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FDI STATISTICS: DATA COMPILATION AND POLICY ISSUES*

Note by the UNCTAD secretariat

Executive summary

Reliable, accurate, timely and comparable statistical information on foreign direct investment (FDI) and the activities of transnational corporations (TNCs) is required for policymakers to formulate policies that will help their country achieve its development objectives. However, the data collecting and reporting systems of many developing countries, in particular least developed countries (LDCs), are not in a position to provide such information. There is a need to consider what can be done to improve this situation, including through international and regional cooperation.

This note – prepared for the Expert Meeting on Capacity Building in the Area of FDI – is a step in that direction. It addresses a non-exhaustive set of issues that deserve careful consideration in exploring the development dimension of FDI and the implications arising from the activities of foreign affiliates of TNCs. More specifically, it focuses on issues related to, first, the availability and problems related to the compilation of FDI statistics, including data on cross-border mergers and acquisitions (M&As) and greenfield investments, and the activities of TNCs; and second, on policy implications and the approaches that could be adopted to improve the current situation. This note documents those issues and suggests a list of questions that experts may wish to consider.

* This document was submitted on the above date owing to technical delays.

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I. Introduction

1. At its ninth session held in Geneva (26–30 January 2005), the Commission on Investment, Technology and Related Financial Issues requested the UNCTAD secretariat to organize an Expert Meeting on Capacity Building in the Area of FDI: Data Compilation and Policy Formulation in Developing Countries. This note has been prepared to facilitate and stimulate the discussion at the Expert Meeting, scheduled to take place from 12 to 14 December 2005.

2. Foreign direct investment (FDI) is an indicator of a country's participation in the globalization of the world economy. Developing countries seek to attract FDI for a number of reasons. In contrast to portfolio and debt flows, FDI involves more than financial resources in both benefits and potential negative effects. Comprehensiveness, timeliness, reliability and international comparability of data sources are the basis for FDI analysis and sound policy formulation. International comparisons, however, require an agreed definition and measurement of FDI and a harmonized set of procedures to compile and disseminate FDI data. The expansion of the activities of transnational corporations (TNCs) further underscores the need for reliable data on both the magnitude and the characteristics of their international investment.

3. Various data can be used to measure and evaluate TNC activities. The most widely cited measures are balance-of-payments (BOP) statistics on FDI flows and international investment position (IIP) statistics on FDI stocks, as presented by UNCTAD in the *World Investment Report*. Other measures of the magnitude of international investments include data on cross-border mergers and acquisitions (M&As), FDI projects related to greenfield and expansion investments,¹ and various non-equity forms of internationalization. Finally, to assess the economic impact of FDI, it is necessary to consider operations data measuring the activities of foreign affiliates and their parent companies. Such data may reveal the role of foreign affiliates in terms of, for example, fixed capital formation, employment, sales, trade, tax revenues, and research and development (R&D). UNCTAD XI reconfirmed UNCTAD's "lead role in the area of policy analysis on the impact of FDI" and stated that "[I]t should collect and analyse data and conduct policy-oriented research on investment issues related to development..." (São Paulo Consensus, TD/410, para. 51). Such data collection and analysis are essential in order to further the understanding of the globalization process in all its dimensions, including its impact on development. UNCTAD has been working on FDI statistics for many years.

4. Regrettably, the lack of reliable statistical information in many countries complicates international comparisons and makes impact assessments difficult. Moreover, scarcity, unreliability and inconsistency in the data collecting and reporting systems of many countries also cause problems in formulating policies and strategies on FDI. While a considerable effort has been made to achieve a harmonized system for the definition, collection and presentation of data related to FDI and TNC activities, important discrepancies remain even

¹ Greenfield investment is investment in new facilities and the establishment of new entities through entry as well as expansion, while the term "M&As" refers to acquisitions of, or mergers with, existing local firms. In a cross-border merger, the assets and operations of two firms belonging to two different companies are combined to establish a new legal entity, and in a cross-border acquisition, the control of assets and operations are transferred from a local to a foreign company, the former becoming an affiliate of the latter.

among developed countries. However, the issue is more serious for developing countries. It is against this background that this Expert Meeting has been organized. Its objectives are to contribute to the understanding of the nature of data and associated problems; to clarify methodologies for the compilation of required statistics; to identify ways in which the current data situation can be improved; and to review the requirements of individual countries, as well as the need for technical assistance and international cooperation in this area. Special attention should be paid to the implementation of internationally recommended standards and ways to enable national authorities to develop and maintain high-quality and up-to-date systems for information regarding FDI and TNC activities.

5. This short note is not exhaustive in its treatment of relevant issues. Other IMF or OECD reports and meetings have also discussed issues related to FDI statistics. For example, documents prepared for the OECD's annual Workshop on International Investment Statistics discuss a number of issues related to FDI data. The IMF's Committee on Balance of Payments Statistics meets each year to discuss all aspects of external sector statistics; FDI has figured prominently in this committee in recent years. The next section of this note presents the main types of data that are currently used to assess the magnitude and impact of FDI of host and home economies. It also discusses the availability, complexity and main advantages and disadvantages associated with different types of data. Section III draws policy implications and considers approaches that could be taken at the national, regional and international levels to address the current data situation. In each section several issues are raised for consideration and discussion at this Expert Meeting.

II. Data on FDI and TNCs' activities

1. FDI statistics

6. The most widely available information on the international expansion of TNC activities is statistics on FDI flows and stocks. FDI is defined as an investment involving a long-term relationship and reflecting a lasting interest and control by a resident entity in one economy in an enterprise resident in an economy other than that of the investor.² FDI implies that the investor exerts a significant influence on the management of the enterprise resident in the other economy. This distinguishes FDI from portfolio investment, which is not expected to generate a significant and lasting interest and control over the enterprise in the host economy (box 1). For practical reasons, ownership of 10 per cent of ordinary shares or the voting shares in a firm is the benchmark commonly used and recommended in international standards to determine the existence of a direct investment relationship (IMF, 1993, p. 86; OECD, 1996, para. 8). While somewhat arbitrary, the 10 per cent limit has been agreed upon to enhance international comparability and countries are recommended to follow this rule. Of course, there are problems in setting this as a precise threshold. Nevertheless, this rule offers the advantage of providing an objective criterion, rather than a subjective judgement, for determining whether a foreign investment should be considered an FDI.

² It should be noted in this context that the country of residence is different from nationality or citizenship.

Box 1. FDI versus foreign portfolio and other investment flows

Direct investors have different investment motives from investors in portfolio and other investments. In supplying long-term capital to a foreign entity, a direct investor is interested in establishing a lasting relationship with that company. The investment could be made to provide access to natural resources and markets for products; gain access to labour supply, technology and other assets; ensure security of supplies; and control the quality of a certain product or service etc. Investors in portfolio or other investment, on the other hand, may have no intention of establishing a relationship with the management of the foreign entities. They do not usually participate in the management of the firms in which they have invested. These investors have either invested relatively small amounts in the voting shares of the foreign companies or have acquired other types of claims, such as debt, on the foreign entity.

Source: UNCTAD, based on IMF (1993, chapters XVIII and XIX).

7. It should be emphasized that FDI is a BOP concept used to measure cross-border financial flows. It does not measure the true extent of investment (in building, lands, machinery equipment) by foreign investors, as reflected in the national accounts of the host economy, for instance. Indeed, while the concepts and definitions of BOP and FDI should be consistent with international standards – as set out by the IMF's *Balance of Payment Manual*, fifth edition (IMF, 1993)³ and the OECD's *Benchmark Definition of Foreign Direct Investment*, third edition (OECD, 1996) – they offer limited guidance regarding the real economic role played by foreign affiliates in a host economy. For example, foreign affiliates may finance an investment through local borrowing, but this investment is not recorded as FDI flows in the BOP. Thus, trends in FDI often differ from other indicators of economic performance. In the case of the United States, comparisons of FDI outflows with capital expenditures of (majority-owned) foreign affiliates show that trends between the two indicators are far from parallel. In certain economies, such as Hong Kong (China) and Singapore, FDI outflows from the United States always exceed capital expenditures of United States foreign affiliates; in others, such as Argentina and Brazil, the opposite applies (table 1). The former case demonstrates the fact that FDI flows are a source of corporate finance but do not always translate into actual capital expenditures, and the latter case shows that FDI only partly reflects investment by foreign affiliates.

8. Not all countries apply agreed international standards;⁴ and different ways of collecting information are used. For instance, there are significant gaps in the extent to which countries collect data on each of the three components of FDI: equity capital, reinvested earnings and other capital (mainly intra-company loans). For instance, only 46 out of 56

³ Two complementary publications have been published by the IMF providing more practical guidance to the understanding of the concepts contained in the *Manual*. The *Balance of Payments Compilation Guide* was published in 1995 to provide more practical direction in the compilation of both BOP and international investment position statistics and the *Balance of Payments Textbook*, published in 1996, was intended as reference material for the BOP courses provided by the IMF. This latter publication also contributes to a better understanding of the BOP issues, providing concrete illustrations and examples.

⁴ For example, according to the 2001 IMF/OECD Survey of Implementation of Methodological Standards for Direct Investment (SIMSDI), some countries such as Chile, Indonesia, Israel, Italy, the Philippines and Turkey use a percentage of ownership other than 10 per cent, and others (e.g. Croatia, the Republic of Korea and the Netherlands) add an additional qualification to this 10 per cent threshold, namely effective voice in management (IMF/OECD, 2003).

Table 1. Capital expenditures of United States foreign affiliates^a and outward FDI flows from the United States, 2000–2003
(Millions of dollars)

Economy	2000		2001		2002		2003	
	Capital expenditures ^a	Outward FDI flows	Capital expenditures ^a	Outward FDI flows	Capital expenditures ^a	Outward FDI flows	Capital expenditures ^a	Outward FDI flows
TOTAL WORLD	110 637	142 627	110 758	124 873	110 275	115 340	114 973	151 884
<i>of which:</i>								
Argentina	2 302	675	2 404	- 511	1 029	- 769	1 209	207
Brazil	4 008	3 350	3 335	113	3 364	339	2 287	- 266
China	1 589	1 817	1 629	1 912	2 139	924	1 573	1 540
Hong Kong (China)	1 167	4 922	514	4 787	507	1 687	674	1 725
Indonesia	1 307	683	2 253	985	1 599	1 207	1 420	72
Korea, Republic of	1 380	2 338	712	1 206	670	1 755	724	954
Malaysia	1 139	1 787	1 041	17	984	- 609	1 059	763
Mexico	4 252	4 203	4 936	14 226	4 784	5 171	4 179	5 667
Singapore	1 833	3 688	1 933	5 593	1 275	4 377	1 571	5 699
Venezuela	1 555	3 798	1 493	461	1 027	295	828	440

Source: United States, Bureau of Economic Analysis; and UNCTAD FDI/TNC database.

^a Capital expenditures by majority-owned non-bank foreign affiliates.

countries that responded to the 2001 IMF/OECD Survey of Implementation of Methodological Standards for Direct Investment (SIMSDI) (IMF/OECD, 2003) included all three components of FDI flows as required by international standards (table 2). All countries that reported FDI inflows statistics in that survey included, at least, the equity capital component. Some countries are not able to report reinvested earnings, as the data are not easily available from company reports or BOP surveys; even where they are, they are often reported with a significant time lag.⁵ Many countries report other capital, but they do not necessarily collect all relevant debt instruments.⁶ Among OECD member countries only 12 countries covered all these instruments (IMF/OECD, 2003). Recording practices may also change over time, leading to structural breaks in time series data on FDI. For example, before 1996 Japanese data on FDI flows excluded reinvested earnings and German data did not cover short-term intra-company loans. Some countries report overall figures, but do not provide information on the breakdown of flows between the three components. Finally, some economies do not collect any data on FDI at all. This is the case with a number of Caribbean island economies (e.g. Cayman Islands, British Virgin Islands) and many LDCs (e.g. Afghanistan, Somalia, Samoa). In such cases, investments in these countries reported by major investor economies are usually used as a proxy.⁷ Of greater concern is the patchy coverage of FDI statistics by the developing countries that actually compile FDI statistics.

9. Although progress has been achieved in recent years, the scope and quality of FDI data in a number of developing countries, especially least developed countries (LDCs), are often inadequate for the purposes of policy analysis and formulation. Meeting international standards is increasingly a precondition for providing quality information on FDI and for assessing the development impact of FDI on the host economy.

⁵ Out of 34 developed economies, only Greece did not report reinvested earnings at all in 2003.

⁶ Such instruments include bonds and money market instruments, long-term loans, short-term loans, financial leases and trade credits.

⁷ For example, UNCTAD uses this methodology in the *World Investment Report*. For details, see "Definitions and sources" in UNCTAD (2005).

Table 2. Availability of FDI flow data, by component, 2003–2004

Inward flows				Outward flows			
Economy reporting all three components of FDI data (46)	Economy <i>not</i> reporting part of the components of FDI data			Economy reporting all three components of FDI data (39)	Economy <i>not</i> reporting part of the components of FDI data		
	Equity capital (0)	Reinvested earnings (8)	Other capital (3)		Equity capital (5)	Reinvested earnings (13)	Other capital (12)
Argentina, Australia, Austria, Belgium, ^a Bolivia, Botswana, Canada, Chile, ^b Costa Rica, Croatia, Czech Republic, Denmark, ^b Ecuador, Estonia, Finland, France, Germany, Guatemala, Hong Kong (China), Hungary, ^a Iceland, Ireland, Israel, Italy, Japan, Kazakhstan, Latvia, Luxembourg, ^a Malaysia, ^a Mexico, Netherlands, New Zealand, Nigeria, ^a Norway, Peru, Philippines, Poland, Portugal, Russian Federation, Slovakia, Spain, ^a Sweden, Switzerland, Turkey, ^a United Kingdom, United States		Greece, Indonesia, Kuwait, Rep. of Korea, Singapore, South Africa, Thailand, Tunisia	Colombia, Kuwait, Slovenia	Argentina, Australia, Austria, Belgium, ^a Botswana, Canada, Costa Rica, Croatia, Czech Republic, Estonia, Finland, France, Germany, Hungary, ^a Hong Kong (China), Iceland, Ireland, Israel, Italy, Japan, Kazakhstan, ^a Latvia, Luxembourg, ^a Malaysia, ^a Netherlands, New Zealand, Nigeria, ^a Norway, Poland, Portugal, Rep. of Korea, Russian Federation, Slovakia, Spain, ^a Sweden, Switzerland, Turkey, ^b United Kingdom, United States	Bolivia, Denmark, Ecuador, Guatemala, Indonesia, Mexico	Denmark, Ecuador, Greece, Guatemala, Indonesia, Kuwait, Mexico, Peru, Philippines, Singapore, South Africa, Thailand, ^a Tunisia	Bolivia, Chile, Colombia, Ecuador, Guatemala, Indonesia, Kuwait, Mexico, Peru, Philippines, Slovenia, Tunisia

Source : based on IMF/OECD 2003 and information supplemented by UNCTAD.

Note : Based on 56 economies.

^a Data refer to 2004. ^b Data refer to 2003.

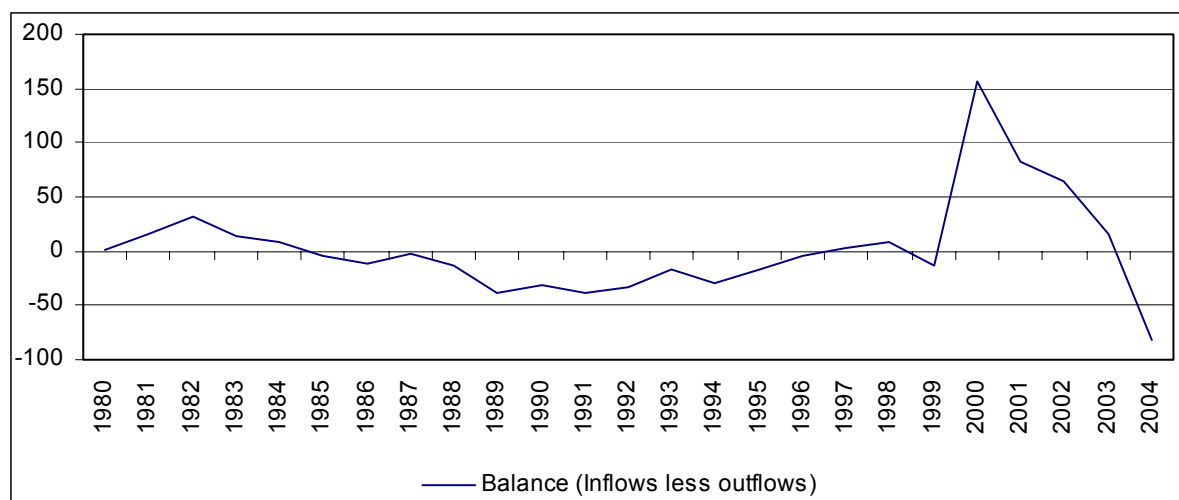
10. Data on FDI financial flows should be recorded on a net basis. Unlike items in the BOP current account, entries in the financial account (including FDI components) should, in principle, be recorded on a net basis (IMF, 1993, para. 511). This means that divestments, reverse investments (investments by a foreign affiliate in its parent firm), loans given to parent firms by foreign affiliates or repayments of intra-company loans to parent firms should be deducted from new flows of FDI when calculating the overall figure for FDI flows. These transactions should be reflected in both FDI inflows (in the recipient economy) and FDI outflows (in the investor's economy). However, it is unclear to what extent compilers of FDI data actually follow the recommended guidelines. Differing practices in this area represent another source of error when comparing FDI data across countries. For example, only eight of the 27 OECD countries included in the above-mentioned IMF/OECD survey recorded reverse investment in 2001 (IMF/OECD, 2003, p. 39).

11. In principle, inward FDI and outward FDI should balance on a global basis, but, as a result of differences in the interpretation of the FDI definition and in the compilation and reporting of statistics, they rarely do. In 2004, for example, countries reported global FDI outflows of \$730 billion, whereas global inward FDI flows were only \$648 billion (UNCTAD, 2005). In recent years this imbalance has widened (figure 1): this disparity also reflects difficulties in calculating and recording M&A transactions in BOP statistics. As discussed later, M&As represent the main mode of FDI in some years.⁸ As shown in table 3, bilateral discrepancies between FDI as reported by home and host countries can also be significant.

⁸ Similarly, growth rates of FDI inflows and outflows do not necessarily move in parallel and sometimes even move in opposite directions (e.g. 1974, 1980, 1981, 1983, 1985 and 2003).

12. FDI flows provide a useful indicator of the trends in international capital flows effected by TNCs. In contrast, *FDI stock* data may better indicate the overall importance of foreign companies in individual economies, and in the world economy as a whole. FDI stocks – estimated at \$9 trillion globally in 2004 – show the value of the share of capital and reserves (including retained profits) in foreign affiliates attributed to the parent firm, plus the net indebtedness of affiliates to the parent firm. Data on FDI stocks are presented in the statistical statement of the international investment position (IIP) of a country, which shows an economy's stock of external financial assets and liabilities at a given point in time. However, some countries report stock data based on accumulated FDI flows. This further compounds existing deficiencies of the original data and does not properly allow for reinvestment, asset revaluation, and so forth. Recent revisions of China's data on FDI inward stock illustrate how different methods of collecting data can influence the outcome: its 2003 FDI stock is now valued at \$228 billion, compared with about \$500 billion before the revision.⁹

Figure 1. How much do global FDI inflows and outflows differ?
(Billions of dollars)



Source: UNCTAD.

13. Reconciliation of the flow activities in the financial account with the change in stocks made during a defined period is an essential exercise. While the BOP accounts record or reflect only transactions, a change of stocks appearing in the IIP can be attributable not only to transactions (financial account flows), but also to valuation changes due to changes in exchange rates and prices, and to other adjustments (such as reclassifications, write-offs, expropriations, unilateral cancellation of debt and measurement errors). Eighty-one out of some 200 economies covered in the *World Investment Report* reported (inward) FDI stock for 2003 (UNCTAD, 2005). Even among countries that collect and report stock data, the methods of stock valuation differ. For instance, some countries base the valuation on market prices, and others use book values. Such differences make inter-country comparisons more

⁹ The revision was made by the China's Ministry of Commerce on the basis of China's own statistical methodology and accounting rules, as well as the following assumptions: FDI inflows into China were mainly greenfield investment that accounted for 95 per cent of total flows, 95 per cent of which was used for fixed assets (UNCTAD 2005).

Table 3. FDI inflows into selected countries, 2002
(Millions of dollars)

Economy	Inflows into Brazil		Inflows into China		Inflows into Germany		Inflows into Mexico		Inflows into Morocco		Inflows into Thailand		Inflows into the United States	
	As reported by Brazil	As reported by the investing economy	As reported by China	As reported by the investing economy	As reported by Germany	As reported by the investing economy	As reported by Mexico	As reported by the investing economy	As reported by Morocco	As reported by the investing economy	As reported by Thailand	As reported by the investing economy	As reported by the United States	As reported by the investing economy
Australia	4	..	..	- 52	1 076	- 309	..	..	..	..	- 14	..	6 081	3 874
Austria	35	- 22	67	13	1	187	7	17	..	..	15	8	960	74
Belgium	45	- 30	124	8	5 699	5 777	85	..	..	- 18	- 19	- 15	- 2 887	- 2 711
Brazil	..	..	..	..	21	..	..	..	..	..	..	..	426	..
Canada	989	..	588	..	- 168	..	172	..	..	..	18	..	2 976	9 841
China	10	..	..	..	- 153	..	- 2	..	..	..	19	..	- 129	..
Czech Republic	..	- 1	..	1	107	- 1	..	-	..	..	..	..	20	8
Denmark	93	22	71	57	- 39	1 203	164	..	..	..	3	4	814	563
Finland	4	- 130	65	- 106	- 1 738	- 119	25	84	..	..	38	23	- 478	- 1 475
France	1 815	943	576	563	3 529	5 531	261	212	198	244	- 11	208	6 678	15 556
Germany	628	80	928	887	..	..	587	261	42	- 3	10	19	- 842	- 7 865
Hong Kong (China)	12	..	17 861	15 938	- 124	..	..	..	..	..	25	333	586	923
Ireland	53	..	13	..	2 096	2 538	115	..	..	..	55	..	1 288	400
Italy	473	..	177	..	320	..	33	..	7	..	3	..	220	..
Japan	504	741	4 190	2 608	97	576	157	240	1	..	635	524	6 061	7 587
Luxembourg	1 013	..	14	..	- 475	..	45	..	..	..	- 13	..	1 288	..
Malaysia	-	..	368	81	92	8	..	2	..	1	- 16	12	- 55	1 504
Mexico	24	..	..	..	- 27	..	..	..	..	..	1	..	2 099	..
Morocco	..	..	..	..	4	..	..	..	..	..	..	..	..	..
Netherlands	3 372	1 389	572	156	9 747	6 629	1 196	- 455	20	- 42	- 729	336	5 650	- 8 207
New Zealand	..	..	..	..	222	..	..	..	..	..	1	..	118	- 530
Norway	60	..	..	..	2 067	2 397	..	..	..	..	15	..	675	424
Philippines	..	..	186	..	- 17	..	..	..	..	..	- 0	..	18	..
Portugal	1 019	136	10	-	- 80	- 35	12	- 27	21	- 91	0	..	- 21	64
Republic of Korea	4	..	2 721	..	- 216	..	31	..	..	..	41	..	- 237	..
Singapore	20	..	2 337	..	- 122	..	50	..	..	..	1 237	..	- 514	..
South Africa	6	..	..	..	- 296	..	..	..	..	..	..	..	- 65	..
Spain	587	702	92	24	2 158	1 861	648	1 877	33	51	-	..	53	..
Sweden	205	- 157	100	41	551	- 94	- 38	- 402	..	2	10	12	386	492
Switzerland	347	- 394	..	- 41	- 222	159	423	118	19	17	15	107	6 566	2 182
Taiwan Province of China	13	..	3 971	..	136	..	14	..	..	..	73	..	31	..
Thailand	..	..	188	16	9	- 23	..	..	..	..	..	..	- 3	28
United Kingdom	474	25	896	1 135	7 660	12 699	1 160	1 407	26	..	222	- 82	23 941	- 1 475
United States	2 615	339	5 424	924	1 955	- 216	9 553	5 171	29	- 5	- 236	1 501	..	..

Source: UNCTAD FDI/TNC database.

difficult.¹⁰ In this respect, the feasibility of undertaking an internationally coordinated survey of the direct investment position is currently being studied by the IMF in consultation with ECB, Eurostat, OECD, UNCTAD and the World Bank. If conducted, such a survey would be an important step in improving the collection of FDI stock data based on common FDI methodologies.

14. As noted above, countries apply various approaches to collecting FDI flow and stock data. The international transactions reporting system (ITRS), which is a foreign exchange control system operated largely by central banks, reports international transactions on the basis of forms submitted by enterprises and collected by domestic banks. According to the 2001 IMF/OECD Survey (IMF/OECD, 2003), 25 out of 61 countries use this approach.¹¹ Typically, the ITRS approach suffers from certain limitations: for instance, a lack of sufficient details on transactions to meet the classification needs of FDI statistics by industry and country; coverage of only cash transactions in foreign currencies; exclusion of reinvested earnings; and an absence of information on FDI stock. Enterprise surveys may be seen as an alternative or complementary approach. Other potential sources of FDI-related data include administrative sources such as investment promotion agencies (IPAs), tax revenue offices, security exchange offices and national statistical authorities. All sources have their merits and disadvantages (table 4).

Table 4. Sources of information on FDI: Advantages and disadvantages

Sources	Advantages	Disadvantages
ITRS	• Much of the needed information is often readily available from banking records; • There is no need to develop alternative collections for countries already using this method for compilation of BOP statistics.	• In general only cash transactions are measured. FDI often involves non-cash transactions (reinvested earnings, equity provided in the form of machinery, and intra-company indebtedness). Additional data collections are required to include these transactions properly; • There are problems with classification and the level of details is limited; • An ITRS may not readily provide information on levels of investment; • Transactions in domestic currency or through accounts with non-resident banks are difficult to measure.
Enterprise surveys	• Provide for complete recording of FDI transactions and stocks of investment by those surveyed; • Information on other economic activity relating to FDI can be collected for analytical purposes and quality control; • Best opportunity to explain to data providers the concept of FDI and the treatment of particular transactions.	• It may be difficult to maintain comprehensive lists of enterprises with FDI transactions; • Countries that do not normally use enterprise surveys for BOP measurement will incur additional costs for developing and implementing specialized FDI surveys.

/...

¹⁰ For example, the value of FDI inward stock for 2003 in the United States was \$1.4 trillion in book value and \$2.4 trillion in market prices (United States Department of Commerce, 2005).

¹¹ ITRS provides information regarding the sale or purchase of the currency used in the transaction, the value of the transaction, the country of the non-resident party and the purpose of the transaction. The ITRS measures *individual* cash transactions.

Table 4 (concluded)

Sources	Advantages	Disadvantages
Administrative sources	Information may be readily available as a by-product of administrative processes.	- Level of details may be unsatisfactory; - Administrative processes are rarely set up with BOP requirements in mind; - Time lags between approval and actual investment; - Information on income (including reinvested earnings), divestments and actual investment expenditures may not be available; - Limited information on non-equity transactions; - Information on stocks of investment valued at market price is typically not available; - The approval process may relate only to investment in particular industries or to investment above certain thresholds; - Approvals generally relate only to FDI in the reporting economy and not to outward FDI.

Source: UNCTAD, based on IMF (1993, paras. 696–698).

15. Information on FDI data flows and stocks by country of origin and by industry is a major issue for analytical purposes. Out of 195 countries, for instance, a breakdown of FDI inflows by industry or by country is reported by 60 and 66 countries respectively (table 5). Only a few countries, mainly developed countries, report a complete and detailed breakdown of FDI. The scarcity of detailed data on outflows as well as inward and outward stocks is even greater (table 5).

Table 5. The availability of FDI data from countries providing breakdown by countries and industries, 2003 or latest year available
(Number of countries)

FDI category	Developed countries	Developing countries					World
		Total	Africa	Asia and Oceania	Latin America and the Caribbean	Central and Eastern Europe ^a	
Inflows by countries	19	42	5	13	24	5	66
Inflows by industries	18	38	3	13	22	4	60
Outflows by countries	19	9	1	0	8	2	30
Outflows by industries	19	7	1	1	5	2	28
Inward stocks by countries	20	18	1	4	13	5	43
Inward stocks by industries	17	16	0	5	11	6	39
Outward stocks by countries	19	9	0	1	8	4	32
Outward stocks by industries	15	7	0	1	6	4	26
Number of countries covered	26	150	53	57	40	19	195

Source: UNCTAD, based on national sources.

^a Includes new member states of the EU.

2. Data on M&As, greenfield investments and non-equity forms of investment

16. TNCs can expand into a foreign location in different ways. The two main forms of market entry are greenfield investments and M&As.¹² A firm may also achieve influence over activities outside its home economy by way of non-equity investments. Data on greenfield FDI and M&As are usually not separately identified in the BOP statistics. As to non-equity forms of investments, as long as they do not involve cross-border financial transactions (except for reinvested earnings), they are not reflected in BOP statistics. However, some privately published data can be considered as complementary sources for information.

17. Given that FDI through M&As may have a different impact on host and home economies than greenfield investment, it is useful to identify the role played by this mode of entry in different countries. During the past two decades or so, cross-border M&As have assumed a growing importance in global FDI flows. Cross-border M&As were a driving factor behind the dramatic growth of FDI in the 1990s, peaking in 2000, particularly among and in developed countries (UNCTAD, 2000). Although M&As involve the purchase of existing assets and companies, the accounting books of the target company will remain unchanged (if no additional capital is provided to the target company) as there is only a change of ownership. An M&A transaction needs to be included in the financial account of the BOP, as long as there is an international transaction of capital. This does not necessarily mean, however, a net addition to the capital stock in the host economy.

18. Data on cross-border M&As are published mainly by investment banks and consulting firms. A problem with these data is the lack of a common definition of M&As. Another problem is related to the varying nature of data collected. For example, M&A data can be compiled on an announcement basis or on a completion basis. Nevertheless, despite differences, the broad trends presented by various data sources are similar. Comparisons between FDI and cross-border M&A data are not straightforward. For instance, while FDI data are presented on a net basis, M&A data are expressed as total transaction values of individual deals. In addition, cross-border M&A transactions do not necessarily result in international capital flows across borders (UNCTAD, 2000).¹³ Furthermore, M&As undertaken through the exchange of shares add additional difficulties to the compilation of these transactions in BOP statistics.¹⁴

19. In recent years, some private companies have also started to develop information on FDI related to greenfield and expansion projects,¹⁵ although these databases typically record *announced* FDI projects. Information is obtained from the media, industry organizations, investment promotion agencies and market research companies. There are limitations in using these data as they do not necessarily reflect the actual implementation of projects, and the

¹² For definition, see footnote 1.

¹³ For example, if a German company acquires a company in the United States and finances the deal with funds raised in the United States capital market, no capital will cross the border and no FDI will be registered.

¹⁴ The mode of exchange of shares is frequently used to finance a mega deal as their sheer size makes cash payment virtually impossible. For example, in the case of the 1998 Daimler-Chrysler deal with a transaction value of \$40 billion, there was no direct impact on the BOP of the countries concerned: the inflow of capital (in FDI) that resulted from Daimler's acquisition of Chrysler stock was offset by the outflow of capital recorded in the portfolio investment account that resulted from the distribution to Chrysler shareholders of the stock of the new company, DaimlerChrysler (UNCTAD, 2000).

¹⁵ The OCO Consulting's LOCOMonitor Database and the IBM Business Consulting Services' Global Locations Database are examples.

geographical coverage and other methodological aspects vary according to the source. Nevertheless, FDI project information can complement BOP data on FDI by providing detailed information on the companies, industries and locations involved in the transactions. As with M&A data, greenfield and expansion projects data are hard to compare with BOP data on FDI as they do not measure capital flows across borders.

20. Non-equity forms of investment involve a wide range of TNC activities, in particular subcontracting, contractual arrangements (e.g. offshoring, buy-back arrangements, turn-key arrangements, non-equity joint ventures, product-sharing), strategic alliances, including R&D contracts, franchising and licensing, which can also contribute to the development of host economy. Non-equity forms are common in the services sector, as well as in some natural-resources-related industries. While some information on these forms of investment can be partly obtained from data on royalties and licensing fees provided in the BOP statistics,¹⁶ the type of arrangement, value, partner names and, perhaps more importantly, the extent of these types of TNC activities are not available.

3. Operations data on TNCs' activities

21. The data referred to above are primarily useful when seeking to measure the magnitude of FDI. They do not provide much information about the actual activities undertaken by parent companies and foreign affiliates. A set of data on economic activities undertaken by parent firms and foreign affiliates is required in order to obtain a clearer picture of the importance of TNCs to the host economy. Operations data provide information on production (sales, value-added), labour (employment, wage rates), trade (exports and imports), innovation activities (R&D expenditures), tax payments, and so forth. The availability of such information is of importance to policymakers for assessing the economic impact of FDI and designing policy measures geared towards maximizing the benefits of FDI to the host country. At the same time, for home countries, data on the operations of home-based TNCs are important for monitoring the performance of their foreign affiliates and assessing the integration of the country into the global economy through outward investment.

22. The methodology for compiling statistics on the operations of TNCs is less developed than for measuring FDI flows and stocks. Moreover, relatively few countries collect such information, and it is normally collected through their own enterprise surveys. However, the need for operations data is increasingly acknowledged by both national statistical offices and international organizations. A useful reference document is the *Manual on Statistics of International Trade in Services* (MSITS), which was developed jointly by international bodies such as the IMF, OECD, WTO, the United Nations Statistics Division, the Statistical Office of the European Communities (Eurostat) and UNCTAD (United Nations et al., 2002). It reviews the key issues and definitions involved and makes comprehensive recommendations for the collection of these statistics (box 2). At the country level, for example, a "Multinational Enterprise Project" coordinated by the national statistical office of Canada (Statistics Canada) – and involving some TNCs of participating countries – aims at measuring the activities of TNCs on the basis of standardized and coordinated approaches.¹⁷

¹⁶ Defined as "receipts and payments of residents and non-residents for: (i) the authorized use of intangible non-produced, non-financial assets and proprietary rights such as trademarks, copyrights, patents, processes, techniques, designs, manufacturing rights, franchises, etc., and (ii) the use, through licensing agreements, of produced originals or prototypes, such as manuscripts, films, etc. " (IMF, 1993, p. 40).

¹⁷ See, for instance, the document submitted by Statistics Canada for the Conference of European Statistics, "Multinational enterprise (MNE) project progress report as of 10 May 2004" (CES/2004/WP.2, 11 May 2004).

Box 2. *Manual on Statistics of International Trade in Services*

The Inter-agency Task Force on Statistics of International Trade in Services – comprising the IMF, OECD, WTO, United Nations Statistics Division, Eurostat and UNCTAD – was established by the United Nations Statistical Commission in 1994 and began to develop in 1996 a manual (primarily for statistical compilers) with a view to setting out an internationally agreed framework for the compilation and reporting of statistics of international trade in services. The objective of this manual is to further the achievement of comparability of published statistics on international trade in services. It covers trade in services between residents and non-residents and services provided by locally established foreign-owned enterprises. The latter transactions are referred to as foreign affiliates trade in services (FATS) statistics. One chapter of this manual (chapter IV) is devoted to measuring the operations of foreign affiliates. Transactions between related parties are particularly highlighted in order to understand the degree to which the globalization of services is taking place.

The Inter-Agency Task Force has reached the implementation phase of the recommendations contained in the manual. Issues related to technical assistance and monitoring progress on the collection, dissemination and quality of the data on international trade in services and FATS, and to updating the manual, are currently included in the discussion agenda of the Task Force.

Source: UNCTAD.

23. The concepts relating to *foreign investment* and *foreign affiliation* (including, for example, the concepts of ownership, residence and valuation), recommended for use in operations statistics, are based on concepts developed by the United Nations and the IMF, respectively, in the System of National Accounts (SNA) and the BOP. They have been further elaborated in the MSITS by the organizations referred to above. There is general agreement on all but a few issues. The main issues still under discussion include whether data should be collected only for majority-owned foreign subsidiaries and branches or also for foreign associates, and whether to ascribe ownership of a direct investment enterprise to its immediate foreign owner or ultimate beneficial owner. MSITS recommendations on operational variables are to a large extent based on concepts used in the SNA. MSITS recommends that countries collect at least the following information on foreign affiliates: number of affiliates, sales, output, employment, value-added, exports and imports.¹⁸

Issues for consideration by experts

24. In view of the above analysis, experts may wish to consider the following issues for discussion regarding data on FDI flows and stocks and activities of TNCs:

- What are the main uses of different kinds of FDI and TNC-related data, particularly for policymakers in developing countries?
- What data collection methods should be used, taking into account the scarcity of financial and human resources in developing countries as well as the needs of their policymakers?
- How can we measure non-equity investments that are not covered in FDI statistics, nor in the current recommended list of variables on activities of TNCs?

¹⁸ This is the list of recommended variables in MSITS that "should be based primarily on their usefulness in implementing the GATS and in analysing globalisation phenomena" (United Nations et al., 2002, chapter IV).

III. Policy implications

25. The above review of different sources of data related to FDI and TNC activities illustrates the need to implement existing international standards. International guidelines on FDI data compilation also need to be developed further, taking into account recent changes in TNCs' mode of investment and types of activities in an increasingly globalized and liberalized international economy. Both the IMF and the OECD guidelines are currently undergoing revision, with new methodologies and definitions of FDI scheduled to be released in 2008. A Direct Investment Technical Expert Group (DITEG) was set up in 2004 by the IMF and the OECD to provide technical expert advice on the revision of the IMF's BOP manual and the OECD's Benchmark Definition of FDI. This group, of which Eurostat, the ECB and UNCTAD were members, completed the discussion and made recommendations on each of some 30 different issues related to FDI statistics on a BOP basis (box 3). Further discussion on some unresolved issues (e.g. special purpose entities (SPEs)) is being continued by the OECD in the context of updating the Benchmark Definition of FDI.

Box 3. Objectives and topics discussed at DITEG meetings, 2004–2005

The main objective of the joint IMF/OECD DITEG was to identify conceptual and methodological issues and to make recommendations to the IMF Committee on Balance of Payments Statistics and the OECD Workshop on International Investment Statistics on the issues suggested by DITEG. These issues are:

1. Valuation of (i) direct investment equity and (ii) branches
2. Direct investment – 10 per cent threshold of voting power/equity ownership, employment
3. Indirect investment – fully consolidates system, United States method, or 50 per cent ownership
4. Mergers and acquisitions
5. Reinvested earnings
6. Bring together all direct investment issues (stocks, flows, income, between affiliates) in an appendix to the BOP Manual.
7. Directional principle
8. Reverse investment – classification
9. SPEs, shell companies, holding companies, off-shore enterprises (units, sectorization, residence, transactions)
10. Rules for identification of branches
11. SPEs
12. Inclusion in direct investment of transactions between non-financial direct investment enterprise (foreign affiliate) and affiliated financial SPE
 - (i) Country identification (Ultimate beneficial owner/ultimate destination and immediate host/investing country)
 - (ii) Geographic classification principles (debtor/creditor or transactor principle)
13. Round tripping
14. Permanent debt between affiliated financial intermediaries
15. Land and buildings owned by non-residents
16. Use of maturity and full instrument split for direct investment
17. Multi-territorial enterprises
18. Application of direct investment to government
19. Bring together all direct investment related issues (transactions in goods and services, income, financial flows, stocks, between affiliates) as an appendix to the BOP Manual
20. Define terms more clearly, including: direct investor; affiliated direct investment enterprise; parent company; majority ownership and control; multinational enterprise; loan guarantees; debt forgiveness

21. Various special cases, including banking activities; (a) transfer pricing between banks; (b) shipping companies; (c) natural resource exploration and construction
22. Other capital (focusing on short-term instruments)
23. Inter-company transactions and amounts outstanding with fellow subsidiaries
24. FDI stock (financial versus economic measurement)
25. Valuation of real estate
26. Accounting methods and international accounting standards
27. Principles for classification by industry (according to direct investor or direct investment enterprise)
28. Greenfield investments
29. Extensions of capital
30. Mutual funds (units, sectorization, residence, transactions)

Source: DITEG.

26. Policymakers and researchers require data, classified by economic activity and geographical location, to understand fully the impact of FDI at both the macro and micro levels. They need to assess not only the amount of FDI they receive, but also whether this is the right kind of FDI, given their development objectives. They have to understand the impact of FDI on individual industries, in order to appreciate to what extent exports are promoted and technology enhanced; which industries and sectors are most affected; what the level of concentration is in individual industries; and how these effects change over time. Adequate information is similarly relevant to Governments that are considering entering into tax treaties and investment agreements and wish to evaluate their FDI policy efforts in a development perspective.

27. The availability of operational data and additional financial data would greatly enhance the ability of policymakers to assess the economic impact of FDI and design appropriate policies. By providing a broad array of statistical measures relating to the production and financial activities of TNCs, operational data give deeper insights that would otherwise not be available. Such data can convey a more specific and comprehensive picture of the operational activities of TNCs and their economic significance. However, such information is even more difficult to obtain than FDI data captured in the BOP framework. It requires additional effort, expertise and resources on the part of institutions responsible for compiling such information, often through surveys of foreign affiliates and parent firms.

28. The quality of FDI statistics is, to a large extent, determined by the comprehensiveness, timeliness, reliability and international comparability of data. To meet these criteria, official compilers have to be familiar with the methodology in use for producing estimates of FDI activity, as well as with the various types of institutional support available for properly recording and monitoring such activity. Institutional capacity building in the field of FDI statistics has a twofold dimension: one is methodology-related, drawing upon the principles and methodological standards of data on FDI and activities of TNC, and the other is organization- or institution-related. The former involves appropriate tools and human resources development, and the latter requires that a proper institutional or organizational framework be in place to enable relevant institutions to compile and process FDI data as well as operational TNC data.

29. There are important institutional bottlenecks to address. The quality of any individual data set reflects that of the institution producing it. Therefore, institutional arrangements

establishing the role and functions of agencies involved in the collection of relevant data are vital for the successful implementation of the FDI statistical capacity-building strategy. Some countries do not have a designated body reporting statistics on FDI and TNC activities. In others, multiple agencies report different series of FDI statistics; this suggests a need for better coordination between them. In both cases human resources development is required. For developing countries to establish their own FDI and TNC database system, there may therefore be a need for specialized technical assistance.

30. Such technical assistance could, for example, be provided to help establish systems for data compilation in line with international methodological standards and create the local capacity needed to maintain such a system. UNCTAD, for instance, has helped some developing countries collect and report FDI statistics (box 4). Work on improving data reliability and availability can also be conducted on a regional scale. The Association of South-East Asian Nations (ASEAN) provides an interesting illustration of how regional coordination and cooperation can be used in the area of FDI statistics (box 5).

Box 4. Examples of technical cooperation by UNCTAD in the area of FDI statistics

As part of a joint ESCWA/UNCTAD project on "Strengthening Networking and Expertise on Foreign Direct Investment in ESCWA Member Countries", ESCWA and UNCTAD during 2003–2005 organized national workshops in Bahrain, Jordan, Oman, Saudi Arabia, the Syrian Arab Republic and Kuwait to implement international methodological standards and assist in setting up data compilation and dissemination systems for internationally comparable FDI statistics. After the training workshops, participating countries undertook or will undertake their first surveys on FDI in 2004–2005. The first results of these surveys (e.g. Saudi Arabia) are reflected in the *World Investment Report 2005* (UNCTAD, 2005).

In Africa, as part of the project on "Capacity building in FDI statistics in Africa", which aims at strengthening the capacity of African countries to collect and analyse FDI flows in Africa, and is funded by InWent Capacity Building International of Germany, a workshop on "Capacity Building for Promoting FDI in Africa: Trends, Data Compilation and Policy Implications" was jointly organized by UNCTAD, UNECA and InWent Capacity Building International of Germany in November 2004 in Addis Ababa, Ethiopia. It was organized for central banks, national statistical institutes, investment promotion agencies and policymakers to address problems faced by African countries in compiling comparable and consistent statistics on FDI. At this workshop government participants from the 10 countries unanimously recommended the establishment of a regional network of FDI data compilers and statisticians. The objectives of this network would include narrowing data gaps and improving data quality (regional and national levels); networking; sharing of experiences and regional capacity building; and supporting policy development and analyses.

Source: UNCTAD.

31. Given the weak statistical systems for FDI and TNCs' activities existing in many developing countries, experts may wish to discuss the measures and policies required in order to enhance the capacity of national government agencies as regards the compilation, dissemination and analysis of such statistics so as to better meet the needs of policymakers and provide them with relevant, accurate and timely data that will help them in their investment policy decisions.

Box 5. Working Group on FDI Statistics in ASEAN

At the 29th ASEAN Economic Ministers Meeting, held on 16 October 1997 in Kuala Lumpur, the Ministers stated that the establishment of the ASEAN Investment Area (AIA) would enhance ASEAN's competitiveness and place ASEAN in a better position to attract continuously higher inflows of FDI into the region. In order to monitor and measure the progress of the AIA, it was deemed to be of paramount importance to review regularly, on a consolidated basis, FDI flows supporting FDI policy formulation in ASEAN. The need to have comparable FDI statistics in ASEAN was felt to be imperative. In addition, such provision of comparable FDI data would provide meaningful information for investors, policymakers and the general public. To this end, the heads of ASEAN investment agencies established in 1998 a Special Task Force on FDI statistics that later became the Working Group on FDI Statistics.

The primary objective of this group is to develop a harmonized or comparable approach for measuring, collecting and reporting FDI statistics with a view to providing a regional perspective of FDI flows and trends in the region, and allow the AIA Council to monitor progress and developments under the AIA arrangement. A regional view of FDI flows in ASEAN will provide a better basis for the objective evaluation needed to ensure the realization of the objectives of ASEAN as regards investment. The group meets twice a year and has helped improve FDI statistics in each member State. UNCTAD has been associated with this working group in an advisory capacity.

Source: Information from the ASEAN secretariat.

Issues for consideration by experts

32. Experts may wish to consider the following policy-related issues:
 - What are the main problems faced by developing countries, especially LDCs, in compiling BOP statistics on FDI flows and stocks?
 - In the light of resource constraints, in which areas are efforts most pressing to improve the availability and comparability of FDI data?
 - Which actions should be prioritized on which type of data and information? What schedule of activities should be established?
 - What are the main dos and don'ts that Governments should keep in mind when utilizing FDI statistics in the decision-making process for national policies?
 - How can country and regional experiences be most efficiently shared between developing countries?
 - What role can regional cooperation play in harmonizing FDI/TNC data compilation and reporting and improving the dissemination of such information? How can networking and partnership among countries in different regions be strengthened in these areas?
 - What are the technical assistance needs of developing countries that currently lack appropriate systems for data collection and reporting? How might LDCs be best helped in this respect?

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