

DATA APPENDIX

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INTRODUCTION

This Data Appendix provides a brief summary of the most commonly used sources of data in the research described in the main part of this paper. It is not comprehensive: it would be impossible to summarise all possible data sources. However, it is intended both to summarise the most important sources which have been used to date, and to provide a guide for future research, including a description of some little-used sources.

Section A describes data on international flows of capital and income from capital. Section B describes information on measures of taxation.

SECTION A

DATA ON INTERNATIONAL FLOWS OF CAPITAL, AND INCOME FROM CAPITAL

Section A.1 describes data on foreign direct investment, available through national balance of payments statistics. Section A.2 describes sources of aggregate data on the affiliates of multinational companies. Sections A.3 and A.4 describe firm level data; A.3 outlines data available at the level of the multinational, and A.4 describes data on affiliates and parents. Section A.5 summarises other related datasets.

A.1 Aggregate data on Foreign Direct Investment, from Balance of Payments statistics

This section describes data on foreign direct investment, available through national Balance of Payments statistics. These data are available for most countries through publications of either national statistics offices or central banks. Three international organizations collect data from individual countries, and make available data which is broadly comparable between countries.

According to the definition used by Eurostat, the balance of payments is

“a statistical statement that systematically summarizes, for a specific time period, the economic transactions of a country with the rest of the world. The two main categories of the balance of payments are: the current account (goods, services, income and current transfers) and the capital and financial account (capital transfers, direct investment, portfolio investment, other investment and reserve assets). Foreign direct investment (FDI) flows appear in the financial account of the balance of payments, FDI income flows in the current account.

Foreign direct investment (FDI) is cross-border investment made by a direct investor with the intent of obtaining a lasting interest in an enterprise resident in another country (direct investment enterprise). International investment is classed as FDI when an investor owns 10% or more of ordinary shares or voting rights in an incorporated or unincorporated enterprise abroad respectively.

FDI flows are direct investment transactions from the reporting to the partner country (outward FDI) and from the partner to the reporting country (inward FDI). They include the net purchase by the investor of the investment company's equity capital, plus the direct investor's share in the company's reinvested earnings, plus other capital, which is the net increase in trade and other credit, including the net purchase of debt and other financial instruments.

Also referred to as FDI positions, foreign direct investment stocks are a measure, at a specific point in time, of the value and composition of a country's FDI assets (outward stocks, or claims on the rest of the world) and of its FDI liabilities (inward stocks from the rest of the world)".¹

These flows therefore differ from measures of capital expenditure in two main ways.

First, if a multinational corporation resident in country *i* undertakes capital expenditure through an affiliate in country *j*, it may finance that investment in several ways. One is in a loan or an injection of new equity from the parent, which would represent a flow of FDI from *i* to *j*. Another is that the affiliate raises funds locally, in which case there is no flow of FDI. In fact, roughly equivalent options are available to any company in *j*; any company can raise funds for capital expenditure domestically or on the international market. In the latter case, there would be a flow of foreign portfolio investment (FPI) to *j*.

Second, FDI can fund activities other than capital expenditure. In particular, a large proportion of FDI flows tend to finance mergers and acquisitions.² For example, the multinational in *i* may simply purchase another existing company in *j*. If that purchase was financed by a flow of funds from the multinational, it would count as FDI from *i* to *j*. Yet such FDI may have no effect on the aggregate capital stock in *j*. It merely reflects a change in ownership.

A.1.1 National statistics

Every country collects data on the national balance of payments and on FDI. In the table below we summarise the data collected by a number of major countries. We then describe in more detail the case of the USA as an example – and the most studied country - of data on FDI.

COUNTRY	COLLECTED BY	COLLECTION METHOD	COVERAGE
FRANCE	Banque de France and the Ministère de l'Economie des Finances et de la Privatisation.	Data on flows and end-Of-year positions of FDI in France and French Investment overseas are collected through surveys sent to the enterprises and bank settlements.	Operations with foreign capital participation > 10 %, increases of capital, purchases of shares in a firm, loans of affiliates from parent companies (short and long term), unguaranteed loans and subsidies, purchases of property.

¹ Eurostat, "European Union Foreign Direct Investment Yearbook 2005, Data 1998-2003", Statistical Office of the European Union, Luxembourg, 2005.

² The OECD indicates that mergers and acquisitions account for more than 60% of all FDI (OECD, 2000b).

GERMANY	Deutsche Bundesbank	Enterprises report transactions and investment stocks to the Deutsche Bundesbank. Additionally, data are also collected from an annual survey on direct investment.	Data are available on a monthly basis.
IRELAND	Central Statistics Office	Data are collected through an annual survey of domestic branches and subsidiaries of foreign parent companies.	
ITALY	The Ufficio Italiano Cambi (UIC) and the Bank of Italy.	The Ufficio Italiano Cambi (UIC) collects information on settlements. The Bank of Italy then compiles the BoP on the basis of transactions.	Transactions above a certain value have to be declared to the UIC which registers them. Any participation of over 20% in the capital Of a firm is treated as direct investment. Direct investment flows contain equity capital and debt securities but they exclude reinvested Earnings.
JAPAN	Balance of payment data are collected by the Bank of Japan. Data on FDI are published by the Ministry of Finance.	Data for the balance of payments are based on total net transactions and include reinvested earnings only for incorporated enterprises. The position at the end of the fiscal year is derived from cumulative value of FDI.	FDI data include all foreign projects which lead to an intended participation in the management of a business enterprise. FDI stock data is derived from the cumulated approved values of specific projects presented to the Japanese Ministry of Finance.
SPAIN	Banco de Espana,	Any transaction above a certain threshold has to be reported to the Banco de Espana according to the International Transaction Reporting System.	Data include information on shares and other equity representing more than 10 % of a company's capital, real estate investment and long and short-term net claims (claims less liabilities) on parent/affiliate companies. Data on reinvested earnings and data on positions are not available.

SWEDEN	Sveriges Riksbank.	<p>Companies report information on FDI flows directly to the Sveriges Riksbank.</p> <p>An annual sample survey gathers data on stocks and reinvested earnings. The survey is submitted to Swedish companies with subsidiaries abroad and to Swedish enterprises wholly or partially owned by non-residents.</p>	<p>FDI flow data include equity capital, inter-company long-term loans, and reinvested earnings.</p>
U.K.	Business Statistics Office of the Department of Trade and Industry		<p>Net outward direct investment consists of investment in foreign branches, subsidiaries or associated companies by their British parents, net of disinvestment.</p> <p>Data on foreign direct stock represent the foreign-owned portion of the book value of assets of foreign affiliates, as provided by British current accounts.</p>

USA: FDI data from the Bureau of Economic Analysis

Coverage	<p>Type of data: <i>Balance of payments and direct investment position data</i> cover U.S. affiliates of foreign companies when an affiliate assets, annual sales, or annual net income exceeds \$20 million (inward investment). Regarding outward investment, the data cover all foreign business enterprises owned 10 per cent or more, directly or indirectly, by a U.S. person.</p> <p>Time period: from 1977.</p> <p>Frequency: quarterly.</p>
Variables	<p>Variables: Balance of payments and direct investment position data - Inward³</p> <ul style="list-style-type: none"> • Direct investment capital flows • Direct investment income • Royalties and license fees • Other transactions with affiliated foreigners <p>Outward</p> <ul style="list-style-type: none"> • Direct investment income (current account flows item) • Royalties and license fees (current account flows item) • Charges for other services (current account flows item) • Equity capital (capital account flows item) • Intercompany debt (capital account flows item) • Reinvested earnings (capital account flows item) • Direct investment position abroad (stock item)
Sources of data & collection methods	Balance of payments and direct investment position data are collected through a quarterly mandatory survey.
Drawbacks of the data	The FDI data are based on a benchmark survey carried out every four years. For nonbenchmark years, all the series are estimated extrapolating the benchmark data based on sample data from the quarterly survey. When new benchmark data are available, the previous estimates are not revised and this could lead to a misestimate of true FDI. The bias would get worse the further the year is away from the benchmark year.
Availability	Available on the Bureau of Economic Analysis (BEA) website or through various issues of the <i>Survey of Current Business</i> ⁴ .
Information on the dataset	<p>www.bea.gov</p> <p>Mataloni, R. "A Guide to BEA Statistics on U.S. Multinational Companies", <i>Survey of Current Business</i>, pp.38-55, March 1995.</p> <p>Quijano, M. "A Guide to BEA Statistics on Foreign Direct Investment in the U.S.", <i>Survey of Current Business</i>, pp.29-37, February 1990.</p>
Literature using the dataset	Hartman (1984); Boskin and Gale (1987); Murthy (1989); Newlon (1987); Young (1988), Slemrod (1990).

³ Inward data are all presented by country of foreign parent and by industry of affiliate.

⁴ Quarterly balance of payments data appear in the March, June, September, and December Survey of Current Business articles on U.S. international transactions. The annual direct investment position data appear in the June Survey article on the direct investment positions on a historical-cost basis. Detailed annual data on the position and related capital, income, and other flows between parents and affiliates generally appear in the August Survey. Some historical data are available in separate BEA publications.

A.1.2 International collections of data on FDI

Eurostat

Coverage	Balance of payments data (with FDI flows and positions) for European Union countries, the United States, Japan, Norway, Iceland, Bulgaria, Romania, Turkey. Frequency: Balance of Payments data are available monthly (only for the euro-zone), quarterly and annually. FDI data are available annually.
Variables	Variables: Current account transactions: <ul style="list-style-type: none">• Exports, imports and balance• Goods: exports, imports and balance• Services: exports, imports and balance• Income: exports, imports and balance• Current transfers: exports, imports & balance• Balance of the current account Balance of payments: <ul style="list-style-type: none">• Trade integration of goods• Trade integration of services• Balance of international trade in goods• Balance of international trade in services• Direct investment flows as % of GDP• Direct investment stocks as % of GDP• Foreign Direct Investment intensity European Union Direct Investment: <ul style="list-style-type: none">• Current account transactions.• Extra-EU outward FDI (by sector⁵, country and economic activity)• Extra-EU inward FDI (by sector, country and economic activity)• Income from FDI extra-EU⁶• Intra-EU outward and inward direct investments (breakdown by sector & country)• EU FDI in Emerging Markets⁷ <i>Some examples:</i> <ul style="list-style-type: none">• Equity + Other Capital (by Country and Economic region)• Equity Capital (by Country and Economic region)• Other Capital (by Country and Economic region)• Reinvested Earnings (by Country and Economic region)• Total Capital (by Country and Economic region)
Sources of data & collection methods	Data are collected from questionnaires sent out to Member States, national Balance of Payment publications and additional information provided by national compilers. Eurostat collects FDI data via common EUROSTAT/OECD questionnaires from Member States.

⁵ Eurostat, ISIC and NACE codes are used.

⁶ FDI income consists of income on FDI equity and of interest payable on inter-company debt. Income on equity consists of dividends due for payment in the period to the direct investor, gross of withholding taxes, plus the direct investor's share of the company's reinvested earnings. Interest payable on inter-company debt is interest accrued during the period by the enterprise to the direct investor and includes interest on the borrowing and the lending of funds including debt securities and suppliers' credits.

⁷ Data are also divided in EU FDI in candidate countries, Latin America, Far East Asia and Mediterranean Partner Countries.

Drawbacks of the data	Definitions of FDI vary across countries (i.e. some countries do not include retained earnings) ⁸ : consequently data may not be completely comparable across countries.
Availability	Available through European Union website. Detailed statistical tables can be found at the website: http://www.europa.eu.int/comm/eurostat there click on: Tables/Long-term indicators - Economy and finance/Balance of payments - International transactions.
Information on the dataset	Eurostat, "European Union Foreign Direct Investment Yearbook 2005, Data 1998-2003", European Communities, 2005.
Literature using the dataset	Devereux M.P. and Freeman, H. (1995); Gorter and Parikh (2003); Bénassy-Quéré et al (2005).

⁸ Some countries have different collection methods, concepts and classifications for gathering FDI data. To overcome such a problem, EUROSTAT harmonizes national data. EUROSTAT also estimates missing data for each Member State in order to create complete EU FDI flows and positions.

OECD International Direct Investment Database

Coverage	<p>The OECD International Direct Investment Database is collected by the Investment Division of the OECD Directorate for Financial and Enterprise Affairs (DAF). It gathers data on foreign direct investment (FDI) to and from the OECD member countries⁹.</p> <p>Period covered: 1980-2003.</p> <p>Frequency: all data are annual and based on the calendar year.</p>
Variables	<p>Variables:</p> <ul style="list-style-type: none">• Direct investment inflows (by sector and by country)• Direct investment outflows (by sector and by country)• Direct investment inward positions (by sector and by country)• Direct investment outward positions (by sector and by country)
Sources of data & collection methods	<p>FDI data is collected through common EUROSTAT/OECD questionnaires from Member States¹⁰. Balance of payments and international investment position statistics compiled by Central Banks or Statistical Offices are used together with other sources (e.g. FDI notifications or approvals).</p>
Drawbacks of the data	<p>Definitions of FDI vary across countries (i.e. some countries do not include retained earnings): consequently data may not be completely comparable across countries. Comparability is also affected by differences in industrial classifications and geographical breakdowns.</p>
Availability	<p>Data is available through the publication OECD, "International Direct Investment Statistics Yearbook: 1992-2003 (2004 Edition)". OECD Publishing, 2005.</p>
Information on the dataset	<p>www.oecd.org</p>

⁹ The 30 OECD Member countries are Australia, Austria, Belgium, Luxembourg, Canada, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Korea, Mexico, Netherlands, New Zealand, Norway, Poland, Portugal, Slovak Republic, Spain, Sweden, Switzerland, Turkey, United Kingdom, United States.

¹⁰ Some countries have different collection methods, concepts and classifications for gathering FDI data and this might make the comparison difficult.

UNCTAD FDI/TNC, Cross-Border Mergers and Acquisition and the Largest TNCs Databases.

Coverage	<p>The UNCTAD FDI/TNC (Transnational Corporations) database contains information on inward and outward flows and stock of FDI, classified by type of investment, by region and by industry (and, whenever available, by both country and industry), for almost 200 countries and economies worldwide.</p> <p>The cross-border mergers and acquisitions database covers data on cross-border M&As, documenting all transactions with more than 10 per cent equity capital since 1987. It also includes information on over 73, 000 deals involving more than 150 countries, as of January 2005.</p> <p>The largest TNCs database ranks the world's largest non-financial TNCs by the size of their foreign assets, and has been published since 1993. This has been complemented since 1995 by a list of the 50 largest TNCs headquartered in developing countries and since 1999, by a list of the 25 largest TNCs from the countries in Central and Eastern Europe.</p>
Variables	<p>Frequency: all data are annual.</p> <p>Variables:</p> <p>FDI/TNC database:</p> <ul style="list-style-type: none"> • Inward and outward FDI flows • Inward and outward FDI stocks • TNCs no. of enterprises • TNCs no. of employees • TNCs wages and salaries • TNCs sales • TNCs value added • TNCs profits • TNCs export and import • TNCs R&D expenditures • TNCs R&D employment <p>Mergers & Acquisition database:</p> <ul style="list-style-type: none"> • value of the deal • name of acquiring company, its home economy and industry • acquired company name, its host economy and industry • the nature of the deal <p>The largest TNCs database:</p> <ul style="list-style-type: none"> • Total and foreign sales • Assets by company and by industry • Employment by company and by industry • Index of transnationality
Sources of data & collection methods	<p>UNCTAD collects published and unpublished national official FDI flows data from central banks, statistical offices or national authorities on an aggregated and disaggregated basis. These data are further complemented by data obtained from: (i) other international organizations such as the International</p>

¹¹ For those economies for which data were not available from national official sources, data on the FDI outflows of the OECD, as presented in its publication, *Geographical Distribution of Financial Flows to Developing Countries*, and as obtained from its online databank, are used as a proxy for FDI inflows. OECD data are based on FDI outflows to developing economies from the member countries and are collected by the Development Assistance Committee (DAC) of OECD.

	Monetary Fund (IMF), the World Bank and the OECD ¹¹ ; (ii) regional organizations such as the ASEAN Secretariat and the European Bank for Reconstruction and Development (EBRD); (iii) Banque Centrale de l’Afrique de l’Ouest; (iv) Banque Centrale des Etats de l’Afrique Centrale and (vi) UNCTAD’s own estimates.
Drawbacks of the data	There are limitations in data comparability due to differences in national definitions. Data for some countries are missing and therefore estimated.
Availability	Data is available at the UNCTAD website (free of charge): www.unctad.org/fdistatistics
Information on the dataset	UNCTAD, “World Investment Report 2005. Transnational Corporations and the Internationalization of R&D.”, September 2005.

A.2. Aggregate data on the affiliates of multinational companies

The Bureau of Economic Analysis data

Coverage	<p>Type of firms: <i>Financial and operating data</i> focus on the overall operations of the U.S. affiliates whose assets, sales or net income exceeds \$1 million (inward investment) and on the overall domestic and foreign operations of U.S. multinationals (i.e. parent companies and their affiliates in which the parent owns at least 10% of the capital). <i>Establishment and acquisition data</i> covers existing U.S. business enterprises in which foreign direct investors acquired, directly or through their U.S. affiliates, at least a 10-percent ownership interest and new U.S. business enterprises established by foreign direct investors.</p> <p>Time period: from 1977.</p> <p>Frequency: <i>Financial and operating data:</i> annually <i>Establishment and acquisition data:</i> annually</p>
Variables	<p>Variables: Financial and operating data¹²</p> <ul style="list-style-type: none">• Income statement items• Balance sheet items• External financial position• Property, plant and equipment• No. of employees• Employees compensation <p>Tax variables:</p> <ul style="list-style-type: none">• Direct foreign and home taxes paid• Indirect home and foreign taxes paid
Sources of data & collection methods	<p><i>Financial and operating data</i> is collected through both a mandatory annual survey and a mandatory Benchmark Survey organized every five years. The Benchmark Survey contains more detailed and complete information. <i>Establishment and acquisition data</i> is collected through an annual mandatory Survey.</p>
Drawbacks of the data	<p>The FDI data are based on a benchmark survey carried out every four years. For nonbenchmark years, all the series are estimated extrapolating the benchmark data based on sample data from the quarterly survey. When new benchmark data are available, the previous estimates are not revised and this could lead to a misestimate of true FDI. The bias would get worse the further the year is away from the benchmark year.</p>
Availability	<p>Available on the Bureau of Economic Analysis (BEA) website or through various issues of the <i>Survey of Current Business</i>¹³.</p>
Information on the dataset	<p>www.bea.gov</p>

¹² For U.S. multinationals (outward investment), financial and operating data are separately tabulated for two foreign-affiliate groups: all foreign affiliates and majority owned foreign affiliates (MOFAs). MOFAs are foreign affiliates in which the combined ownership of all U.S. parents exceeds 50 percent.

¹³ Summary annual financial and operating data appear in articles on U.S. multinational companies operations, usually in the June Survey. The U.S. Business Enterprises Acquired or Established by Foreign Direct Investors is available in the May Survey of Current Business. Supplementary tables are available from the BEA for 1980 forward.

Mataloni, R. "A Guide to BEA Statistics on U.S. Multinational Companies", *Survey of Current Business*, pp.38-55, March 1995.

Quijano, M. "A Guide to BEA Statistics on Foreign Direct Investment in the U.S.", *Survey of Current Business*, pp.29-37, February 1990.

Literature using the dataset Auerbach and Hines (1993); Desai and Hines (1999); Grubert and Mutti (1991); Hines and Rice (1994); Mody and Wheeler (1992); Mutti (1991)

The OECD Activities of Foreign Affiliates (AFA) Database

Coverage	<p>Type of firms: the AFA database contains information (inward and outward investment) on activity of majority-foreign owned affiliates (more than 50% of the firm's capital is owned by a foreign enterprise¹⁴) or majority and minority foreign-owned (more than 10 per cent) mainly in the manufacturing sector. Data are provided for the following declaring countries: Canada, the Czech Republic, Finland, France, Germany, Hungary, Ireland, Italy, Japan, Luxembourg, Mexico, the Netherlands, Norway, Poland, Sweden, Turkey, the United Kingdom and the United States.</p> <p>Time period: from 1983</p> <p>Frequency: Annual</p>
Variables	<p>Type of data: data based on information at the enterprise level, rather than at the establishment level. Variables are aggregate by sector.</p> <p>Variables¹⁵:</p> <ul style="list-style-type: none">• Number of enterprises/establishments• Number of employees• Production• Turnover• Value added• Wages and salaries• R&D expenditure• Number of researchers• Gross fixed capital formation• Total exports• Total imports• Intra-firm exports• Intra-firm imports• Gross operating surplus• Technological payments• Technological receipts• Stock of foreign direct investment• Capital under foreign influence
Sources of data & collection methods	<p>The AFA database is based on a survey sent out by the OECD Directorate for Science, Technology and Industry (STI). Member countries report to the OECD on the basis of their own surveys or their own business registers information.</p>
Drawbacks of the data	<p>Data availability varies according to country. There might be problems in comparing different countries. Discrepancies are related to different definitions of foreign controlled affiliates, the use of different sources and different definitions of the variables.</p>
Availability	<p>Available annually on-line at: www.oecd.org</p>
Information on the dataset	<p>www.oecd.org OECD, <i>Measuring Globalisation: The Role of Multinationals in OECD Economies</i>, 2001 Edition. Vol. I: Manufacturing.</p>

¹⁴ In fact, this definition of majority-foreign owned affiliate can change across countries and across time.

¹⁵ The AFA database does not contain enterprises' capital stocks.

A.3 Data on individual companies

Firm-level micro data are not as commonly available as balance of payments and FDI data. Some countries assemble data sets on inward direct investment (France, United States, Germany, Italy, among others). Information on and identification of foreign subsidiaries of domestic-based firms are more difficult to find.

As we will describe in the following pages, only Germany and the U.S. create data sets with information on both domestic multinational companies and domestic-based affiliates of foreign corporations (i.e. information on the latter requires data on Germany and U.S. based affiliates of foreign MNCs.).

This is the reason why many study on international taxation issues use data collected and sold by private agencies such as Datastream, Compustat and AMADEUS.

In this section, we present firm-level data sets collecting information on MNCs. The characteristic of this first group of micro-level data is that information on the multinational groups are presented in consolidated accounts (at the level of the parent company). This makes it difficult to distinguish the parent's from the affiliates' activities. Moreover, it is impossible to match the parent with its affiliates.

Compustat

Compustat North America provides firm level data on U.S. and Canadian public companies, specifically those trading in the NYSE, ASE, NASDAQ, OTC, Toronto Stock Exchange, Quebec Stock Exchange, and Montreal Stock Exchange and data from wholly-owned subsidiaries of companies that are required to file with the U.S. Securities and Exchange Commission. Compustat covers up to approximately 10,000 and 1,100 U.S. and Canadian actively traded companies. Approximately 9,000 inactive companies are also covered. The Compustat Global database provides financial and market data on more than 16,000 non-U.S. and non-Canadian companies.

Coverage

Type of firms: U.S. and Canadian public companies trading in the NYSE, ASE, NASDAQ, OTC, Toronto Stock Exchange, Quebec Stock Exchange, and Montreal Stock Exchange and data from wholly-owned subsidiaries of companies required to file with the U.S. Securities and Exchange Commission (Compustat North America).

Non-U.S. and non-Canadian publicly traded companies in more than 80 countries¹⁶ (Compustat Global).

¹⁶ The Asia-Pacific region is covered with more than 8,200 companies; Europe with more than 6,200; Latin America and the Caribbean with more than 1,280 companies and Africa and the Middle East with more than 320 companies.

Time period: Data normally cover 20 years and 48 quarters but historical data are available back to 1950.

Frequency: Yearly and quarterly.

Variables	Variables: <ul style="list-style-type: none">• Income statement items• Balance sheet items• Cash flow items <i>Some examples:</i> <ul style="list-style-type: none">• Number of Employees• Labor costs• Foreign pretax earnings• Net sales• Capital book value• Export sales (to unaffiliated customers)• Foreign sales¹⁷• R&D expenditures• Capital expenditures• Cost of goods sold• Industry indication (SIC codes) <i>Geographic Segment file</i> <ul style="list-style-type: none">• Exports to unaffiliated foreign customers• Sales from foreign operations to unaffiliated foreign customers <i>Prices-Dividends-Earnings file</i> <ul style="list-style-type: none">• Market information Tax variables: <ul style="list-style-type: none">• Taxes paid• Foreign taxes paid
Sources of data & collection methods	S&P examine original company sources by extracting financial information, removing reporting biases and reconciling data discrepancies. They standardize data by financial statement and by specific data item definition, preparing information that is broadly comparable across companies, industries, time periods and sectors.
Drawbacks of the data	Inability to isolate domestic from international expenditures and investment opportunities.
Availability	Created and sold by Standard and Poor's.
Information on the dataset	www.compustat.com
Literature using the dataset	Collins, Kemsley and Lang (1998); Cummins and Hubbard (1995); Devereux and Griffith (1998); Froot and Hines (1995); Kemsley (1998); Klassen, Lang and Wolfson (1992).

¹⁷ These are sales to unaffiliated foreign customers from foreign operations.

A.4 Data on matched affiliates and parents within multinational companies

In this Section, we present data sets containing unconsolidated firm-level information. For multinational companies, these datasets include information which permits a match to be made between the affiliate and the parent, and to distinguish the parent's activities from the activities of its affiliates. Most of the data sets in this Section are confidential and can be accessed only at the premises of the Institution collecting them. Only the AMADEUS database – produced by a private company, Bureau Van Dijk - is generally available.

AMADEUS – (Analysis of Major Databases from European Sources)

Coverage	Type of firms: population of over 7 million public and private companies from 34 countries, including all the EU countries and Eastern Europe ¹⁸ . Time period: from 1991 Frequency: annual
Variables	Type of data: accounting unconsolidated data and consolidated statements when available. Variables: <ul style="list-style-type: none">• 24 P&L accounts items• 22 balance sheet items• 26 ratios• Ownership information (on owners and subsidiaries)• Security and price information¹⁹ <i>Some examples:</i> <ul style="list-style-type: none">• Number of Employees• Total employees compensation• EBIT Ownership variables: <ul style="list-style-type: none">• Country, name and ID of shareholder• Country, name and ID of subsidiary• Direct/Total percentages of ownership• Type of shareholders²⁰• Independence indicator• Ultimate owner Tax variables:

¹⁸ There are three different modules available. The “Top 250,000 Module” contains data for British, German, French, Ukrainian, Russian and Spanish companies which satisfy at least one of the following criteria: operating revenues > 15 million EUR, total assets > 30 million EUR, number of employees > 200. For all other countries, companies are included if their operation revenue is bigger than 10 million EUR or total assets are bigger than 20 million EUR or the number of employees is bigger than 150. In the “Top 1.5 million Module”, British, German, French, Ukrainian, Russian and Spanish companies are included if they satisfy at least one of the following criteria: operating revenues > 1.5 million EUR, total assets > 3 million EUR, number of employees > 20. For all other countries, companies are included if their operation revenue is bigger than 1 million EUR or total assets are bigger than 2 million EUR or the number of employees is bigger than 15. In the “7 million Module”, all the enterprises are recorded. The Bureau Van Dijk claims the module should cover about 95% of total companies in each country.

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- Taxes charged to the P&L account

Sources of data & collection methods	Data is derived from original documentation of each company (balance sheet, P&L account, financial statements notes) and complemented with news, market research, information from official bodies (i.e. stock exchanges) and private correspondence. The BvDEP has developed a uniform format which is applied to each entity analysed in order to address comparison issues.
Drawbacks of the data	There might be differences in accounting standards which could make the comparison difficult.
Availability	The data set is compiled by the Bureau van Dijk and can be accessed by annual subscription or bought at one of their offices around the world.
Information on the dataset	www.bvdep.com
Literature using the dataset	Huizinga and Nicodème (2005), Huizinga and Laeven (2005)

¹⁹ Current, monthly and annual market capitalization figures together with current and annual stock data and valuation, security information, type of share, market price and price trends in any stock exchange the company is listed on. Beta values, correlation coefficients to the main indexes and monthly pricing series are available.

²⁰ Shareholder types are divided in 11 categories: banks and financial companies, insurance companies, industrial companies, public authorities/State/Government, One or more individuals or families, foundations (inc. research institutes), Mutual and pension funds/Nominees/Trusts/Trustees, Employees/Managers/Directors, unnamed individuals and families, bulk lists of companies and private owners, public (used only for publicly listed companies).

Bureau of Economic Analysis (BEA) firm-level data.

The aggregate data from the Bureau of Economic Analysis described in Section A.1.1. is derived from firm-level data, which has been made available to specific researchers under contract with the BEA.

Coverage	<p>Type of firms. For outward investment: all nonbank U.S. affiliates (owned 10 per cent or more) of foreign companies. Data are separately tabulated for two foreign-affiliate groups: all foreign affiliates and majority-owned foreign affiliates (MOFA). MOFA are foreign affiliates in which the combined ownership of all foreign parents exceeds 50 percent.</p> <p>For inward investment: All foreign business enterprises owned 10 per cent or more, directly or indirectly, by a U.S. person.</p> <p>Time period: from 1974 (for inward investments) and 1977 (for outward investment).</p> <p>Frequency: every five years and yearly.</p>
Variables	<p>Variables:</p> <p><i>Some examples:</i></p> <ul style="list-style-type: none">• Number of Employees• Labor costs²¹• Material inputs• Property, plant and equipment• Dividends/net income to owners• U.S. parent's domestic sales• Affiliates' domestic sales• Intermediates shipped intra-firm (in both directions)• Affiliates' arms-length sales to U.S.²²• Foreign sales²³• R&D expenditures• Capital expenditures• Cost of goods sold• Industry indication (SIC codes)• External financing <p>Tax variables:</p> <ul style="list-style-type: none">• Direct and indirect²⁴ taxes paid• Foreign income taxes paid• Foreign indirect taxes
Sources of data & collection methods	<p>Data is taken from mandatory Benchmark and Annual Surveys of U.S. Direct Investment Abroad. In non benchmark survey years, a sample survey is conducted excluding small affiliates in order to reduce reporting burden on them. The BEA estimates the data for these affiliates by extrapolating forward their data from most recent benchmark survey.</p>

²¹ As explained in Desai et al. (2006), payroll taxes are reported as an indistinguishable component of employee compensation.

²² Data do not contain US parents' arms-length sales to the country where the affiliate is located.

²³ These are sales to unaffiliated foreign customers from foreign operations.

²⁴ The indirect tax burden is reported as a sum of sales, value added and excise taxes. For more information, see Desai et al. (2004).

Drawbacks of the data	For smaller firms, data between two Benchmark Surveys are estimated and this could lead to mis-estimates of the effect of taxes on the behaviour of multinationals, as explained in section A.1.1.
Availability	It can be accessed only on site at the Bureau of Economic Analysis through the "BEA Program for Outside Researchers".
Information on the dataset	www.bea.org Mataloni, R. "A Guide to BEA Statistics on U.S. Multinational Companies", <i>survey of Current Business</i> , pp.38-55, March 1995. Quijano, M. "A Guide to BEA Statistics on Foreign Direct Investment in the U.S.", <i>Survey of Current Business</i> , pp.29-37, February 1990.
Literature using the dataset	Desai et al. (2001, 2004a, 2004b, 2005, 2006a, 2006b)

Deutsche Bundesbank firm-level data set

The German Central Bank (*Deutsche Bundesbank*) has recently made available a firm-level data to external researchers. The data set provides information on the activities of German companies in foreign countries and on affiliates of foreign multinationals in Germany.

German inward investments are covered by the “Ausländische Direktinvestitionen in Deutschland in: *Kapitalverflechtung mit dem Ausland*” (Foreign direct investment in Germany in: *International capital links*). German outward investment information are collected in the “Deutsche Direktinvestitionen im Ausland in: *Kapitalverflechtung mit dem Ausland*” (German direct investment abroad in: *International capital links*). Both sets of data are recorded in the Special Publication of the Supplement of the “Balance of payments statistics” of the Deutsche Bundesbank.

An example of the coverage of the dataset is that, for the year 2002, this data contains reports from around 6,000 German enterprises with 22,000 foreign affiliates. For inward FDI, there are data on over 7,000 foreign enterprises with 10,000 subsidiaries and branches in Germany.

Coverage	<p>Type of firms: Germany-based foreign owned firms and foreign affiliates of German parent companies.</p> <p>Time period: Data currently cover 14 years starting in 1989 but a panel-data is available only from 1996. However, from 1989 to 2001, semi-aggregated data by country and/or by sector are available²⁵.</p> <p>Frequency: Yearly</p>
Variables	<p>Variables:</p> <ul style="list-style-type: none"> • Number of foreign affiliates • Number of Employees • Annual turnover • Balance sheet total • Stock of foreign direct investment (of affiliates)²⁶ • The shares in the asset and liability positions of the nonresident; <p>Tax variables: None.</p>
Sources of data & collection methods	<p>According to the Foreign Trade and Payments Regulation (<i>Außenwirtschaftsverordnung</i>), Germany-based firms have to submit answers to an annual stock survey organized by the Deutsche Bundesbank if the German enterprise has a balance sheet total of more than €3 million in which a non-resident (or several economically linked non-residents) holds</p>

²⁵In this data is possible to distinguish between the foreign activities of firms that set up affiliates in the same sector from firms that set up affiliates in different sectors. Since 1995, allocation to economic sectors has been based on the classification in NACE (*Nomenclature générale des activités économiques dans les Communautés Européennes*) Revision 1. Before, the classification was based on the Federal Statistical Office’s classification of economic activities (WZ79).

²⁶This variable gives the sum of equity capital of the foreign affiliate, capital reserves, and retained earnings which is hold by a foreign-owned Germany-based firm.

	<p>10% or more of the shares or voting rights in the German enterprise on the balance sheet date. Reports are also required of non-residents' branch offices or permanent establishments in Germany with operating assets in excess of € million.</p> <p>Germany-based firms have to report their foreign direct investments to the Deutsche Bundesbank if either the capital shares or voting rights in the foreign affiliate exceed the threshold (10% starting in 2002) and/or the balance sheet total of the affiliate is above the thresholds²⁷ (3 million EUR starting in 2002).</p>
Drawbacks of the data	<p>Data for the foreign parent are scarce: information is restricted to the economic sector and the country in which the firm is active.</p> <p>No income statements but only balance sheet profits.</p> <p>Threshold for mandatory reporting of data varies over time.</p>
Availability	Available only at the Research Centre of the Deutsche Bundesbank.
Information on the dataset	<p>Deutsche Bundesbank, 1997, "International capital links, Methodological Notes".</p> <p>Lipponer, A. (2003), A "new" micro database for German FDI, in: Herrmann, H. and R. Lipsey, <i>Foreign Direct Investment in the Real and Financial Sector of Industrial Countries</i>, Berlin et al., pp. 215-244.</p> <p>Deutsche Bundesbank (2005). <i>International Capital links</i>, Special Statistical Publication 10, Frankfurt a.M., Deutsche Bundesbank.</p> <p>http://www.bundesbank.de/stat/download/stat_sonder/statso10_en.pdf</p>
Literature using the dataset	Buettner and Ruf (2006).

²⁷For more details, see Buch, C., Kleinert, J., Lipponer, A. and Toubal, F. (2005).

Firm-level tax returns

Coverage	Type of firms: all companies filing in the U.S. Frequency: yearly.
Variables	Type of data: tax return data. Variables: <ul style="list-style-type: none">• Inter-company transactions• R&D expenditures of the parent• Income of the parent and of the controlled foreign company Tax variables: <ul style="list-style-type: none">• Taxes paid• Deductions• Foreign taxes paid
Sources of data & collection methods	Data are taken directly from U.S. tax returns Forms 1120 and 5471. The former is the basic parent corporate income tax return. The latter contains the CFC's income, foreign taxes paid, and transactions with related parties, including the parent company.
Drawbacks of the data	
Availability	The data is confidential and it is not available to the general public.
Literature using the dataset	Althshuler and Newlon (1993); Althshuler et al. (2001); Grubert, Goodspeed and Swenson (1993); Grubert (1998); Grubert and Slemrod (1998); Grubert and Mutti (2000); Grubert (2003); Hines and Hubbard (1990)

A.5 Other data available

COUNTRY	INWARD/ OUTWARD	NAME OF DATA SET	COVERAGE
FRANCE	Inward	“L’Implantation Etrangère dans l’Industrie”, SESSI, Service des Statistique Industrielles, Ministère de l’Industrie, de la Poste e des Telecommunications.	Foreign-owned manufacturing enterprises with 20 or more employees.
	Outward	LIFI (liaison financières), annual mandatory survey developed by the Institute National de la Statistique et des Etudes Economiques (INSEE).	Private enterprises with 20 or more employees.
IRELAND	Inward	Census of Industrial Production, annual survey elaborated by the Irish Central Statistics Office (CSO).	Ireland-based enterprises with at least 3 employees and owned at least at the 50% by foreign companies or individuals.
ITALY	Outward/Inward	Reprint Database, developed at the Department of Economics and Production of the <i>Politecnico di Milano</i> with the support of the ICE (National Institute for Foreign Trade) and CNEL (the Italian National Council for Economy and Labour).	Italy-based mining and manufacturing firms controlled by foreign companies or individuals and foreign entities controlled by Italian companies.
JAPAN	Inward	Annual Survey on Trends in Business Activities of Foreign Affiliates in Japan & on Japanese investors and their foreign affiliates carried out by the Enterprise Statistics Division, Research and Statistics Department and the International Business Affairs Division, Industrial Policy Bureau, MITI.	Majority foreign-owned firms based in Japan (excluding financial, insurance and real estate sector) and Japanese investors abroad.
SPAIN	Inward	CBBE data set of the Bank of Spain’s Central Balance Sheet Office. CBBE reports shares of a firm’s capital owned by non-residents. Thus, it is possible to recognize foreign-owned entities.	Panel of 1080 Spanish manufacturing companies (excluding companies in the energy sector).

	Inward/Outward	ESEE data set (Spanish Ministry of Industry and Energy). ESEE reports shares of non-resident in firm's capital and the number of foreign countries where the firm has establishments.	Unbalanced panel of 968 Spanish manufacturing companies.
SWEDEN	Inward	Foreign owned enterprises in Sweden, annual surveys conducted by NUTEK (Swedish National Board for Industrial and Technical Development) with Statistics Sweden.	Majority foreign-owned Swedish enterprises.
	Outward	Swedish owned enterprises abroad, surveys conducted by NUTEK (Swedish National Board for Industrial and Technical Development).	All Swedish groups having subsidiaries abroad with more than one employee.
		Repeated survey (every 4/5 years) prepared by the Research Institute of Industrial Economics (IUI).	Manufacturing Swedish companies with 50 or more employees.
U.K.	Inward	Annual Respondents Database (ARD), that is the Annual Census of Production (ACOP) and Annual Business Inquiry (ABI) Respondents Database (ARD) held at the Official National Statistics Office	Production establishments located in the UK with over 100 employees.

SECTION B

DATA ON TAXATION

This section measures of taxation used in the empirical literature, and indicates the sources for various measures. As indicated in the main part of the paper, measures of tax rates can be divided into forward-looking and backward-looking measures.

The former include the effective marginal tax rate (EMTR) and the effective average tax rate (EATR). Calculations are carried out by applying the rules of a particular tax regime (such as tax incentives, depreciation allowances, valuation method for inventories) to a hypothetical investment (eg. in plant and machinery), with a given financing method (eg. retained earnings) and a specific tax status of the investor.

Backward-looking indexes are generally calculated by dividing a tax liability or payment by a measure of profit. They can be calculated either at the aggregate level (i.e. implicit tax rates, ITRs) using data on aggregate tax payments and aggregate measures of profit or capital income. They can also be calculated at the micro level (micro-level average tax rates, ATRs) using company-level data on tax liabilities and profit.

The first part of this section describes forward-looking tax measures. The next part describes backward-looking tax rates. The final section briefly describes other datasets containing useful and relevant information on taxation.

B.1 Forward-looking measures

Effective marginal and average tax rates are described in the main text of the paper. Here we present a brief summary, and indicate sources for available data.

<p>Description</p>	<p>EMTR: Proportionate difference between pre-tax and post-tax required rates of return:</p> $EMTR = \frac{(p^* - r)}{p^*}$ <p>Where p^* is the cost of capital for the marginal unit of investment and r is the associated post-tax rate of return. The higher the EMTR, the greater the required pre-tax rate of return and thus, the lower the incentive to invest.</p> <p>EATR: For a given value of the cost of capital, the EATR is the net present value of tax payments expressed as a proportion of the net present value of total pre-tax capital income:</p> $EATR = \frac{NPV(\text{tax payments})}{NPV(\text{tot pre-tax capital income})} = \frac{p}{1+r}$ <p>Where p^* is the cost of capital for the marginal unit of investment and r is the associated post-tax rate of return. The EATR represents the proportion of profit taken by taxes for a given investment.</p>
<p>Developed by</p>	<p>The EMTR was developed by King and Fullerton (1984) for domestic investment. Alworth (1988), OECD (1991) and Keen (1991) extended this to cross-border investment. Devereux and Griffith (1998b, 2003) proposed an alternative methodology for the EMTR, and also developed a measure of the EATR; both were used by the European Commission (2001).</p>
<p>Availability</p>	<p>OECD (1991) (for the EMTR) and European Commission (2001) (for the EMTR and EATR) provide detailed estimates for a single year. Data following the Devereux and Griffith methodology are available at http://www.ifs.org.uk/publications.php?publication_id=3210 Jacobs et al. (2004) calculate EATRs for a German company investing in each of the new 10 EU members. OECD (2003) calculates EATRs and EMTRs for member countries for 1991, 1996 and 2001.</p>
<p>Advantages</p>	<p>Based on a theoretical neoclassical model of investment and therefore appropriate for measuring tax burden on marginal and average investment.</p>
<p>Drawbacks</p>	<p>The EMTR and the EATR depend on assumptions made about the type of investment, personal income taxation, the source of finance for the investment, and on whether inflation and market rate of interest fluctuate.</p>
<p>Literature using EMTRs</p>	<p>Slemrod (1990); Devereux and Freeman (1995); Cummins and Hubbard (1995); Devereux and Griffith (1998); Buettner (2002); Gorter, Parikh (2003); Bénassy Quéré et al (2005)</p>
<p>Literature using EATRs</p>	<p>Devereux and Griffith (1998); Bénassy Quéré et al (2005) Bellak, Leibrecht (2005); Buettner and Ruf (2006).</p>

B.2 Backward-looking measures

B.2.1 Aggregate backward-looking measures: Implicit tax rates (ITRs)

Description	The implicit tax rate (ITR) is calculated by dividing total tax revenues in three groups: labour, consumption and capital (“capital” is substituted by “other factors of production” in the Eurostat definition). The last group is divided by a measure of the operating surplus of the economy for obtaining the ITR.
Developed by	Mendoza, Razin and Tesar (1994) European Commission (2004)
Availability	For the EU25, Eurostat provides implicit tax rates on capital for corporations. 1995 to 2003 data are available free of charge from the website: (www.europa.eu.int/comm/eurostat).
Information on ITRs	European Commission, Directorate-General Taxation and Customs Union, “Methodology of the Structures of the Taxation Systems in the EU: The implicit tax rate on capital”, Staff Working Paper, 2004. European Union, Directorate General Taxation and Customs Union, “Structures of the Taxation Systems in the European Union, Data 1995-2003”, 2005 Edition, Eurostat, 2005. Carey and Rabesona (2004) Clark (2004)
Advantages	The calculation of implicit tax rates is relatively straightforward and requires less statistical input than, for example, microeconomic or marginal tax rates. Allows comparisons across countries, years and types of taxes.
Drawbacks	Not based on a theoretical model of investment. ITRs group together different taxes some of which are not related to corporate income (e.g. inheritance and estate tax). They do not measure the final incidence of taxes that can be shifted from one activity to another via behavioural effects. The potential tax bases do not measure the actual tax bases as defined in the legislation. In practice there might be problems in linking developments in the implicit tax rates to tax policy changes. It does not discriminate between revenues from different types of companies (i.e. domestic and multinational firms).

Micro-level average tax rates (ATRs)

Description	Micro-level ATRs are computed as the ratio of taxes paid by a firm divided by a measure of its operating surplus ²⁸ .
Availability	Data necessary for building an ATR are available from tax returns and accounting data (Amadeus, BEA data, Compustat)
Advantages	Easy to calculate once firm-level data are available.
Drawbacks	It only denotes the impact of taxes at one moment in time and not over the life of a particular investment. It depends on the past history of the firm since many variables such as business losses are carried forward to the following years. Could be sensitive to international profit shifting behavior which could affect the denominator of the tax rate.
Literature using micro-level ATRs	Altshuler et al. (2001); Altshuler and Hubbard (2003); Collins et al. (1998); Grubert and Mutti (1991, 2000); Harris (1993); Harris et al (1993); Hines and Rice (1994); Kemsley (1998); Klassen et al (1993); Froot and Hines (1995); Huzinga and Nicodeme (2006); Swenson (1994).

²⁸ Huizinga and Nicodème (2005) use the ratio of taxes charged to the P&L account (from the AMADEUS database) to total assets. This measure of tax burden should be less sensitive to international profit shifting.

B.3 Data on tax systems

The OECD and IMF produce statistics on government tax revenues, which, among other things, enable the creation of macroeconomic measures of tax rates. The OECD produces also a detailed database on the tax systems and tax rates of each member country. Data are gathered directly from Government officials of the member countries and they encompass recent reforms and special provisions.

OECD Tax database

Description	<p>The OECD Tax Database contains detailed information on personal and corporate income taxes, consumption taxes and social securities contributions levied both on the employers and employees. Information concerns both tax systems and tax rates. Information include:</p> <ul style="list-style-type: none">• Basic corporate income tax rates (for central, sub-central and combined rates)• Surtaxes and their effects• Small businesses tax rates• Other targeting provisions• Statutory tax rate on dividend income• Effective statutory tax rates on distributions of domestic source income²⁹ <p>Information are available annually from 2000.</p>
Developed by	OECD Centre for Tax Policy and Administration (CTPA).
Availability	Publicly available at the following website: www.oecd.org/ctp/taxdatabase
Advantages	Very detailed information on many aspects of taxation. Tax rates are also reported for the different levels of governments. Very useful tool for international comparisons.

²⁹ This variable takes into account the corporate income tax, the personal income tax and any type of integration or relief to reduce the effects of double taxation.

OECD Revenue Statistics

Description	The OECD Revenue Statistics collects tax and non-tax government revenues, including social security contributions for all member countries since 1984, divided also by levels of government. Some interesting variables for the aforementioned analysis are: <ul style="list-style-type: none"> • Corporate taxes on income and profits • Taxes levied on the capital gains of corporate enterprises
Developed by	OECD Centre for Tax Policy and Analysis (CTPA)
Availability	Statistics are available through the publication OECD, Revenue Statistics 1965-2004, OECD Publishing, 2005.
Advantages	The tax revenues are divided in very detailed categories and subcategories so that taxes paid can be easily linked to the related economic activity. This is important for building accurate average tax rates.

IMF Government Finance Statistics

Description	IMF Government Finance Statistics collects data on revenue, expense, transactions in assets and liabilities, and stocks of assets and liabilities for the general government sector and its sub-sectors. Data are available in levels and as a percent of GDP. Tax variables contained are: <ul style="list-style-type: none"> • Taxes on income, Profits, & Capital Gains (divided between taxes on individuals and taxes on corporations and other enterprises) • Taxes on Payroll and work Force • Taxes on Property • Taxes on Goods and Services (divided between general taxes on goods and services and excise taxes) • Taxes on International-trade • Other Taxes
Developed by	International Monetary Found (IMF)
Availability	Order through the IMF website: www.imf.org
Advantages	It provides tax revenues for 130 reporting countries. It divides tax revenues raised from individuals from taxes raised from corporations together with other businesses.

Additional References

Carey D. and Rabesona J. (2004) “Tax Ratios on Labor and Capital Income and on Consumption”, in P.B. Sorensen ed. Measuring the Tax Burden on Capital and Labor, Cambridge, USA: MIT Press.

Clark S.W. (2004) “Using Micro Data to Assess Average Tax Rates”, in P.B. Sorensen ed. Measuring the Tax Burden on Capital and Labor, Cambridge, USA: MIT Press.

European Commission (2001) Company taxation in the internal market, *European Commission Staff working Paper* COM(2001)582.

European Commission, (2004) “Methodology of the Structures of the Taxation Systems in the EU: The implicit tax rate on capital”, Staff Working Paper.

Eurostat (2005) “Structures of the Taxation Systems in the European Union, Data 1995-2003”.

Jacobs, O, C. Spengel, M. Finkenzeller and M. Roche (2004) Company Taxation in the New EU Member States, Frankfurt am Main/ Mannheim.

OECD, Corporate Taxation Of Foreign Direct Investment Income 1991-2001, Economics Department Working Papers No.365, 2003.

Sørensen P.B. (2004) “Measuring Taxes: An Overview of Methods and Issues”, in P.B. Sorensen ed. Measuring the Tax Burden on Capital and Labor, Cambridge, USA: MIT Press.