an international oligopoly. The author pays special attention to technology spillovers within and across firms, concluding that these change depending on whether the entering FDI is a Greenfield investment or an acquisition, and whether the incumbent investor has a technological lead. (PDF, 618KB)


In theory, the most common benefits of foreign direct investment (FDI) are technology transfers and more competitive markets. But government policy often restricts inward FDI. This study looks at how foreign firms decide between direct entry, in which a foreign firm establishes a wholly-owned subsidiary, and total or partial acquisition of an existing domestic firm. Sometimes there is a divergence between the firm's choice and the domestic welfare interest. The authors conclude that policy interventions should induce the domestically preferred mode of entry to increase the degree of technological transfer to the domestic economy without restricting access by foreign firms. (PDF, 503KB)


This paper examines the role that technology licensing, foreign direct investment (FDI) and international trade played in the economic transformation of Eastern Europe. The authors highlight the great importance of FDI in direct technology transfer to local firms, associated indirect intra-industry spillovers from FDI, and its importance as an alternative source of technology for firms without FDI. (PDF, 387KB)


This paper looks at the relationship between foreign direct investment (FDI) and domestic spillovers in host countries. The authors conclude that the desired spillovers are only obtained if local firms have the ability and motivation to absorb foreign technologies and skills. To motivate subsidization of foreign investment, it is therefore necessary, to support learning and investment in local firms as well. (PDF, 197KB)

Using panel data from 1973 to 1992 for manufacturing firms in the United Kingdom, this study explores whether there are productivity spillovers from foreign direct investment (FDI) to domestic firms and, if so, then how much host countries should pay in subsidies to attract FDI. It finds that there is a significantly positive correlation between a domestic firm's total factor productivity and the foreign-affiliate's share of activity in that firm's industry. The findings also suggest that the per-job value of spillovers appears to be significantly less than per-job incentives governments have granted in recent high-profile cases. (PDF, 226KB)

- World Investment Report 2001: Promoting Linkages

This report examines the issue of linkages between foreign affiliates of multinational enterprises and local companies. It argues that the objective is not to establish linkages at any cost, but to use them to upgrade competitive capabilities of domestic enterprises by diffusing knowledge, information and skills.

- Brian Portelli, Coordination Failures and the Role of Foreign Direct Investment in Least Developed Countries: Exploring the Dynamics of a Virtuous Process for Industrial Upgrading, Centre for Technology, Innovation and Culture, University of Oslo, Oslo, September 2002

This paper reviews the relationship between foreign direct investment (FDI) and growth and argues that this must be maximized through a comprehensive approach to industrial policy in recipient countries. Specifically, the author believes that domestic firms must develop the necessary technological capacity and capability to promote the required linkages necessary for profiting from the potential externalities of FDI. (PDF, 66KB)


This paper reviews the domestic effects of foreign direct investment (FDI) and asks when FDI incentives and promotion activities should be used by countries. The author analyzes the determinants of multinational production and location, and the question of domestic spillovers from FDI. Creating a theoretical model for the evaluation of FDI support and highlighting practical examples, the author concludes that there is weak evidence that FDI creates positive spillovers for host economies. Accordingly, the author says it is important that countries carefully choose the correct promotion strategies to maximize the benefits of FDI. (PDF, 167KB)


This paper examines the factors that may influence the expansion of foreign investors in a host country, looking at the role of host country experiences and international strategic alliances in expansion after entry. To illustrate the issues, the expansion of Japanese auto suppliers in the United States is analyzed. Essential to the analysis is a discussion of the development of buyer-supplier relationships and the creation of domestic linkages following Japanese foreign investment. (PDF, 283KB)


The paper examines the development of linkages between foreign direct investment (FDI) and local firms, especially through backward linkages. The authors use plant-level data from several Latin American countries to compare the linkage potential of domestic firms, concluding that the characteristics of some countries increase the likelihood of such linkages. (PDF, 1.05MB)


This study uses firm-level data from Lithuania to examine spillovers from foreign affiliates. It finds positive spillovers from foreign direct investment (FDI) through linkages between foreign affiliates and local suppliers, but no spillovers with similar firms in the same industry. (PDF, 92KB)
This paper examines the question of capacity spillover from foreign direct investment (FDI) to domestic firms. The authors use data from an innovation survey of Argentina for empirical analysis of the Argentinian experience. The authors conclude that positive spillovers are related to the absorptive capacities of the domestic firms, and argue for a holistic approach to domestic technological and skill development. The paper also finds that a large portion of multinational activity has limited opportunities for positive linkages and spillovers. (PDF, 374KB)

Kevin P. Gallagher and Lyuba Zarsky, Sustainable Industrial Development? The Performance of Mexico's FDI-led Integration Strategy, Global Development and Environment Institute, Fletcher School of Law and Diplomacy, Tufts University, Boston, February 2004

The paper examines the performance of Mexico in terms of its foreign direct investment (FDI)-led strategy of liberalization and integration. Specifically, the domestic-linkage goal of promoting sustainable industrial development is examined. The authors explain why this goal has not been accomplished and offer policy advice for the future. (PDF, 1.02KB)

Stephen Thomsen, “South East Asia: the role of foreign direct investment policies in development”, 1999


P. Loungani and A. Razin, “How beneficial is foreign investment for developing countries”, Finance and development (quarterly magazine of the IMF) - June 2001


http://www.nottingham.ac.uk/economics/leverhulme/research_papers/05_09.pdf

This paper investigates the productivity effects of inward and outward foreign direct investment using industry and country level data for 17 OECD countries. The paper relates to a large recent literature on productivity spillovers from inward FDI, however, we also consider the relationship between productivity and outward FDI in the same estimation. Our results show that there are, on average, productivity benefits from inward FDI, although we can identify a number of countries which, on aggregate, do not appear to benefit in terms of productivity. On the other
A hand, a country’s stock of outward FDI is, on average, negatively related to productivity. However, again there is substantial heterogeneity in the effect across OECD countries.


  [http://www.bis.org/publ/cgfs22bde2.pdf](http://www.bis.org/publ/cgfs22bde2.pdf)

  This paper reviews the theoretical literature explaining financial FDI, as well as the empirical results on the determinants of financial FDI and its potential effects for the home country. From this revision, we conclude that, at the present stage, the existing theoretical paradigms need to be adapted to explain the recent surge in international banks’ local operations in emerging countries financial sectors. Macroeconomic and risk diversification theories would deem particularly well-suited to explain this reality. The empirical literature on financial FDI has concentrated on bank-specific factors and much less so on macroeconomic determinants, particularly push factors where generally only general FDI literature is available. The survey draws in this literature in those cases where no specific results for financial FDI exist. Finally, the effect of financial FDI on the home country are virtually unknown. The literature on general FDI has focused on employment, trade and investment effects, yet the consequences on the profitability and systemic risk of home’s financial system remain a topic for debate.


  This paper summarizes recent arguments/findings on two aspects of foreign direct investment (FDI): its correlation with economic growth and its determinants. The first part focuses on recent literature regarding positive spillovers from FDI while the second deals with the determinants of FDI. The paper finds that while substantial support exists for positive spillovers from FDI, there is no consensus on causality. On determinants, the paper finds that market size, infrastructure quality, political/economic stability, and free trade zones are important for FDI, while results are mixed regarding the importance of fiscal incentives, the business/investment climate, labor costs, and openness.

- **Lipsey Robert C. (July 2000), “Interpreting Developed Countries’ Foreign Direct Investment”**


  Inward and outward direct investment (FDI) stocks and flows tend to go together, across countries and over time. The countries that invest extensively abroad are usually also large recipients of FDI.

  There is little evidence that flows of FDI are a major influence on capital formation. That lack of effects suggests that financing capital formation is not a primary role of FDI.

  FDI transfers the ownership of existing productive assets from one set of owners to others willing to pay more for them, possibly from less efficient to more efficient owners. One fact that suggests this function is that outward U.S. FDI production and outward minus inward production tends to be concentrated in industries of U.S. comparative advantage. It is not in industries of U.S. comparative disadvantage, as might be expected if FDI were primarily a method of relocating production to more suitable locations. Within individual broad industry groups, U.S. FDI tends to move to countries with comparative disadvantages in trade relative to the United States in machinery industries. In resource-intensive industries, however, it moves to countries with comparative advantages in trade relative to the United States. The difference suggests that company comparative advantages dominate investment in machinery, but country comparative advantages dominate in resource-intensive industries.

  If FDI is transferring assets and production from less efficient to more efficient owners and managers, inward FDI can be viewed in the recipient countries as freeing capital that had been frozen in industries that the owners would prefer to leave. It permits the former owners to allocate their capital in more desirable and profitable ways. Outward FDI permits a home country’s firms to optimally exploit their skills and comparative advantages, perhaps lost to the home countries, but retained by the country’s firms.


The concept and measurement of foreign direct investment have changed over time, and what is measured by balance of payments flows and stocks is quite different from what is implied by theories of direct investment. The industrial distribution of stocks of FDI, the most widely available measure, is only poorly related to the distribution of FDI production, and changes in stocks are poorly related to changes in production.

FDI flows have grown in importance relative to other forms of international capital flows, and the resulting production has increased as a share of world output, but it was still only about 8 per cent at the end of the 20th Century, the United States began its role as a foreign direct investor in the late 19th Century, while it was still a net importer of capital. It became the dominant supplier of direct investment to the rest of the world, accounting for about half of the world's stock in 1960. Since then, other countries have become major direct investors. The U.S. share is now less than a quarter of the world total and the United States has become a major recipient of FDI from other countries.


This paper reviews evidence on the geography of international investment:
1. The importance of multinationals in the world economy has increased steadily. In the mid-1990s 66% of total US exports were undertaken by multinational firms, and 45% of these exports went directly to affiliate companies. The overseas production of US affiliates is three times larger than US exports.

2. Much the largest amount of foreign direct investment (FDI) is between high income countries, but there has been rapid growth of investment in some developing and transition regions during 1990s. Thus, the ratio of FDI inflows to GDP has remained fairly stable for developed countries, at around 0.9% of GDP. But for developing and transition countries, this ratio has increased from 0.8% in the late 1980s to 1.9% in the mid-1990s. Outward investment from developing countries has also risen recently, but remains modest compared to both developing country GDP and total world outward investment.

3. Adjusting for market size, a large share of investment stays close to home, and adjusting for distance, a large share of investment heads towards the countries with the largest markets. FDI is a good deal more geographically concentrated than either exports or production as a whole. Thus, while US affiliate production in Europe is 7 times larger than US exports to Europe, this ratio drops to 4 for developed countries as a whole and to 1.6 for developing countries.

4. Multinational activity in high income countries is overwhelmingly 'horizontal', involving production for sale to the host country market. In developing countries, a higher proportion of activity is ‘vertical’, involving manufacture of intermediate stages of the production process. Thus, only 4% of US affiliate production in the EU is sold back to the US, whereas for developing countries the figure is 18%, rising to 40% for Mexico. Similarly, less than 10% of Japan’s affiliate production in the EU is sold back to Japan, compared to more than 20% in developing countries.

5. Two distinct types of theoretical models describe the two distinct forms of multinational activity. In models of horizontal activity, the decision to go multinational is described as a trade-off between the additional fixed costs involved in setting up a new plant, and the saving in variable costs (transport costs and tariffs) on exports. In models of vertical activity, direct investment is motivated by factor cost differences. Tariffs and transport costs both encourage vertical multinational activity, by magnifying factor price differences, and discourage it, by making trade between the headquarters and the affiliate more expensive. Both types of models suggest concentration of multinational activity.

6. The major outward investors carry out much of their horizontal investment, quite naturally, in large markets. For the US, this means Europe, and especially the UK. For Japan and Europe, this means the US. The vast majority of EU investment, however, stays within the EU. The major outward investors carry out much of their vertical investment close to their borders, the US in Mexico, the EU in Central and Eastern Europe, and Japan in Asia.


A number of analyses suggest that the effect of foreign direct investment (FDI) on economic growth is not robust, even though world FDI flows continue to set new records. We attribute such significant effects to inappropriate aggregation of FDI. Using a data set of 92 countries from 1987 to 2001, we separate FDI into greenfield investment and cross-border mergers and acquisitions (M&As). We find that greenfield FDI promotes economic growth while M&As can be beneficial only when host countries have adequate level of human capital.
This article uses the investment development path to analyze the evolution of Portugal’s competitiveness in recent years. This is interpreted as the country’s capacity to both attract and engage in foreign direct investment. The estimation of the Portuguese IDP confirms previous claims that Portugal has joined other late industrializing countries as a ‘stage 4’ country, but that this position may not be consolidated. Outward FDI, albeit limited in terms of the number of firms and destinations, seems to show most characteristics expected at this stage of development. However, the fading of export-oriented inward FDI during the 1990s represents a danger in a country where FDI has been critical for market access and industrial diversification despite a much smaller weight in the economy than in other OECD countries.


Theoretically, the explanatory approaches of foreign direct investment (FDI), as for example, the internalization theory and the eclectic paradigm, and general equilibrium trade models that incorporate horizontal multinational firms (MNEs), sustain the existence of a substitution relationship between FDI and international trade. Models of vertical FDI and considerations concerning demand, for their part, support a complementarity relationship. Empirically, however, it is difficult to find substitution between the two variables. This work presents a review of the existing theoretical and empirical literature, highlighting the reasons that underlie the apparent incongruity between theory and empirical works, and drawing attention to gaps that should be corrected in future works.


This paper builds a multi-country, multi-sector general equilibrium model that explains the decision of heterogeneous firms to serve foreign markets either through exports or local subsidiary sales (FDI). These modes of market access involve different relative costs, some of which are sunk while others vary with sales volume (such as transport costs and tariffs). Relative to investment in a subsidiary, exporting involves lower sunk costs but higher per-unit costs. In equilibrium, only the more productive firms choose to serve the foreign markets and the most productive among this group will further choose to serve the overseas market via FDI. The paper then explores several implications of the individual firms’ decisions for aggregate export and FDI sales relative to the domestic and foreign market sizes. In particular, it is shown that firm level heterogeneity is an important determinant of relative export and FDI flows.

We use the model to derive testable empirical predictions on the relative aggregate export and FDI sales in a given country for a given sector based both on relative costs and the extent of firm level heterogeneity in that sector. These predictions are tested on data of US affiliate sales and US exports in 38 different countries and 52 sectors. The comparative statics based on relative costs are very similar to those tested by Brainard (AER 1997) and are confirmed in our data: sector/country specific transport costs and tariffs have a strong negative effect on export sales relative to FDI. More importantly, our new predictions for the effects of firm-level heterogeneity on the relative export and FDI sales are also strongly supported by the data: more heterogeneity leads to significantly more FDI sales relative to export sales.

Determinants of foreign direct investment


DG. Demekas, B. Horvath E. Ribakova and Yi Wu “Foreign direct investment in Southeastern Europe: how (and how much) can policies help? IMF Working Paper WP/05/110, June 2005
Foreign direct investment offers a rich laboratory in which to study the broader economic effects of securities market mispricing. We outline and test two mispricing-based theories of FDI. The “cheap assets” or file-sale theory views FDI inflows as the purchase of undervalued host country assets, while the “cheap capital” theory views FDI outflows as a natural use of the relatively low-cost capital available to overvalued firms in the source country. The empirical results support the cheap value view: FDI flows are unrelated to host country stock market valuations, as measured by the aggregate market-to-book-value ratio, but are strongly positively related to source country valuations and negatively related to future source country stock returns. The latter effects are most pronounced in the presence of capital account restrictions, suggesting that such restrictions limit cross-country arbitrage and thereby increase the potential for mispricing-driven FDI.

FDI and the activities of foreign firms have grown dramatically in recent decades, both in absolute terms and as a share of world GDP. Most explanations of this phenomenon focus on the impact of the macroeconomic environment on the choices facing individual firms over whether or not to engage in FDI. We focus instead on the characteristics of demand for the products produced in sectors known to be conducive to FDI. These characteristics are shown to help explain recent growth in the FDI-to-GDP ratio.

In this paper, we contribute to the literature on the determinants of FDI in developing countries and re-evaluate the role of the quality of institutions on FDI. We use a newly available database, with unprecedented detail on institutions of a set of 52 countries, and compare the results with matched variables from more familiar datasets. The paper controls for the correlation between institutions and GDP per capita of the host country, and also accounts for potential endogeneity of institutions. Finally, we evaluate whether proximity of institutions between the host and the origin raises bilateral FDI.

In this paper, we question whether there is a catch-up effect or announcement effect in Foreign Direct Investment (FDI) from the European Union (EU) to the ten EU accession countries. We study FDI outflows from the Netherlands, a small open economy with few historical ties to Eastern Europe to FDI in others regions – most notably to transition countries in Central Asia. In our analysis we try to impose as little structure as possible on the data and allow for heterogeneity within the different regions. In an effort to improve on past studies in the same area, we use a very broad sample of countries, we present country-specific results and test how robust regional dummies are, we check for omitted variable bias and we try to correct for possible non-linearity in the gravity relationships. We find that many of the differences in results of previous studies can be attributed to these specification problems. There is no evidence that an overall catch-up effect or announcement effect exists. Rather, economic fundamentals explain differences in inward investment in the region. FDI and trade are mostly complementary and there is no evidence that there is crowding out between regions.

The growth of FDI in the world has been significant in recent years. Between 1990 and 2000 world’s FDI inflows increased more than five times, and after 2000 world’s FDI inflows have declined. During the period of FDI expansion, growth has been especially strong since 1997. However, most of the FDI transactions were between the developed countries. The distribution of FDI is unequal and less developing countries face difficulties in attracting
FDI. Despite the fact that FDI is increasingly important to developing countries, over the past few years the share of the developing countries in world’s FDI inflows has been declining.

The paper analysis geographical and sector’s distribution of FDI in the South Eastern European countries and compares its amount with CEE countries. According to economic theory, FDI towards developing countries flows to labour-intensive and low technology production while factors of FDI is a complex problem, which depends on several characteristics specific for each country, sectors and companies. All those factors could be regrouped in three broad categories: economic policy of host country, economic performance and attractiveness of national economy. On desegregated level FDI depends on size and growth potential of a national economy, natural resources endowments and quality of workforce, openness to international trade and access to international markets, quality of physical, financial and technological infrastructure.

An important question is how South East European countries can attract more foreign investment. To find the answer, this paper uses data on FDI inflows to SEE countries, to determine the main host country determinants of FDI and provides regressions based estimation of determinants of FDI. Using a sample of South European countries and panel data techniques, the determinants of FDI in this part of Europe are investigated. The paper research relationship between FDI, GDP, GDP per capita, number of inhabitants, trade openness, inflation, external debt, and ICT sectors. For SEE countries FDI inflows are largely dependent on the completion of the privatization process and in this paper we include the level of private sector and privatization as explanatory variables. Our findings suggest that certain variables such as privatization and trade regime, as well as, the density of infrastructure appear to be robust under different specifications. Positive significance of the agglomeration factor is also observed, confirming the relevant theoretical propositions. However certain deferential variables, such as the privatization, could not be fully captured due to the statistical homogeneity of the sample.

- Buch Claudia M., Jörg Kleinert, Farid Toubal (2003), “Heterogeneity and FDI: Evidence from German Firm-Level Data”


Recent theoretical work suggests that firm heterogeneity has an impact on the international investment decisions of multinational firms. This paper provides evidence on the impact of heterogeneity on foreign direct investment (FDI) decisions, using a novel firm-level dataset on the FDI stocks of German firms. Our data cover the years 1990-2000. We provide evidence on the patterns of aggregated FDI, on the size of the foreign affiliate, and on the number of affiliates per host country. While market size and geographic distance have a significant impact on FDI stocks, we also find evidence in favour of the hypothesis that heterogeneity with respect to the degree of internationalisation of the reporting firm and the size of the foreign affiliate have an impact on investment decisions.


In this paper we try to reconcile the often inconclusive evidence on the impact of FDI on output growth by taking explicitly two types of heterogeneity into account: heterogeneity among industries and among countries. Our empirical analysis is based on a specially compiled data set, including FDI inward stocks, output, employment, investment, as well as exports, imports and wages for eight industries and 35 countries (OECD, Asian and Eastern European catching-up countries) over the period 1987 to 2002. On this sample, we test the importance of both – stage of development and industrial pattern of FDI – for the impact of foreign capital on an economy. It turns out that the stage of development is highly crucial for the impact of FDI on growth. Further, FDI alone rarely translates into higher output or productivity growth, however in certain industries a significant and positive relationship emerges when FDI is interacted with investment or export orientation.


http://www.ecb.int/pub/pdf/scpwps/ecbwp329.pdf
Abstract: The long-run determinants of euro area FDI to the United States during the period 1980-2001 are explained by employing the Tobin’s Q-model of investment. By using the fixed effects panel estimator, stock market developments in the euro area countries – including a measure adjusted for economic developments common to both the United States and the euro area – are found to influence euro area FDI to the United States. Moreover, the inclusion of the Tobin’s Q enhances the traditional knowledge-capital framework specification. Overall, the empirical findings suggest that euro area patents (ownership advantage), various variables related to productivity in the United States (location advantage), the volume of bilateral telephone traffic to the United States relative to euro area GDP (ownership advantage), euro area stock market development (Tobin’s Q), and the real exchange rate are statistically significant determinants of euro area FDI to the United States.

✓ De Sousa José, Julie Lochard,(2004) “Does the single currency affect FDI?”


This paper studies empirically the impact of monetary integration on foreign direct investment. We find that the single currency affects positively the decision of the Economic and Monetary Union (EMU) countries to invest inside and outside the euro zone.


http://wbln0018.worldbank.org/eurvp/web.nsf/Pages/Paper+by+Dunning/$File/DUNNING+1.PDF


http://www.cbe.wwu.edu/cib/globerman%20research/global%20foreign%20direct%20investment%20flows.pdf

It is widely argued that a country’s economic performance over time is determined to a great extent by its political, institutional and legal environment. We refer to these institutions and policies as the governance infrastructure of a country. We utilize new developed indices to examine the effects of governance infrastructure on both FDI inflows and outflows for a broad sample of developed and developing countries over the period 1995-97. In addition, we examine the role of other forms of infrastructure including human capital and the environment. The results clearly indicate that governance infrastructure is an important determinant of both FDI inflows and outflows. Investments in governance infrastructure not only attract capital, but also create the conditions under which domestic MNCs emerge and invest abroad. It would appear that investments in governance infrastructure are subject to diminishing returns, so that the benefits, in terms of inflows, are most pronounced for smaller and developing economies.


The present paper is concerned with the attractiveness of countries to direct foreign investments, that is, the host country characteristics that attract direct foreign investment (FDI). It focuses on two types of national characteristics – those that attract inflows of all foreign investment (intermediate products), including FDI, that is, mobility factors; and those that influence the modality of these inflows, that is, reflect the preference for FDI rather than other forms of foreign investment or ‘straight (unbundled) imports of intermediate products by indigenous firms (modality factors)’. The paper reports preliminary findings from a study of plausible determinants of FDI inflows into a sample of 25 countries.


This paper studies the determinants of foreign direct investment inflows in 25 transition economies between 1990 and 1998. We find that the main determinants of inward FDI in the transition countries are agglomeration, low labour cost, natural resources, openness to trade, and the lower level of corruption. We also find an important difference between the non-CIS (the CEE and Baltic states) and the CIS. The agglomeration effect is smaller for CIS countries than in non-CIS countries. For non-CIS countries, large market size, cheap labour and openness to trade are the main determinants. For CIS countries, rich natural resources and more liberal trade regime attract more FDI. Corruption is a deterrence to FDI in both groups.


Eight determining variables of FDI inflows are examined by applying extreme bounds analysis to a cross-sectional sample encompassing data on 140 countries. With GDP per capita serving as the free variable, seven variables are tried as the variables of interest in combination with three other variables. The results reveal that only two variables are robust: exports as a percentage of GDP and telephone lines per 1000 of the population. It is shown that a parsimonious model with a reasonably good predictive power contains the free variable, the two robust variables and two dummies.

Studies focusing on relationship between direct investment and taxation


This paper aims at verifying the impact of fiscal variables in the multinational firms’ localisation choices within the European Union Member States. In particular, the sensitivity of bilateral foreign direct investments towards EU member countries to the receiving country’s fiscal characteristics is tested. Among fiscal variables, the empirical analysis shows that FDI inflows in the European Union countries are influenced by the total fiscal wedge on labour more than the corporate tax rate. This suggests that Multinationals, while making their localisation choices, focus their attention on the overall tax and contribution burden more than on single corporate tax rates, which indeed provide only a partial (even though immediate) information.

The estimated elasticities of FDI inflows to fiscal variables suggest that a high-taxation country might draw considerable benefits in terms of FDI through a relatively modest tax rate reduction. This means that not necessarily each Member State must switch to very low tax rates (for example those of Ireland) to obtain an optimal combination between costs (associated to the tax rate reduction) and benefits (linked to the tax base enlargement, i.e. larger FDI flows).

✔ A. Bénassy-Quéré, Lionel Fontagné and Amina Lahrèche-Réville, “Foreign direct investment and the prospects for tax coordination in Europe”, CEPII, April 2000

✔ Buettner Thiess (2002),”’The Impact of Taxes and Public Spending on the Location of FDI: Evidence from FDI-flows within Europe”


In a place to place analysis of bilateral FDI flows the average company tax burden, the statutory corporation tax rate, as well as the cost of capital are used to capture the tax incentives. In addition, indicators of public rankings of competitiveness related to public sector activities are used to measure the role of public service provision. The results show significant effects of tax incentives, in particular, the marginal tax burden and the statutory tax rate prove jointly significant. However, only weak indications of a countervailing effect of public expenditures are found.
De Mooij Ruud A., Sjef Ederven (2001) « Taxation and foreign direct investment »


This paper reviews the empirical literature on the impact of company taxes on the allocation of foreign direct investment. We make the outcomes of 25 empirical studies comparable by computing the tax elasticity under a uniform definition. The mean value of the tax rate elasticity in the literature is around –3.3 i.e. a 1 % -point reduction in the host-country tax rate raises foreign direct investment in that country by 3.3%. There exists substantial variation across studies, however. By performing a meta analysis, the paper aims to explain this variation by the differences in characteristics of the underlying studies. Systematic differences between studies are found with respect to the type of foreign capital data used, and the type of tax rates adopted. We find no systematic differences in the responsiveness of investors from tax credit countries and tax exemption countries.

Studies focusing on the monetary effect of cross-border transactions and positions

ECB, Box 1 on “Estimating the size of portfolio shifts from equity to money”, ECB Monthly Bulletin, May 2003

ECB, Box 1 on “monetary presentation of the balance of payments”, ECB Monthly Bulletin, June 2003 and subsequent references to this monetary presentation in the ECB Monthly Bulletin

ECB, Box 1 on “monetary analysis in real time”, ECB Monthly Bulletin, October 2004


Frenkel and Johnson (1976), “The Monetary Approach to the balance of payments”.


Studies focusing on the relationship between foreign exchange and balance of payments

✓ Deutsche Bank Guide to exchange rate determination, page 86, May 2002
✓ Renu Kohli, “Capital flows and their macro-economic effects in India”, IMF

Statistical studies


Foreign direct investment (FDI) is a crucial indicator for a country’s integration into the global division of labour and its general level of development. Empirical analyses of integration processes however require harmonized procedure to compile and disseminate FDI data. This paper focuses on the question whether and to what extent a comparability of FDI data can be taken for granted.

In the recent past, comparability of FDI data has improved a lot: According to IMF surveys in 2001 and 1997, the Applicant Countries (ACs) in particular were rather successful in complying with the international standards. However, a lot of problems remain, especially concerning the inclusion of indirectly owned direct investment enterprises, the comprehensive coverage of FDI components, the reporting of reverse investment and the measurement of stock data. For certain established EU countries the problem of international holding companies causes further complications. Moreover, harmonization in recent years does not necessarily mean respective ex post adjustments. So international comparisons should focus on the very recent years of more successful harmonization and always keep in mind, that deviations might, to a high extent, be due to statistical and methodological reasons.


The United States has a lengthy history as a direct investor and as a host of direct investment. It has developed an extensive data system to track this investment and the related operations, and over time it has made numerous improvements to the system as policy and other needs have created new demands. This presentation gives a general overview of the system and discusses selected need-driven data improvements. The improvements singled out for discussion relate to the development of current-price measures of investment stocks, supplemental current-account measures based on ownership, unduplicated measures of production by direct investment enterprises, and data on services delivered through the commercial presence mode of supply. Use of the data to address topical issues is illustrated through a discussion of offshore outsourcing by U.S. multinational companies. The presentation concludes with a discussion of two situations that have created difficulties in the interpretation of U.S. data on direct investment—(1) the interposition of holding company affiliates between U.S. parent companies and their foreign operating affiliates, and (2) corporate inversions.