**Twenty-Fifth Meeting of the**
**IMF Committee on Balance of Payments Statistics**
**Washington, D.C.**
**January 14–16, 2013**
**(Rescheduled from October 29–31, 2012)**

# Recent Activities of the OECD Working Group on International Investment Statistics

**Prepared by the**
**OECD**

Organisation de Coopération et de Développement Économiques
Organisation for Economic Co-operation and Development

English - Or. English

DIRECTORATE FOR FINANCIAL AND ENTERPRISE AFFAIRS
INVESTMENT COMMITTEE

## Working Group on International Investment Statistics

# RECENT ACTIVITIES OF THE OECD WORKING GROUP ON INTERNATIONAL INVESTMENT STATISTICS

**(Report by OECD, Investment Division)**

**IMF BOPCOM 29-31 October 2012, Washington D.C.**

Contact
Ayse Bertrand - Tel: +33 1 4524 9124 E-mail: ayse.bertrand@oecd.org

# RECENT ACTIVITIES OF THE OECD WORKING GROUP ON INTERNATIONAL INVESTMENT STATISTICS[1]

1. The present document includes a summary of major statistical activities of the Working Group on International Investment Statistics (WGIIS) over the last twelve-month period[2];

(i) Implementation of the OECD *Benchmark Definition of Foreign Direct Investment, 4th edition* (BMD4);

(ii) Transmission of FDI statistics to OECD according to BMD4

(iii) Globalisation research agenda: Total financing of MNEs

## I. IMPLEMENTATION OF BMD4

2. Issues related to the implementation of revised international standards of BMD4 are discussed under a regular agenda item "Tour d'Horizon". Several countries (Australia, Israel, France, New Zealand, South Africa, Turkey, United States) reported on their implementation process. The present section of the document will be limited to (a) the *new data collection system of Italy* which introduced a major change in its data collection[3]; and (b) *the communication policy of BMD4*.

### *a. New data collection system of Italy*

3. Italy has undertaken a major renovation of its external sector data collection system including the data collection for FDI statistics[4]. The major renovation of the data collection was the changeover to a new enterprise survey system while reducing substantially the contribution of the settlement system. The comparative advantage of the survey system is the increased ability to investigate directly with respondents and to obtain information on certain types of phenomenon which are blurred in a settlement system (e.g. treasury centres, cash pooling activities, etc). However, Italy continues using other sources as complement: securities database, balance of payments enterprise register; press releases; websites on financial event; commercial databases; EU FDI network; database of supervisory authorities.

4. The new Italian survey system comprises four questionnaires addressed to around 6000 enterprises. The so-called "Big players" are surveyed on a census basis for monthly or quarterly reporting. The remaining FDI population is sampled on the basis of stratification of variables included in the balance of payments register (total assets, geographical area and FDI relationship). The survey incorporates the

---

1 Report prepared by Ayse Bertrand, principle administrator, WGIIS Secretariat (Investment Division of Directorate for Financial and Enterprise Affairs, OECD)

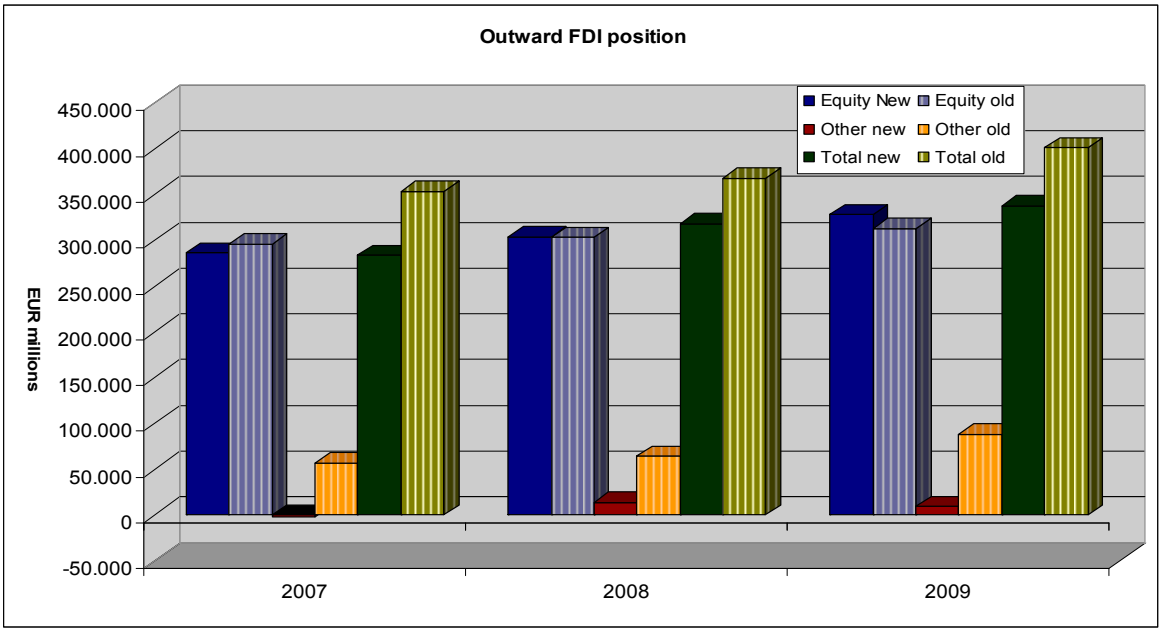
2 In addition WGIIS was involved in confidential accession and post-accession reviews which are not included in this document.

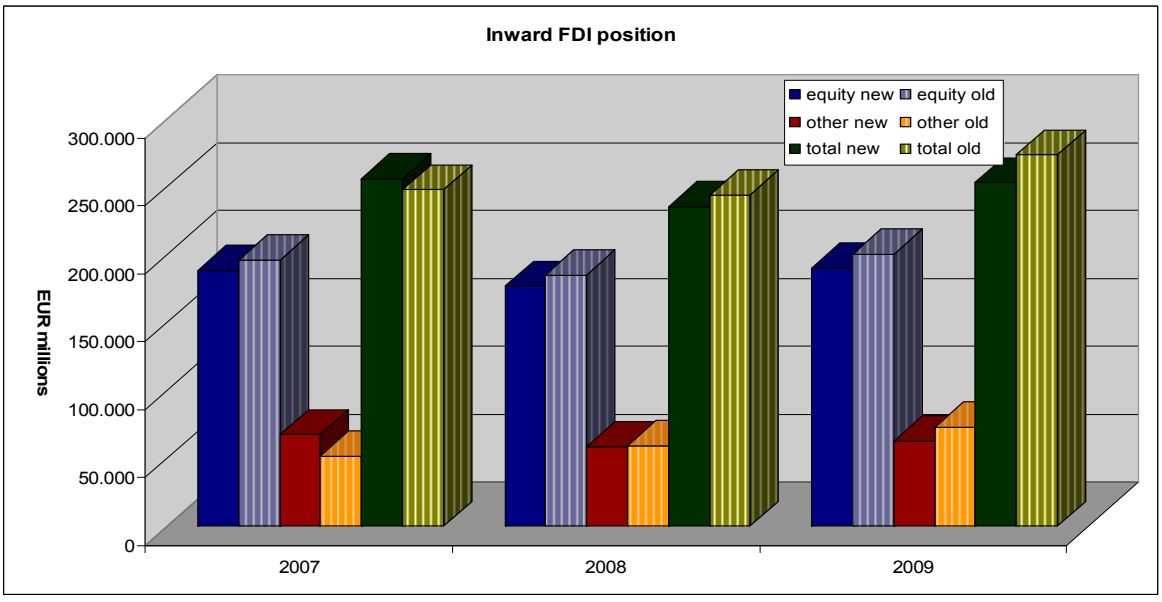
3 Australia's implementation of revised international standards in its macroeconomic statistics was included in a previous BOPCOM agenda and therefore is not included in the present document to avoid duplication.

4 Reference: DAF/INV/STAT/WD(2012)1

new concepts and methods of BMD4. Where it was considered to be necessary, some of the concepts were simplified and presented in a step-by-step approach.

**Chart 1: FDI POSITIONS OF ITALY:**
**Comparison of old and new data collection systems**




5. Critical issues were jointly analysed with reporting countries. Training sessions and access to frequently asked questions were organised for respondents as well as bilateral meetings with "Big players." Respondents were also provided free data entry software and a contact point for feedback.

6. Direct reporting for FDI was launched in 2008. The response rate of the new system improved has reached 90% in 2011. Back data for main FDI-aggregates are available since 1997 for both FDI flows and stocks. Detailed sectoral and partner country data start only in 2007.

7. Improvements in the data collections revealed cases of round-tripping of funds. FDI according to ultimate investing country is not yet fully available but information on SPEs is provided by respondents who are also asked to identify non-resident SPE counterparts. Main changes of the data between the old and the new system are mostly in the "other capital" component and to a lessER extent in "reinvested earnings". Changes were also observed in geographical and sector allocation. It is expected that looking through SPEs (including non-resident SPEs) would improve significantly the geographical breakdown.

### *b. BMD4 communication policy*

8. The main focus for the revision of international standards for foreign direct investment statistics was to respond more accurately and more clearly to users' analytical needs. FDI statistics rely more and more on sophisticated and complex methodologies. To this end, a new chapter on the uses of FDI statistics was introduced in BMD4. WGIIS, which has the technical responsibility of the FDI methodology, recommended that documentation should be put together in the form of a communiqué for the public at large, including the non-specialised public. This statement should be clear and well targeted and take into account FDI data releases of other international organisations in order to provide a good understanding of which data sets should be used for which type of analysis.

**Box 1. OECD's DISSEMINATION AND USES OF FDI STATISTICS**

OECD Secretariat collects annual [and quarterly] data from its members in accordance with standard statistical questionnaires[5] using the standard methodology [currently BMD3 but BMD4 for the purpose of the communiqué]. These data are disseminated by the Directorate for Financial and Enterprise Affairs [DAF] in various ways and are based on directional principle:

*(i)* *International Direct Investment Statistics Yearbook* includes detailed statistics for each reporting country;

*(ii)* *International Direct Investment On-line Database* is an on-line service providing detailed historical FDI statistics for all reporting countries. The database is updated on an on-going basis as reporting countries submit their revisions

*(iii)* *Trends in Foreign Direct Investment – OECD indicators* is an annual publication combining annual detailed FDI statistics and aggregate data and includes some analysis of FDI trends as well as short country profiles of reporting countries;

*(iv)* *FDI in figures* is a web based product to provide timely quarterly estimates of FDI aggregates accompanied by a brief description of recent FDI trends.

*(v)* *Ad Hoc publications:*

- *OECD Newsletters [Investment Newsletter and OECD Statistics Newsletter]*: the Secretariat includes articles in selected issues of newsletters together with FDI aggregates.
- *OECD Handbook on Globalisation Indicators:* FDI indicators are part of this irregular publication which includes data and analysis;
- *OECD Factbook* is an OECD-wide annual publication including main indicators for all OECD statistics including FDI.
- *Committee reports and country studies.*

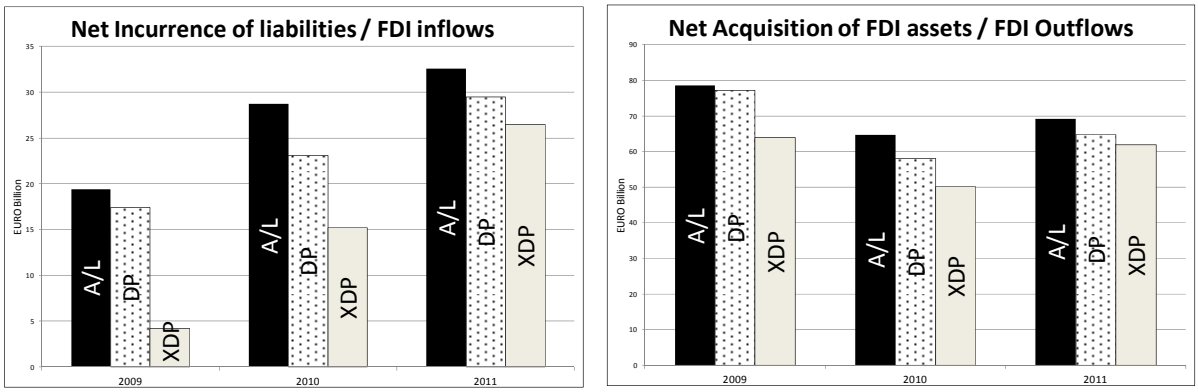
[5] See DAF/INV/STAT(2012)2/REV1 and its addenda for standard OECD Questionnaires on FDI statistics.

*A/L versus DP and XDP*

9. The methodology of BMD4 and BPM6 are fully consistent. However the presentation of the statistics is based on different principles for different types of analysis. While BMD4 recommends the use of the extended directional principle[6] (XDP) for detailed FDI statistics, FDI as part of the balance of payments and international investment position statistics are presented according to the asset/liability principle adopted by BPM6. On the other hand, FDI statistics compiled under the IMF initiative Co-ordinated direct Investment Survey (CDIS) is based on the extended directional principle and therefore in line with FDI statistics of the OECD and UNCTAD and the recommendations of BMD4.

10. FDI according to asset/liability and the extended directional principle may represent large differences, depending on the extent of reverse investments and intercompany loans between fellow enterprises. FDI according to A/L also shows differences with FDI according to directional principle, i.e. the methodology according to BMD3. For the OECD area, in total, cumulated FDI flows over 2008-10 measured according to DP [BMD3] show a reduction of inflows by $325 billion (-10%) from "net incurrence of liabilities" and of outflows by $315 billion (-7%) from "net acquisition of assets". These data are based on estimates and may, when revised, represent more significant differences. At the World level, the difference is not as significant as one might have expected because a large number of non-OECD countries do not measure reverse investments according to standards set by BPM5 or BMD3.

***Chart 2.*** **FRANCE: FDI FLOWS – DIFFERENT RECORDING PRINCIPLES**




*Source: Banque de France, Rapport annuel 2011 and IMF*

11. A comparison of the A/L based data and XDP for the entire OECD area could not be presented in the present document due to lack of relevant statistics for all countries. When all countries produce data according to BMD4, this comparison should cover XDP. Differences in the results are expected to be even more significantly due to the recording method of loans between fellow enterprises to eliminate the effects of round-tripping and capital in transit.

6 For the sake of clarity, in this document Extended Directional Principle (XDP) relates to the recommendations of BMD4 and Directional Principle (DP) to BMD3 [see Box 2 for definitions].

**Box 2. FDI Statistics- measurement principles**

***Directional principle:***

**According to BMD4 – Extended Directional Principle (XDP):**

Presentation of the FDI data on a directional basis reflects the direction of influence by the direct investor underlying the direct investment: *inward or outward direct investment*. FDI according to directional principle relates to the treatment of *reverse investment* and to the treatment of *fellow enterprises*.

(i) Reverse investment

(ii) Investment between fellow enterprises:

- If the ultimate controlling parent is a resident of the compiling economy, then the transactions and positions between the two fellow enterprises are categorised as *outward foreign direct investment*
- if the ultimate controlling parent is not a resident of the compiling economy, then the transactions and positions between the two fellow enterprises are categorised as *inward foreign direct investment.*

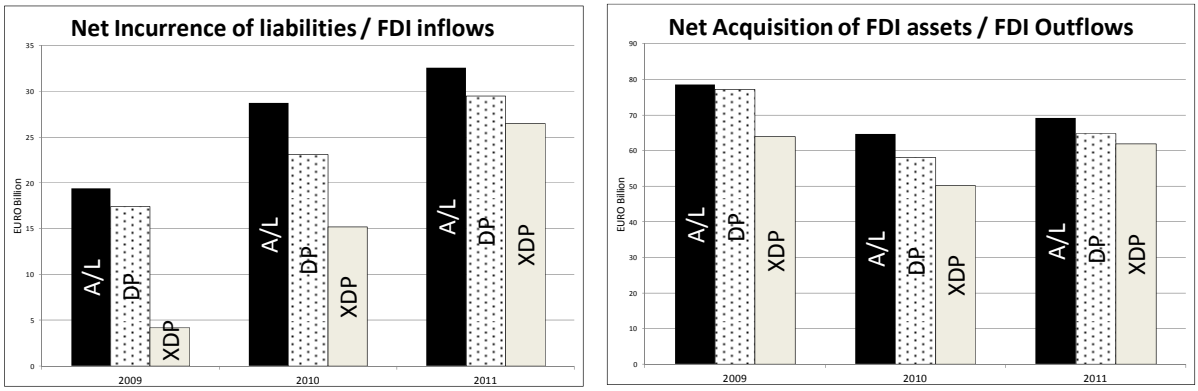
**According to BMD3 and BPM5 – Directional Principle (DP):**

Directional principle relates only to the reverse investment indicated above. Transactions/positions between fellow enterprises are recorded as assets and liabilities.

***Asset/Liability principle:***

The asset/liability principle records all FDI financial claims on and obligations to non-residents using the normal balance sheet data showing gross assets and liabilities for positions, and net transactions for each category. The data presented on this basis, while compiled distinguishing the nature of the relationship between the counterparts (according to Framework for Direct Investment Relationships), do not incorporate any offsetting of reverse direct investment transactions or positions in equity or debt between a direct investment enterprise and its direct investor. Similarly, the asset/liability presentation does not incorporate any offsetting of any transactions or positions between fellow enterprises.

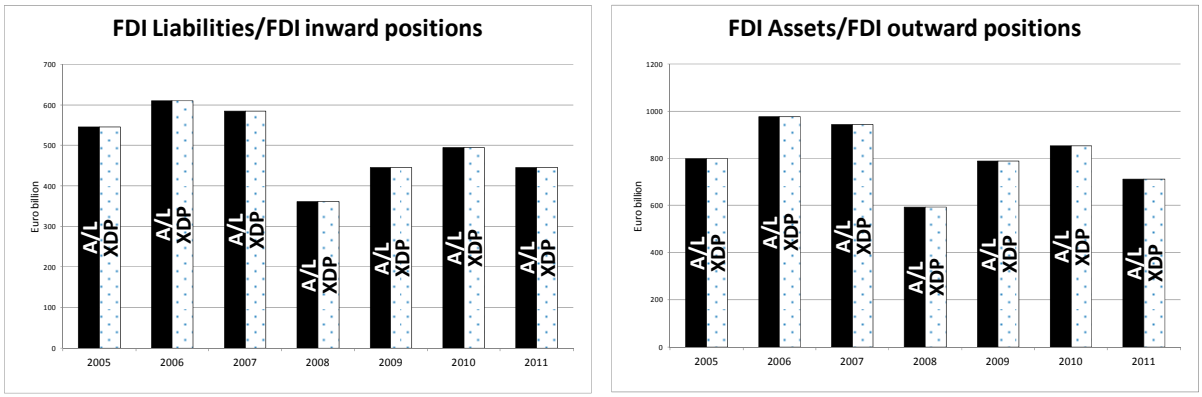
***Chart 3.*** **FRANCE: FDI FLOWS – DIFFERENT RECORDING PRINCIPLES**




*Source: Banque de France, Rapport annuel 2011 and IMF*

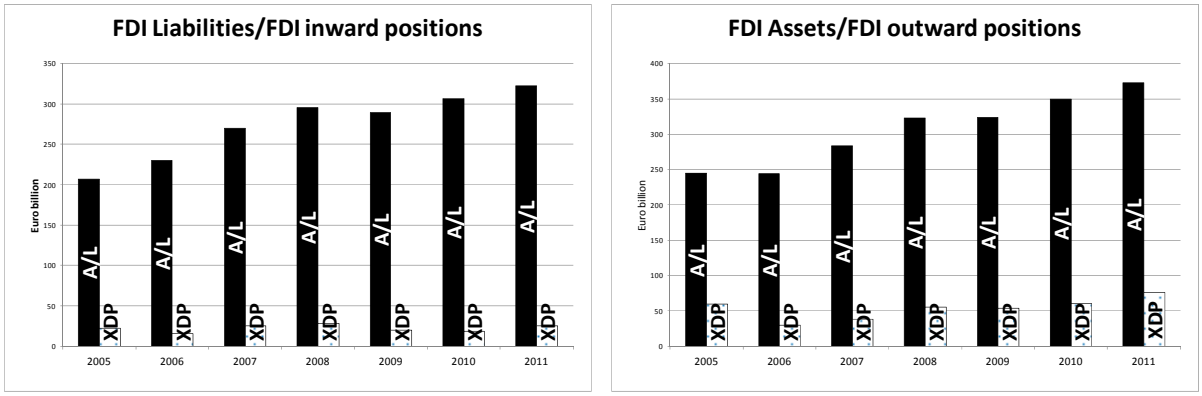
12. FDI according to asset/liability and the extended directional principle may represent large differences, depending on the extent of reverse investments and intercompany loans between fellow enterprises. FDI according to A/L also shows differences with FDI according to directional principle, i.e. the methodology according to BMD3. For the OECD area, in total, cumulated FDI flows over 2008-10 measured according to DP [BMD3] show a reduction of inflows by $325 billion (-10%) from "net

***Chart 4.*** **FRANCE: FDI "EQUITY" POSITIONS – DIFFERENT RECORDING PRINCIPLES**




*Source: Banque de France, Rapport annuel 2011 and IMF*

***Chart 5.*** **FRANCE: FDI "DEBT" POSITIONS – DIFFERENT RECORDING PRINCIPLES**

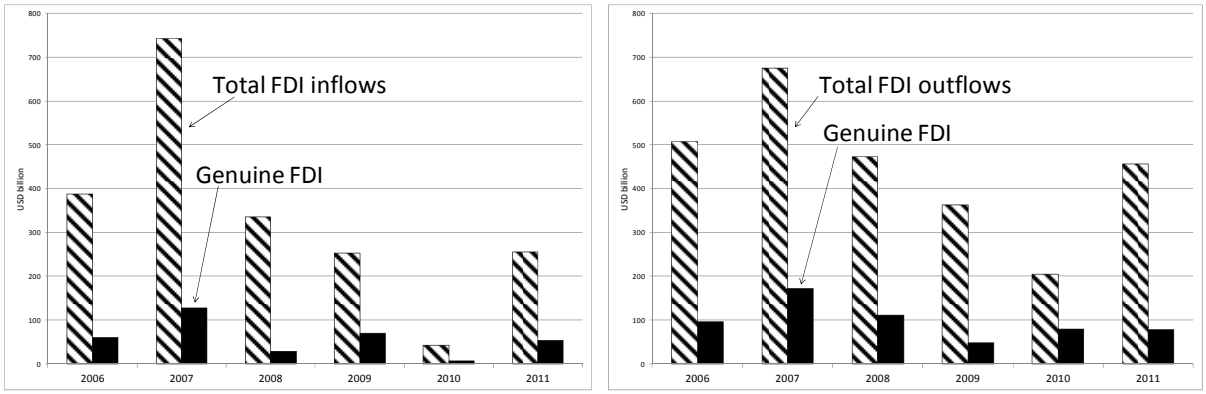



*Source: Banque de France, Rapport annuel 2011 and IMF*

*FDI including/excluding SPEs*

13. BMD4 recommends that in addition to standard total FDI flows and positions, the data should be presented with further breakdowns segregating resident Special Purpose Entities (SPE). In other words, there will be three data sets for each type of FDI corresponding to all entities, all entities except resident SPEs, and resident SPES.

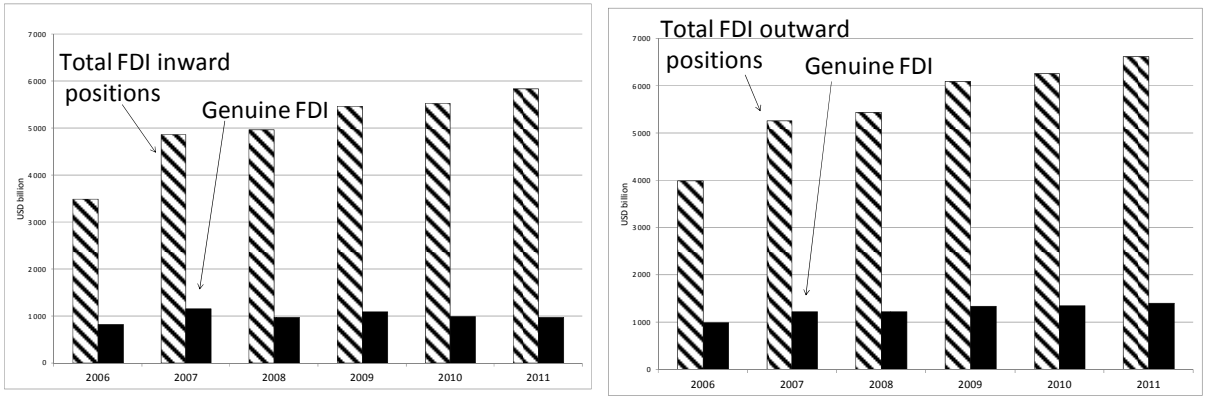
***Chart 6.*** **"GENUINE" FDI FLOWS AND SPEs: TOTAL FOUR**
**(Austria, Hungary, Luxembourg, Netherlands)**




*Source: OECD - International Direct Investment database*

14. Some OECD countries already publish separately their FDI statistics for resident SPEs. The difference between transactions and positions of SPEs could be significantly large depending on the extent of the presence and the activities of SPEs in a specific jurisdiction. Genuine FDI positions (investments excluding SPEs) of four OECD countries in aggregate, Austria, Hungary, Luxembourg and the Netherlands, represent one sixth of their total inward positions and one fifth of their outward positions.

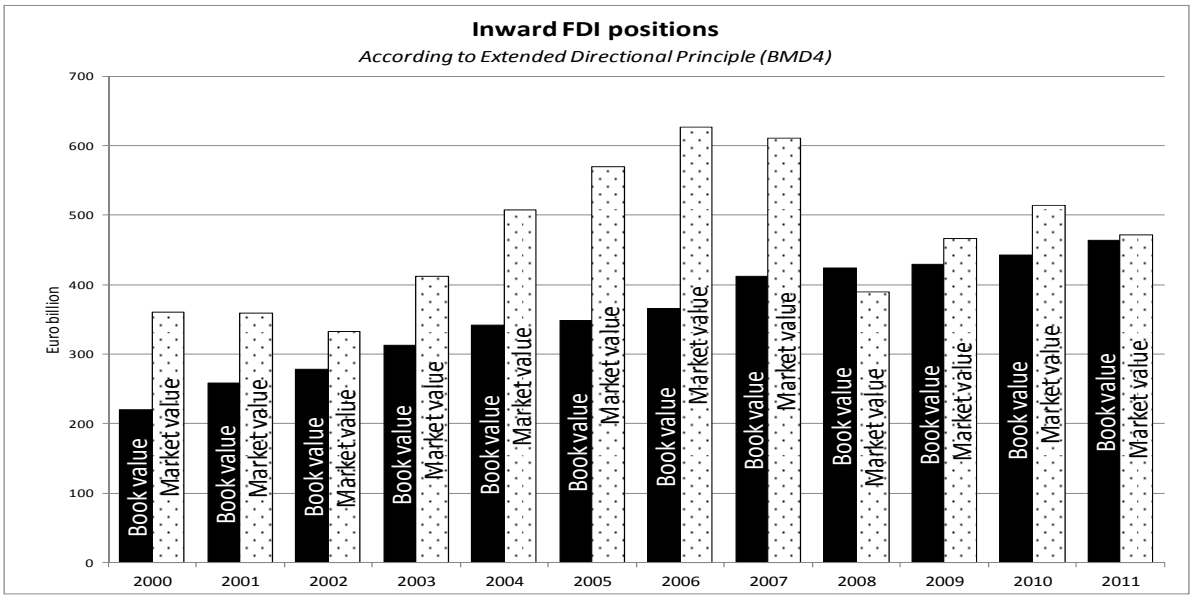
***Chart 7.*** **"GENUINE" DI POSITIONS AND SPES: TOTAL FOUR**
**(Austria, Hungary, Luxembourg, Netherlands)**

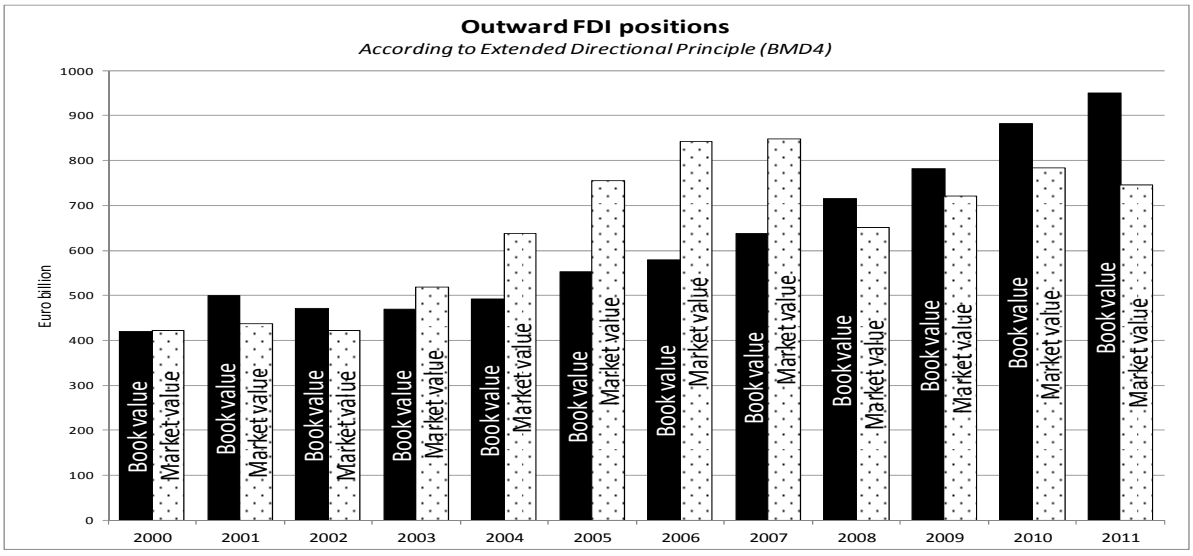


*Valuation*

15. BMD4 recommends that FDI statistics be compiled using market values. It provides a list of methods to approximate market values for unlisted companies. A number of countries continue using book values for their detailed FDI statistics. The differences in the choices and the reasons behind are not well known to all users of statistics. On the other hand, values measured with different valuation methods may be large and may show different trends. For example, between 2003-2007 outward FDI positions of France at market value was superior to FDI measured on the basis of book values. As from the start of the economic and financial crises in 2008 and lower stock prices, outward FDI measured according to book values became more prominent (difference of 20% in 2011).

***Chart 6.*** **FRANCE: FDI POSITIONS – METHODS OF VALUATION**




*Source: Banque de France, Rapport annuel 2011*

**II. Transmission of FDI statistics to OECD according to BMD4**

16. In 2011WGIIS endorsed a new statistical questionnaire for national agencies to report FDI statistics to the OECD. The questionnaire incorporates the concepts and definitions of the BMD4 and is closely aligned with its data reporting templates. OECD will support two technical data transmission procedures: (i) Excel based electronic questionnaire; and (ii) Statistical Data and Metadata Exchange (SDMX).

17. WGIIS agreed that the transition to BMD4 basis will be at the latest on 2014 for reference year 2013 which will be a break in series. Countries which can provide revised historical data are welcome to do so.

18. Since March 2012, when WGIIS last discussed FDI data transmission modes, the design of SDMX dimensions for external sector statistics has progressed. The preparatory work is carried out by the Technical Group on SDMX BOP-DSD (TG) which looks after balance of payments and international investment statistics as well as FDI. This work involved, to a large extent, a conceptual organisation of the methodology included in international manuals but not the technical aspect of SDMX transmission. The exercise has reached a stage of maturity where pilot testing is presented to countries willing to test the proposed structure.

19. In accordance with the initial timetable, the TG finalised the first step of the project whereby it prepared two Data Structure Definitions (DSD):

(i) BOP-DSD for balance of payments and international investment position statistics; and

(ii) FDI-DSD for direct investment statistics.

20. The first phase pilot review for FDI-DSD was launched at end-July 2012. Its outcome will be discussed by WGIIS at its meeting on 9-10 October 2012. Phase 2 pilot review will be in November 2012.

**Box 3. FDI reporting to OECD: Coverage of statistical questionnaires**

FDI questionnaire of the OECD covers the following standard and supplemental reporting:

(i) *Macro-economic statistics - FDI aggregates*: using *asset/liability principle* (fully consistent with balance of payments statistics and international investment position)
- *Standard reporting*: aggregate data without partner country or activity breakdown

(ii) *FDI statistics:* using *directional principle*
- *Standard reporting:* Inward and outward FDI financial and income flows and positions broken down by immediate partner country or by economic activity. Each breakdown is further disaggregated by main components and by type of enterprise: (i) enterprises excluding resident Special Purpose Entities (SPE); and (ii) resident SPEs
- *Supplemental reporting:*
  - inward and outward FDI financial and income flows and positions broken down by immediate partner country or by economic activity looking through non-resident SPEs (in addition to the above standard presentation)
  - Segregating equity flows which are mergers and acquisitions
  - Allocating inward FDI positions to ultimate controlling parent
  - Reporting FDI by crossing partner region and economic activity

## III. TOTAL FINANCING OF MULTINATIONAL ENTERPRISES (MNE)[7]

21. International investment, which has a long history going back to the 19th century, is one of the key elements of international economic integration. Initially, foreign investors were almost exclusively large multinational enterprises (MNE). Gradually, small and medium size enterprises became important players. Along with deregulation of markets in the second half of the 20th century, investment behaviours changed to maximize profits.

22. The need to measure the size of rapidly growing cross-border investments and increasingly complex financing structures led OECD Governments to adopt in 1983 a new instrument -- the Benchmark Definition of Foreign Direct Investment -- to provide guidance to national authorities on how to measure financial and income flows and stocks of foreign direct investment by multinational enterprises. OECD published in 2005 the *Handbook on Economic Globalisation Indicators* (Handbook) which includes guidance on a new sets of statistics --Activities of Multinational Enterprises (AMNE)- and focuses on the economic measures of foreign direct investment enterprises

23. These measures of financial and economic activities of MNEs are however not based on compatible statistical concepts and definitions and therefore cannot be used in tandem. Against this background, the Council, at the time when it endorsed the BMD4, "*instructed the Investment Committee, to take steps through its Working Group on International Investment Statistics "for the harmonization and integration of FDI statistics and the statistics on the activities of multinational enterprises to respond to the needs of the analysis of the global economy*".

24. The proposal by WGIIS does not recommend any modifications to BMD4, which is consistent with IMF's Balance of Payments and International Investment Position Manual, 6th edition (2008) and the System of National Accounts 2008. The report does however recommend a review of some of the chapters of the Handbook which are no longer in line with international standards for macroeconomic statistics.

25. Regarding the integration of FDI and AMNE statistics, the report recommends a new analytic framework, MNE Framework, for consistent data series for financial and economic activities of MNEs. This recommendation is, to a large extent, based on existing data sets to limit additional reporting burden on national data providers. It also promotes more efficient and co-ordinated data collection on MNEs -- a feature most particularly of interest for emerging economies involved in establishing new statistical systems. The highlights of the new MNE Framework are to:

(1) measure total assets/liabilities and total economic activities of MNEs according to a common data reporting framework (i.e. going beyond, but also including FDI);

(2) include both cross-border and local financing;

(3) include direct and indirect control relationships (more than 50% ownership of voting equity);

(4) use stock data from balance sheets of direct investment enterprises as a matter of principle and to consider use of flow data, and data on the acquisition of equity by type (M&A, greenfield, etc.) as a supplement;

(5) allocate to ultimate investor (ultimate controlling parent) and to ultimate host;

(6) consolidate statistically for the group to eliminate double counting due to funds in transit or round-tripping; and

(7) provide a set of meaningful indicators to analyse MNEs.

[7] See Appendix for the full report

26. The report provides a consistent theoretical framework for financial and economic activities of MNEs. Such data are not currently collected in a consistent way as part of official statistics. If the proposal is endorsed by the Investment Committee, WGIIS will devote time during 2013-14 work programme to provide practical compilation guidance for the statistics. Integrated and comprehensive financial and economic MNE data and indicators would provide a valuable tool for policy making as well as for other types of analysis.

***Case study of group financing for a simple MNE:***

***Figure 1*: A SIMPLE MULTINATIONAL ENTERPRISE GROUP**

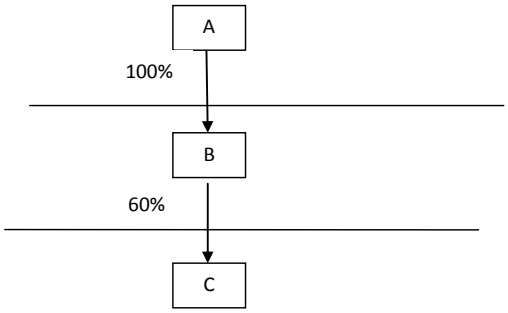



***Exhibit 1*: BALANCE SHEETS OF ENTERPRISES IN A SIMPLE MNE GROUP**

**Balance sheet of A (Country A)**

| Assets | | Liabilities | |
|---|---|---|---|
| Equity in B | 200 | | |
| | | Loan from B | 50 |
| | | Other | 150 |
| Other | 300 | Equity | 300 |
| Total | 500 | Total | 500 |

100%

**Balance sheet of B (Country B)**

| Assets | | Liabilities | |
|---|---|---|---|
| Equity in C | 420 | Other | 50 |
| | | Bank loan | 450 |
| Loan to A | 50 | | |
| | | Equity | 200 |
| Other | 230 | | |
| Total | 700 | Total | 700 |

60%

**Balance sheet of C (Country C)**

| Assets | | Liabilities | |
|---|---|---|---|
| Deposit | 1000 | Bank loan | 490 |
| | | Other | 10 |
| Other | 200 | Equity | 700 |
| Total | 1200 | Total | 1200 |

27. In the above example various financial variables associated with each of the companies of the group can be associated with different measures of analytical values (see also Exhibit 1):

***(i) Elements of the Balance sheet associated with Foreign Direct Investment:***

- FDI from country A to country B: Country A will record an outward equity investment of $200 in a wholly owned foreign subsidiary (100% ownership). On the other hand, the wholly owned foreign subsidiary extended a loan of $50 back to the parent. The outward FDI value according to BMD4 (on a directional basis) is as follows:
  - Equity: $200
  - Debt: $-50
  - Total outward FDI of A= $150
- Country B would report an ***inward FDI*** of $150 from country A. Country B will on the other hand report $420 ***outward FDI equity*** vis-à-vis country C (B owns 60% of B):
  - Inward FDI of B= $150 (from A)
  - Outward FDI of B= $420 (to C which is owned 60% by B)
- Country C will record an inward FDI from country B of $420

***(ii) Beyond Foreign Direct Investment:***

A further analysis of the data, going beyond FDI transactions and related positions, can shed some light on the financial exposure of a group. Two additional variables of the above example can be analysed: ***third party financing or debt exposure outside of the group:***

- Company A in country A has some "other liabilities", of $150, borrowed outside of the group;
- Company B in country B has in total "other liabilities", of $500, which consist of a bank loan of $450 and "other liabilities of $50;
- Company C in country C has a bank loan of $490 "other liabilities" of $10 and a portion of the equity not held outside the group (40% of $700=$280).

The total third party financing of the group is thus:

Balance sheet of A = $150

Balance sheet of B= $450+$50

Balance sheet of C= $490+ $10+$280 (40% of $700)

***Total third party financing: $ 1430***

**Total assets of the group under the control company A which is the group head (ultimate controlling parent) located in country A:**

- Since company A in country A owns 100% of company B and, indirectly, 60% company C, it controls the assets of the entire group.

- The total assets of company A ($500), company B ($700) and company C ($1200) are thus controlled by country A, for a total of $2400.

***Total assets controlled by A = $2400 (of which $570 is FDI)***

28. ***Conclusion: Foreign direct investment is the key element to measure cross-border investments but third party financing and total assets of the group provide a more complete image of the economic involvement of a group as well as its cross-border and local exposure.***

29. The report proposes a common statistical framework for MNE statistics for both financial and economic variables based on a theoretical example. Compilation guidance planned for 2013-2014 could benefit from close co-operation between experts of FDI and AMNE statistics.

30. The proposed statistical framework would also provide an input to the developments of new data series according to G20 Data Gaps Exercise, Recommendation #13 to measure the cross-border risk exposure of non-financial corporations

**APPENDIX:**

**HARMONISATION AND INTEGRATION OF FINANCIAL AND ECONOMIC MEASURES OF MULTINATIONAL ENTERPRISES: DRAFT REPORT**

## 1. INTRODUCTION

### *1.1 Background of the project*

31. Foreign investment has a long history going back to the second half of the 19th century and information indicates it played a relatively important role in the international economy at that time. Historically, most international investment in the early days was in the form of portfolio investment in fixed-interest loans and securities. Prior to the first World War only a very few companies established operational units abroad, a situation which evolved rapidly starting in early 1920s with the growing importance of the United States as a source of foreign investment. The slowdown in international investments in the 30s was due to the depressed economic environment, and the upsurge in the 50's was limited due to regulated capital flows and exchange rates. During 1970s, international direct investment became increasingly important in some domestic market segments signalling important changes in investment behaviour. To promote and strengthen co-operation as markets became deregulated, OECD governments adopted in 1976 the Declaration on International Investment and Multinational Enterprises considering that "international investment has assumed increased importance in the world economy and has considerably contributed to the development of their countries.", .... that "multinational enterprises play an important role in this investment process" and that "co-operation by Member countries can improve the foreign investment climate, encourage the positive contribution which multinational enterprises can make to economic and social progress, and minimize and resolve difficulties which may arise from their various operations". In 1983 the OECD Council endorsed a new instrument – the *OECD Benchmark Definition of Foreign Direct Investment*" -- to provide guidance to national authorities on how to measure international direct investment.

32. Initially, foreign investors were almost exclusively large multinational enterprises (MNE). With the removal of barriers to market access, their number increased more rapidly and, later, small and medium size enterprises became increasingly involved in cross-border investments. MNEs have diversified their investment patterns into more complex structures and, thus, made the size of investments difficult to estimate. One may questions how reliable direct investment statistic reflect the value of economically meaningful "genuine" FDI transactions and positions because the data may be artificially inflated by numerous transactions in the form of funds in transit or round-tripping of domestic capital under complex financing structures that were usually put in place to optimize the benefits to investors. In order to overcome some of the interpretation difficulties, FDI statistics may benefit from complementary information.

33. In the light of these developments of MNEs to finance their cross-border investment and taking into account the revision of the concepts and methods applied to overall macroeconomic statistics[8], the Working Group on International Investment Statistics (WGIIS) revised its recommendations for FDI statistics. In 2008, the OECD Council considered a proposal by the Investment Committee and endorsed the 4th edition of the *Benchmark Definition of Foreign Direct Investment* (BMD4). For the first time, the *Benchmark Definition of FDI* included a chapter devoted to statistics on economic activities of

[8] System of National Accounts (2008) and IMF Balance of Payments and International Investment Position Manual, 6th edition (2008).

multinational enterprises which summarizes relevant sections of the *OECD Handbook of Economic Globalisation Indicators (2005)* (Handbook). The Council also endorsed the research agenda proposed in BMD4 and included in its recommendations specific instructions to the Investment Committee and WGIIS to carry out further work on the *"harmonisation and integration of statistics on foreign direct investment and on the activities of multinational enterprises to respond to the needs of the analysis of the global economy*" (see Box 1).

34. The present report is a follow up of this Council instruction. It was prepared by the WGIIS for approval by the Investment Committee and its possible transmission to the Council. It is also submitted to the Committee on Industry, Innovation and Entrepreneurship.

35. ***The aim of the exercise is to improve the analysis of multinational enterprises in the global economy. To achieve this objective it is necessary to reduce recognised methodological divergences and/or inconsistencies which may exist between the financial and economic measures of multinational enterprises and to propose a comprehensive analytical framework in the form of building blocks.*** It is also worth mentioning that this research work on the analysis of statistics of MNEs is likely to contribute to FSB/G20 Data Gaps exercise, Recommendations 13& 14, relating to cross-border risk exposure of non-bank financial institutions and non-financial enterprises.

**Box 4. WGIIS Mandate to harmonise and integrate FDI/AMNE statistics and working methods**

The OECD Council recommendation on the *Benchmark Definition of Foreign Direct Investment, 4th edition* (BMD4), adopted by the Council on 22 May 2008, instructed the Investment Committee, to take steps through its Working Group on International Investment Statistics "*for the harmonization and integration of FDI statistics and the statistics on the activities of multinational enterprises to respond to the needs of the analysis of the global economy*".

This request is in recognition of the needs for comprehensive and reliable data on multinational enterprises' activities for sound policy making. While foreign direct investment (FDI) statistics include financial information on cross-border investments, statistics on the activities of multinational enterprises (AMNE) examine other economic information. The need for a meaningful analysis of MNE financing and related economic activities was highlighted by the recent global crises.

The Working Group on International Investment Statistics endorsed in October 2010 the roadmap on the harmonization and integration of FDI and AMNE statistics. [DAF/INV/STAT92010)5/REV1]. Following the roadmap on the harmonisation and integration of FDI and AMNE statistics, WGIIS has set up an electronic discussion group (EDG) MNE Statistics Advisory Group (MSAG)[9] which is complemented by a second EDG on Green FDI. This exercise promotes further dialogue between statisticians involved in FDI and AMNE statistics in both national and international agencies.

Upon its approval, the Investment Committee may decide to transmit the report to the Council in response to its instruction in C(2008)76.

### *1.2 The structure of the report*

- The scope and coverage
- Harmonisation and integration of FDI and AMNE variables
- Uses of MNE statistics (indicators)

[9] See AMSG terms of reference in DAF/INV/STAT(2011)3/REV1.

- Revision of the Handbook on Economic Globalisation Indicators
- Annexes & Glossary

## 2. THE SCOPE AND COVERAGE OF THE REPORT

### *2.1 An overview of statistical measures of MNEs: FDI and AMNE*

36. Historically, FDI statistics, first compiled as part of "balance of payments statistics", developed into more detailed statistics beginning in early 1980s. The most recent methodological guidance is provided in the OECD *Benchmark Definition of Foreign Direct Investment, 4th edition*. Underlying concepts/definitions are consistent with those of balance of payments and international investment positions. Additional breakdowns were introduced in FDI statistics as building blocks because users need a variety of analytical data series. These breakdowns are mainly by partner country (geographical allocation) and by industrial activity. All thirty-four OECD countries report FDI statistics annually to the Secretariat. Historical data for most countries start as early as the first half of 1980s.

**Box 5. What do we measure with FDI statistics?**

FDI measures cross-border investments with the objective of having lasting influence on enterprises affiliated to the same multinational group as described in the BMD4.

(i) *FDI flows and stocks measure cross-border equity investments and intercompany debt*. FDI includes acquisitions of existing *equity* and/or issuance of new *equity* representing 10% or more of the voting power as well as *inter-company loans* between parents and their non-resident affiliates (or vice-versa) and loans between fellow enterprises (which generally do not have equity holdings in each other). FDI statistics also cover MNEs' *income from direct investment* which is measured as *income from equity* (dividends and reinvested earnings) and *income on debt* (interest from intercompany loans). FDI transactions and positions are measured with respect to the first counterparty. For inward investments, FDI positions can be reported according to *ultimate investing country* (UIC) on a supplemental basis. For outward investment, the methodology of analogous measures (i.e. positions by ultimate host country) is not available.

(ii) FDI measures only *the percentage share of cross-border investments* but not the total equity capital of enterprises.

(iii) Rules set by the *framework of direct investment relationship* (FDIR) allow mapping the relationships between affiliated enterprises; i.e. identifying the population of enterprises which is to be surveyed for data collection purposes. FDIR includes not only non-resident relationships but also affiliates resident in the same economy and belonging to the same multinational group, even if transactions and positions between them are not recorded in FDI statistics. (For more information see BMD4 Chapter 3 and Annex 4).

(iv) FDI statistics *exclude other types of cross-border flows* such as portfolio investments, financial derivatives and other investments. FDI also *excludes all flows and stock between affiliated enterprises resident in the same economy*.

37. While FDI statistics are crucial to an understanding of the direct investment relationship and allow important insights into the economic linkages between home and host economies, additional indicators are necessary to place these statistics into context and to describe the enterprises in which there is direct investment, measure their activities, and assess their economic impact. The need for such complementary indicators arises for two primary reasons. The first is the requirement for a factual foundation to underpin analyses of the globalisation of economic activity—a phenomenon that entails not only the internationalisation of consumption through trade between residents and non-residents, but also the internationalisation of production through FDI. The second is to provide statistical information that

can be used in support of international agreements, such as the General Agreement on Trade in Services, which include commercial presence as a mode of supply. (BMD4, paragraph 381)

38. AMNE statistics were developed from what is generally referred to as "business statistics"[10] in national statistical systems. A presentation of these data according to common definitions and a consistent framework emerged much later in the latter part of 1990s. The *OECD Handbook on Economic Globalisation Indicators* (2005) is the first manual including recommendations on how these statistics should be compiled and presented[11]. OECD's database includes AMNE statistics for manufacturing and services sectors. However, not all OECD countries report AMNE statistics to the Secretariat. For countries reporting these data, a significant number of improvements are still expected in terms of the availability of individual economic variables, their timeliness and consistency.

**Box 6. What do we measure with AMNE statistics**

AMNE statistics provide measures related to economic activities of MNEs following the recommendations of the *OECD Handbook on Economic Globalisation Indicators*[12]:

(i) AMNE statistics have a broader coverage than Foreign AffiliaTes Statistics (FATS). In addition to foreign- controlled affiliates which are covered by FATS, AMNE statistics include information on the activities of the ultimate controlling parent and its resident affiliates;

(ii) AMNE/FATS statistics relate to control relationships which are measured by the numerical guide of more than 50% ownership of the voting power. Minority holdings are excluded.

(iii) Main economic variables for AMNE/FATS statistics are sales (turnover); employment; value added; imports/exports of goods and services; number of enterprises. Other variables which could have significance are total assets (financial and non-financial, produced or non-produced); compensation of employees; net worth; net operating surplus; gross fixed capital formation; taxes on income, and research and development expenditures.

(iv) Measures used by AMNE/FATS statistics relate to total activities of the enterprise even when foreign control is achieved by less than 100% ownership. The underlying assumption is that the ultimate controller is the decision-making unit for all the activities of the enterprise and not only for the share which corresponds to the percent of foreign ownership of the company's voting share.

39. FDI and AMNE data sets are not consistent and the task to reconcile them could be complex and difficult to achieve. Many of the guiding principles and underlying concepts of financial and economic measures are different even though both sets of statistics relate to cross-border investment of multinational enterprises. It is, therefore, necessary to define what "harmonisation and integration" of FDI and AMNE statistics entail within the context of the present report. The Council leaves it up to the experts to determine the scope and coverage of the exercise as well as the modalities to reach the objective. Hence, the implication of the Council recommendation is twofold.

[10] Business statistics: There is no official definition of "Business Statistics" which generally cover structural and demographic indicators. The national or regional coverage is left to the discretion of the reporting country or region.

[11] Eurostat FATS Recommendations Manual was issued for the first time in 2007, complemented by revisions in 2008, 2009, 2012.

[12] See also Chapter 8: FDI and Globalisation, BMD4.

- *Harmonisation* implies a certain degree of consistency of FDI and AMNE statistics with general definitions and concepts underlying macroeconomic statistics. In contrast to FDI standards (published in BMD4 in 2008), AMNE guidelines, published in 2005, have not been aligned to SNA 2008 as well as general principles of BPM6. In conclusion, the chapters of the *Handbook* relating to FDI (which provide a summary of the earlier BMD3) and AMNE have to be revised.

- On the other hand, *integration* relates to a pertinent analytical framework which would incorporate financial and economic variables in such a way to allow a sound analysis of the impact of multinational enterprises in the global economy.

40. It is also useful to further explore the needs of users to identify specific questions which are implied by the Council's statement. Keeping in mind that user needs may change rapidly, the report adopted a forward looking approach to identify analytical requirements. At the same time, it does not lose sight of the cost and resource implications to both compilers and respondents of surveyed enterprises and, therefore, gives priority to the use of existing information within national statistical systems.

### *2.2 Analyzing MNEs: what are user needs?*

41. Analysts monitoring the effects of globalisation wish to assess in tandem financial and economic activities of multinational enterprises. Foreign direct investment statistics provide financial measures of cross-border investments while AMNE statistics will illuminate the economic impact of foreign-controlled enterprises in home and host country.

42. Foreign direct investment provides the *initial linkage* between enterprises which are not residents of the same economy. FDI is considered a stable source of financing allowing long-lasting relationships between enterprises in different economies and it is one of the key elements for international economic integration and development. The motivation for direct investment is multifold. It may have significant economic and social impact on home and host economies. For example, FDI promotes access to new competitive markets; to technology transfer and know-how; and to research and development. FDI has direct and indirect effects on trade as well financial markets, labour, etc.

#### *2.2.1 Host country analysis*

Attractiveness of an economy

43. Traditionally, one of the main interests of policy makers is to assess the ability of their country to attract foreign direct investment because FDI provides a stable source of financing and facilitates technology transfers and know-how. The attractiveness of regions within the boundaries of a country, particularly in countries with provincial governmental structures, is more and more part of policy analysis. The attractiveness of an economy and its relative importance as compared to other countries is something that analysts are eager to measure. Analytical indicators can provide very useful and meaningful elements depending on their quality, consistency and comparability.

44. Main questions asked by analysts are: How could a country be more attractive than others taking into account its relative size? Which sectors of the economy are most attractive to foreign investors? Is attractiveness linked to technology transfer and, if yes, how? What factors in a host country play a determinant role in attracting foreign investment? What is the performance of specific sectors of the economy and the impact of foreign investment and multinational enterprises?

45. FDI could be in different forms: Mergers and acquisitions (M&A), greenfield investments, extension of capital, or financial restructuring. M&As constitute an important share of foreign direct investment. The impact of FDI in the host economy also depends on the type of investment.

Contribution to development

46. Under a proper policy environment, FDI can contribute to the development of a country. Apart from providing a source of foreign financing in addition to domestic funds and technology transfers, FDI can bring other benefits in the form of spill-overs which may be more or less important for the development of the host economy. As such, FDI is an important complement to official development aid (ODA).

47. Analysts are interested to answering questions such as: Which economic sectors have benefitted from foreign investment? What is the size of cross-border investment and total financing? What is the contribution of FDI and AMNE statistics to GDP? How many jobs are created by direct investment enterprises? What is the contribution of FDI to productivity and industrial competitiveness? How does FDI improve infrastructure? How does FDI reinforce technological capacity?

Impact of restrictions

48. Because countries are sometimes concerned with foreign investment in certain companies or in "strategic industries" of their economy, they may have restrictive arrangements for approving cross-border M&As and other types of investments (by size, etc.). FDI statistics by sector of industry and by type will help to measure the extent of these restrictions. It will also contribute to understanding how different types of investments impact economic activities.

49. Some of the related policy questions are: What type of FDI (M&A, greenfields, etc) and which sectors of the economy are the most restricted? What is the impact of different types of investment on economic variables (e.g. productivity)? Are there any industries owned by foreign states? Which countries/industries are they?

*2.2.2 Home country analysis: Potential costs and benefits of FDI abroad*

50. For the investor (and its home country) FDI enables access to new competitive markets and, hence, may allow optimal profitability of investment. Recognised consequences of globalisation are off-shoring[13] and/or outsourcing[14] of industries particularly from industrialised countries towards emerging economies.

51. In contrast, in response to an economic downturn or balance of payments difficulties, some countries may take measures which have the intent or the effect of restricting outward direct investment. The question arises whether it is possible to measure such restrictions with objective indicators.

52. Some of the main questions are the following: What is the comparative profitability of investments abroad (dividends and other income from abroad as compared to profits of domestic entities)?

---

[13] Off-shoring: Setting-up affiliates abroad which produce the same goods and services. These goods and services could also be produced by existing affiliates abroad.

[14] Outsourcing: In the context of this document the term refers to outsourcing abroad only and excludes outsourcing in the domestic economy.

Outsourcing abroad: an enterprise subcontracts goods and services abroad on a regular basis with another non-affiliated enterprises or another institution abroad.

What is the impact of FDI on trade? Does FDI improve access to new technologies? Does FDI facilitate access to raw materials and to energy? Does FDI allow access to commercially regulated or protected products (e.g., pharmaceuticals)? Does FDI improve the competitiveness of the ultimate parent? What is the scale of off-shoring; has its pace accelerated in recent years, how many jobs are affected by off-shoring; and which sectors (goods and services) off-shore the most? Could off-shoring constitute a threat of de-industrialisation? Do firms controlled by residents and those controlled by foreign investors differ in their off-shoring behavior? How are the benefits of off-shoring shared between the different economic actors? If, and to what extent, outward FDI could help fight the problems of an aging society?

### *2.2.3 Other types of analysis*

Risk exposure of non-financial enterprises

53. The recent financial crisis has shown how interconnected the financial world has become. Shocks in one location or in on one or more asset classes can have a sizable impact on the stability of institutions and markets around the world. Users and market participants need better information on aggregate financial positions and linkages. In 2009 the International Monetary Fund and the Financial Stability Board submitted a report to the G20 entitled "The Financial Crisis and Information Gaps"; this report contains 20 recommendations. The recommendations 13 and 14 concerning statistical data gaps stress the need for monitoring and measuring the international exposure of financial and non-financial corporations, drawing on the experience with the BIS' international banking statistics (IBS), which include data on counterparties on an immediate as well as on an ultimate risk basis. The aim is to detect the concentration of exposures and connected vulnerability risks, using micro-data at the institutional level as well as aggregates at the macro level.

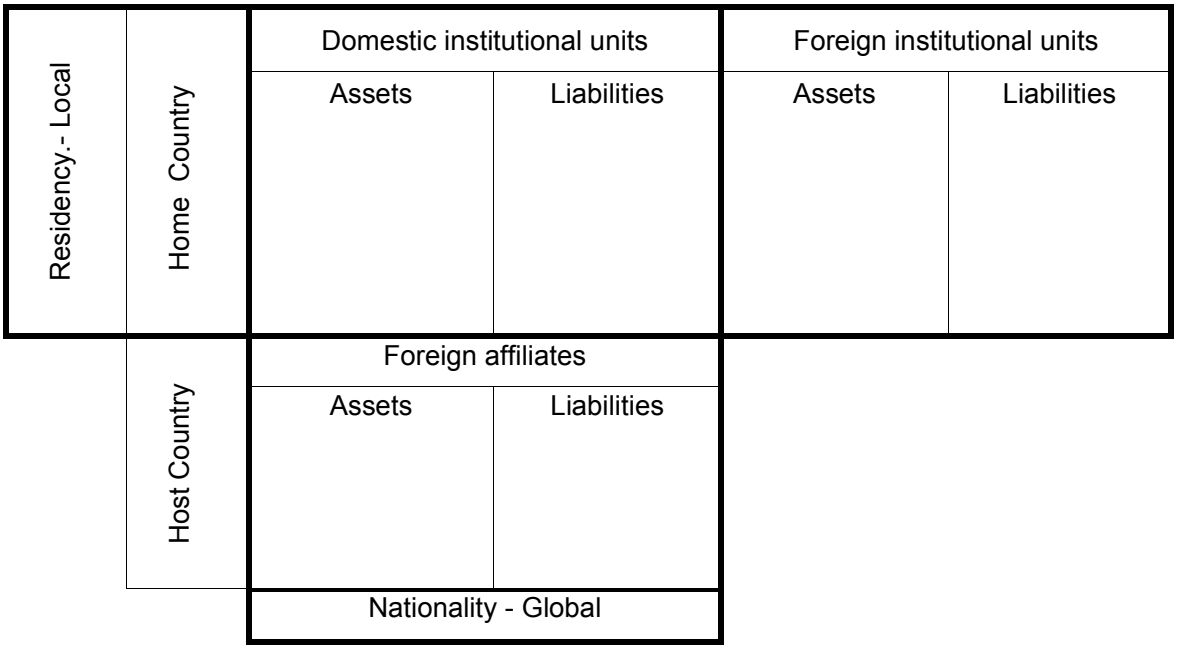
54. The framework of SNA (2008) and BPM6 cover amounts outstanding and flows of financial assets and liabilities of institutional units resident in a single economic territory. The monetary and financial stability of the overall system was analysed adequately with this statistical apparatus in the past. With the increasing internationalisation and globalisation of the real economy and the financial system the needs to look beyond the residency-based approach has developed. In the real sector, the growing importance of multinational companies presents special challenges for national and balance of payment accounts. To summarise: residency-based financial statistics are useful to know **where** financial claims and liabilities are created and held. But in order to know **who** makes the underlying decisions, **who** takes on the risk and **who** needs to hold sufficient capital to cover potential losses, data are needed on a globally consolidated basis.

55. Recommendations 13&14 state that work in this area needs to address the methodological and practical issues of handling the concept of consolidation and the definition of corporate groups. They confirm the complementarity of the residency-based approach and the nationality/group consolidated approach to financial statistics. For the non-financial corporate sector, the use of the currently published FDI statistics, reporting claims and liabilities versus non-residents, could be a starting point to analyse international exposure according to the residency approach. MNE statistics, which are based on a group perspective, can be used to monitor risks and exposure through the appropriate breakdowns of data on financial positions. MNE statistics look beyond the residency approach and apply the group framework to monitor the path of control. This approach, even though the adopted concepts of group consolidation and control may not be fully consistent with the concept of nationality defined for supervisory purposes, can better address the ultimate risk exposure (exposure measures that take account of elements that identify ultimate obligor such as guarantees, commitments, control relationships, legally binding netting).

56. The outcomes of the work of the Inter Agency Group on Economic and Financial Statistic, aimed at defining statistical data to analyse international risk exposure, propose the breakdown of financial

position data of MNE as described in Chart 1. This framework illustrates a stylised picture that contrasts the requirements of a nationality/global approach with the residency/locational approach to financial positions. The residency approach groups together the financial positions of all resident institutional units, irrespective of their nationality. All resident institutional units are seen to be engaged in the real and financial activities in and of the respective economic territory, which are reflected in the various residency-based macro statistics, the financial positions are therefore "sliced" horizontally. The nationality approach slices financial positions vertically, across different jurisdictions. First it separates domestic from foreign institutional units. Subsequently it not only looks at the financial positions of the domestic units in their "home" country but adds to that the positions of their foreign branches or subsidiaries. The latter are operating in "host" countries but their positions form an integral part of the global positions and exposures of the respective national economic units..

***Figure 2*: STYLISED PRESENTATION OF THE RESIDENCY AND NATIONALITY VIEWS OF FINANCIAL POSITIONS FOR AN INDIVIDUAL INSTITUTIONAL (SUB) SECTORS[15]**




Intangible assets[16]

57. Measures provided by FDI and AMNE statistics do not cover intangibles which are, in principle, an integral part of investment. Broadly speaking, such assets relate to "knowledge" transfers. The work done so far in terms of statistical measures of FDI is limited to tangible assets. Integrating valuation of intangible assets linked to cross-border investments would be an invaluable analytical supplement.

15 IFC Working Papers No 8, Residency/Local and National/Global Views of Financial Positions, BIS (2001), prepared for a workshop organized in cooperation with the Inter-Agency Group on Economic and Financial Statistics on 17-18 January 2001.

16 The SNA does not formally include a division between tangible and intangible assets in the classification. However, the categories of dwellings, other buildings and structures, machinery and equipment, weapons systems and cultivated biological resources can be taken to correspond to tangible assets and the other categories to intangible assets.

58. The SNA2008 refers to intangible assets as "intellectual property products" which are "characterized by the fact that most of their value is attributable to intellectual endeavor". Such products are described as "the result of research, development, investigation or innovation leading to knowledge that the developers can market or use to their own benefit in production because use of the knowledge is restricted by means of legal or other protection". These measures relate to the valuation of patent, copyright, licences, trademark, brands, etc. Their treatment in the accounts is dependent on International Accounting Standards. (SNA2008 Ch.10).

## 3. HARMONISATION AND INTEGRATION OF FDI AND AMNE VARIABLES

59. For an informed policy analysis, OECD developed a series of globalisation indicators to monitor foreign direct investment and to understand and to assess its economic impact on home and host countries. These indicators, derived from FDI and AMNE statistics, were initially included in the *Handbook*. (See also BMD4). However, they focus on either one or the other dataset: FDI or AMNE. In view of conceptual differences, it is currently not possible to use financial and economic variables in tandem to construct meaningful indicators. Harmonising statistical concepts and reconciling datasets under a common framework would enable developing *advanced indicators,* as appropriate (see Section 5: Uses of MNE statistics). In that respect some choices have to be made as to what should be harmonised and what should be integrated and how.

60. Differences in the concepts and definitions of FDI and AMNE are not necessarily deviations from standards Some of the differences are justified by the type of analysis the data are compiled for. Each data set was initially designed in isolation to measure different aspects of multinational enterprises. Therefore, they should not be altered to remain consistent with their initial purpose.

61. In the present report, *harmonisation and integration of FDI and AMNE statistics relates to a common framework to accommodate statistically consistent and analytically meaningful quantitative information on financial and economic activities of multinational enterprises.*

62. *Statistical harmonisation* is the alignment of underlying statistical concepts and definitions with international standards generally applied to macroeconomic statistics as set by SNA 2008. Harmonisation also includes the broad concepts of BPM6 on cross-border investments which form the basis for multinational enterprises.

63. Revisions of SNA2008, BMD4 and of BPM6 were completed in 2008. Therefore, the present exercise does not aim to propose changes to the standards of international investments set by BMD4 (or BPM6) which have clarified and have improved the measures of FDI.

64. The *Handbook* was issued in 2005 but not revised thereafter. In consequence, basic statistical concepts and definitions included in the *Handbook* relate to those recommended by the SNA1993, BPM5 (1995) and BMD3 (1995). Moreover, in some instances the recommendations of the *Handbook* provides for more than one option for data collection or compilation which may hinder international comparability of the data. In such instances, recommendations need to be aligned with internationally agreed standards and favour their strict application for the sake of consistency and international comparability. There are also some issues which were not elaborated in depth or left out when the *Handbook* was drafted. For example, the treatment of Special Purpose Entities and the allocation of empty shells that act as headquarters are some examples. All in all, the revision of the relevant chapters of the *Handbook* to include novel concepts and definitions and for clarifying a number of recommendations is a pressing issue. Nevertheless, these revisions will not impact the basic principle for the analysis of multinational enterprises and the effects of globalisation. [See Section 6 on the Revision of the Handbook].

65. S*tatistical integration* of FDI and AMNE is a different aspect of the present exercise. It is complementary to the harmonisation of the statistical concepts and definitions. Currently it is not possible to analyse in tandem the financial and economic activities of multinational enterprises and to establish meaningful links between them. The statistical integration in the present exercise promotes the analysis of financial and economic variables of MNE's under a unique, consistent and comprehensive statistical framework, **MNE statistics.** *In other words, the proposal supports the view that the new framework should include total financing (i.e. total balance sheet) of MNEs, including FDI, and their overall economic results.*

66. FDI statistics measure cross border financing of enterprises which can be identified according to a certain number of well-defined criteria. Main features are mentioned above. FDI is the starting point for an enterprise to operate as a multinational enterprise, i.e. to establish relatively stable investments in the host country.

67. Other than its analytical benefits, a common statistical framework for MNEs promotes integrated data collection for financial and economic variables of MNE statistics. Many OECD countries have a long tradition of collecting separately financial and operations data. The benefits of an integrated framework would promote closer co-operation between compilers. There could be even greater benefits for emerging economies that also have an important task to put in place new systems for collecting and compiling internationally comparable statistics.

### *3.1 Current measures: what are main differences?*

68. *Total versus foreign share of capital:* Two enterprises are considered to be in a FDI relationship when the investor acquires directly or indirectly at least 10% ownership of the voting power in a direct investment enterprise, a foreign affiliate, resident in a different country. FDI statistics record only cross-border transactions (financial and income flows) and positions of voting equity and debt of related enterprises. Inward and outward FDI represent percentage ownership of voting equity held by the non-resident investor but not total assets/liabilities (or credits/debits) unless the investor owns 100% of the shares. Once investments are made to or received from abroad, both the direct investor and the direct investment enterprises have recourse to other types of financing for their day-to-day and other types of operations. These other sources of financing (e.g. domestic or international bank loans) as well as intangible assets may have significant impact on the performance of domestic or cross-border affiliates controlled by MNE's. For example, the value of the stock of FDI will represent only the 80% of total stocks if the FDI relationship is established by ownership of 80% of voting power. The other 20% of equity, which may be owned, for example, by local investors, will not be included in FDI statistics. *Currently, there are no internationally comparable statistics to monitor total assets and liabilities of MNEs with instrument breakdown.*

69. During discussions of the BMD4 revision, it was tentatively considered that FDI could be further broken down into *influence* (between 10% to 50% ownership of voting equity) and *control* (more than 50% to 100% ownership of voting equity) relationships. Nonetheless, the basic statistical principle for recording volumes corresponding to the percentage share would have remained unchanged for this sub-category when the ownership of voting equity is more than 50% but less than 100%.

70. Recording principles for AMNE statistics are different than for FDI. Like FDI statistics, AMNE statistics also relate to direct and indirect ownership of related enterprises but only for control relationships (not influence relationship, i.e. below 50% ownership of voting power). In addition, AMNE statistics record total values of economic results even when control is established by less than 100% ownership of the voting power. In the above example, AMNE statistics will record, for example, total employment or total value added or total turnover, etc and not the share which corresponds to 80%. Thus, there is a clear

difference in the guiding principles to measure AMNEs. It is considered that if the direct investor controls a direct investment enterprise, it controls all its activities disregarding the share or type of financing.

71. *Population of FDI and AMNE*: It is generally considered that the population of enterprises included in AMNE statistics is a sub-set of the population of enterprises covered by FDI data. The recommended statistical unit for both FDI and AMNE statistics is the institutional unit "enterprise" although the Handbook is not very clear because it discusses establishments and enterprise groups as well. As explained previously, FDI statistics include influence and control relationships, but AMNE statistics include only control relationships. Following from this principle the first impression is that the population of enterprises covered by AMNE statistics is a subset of the FDI population. However, this is not exactly the case in all instances although it may be true for some cases. Only cross-border transactions/positions are included in FDI but operations with resident affiliates are excluded. In contrast AMNE statistics include the activities of the foreign-controlled affiliate and its resident affiliates which are indirectly controlled by the same ultimate controlling parent. In this respect, the AMNE population is not fully a subset of FDI population.

72. FDI statistics are based on the Framework of Foreign Direct Investment Relationship to establish the members of the enterprise group and their FDI relationship. AMNE statistics are in practice aligned with these concepts even though the Handbook makes reference the old concept of Fully Consolidated System.

73. *Financial flows versus positions and economic variables of MNEs*: FDI flows and stocks are complementary but provide different types of analysis of investments. The question arises whether it is more appropriate to analyze the flow or the stock of financial data and economic activities of MNE's. Measures of economic activities are basically outstanding amounts at a given time. Nevertheless, flow data may supplement the analysis by looking at the variations of financial and economic activities between two periods.

74. FDI positions are composed of *equity financing* and *intercompany loans.* It would be useful to explore whether all indicators should be based on total FDI positions or should the indicator be based on equity financing only or equity financing and intercompany loans separately in some cases.

75. The extension of the directional principle to the treatment of loans between fellow enterprises as well as the segregation of Special Purpose Entities (SPE) to exclude funds in transit are significant improvements to identify genuine (economically meaningful) FDI stocks. Moreover, the geographical allocation of inward FDI positions to the ultimate investing country (i.e., to the ultimate controlling parent) follows the same conceptual pattern for inward AMNE statistics. Nevertheless, such FDI data are to be compiled on optional bases and also include the influence relationship (between 10-50% ownership of voting power), which is not consistent with AMNEs. Allocation of the ultimate host country for outward FDI was not completed at the time of the revision of BMD4 but is covered in this report under the MNE framework.

***Exhibit 2*: DEFINITION OF INWARD AND OUTWARD INVESTMENT[17]**

| | **FOREIGN DIRECT INVESTMENT TRANSACTIONS AND POSITIONS** | | **ACTIVITIES OF MNES: FOREIGN AFFILIATES CONTROLLED BY NON-RESIDENTS** | |
|---|---|---|---|---|
| | ***Reporting Entity: Direct Investment Enterprise [controlled or influenced entity]*** | ***Direct Investor: [controlling/influencing entity]*** | ***Reporting Entity: Direct Investment Enterprise [controlled entity]*** | ***Direct Investor: [controlling entity]*** |
| ***Inward*** | Resident DIE<br><br>(i) Allocation to the first counterparty, i.e. the non-resident **Direct Parent** [Direct relationship with DI]<br><br>(ii)Allocation to the **UCP [**direct and indirect relationship with DI. In the latter, UCP can be a resident] | Non-resident direct investor which could be:<br><br>(i) **Direct Parent** with a resident or non-resident UCP<br><br>(ii) **UCP [** resident in the Ultimate Investing Country] | Resident DIE and its local subsidiaries:<br><br>(i) Allocation to the non-resident UCP [Ultimate Investing Country] activities of the DIE and its local subsidiaries<br><br>(II) DIE could be a parent controlling directly or indirectly foreign or domestic affiliates. | Allocation to Ultimate Investing Country: **Non-resident UCP** |
| Exclude | Transactions/positions from resident entities in "direct" direct investment relationship. | Transactions/positions with resident entities "direct" direct investment relationship. | Exclude UCP if it is resident (even indirect relationship) | |
| | Reporting Entity: Direct Investor<br><br>[controlling/influencing entity] | Direct Investment Enterprise<br><br>[controlled or influenced entity] | Reporting Entity: Direct Investor [controlling entity] | Direct Investment Enterprise [controlled entity] |
| Outward | Resident direct investor which could be:<br><br>(i) **Intermediate investor** with a resident or non-resident UCP<br><br>(ii) UCP [resident in the reporting country] | Non-resident DIE<br><br>(i) which is the first counterparty of the direct investor<br><br>(ii) first counterparty<br><br>[Recording to Ultimate Host not yet defined] | Resident UCP which controls directly or indirectly non-resident subsidiaries | All non-resident subsidiaries of reporting UCP<br><br>(i) directly controlled DIE<br><br>(ii) indirectly controlled DIE |
| Exclude | Transactions/positions with resident entities "direct" direct investment relationship. | Transactions/positions from resident entities in "direct" direct investment relationship. | Resident parent which is not UCP | Resident affiliates of DIE |

[17] Parent is defined as the direct investor which controls directly or indirectly resident or non-resident subsidiaries. A parent company itself may be controlled by another parent and, thus, is not an ultimate controller.

76. The level of details for *industry* classification of FDI and AMNE statistics are different but can be aligned while both datasets are based on the same classification standards, ISIC. To ensure consistency between the two, the MNE Framework would propose a common list for both datasets. Similar arguments can be made for *partner country* coverage.

### *3.2 Integration under a common MNE framework: Building blocks*

77. AMNE statistics are solely based on control relationships but exclude investments of 50% ownership of voting power. It is quite common that a large share of FDI is accounted for by more than 50% ownership of the voting power by the non-resident investor. ***The MNE framework presented in this report is limited to control relationships.***

78. FDI measures relate to FDI financial flows and positions. As a matter of principle, economic variables are more closely related to the stock concept. For example, the turnover or number of employees will be measured on the accumulated investment, i.e. total existing capacity of the enterprise, not on the changes between two periods. On the other hand some of the flow measures, e.g. distinguishing type of equity (M&A or Greenfield type equity) can be associated to economic activities to measure spillover effects in the host economy. ***While the MNE framework considers that the standard approach is stock data, FDI by type provides complementary information***.

79. Direct investment enterprises have recourse to other sources of financing to conduct and expand their activities. These additional sources may be purely domestic (local) or cross-boarder funds other than FDI. All the supplementary financing, local or cross-border, will impact the operations of the enterprise along with the FDI received by the enterprise. ***MNE framework expands the coverage of the financial analysis to total assets and liabilities, going beyond (and including) FDI.***

80. Regarding inward investment, AMNE statistics allocate all variables to the ultimate controlling parent (UCP), i.e. to the entity which is on top of the ownership chain and which is not controlled or influenced by another entity. BMD4 recommends compiling FDI inward positions according to UCP on a supplemental basis. The reporting enterprise could be an operating company or a special purpose entity (SPE). It could be in the middle of the ownership chain, i.e. have affiliates abroad. ***MNE framework allocates all variables to the UCP.***

81. Regarding *outward investment*, the recommendations of the OECD Handbook is not crystal clear. If the reporting resident enterprise is not the UCP but only a direct or indirect parent (which is controlled by a non-resident UCP), then there is room for substantial overestimation of the overseas control of the reporting country. If, on the other hand, the reporting stops after the first non-resident affiliate, then there may be significant underestimation of its control abroad.

82. Eurostat's Recommendations Manual requires that (i) the reporting entity for outward investment should be the Ultimate Controlling Institutional Unit -UCI[18] (but not the parent) and; (ii) the UCI should report for all its affiliates down the chain of enterprises, i.e. all non-resident controlled affiliates should be recorded in the geographical allocation (but should not stop after the first counterpart). However, in practice, most non-European countries[19] allocate outward AMNEs to the first non-resident affiliate. Moreover, some countries report outward AMNE data for UCI (or UCP) and for direct/indirect parents. ***For outward investment, the MNE framework includes all non-resident affiliates controlled by the UCP (or UCI) resident in the reporting country***. ***MNE Framework also provides for a consolidated approach***

[18] For a comparative discussion of UCP and UCI, see DAF/INV/STAT/WD(2011)6.

[19] EU-countries have to be in line with the FATS regulation / manual.

***to eliminate double counting of assets in the form of funds in transit or round-tripping and lays the ground to allocation of UCP by nationality.***

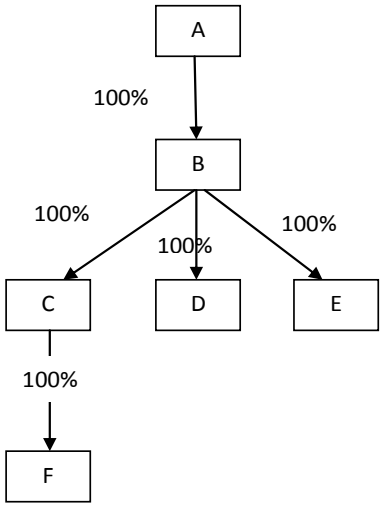
83. AMNE Framework will ensure consistency between partner country and industry classifications of financial and economic variables.

## 4. PROPOSED MNE FRAMEWORK FOR HARMONISED STATISTICS

84. The main principle of the MNE framework is to observe total financial and economic activities of the MNEs. While this concept applies already for AMNE statistics the MNE Framework provides a new approach for financial data, which includes all cross-border and local financing, i.e. total assets/liabilities. Hence, the financial data, which also includes FDI stocks amongst other variables, goes beyond the standards/concepts of balance of payments and international investment position statistics. This section provides examples to demonstrate underlying principles and to describe various steps leading to complete data reporting under the MNE framework.

### *4.1 Basic concepts of MNE Framework*

**Figure 3. A MULTINATIONAL GROUP OF ENTERPRISES**




85. For the purpose of the demonstration, the example used is based on a simple MNE group structure. Each enterprise is located in a different economy and affiliates are 100% owned by the immediate parent:

***(i) Enterprise A resident in Country A***

- is the ultimate controlling parent (UCP) of enterprises B, C, D, E and F;
- fully owns Enterprise B resident in Country B;

(ii) ***Enterprise B resident in Country B*** fully owns three non-resident affiliates:

- Enterprise C resident in Country C;
- Enterprise D resident in Country D, and
- Enterprise E resident in Country E;

(iii) ***Enterprise C resident in Country C*** fully owns Enterprise F resident in Country F.

***Exhibit* 3: BALANCE SHEETS**

| ***ASSETS*** | | | ***LIABILITIES*** | |
|---|---|---|---|---|
| | $ | | | $ |
| **Enterprise A in Ctry A** | | | | |
| Equity in affiliated enterprises | 10000 | | Equity capital | 50000 |
| Other [20] | 34500 | | | |
| Loan to Ent B (in Ctry B) | 1500 | | | |
| Loan to Ent C (in Ctry C) | 3000 | | | |
| Loan to Ent D (in Ctry D) | 1000 | | | |
| **Enterprise B in Ctry B** | | | | |
| Equity in affiliated enterprises | 15000 | | Equity capital | 10000 |
| Other | 3000 | | Loans | 5000 |
| Liquidity | 1500 | | *Of which Loans from Ent A in A* | *1500* |
| | | | Other | 3000 |
| **Enterprise C in Ctry C** | | | | |
| Equity in affiliated enterprises | 3000 | | Equity capital | 6000 |
| Loans | 3500 | | Loans from Ent A (in Ctry A) | 3000 |
| Other | 1500 | | Other | 2000 |
| Liquidity | 3000 | | | |
| **EnterpriseD in Ctry D** | | | | |
| Other | 4000 | | Equity capital | 4000 |
| Liquidity | 1000 | | Loans from Ent A (in Ctry A) | 1000 |
| **Enterprise E in Ctry E** | | | | |
| Other | 5000 | | Equity capital | 5000 |
| **Enterprise F in Ctry F** | | | | |
| Other | 4000 | | Equity capital | 3000 |
| Liquidity | 2500 | | Loans to Ent C (in Ctry C) | 3500 |

[20] Other = assets/liabilities with no related counterpart (loans and deposits with financial institutions, trade credits with customers and providers, real estate, equipment, etc).

86. In foreign direct investment position statistics, both inward and outward investment will be recorded for the first counterpart.

***Exhibit 4*. FDI Position of Reporting Country A, B, C, D, E, F**

| Reporting country | Geographical allocation | Outward $ | | Inward $ | | Geographical allocation | Reporting country |
|---|---|---|---|---|---|---|---|
| | | *Equity* | *Loans* | *Equity* | *Loans* | | |
| **Country A** | **Total** | **10,000** | **5,500** | | | | |
| | *Country B* | 10,000 | 1,500 | | | | |
| | *Country C* | - | 3,000 | | | | |
| | *Country D* | - | 1,000 | | | | |
| **Country B** | **Total** | **15,000** | | **10,000** | **1,500** | **Total** | **Country B** |
| | *Country C* | 6000 | | 10,000 | 1,500 | *Country A* | |
| | *Country D* | 4000 | | - | | | |
| | *Country E* | 5000 | | | | | |
| **Country C** | **Total** | **3,000** | **3,500** | **6,000** | **3,000** | **Total** | **Country C** |
| | *Country F* | 3000 | 3,500 | - | 3,000 | *Country A* | |
| | | | | 6,000 | - | *Country B* | |
| **Country D** | **Total** | **-** | **-** | **4,000** | **1,000** | **Total** | **Country D** |
| | | | | 4,000 | - | *Country B* | |
| | | | | - | 1,000 | *Country A* | |
| **Country E** | **Total** | **-** | **-** | **5,000** | **-** | **Total** | **Country E** |
| | | | | 5,000 | - | *Country B* | |
| **Country F** | **Total** | **-** | **-** | **3,000** | **3,500** | **Total** | **Country F** |
| | | | | 3,000 | 3,500 | *Country C* | |

87. For outward investment the following FDI positions will be recorded:

- Country A will record its outward investment into country B
- Country B will record its outward investment into countries C, D, E in which Enterprise B has direct affiliates (Ent C, Ent D, Ent E)
- Country C will record its outward investment into country F in which Enterprise C has a direct affiliate (Ent F).

88. For inward investment, the following FDI positions will be recorded:

- Country B will record inward investments from A
- Countries C, D, E will record inward investments from B because each of them hosts a direct affiliate of B (of Ent B)
- Country F will record inward investments from C because it hosts a direct affiliate of C (of Ent C).

89. Allocating outward investments to the UCP resident in the reporting economy for all its assets from non-resident affiliates directly and indirectly owned by the UCP is the proposed methodology for economic measures of FDI stocks.

90. According to this scheme, country A will report in its FDI statistics, according to economic measures, a total of $ 28000 outward equity investment and $ 9000 intercompany loans, which will be allocated to countries B, C, D, E, F (see Exhibit 5). More specifically, Enterprise A in Country A will report:

(i) Equity investments for $ 28000 broken down as follows:

- $10 000 in its directly owned subsidiary Enterprise B in Ctry B;
- $6 000 in its indirectly owned subsidiary Enterprise C in Ctry C;
- $4 000 in its indirectly owned subsidiary Enterprise D in Ctry D;
- $5 000 in its indirectly owned subsidiary Enterprise E in Ctry E;
- $3 000 in its indirectly owned subsidiary Enterprise F in Ctry F;

(ii) Intercompany loans for $ 9000 broken down as follows:

- $1 500 in its directly owned subsidiary Enterprise B in Ctry B;
- $3 000 in its indirectly owned subsidiary Enterprise C in Ctry C;
- $1 000 in its indirectly owned subsidiary Enterprise D in Ctry D;
- $3 500 in its indirectly owned subsidiary Enterprise F in Ctry F;

91. The statistics of countries B, C, D, E and F will not record any outward FDI positions according to economic measures and according to the UCP principle::

(i) Enterprise B in Country B *will not report any outward investment* because it is not a UCP and is controlled by Enterprise A in Country A. Enterprise B is the direct parent of Enterprise C in Country C, Enterprise D in Country D, and Enterprise E in Country E and the indirect parent of Enterprise F in Country F;

(ii) Enterprise C in Country C *will not report any outward investment* because it is not a UCP and is indirectly controlled by Enterprise A in Country A which is the UCP.

(iii) Enterprise D in Country D *will not report any outward investment* because it is not a UCP and is indirectly controlled by Enterprise A in Country A which is the UCP.

(iv) Enterprise E in Country E *will not report any outward investment* because it is not a UCP and is indirectly controlled by Enterprise A in Country A which is the UCP.

(v) Enterprise F in Country F *will not report any outward investment* because it is not a UCP and is indirectly controlled by Enterprise A in Country A which is the UCP.

***Exhibit 5*. Outward FDI Position of Country A according to economic measures**

| Geographical allocation | Equity - $ | Loans - $ |
|---|---|---|
| **Total** | **28000** | **9000** |
| Country B | 10000 | 1500 |
| Country C | 6000 | 3000 |
| Country D | 4000 | 1000 |
| Country E | 5000 | - |
| Country F | 3000 | 3500 |

92. This approach provides full symmetry with inward investment recorded according to economic measures. In other words, AMNE statistics allocate all inward variables to the ultimate controller as is the case for supplementary FDI series according to ultimate investing country. Accordingly, the reporting country will allocate all its inward investments to the ultimate controlling parent. Enterprises in countries B, C, D, E, and F will allocate inward investments to their UCP Enterprise A in Country A as follows:

***Exhibit 6*. Inward FDI Position of Country B, C, D, E, F**
according to economic measures allocated to Country A

| Reporting Country | Equity - $ | Loans -$ |
|---|---|---|
| **Total** | **28000** | **9000** |
| Country B | 10000 | 1500 |
| Country C | 6000 | 3000 |
| Country D | 4000 | 1000 |
| Country E | 5000 | - |
| Country F | 3000 | 3500 |

– Equity investments for $ 28000 broken down as follows:

- Enterprise B in Ctry B $10 000 from its direct parent which is also its UCP;
- Enterprise C in Ctry C $6 000 from its UCP in Ctry A;
- Enterprise D in Ctry D $4 000 from its UCP in Ctry A;
- Enterprise E in Ctry E $5 000 from its UCP in Ctry A;
- Enterprise F in Ctry F $3 000 from its UCP in Ctry A.

– Intercompany loans for $ 9000 broken down as follows:

- Enterprise B in Ctry B $1 500 from its direct parent which is also its UCP;
- Enterprise C in Ctry C $3 000 from its UCP in Ctry A;
- Enterprise D in Ctry D $1 000 from its UCP in Ctry A;
- Enterprise F in Ctry F $3 500 from its UCP in Ctry A.

### *4.2 Example of total financing (including funds in transit)*

93. According to the scheme described in the previous section, FDI measures represent the sum of all elements compiled individually. One caveat to this approach is that it may be subject to double counting due to capital in transit.

94. The present section includes a proposal to eliminate double counting expanding on the above described scheme on the basis of total financing of the MNE (both cross-border and total financing). The example also includes minority holdings (below 50%) as well as positions between fellow enterprises and reverse investments. *The basic idea is to measure the amount of assets (cash, property, plant, equipment, intangible assets, etc.) in a foreign controlled subsidiary and that is not reinvested, on behalf of the ultimate controlling parent, in other subsidiaries of the group (such as financial assets relative to other affiliates, or accounts receivable from other affiliates).* The proposed methodology is to calculate the difference between total assets and assets held in other affiliates to eliminate capital in transit:

***Assets of "A" net of capital in transit = Total assets –[minus] Assets held in other affiliated companies***

#### *4.2.1 A simplified example of a multinational group of enterprises with capital in transit*

95. For the purpose of the demonstration, the example used is based on a simplified MNE group structure with capital in transit. Each enterprise is located in a different economy (the enterprise has the same name as the country where it is resident), with the exception of the enterprises A1 resident in country A and G1 and G2 which are both resident in country G:

(i) Enterprise A resident in the country A
- is the ultimate controlling parent (UCP) of enterprises B, C, D, E, F, G1, G2, H and I
- fully owns the enterprises B and C and owns 80% of the voting power of D
- borrows $50 from its direct investment enterprise C

(ii) Enterprise B resident in the country B
- owns 60% of the voting power of the enterprise E, 80% of the enterprise F and fully owns G1
- lends $50 to its fellow enterprise C

(iii) Enterprise C resident in the country C
- lends $50 to its direct investor A, $250 to its fellow enterprise D and $100 to its fellow enterprise G1
- borrows respectively $50, $100 and $40 from its fellow enterprises B, G2 and H

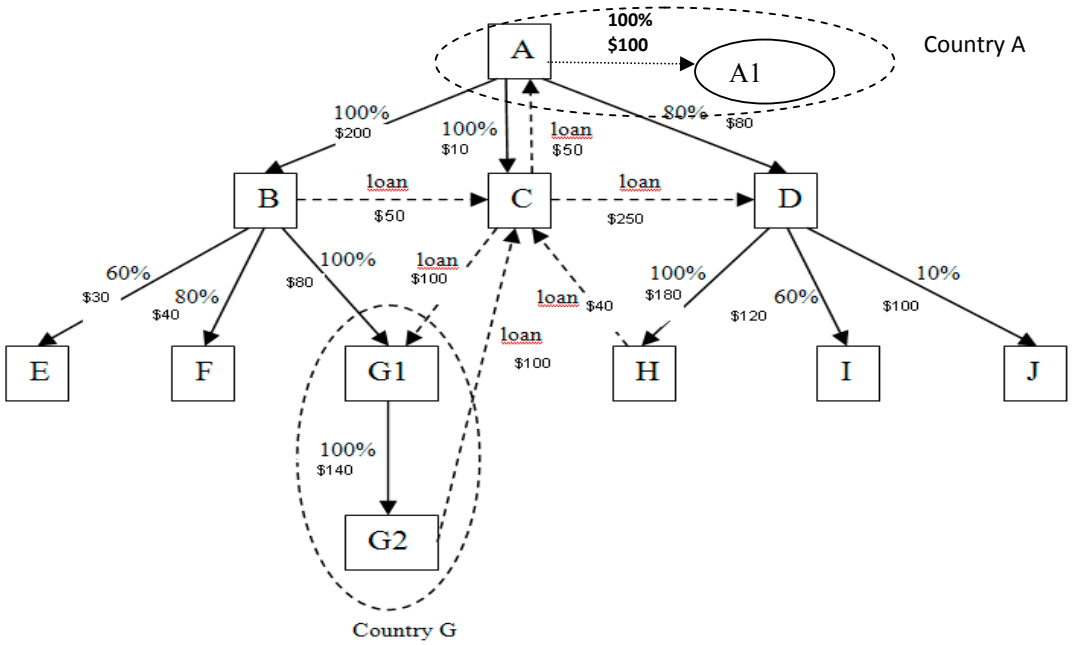
(iv) Enterprise D resident in the country D
- fully owns H and owns respectively 60% and 10% of the voting power of the enterprises I and J
- borrows $250 from its fellow enterprise C

(v) Enterprise G1 resident in the country G
- fully owns G2
- borrows $100 from its fellow enterprise C

(vi) Enterprise G2, resident in the country G, lends $100 to its fellow enterprise C.

(vii) Enterprise H, resident in the country H, lends $40 to its fellow enterprise C.

***Figure 4*: A MULTINATIONAL GROUP OF ENTERPRISES WITH CAPITAL IN TRANSIT**




96. The balance sheets of the members of the MNE group are presented in Figure 5. Enterprise A is the ultimate controlling parent of enterprises B, C, D, E, F, G1, G2, H and I. Enterprise C is a *conduit* that obtains and borrows funds, from affiliated (B,) and unaffiliated enterprises (G2 and H), and remits these funds to its direct investor A ($50 of reverse investment) or to another fellow enterprise (D and G1). So, one can assume that enterprise C meets all the criteria to be a SPE. Enterprises B and D are holding companies that own direct investment enterprises (in countries E, F, G and H, I, J, respectively), but they also undertake production in their country of residence, at various degrees (more for the enterprise D, and less for the enterprise B).

**Box 7. Total assets versus Total cross-border assets**

Examples provided in the present report relate to total cross-border assets for the sake of simplicity and clarity. There are three categories of enterprises of which only the first two are qualified as part of multinational enterprises:

1. Foreign-controlled affiliates which do not have themselves affiliates abroad;

2. Parent companies which are under foreign control and which also control affiliates abroad

3. Enterprises ultimately controlled by a resident enterprise and which does not itself control an affiliate abroad (not a MNE)

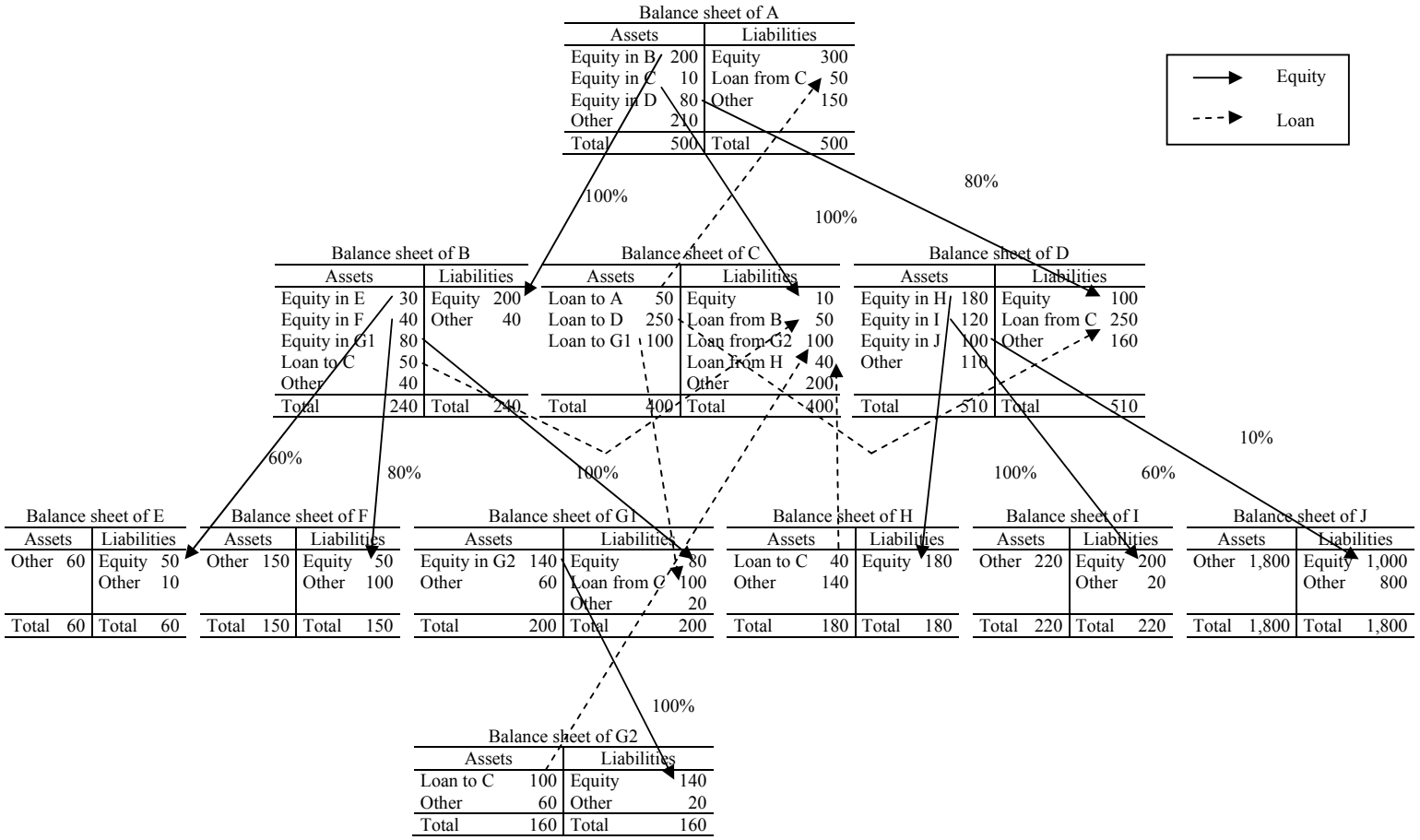
In accordance with this principle, AMNE statistics include enterprises which are controlled by a domestic enterprise which itself is controlled by a foreign parent. Furthermore, AMNE statistics provide additional information on the Headquarter of the MNE and its local subsidiaries. In line with this definition, Total financing of MNEs should include :

1. Resident subsidiaries with a resident parent but ultimately controlled by a non-resident UCP;

2. Resident subsidiaries of the UCP.

The examples in this section include case 1 [G1 and G2] but not the second one. The second case will include A1. This concept will be included in more elaborate examples for compilation guidance.

***Figure 5:*** **BALANCE SHEETS OF THE DIFFERENT MEMBERS OF THE MULTINATIONAL GROUP OF ENTERPRISES**



*4.2.2 FDI statistics*

97. Two presentations of FDI statistics are recommended by BMD4: FDI according to the asset/liability principle and FDI according to the directional principle. In both cases, FDI positions are allocated to the first counterpart country.

***Table 1*: FDI POSITION ACCORDING TO THE ASSET/LIABILITY PRINCIPLE[21]**

| Reporting country | Geographical allocation | FDI assets | | | FDI liabilities | | |
|---|---|---|---|---|---|---|---|
| | | Equity | Loans | Total | Equity | Loans | Total |
| **Country A** | Country B | 200 | | 200 | | | |
| | Country C | 10 | | 10 | | 50 | 50 |
| | Country D | 80 | | 80 | | | |
| | **Total** | **290** | | **290** | | **50** | **50** |
| **Country B** | Country A | | | | 200 | | 200 |
| | Country C | | 50 | 50 | | | |
| | Country E | 30 | | 30 | | | |
| | Country F | 40 | | 40 | | | |
| | Country G | 80 | | 80 | | | |
| | **Total** | **150** | **50** | **200** | **200** | | **200** |
| **Country C** | Country A | | 50 | 50 | 10 | | 10 |
| | Country B | | | | | 50 | 50 |
| | Country D | | 250 | 250 | | | |
| | Country G | | 100 | 100 | | 100 | 100 |
| | Country H | | | | | 40 | 40 |
| | **Total** | | **400** | **400** | **10** | **190** | **200** |
| **Country D** | Country A | | | | 80 | | 80 |
| | Country C | | | | | 250 | 250 |
| | Country H | 180 | | 180 | | | |
| | Country I | 120 | | 120 | | | |
| | Country J | 100 | | 100 | | | |
| | **Total** | **400** | | **400** | **80** | **250** | **330** |
| **Country E** | **Country B** | | | | **30** | | **30** |
| **Country F** | **Country B** | | | | **40** | | **40** |
| **Country G** | Country B | | | | 80 | | 80 |
| | Country C | | 100 | 100 | | 100 | 100 |
| | **Total** | | **100** | **100** | **80** | **100** | **180** |
| **Country H** | Country C | | 40 | 40 | | | |
| | Country D | | | | 180 | | 180 |
| | **Total** | | **40** | **40** | **180** | | **180** |
| **Country I** | **Country D** | | | | **120** | | **120** |
| **Country J** | **Country D** | | | | **100** | | **100** |
| **Total** | | **840** | **590** | **1,430** | **840** | **590** | **1,430** |

98. FDI compiled according to the asset/liability (A/L) principle records financial claims on and obligations to non-residents using balance sheet data showing the gross assets and liabilities positions. It does not incorporate any offsetting for reverse investments and of positions between fellow enterprises. The latter is shown in FDI according to the directional principle (DP) which reflects the direction of the influence or control of the investment (see also box 5). In the above example of the MNE controlled by A, total assets or liabilities of the group amounts to $1430 while total outward or inward investments are only $790 (see Tables 1 and 2). The difference is due to recording principles.

99. In contrast to the asset/liability principle (gross FDI amounts recorded as simple accumulation of assets or liabilities), FDI according to the directional principle, may exhibit negative amounts as a result of

[21] Table 1 is presented only for illustration. The 4th edition of the Benchmark Definition does not recommend providing users with the geographical breakdown of FDI position according to the asset/liability principle.

the netting of reverse investments and of the positions between fellow enterprises. For example, A has a negative outward FDI position vis-à-vis C of $40. The negative sign indicates that A has received more funds from its direct investment enterprise C than it has invested in C. In other words, A has invested $290 in equity in B, C and D but has borrowed $50 from C. So, the net FDI amount of A in its direct investment enterprises B, C and D is only 240 $ (= $290 - $50). In the case of the SPE (C) that has borrowed funds from non-affiliated enterprises (on behalf of the UCP) and has injected these funds in the other members of the MNE, the inward FDI position vis-à-vis the rest of the world is globally negative.

***Table 2*: FDI POSITION ACCORDING TO THE DIRECTIONAL PRINCIPLE**

| Reporting country | Geographical allocation | Outward FDI | | | Inward FDI | | |
|---|---|---|---|---|---|---|---|
| | | Equity | Loans | Total | Equity | Loans | Total |
| **Country A** | Country B | 200 | | 200 | | | |
| | Country C | 10 | -50 | -40 | | | |
| | Country D | 80 | | 80 | | | |
| | **Total** | **290** | **-50** | **240** | | | |
| **Country B** | Country A | | | | 200 | | 200 |
| | Country C | | | | | -50 | -50 |
| | Country E | 30 | | 30 | | | |
| | Country F | 40 | | 40 | | | |
| | Country G | 80 | | 80 | | | |
| | **Total** | **150** | | **150** | **200** | **-50** | **150** |
| **Country C** | Country A | | | | 10 | -50 | -40 |
| | Country B | | | | | 50 | 50 |
| | Country D | | | | | -250 | -250 |
| | Country G | | | | | 0 | 0 |
| | Country H | | | | | 40 | 40 |
| | **Total** | | | | **10** | **-210** | **-200** |
| **Country D** | Country A | | | | 80 | | 80 |
| | Country C | | | | | 250 | 250 |
| | Country H | 180 | | 180 | | | |
| | Country I | 120 | | 120 | | | |
| | Country J | 100 | | 100 | | | |
| | **Total** | **400** | | **400** | **80** | **250** | **330** |
| **Country E** | **Country B** | | | | **30** | | **30** |
| **Country F** | **Country B** | | | | **40** | | **40** |
| **Country G** | Country B | | | | 80 | | 80 |
| | Country C | | | | | 0 | 0 |
| | **Total** | | | | **80** | **0** | **80** |
| **Country H** | Country C | | | | | -40 | -40 |
| | Country D | | | | 180 | | 180 |
| | **Total** | | | | **180** | **-40** | **140** |
| **Country I** | **Country D** | | | | **120** | | **120** |
| **Country J** | **Country D** | | | | **100** | | **100** |
| **Total** | | **840** | **-50** | **790** | **840** | **-50** | **790** |

*4.2.3 Assets controlled by the UCP*

100. In order to improve the harmonization of FDI and AMNE statistics, the present report proposes to move one step further and to compile "***assets controlled by the UCP***". This exercise:

(i) consists of compiling balance sheet data. It is based on financial positions ( financial and income flows are not taken into account);

(ii) is limited to control relationships (more than 50% ownership of the voting power). Minority holdings are excluded. In line with the concepts of AMNE statistics, the value of the assets is not to be factored down by ownership shares

(iii) includes all controlled foreign affiliates, irrespective of whether the affiliate is held directly or indirectly. In contrast to FDI statistics, it also includes positions of a resident affiliate controlled by its resident parent that is itself foreign controlled.

(iv) allocates outward "assets controlled by UCP" to the UCP resident in the reporting economy for all the assets it controls directly or indirectly in non-resident affiliates;

(v) consists in compiling assets controlled (directly or indirectly) by the UCP in its direct investment enterprises. By definition, these assets include also tangible assets, such as plant, equipment, and inventories; intangible assets, such as patents and copyrights; and financial claims (both equity and debt) on (affiliated or not) entities.

**Box 8. Recording FDI according to different methods for a reporting country (RC)**

(i***) FDI according to the asset/liability principle*** (basis used for aggregate macroeconomic data as part of balance of payments and international investment positions)

*Assets* = Investments by direct investors of the RC in direct investment enterprises abroad
*plus*
Reverse investment(s) by direct investment enterprise(s) in the RC in their direct investor(s) abroad
*plus*
Investments by fellow enterprises in the RC in other fellow enterprises abroad

*Liabilities* = Investment by direct investor(s) from abroad in direct investment enterprises in the RC
*plus*
Reverse investment(s) by direct investment enterprise abroad in their direct investors in the RC
*plus*
Investments by fellow enterprises abroad in fellow enterprises in the RC.

***(ii) FDI according to the directional principle (***basis used for detailed FDI statistics by country and by economic activity)

*Outward investment* =
Investments by direct investors of the RC in direct investment enterprises abroad
*minus*
Reverse investment(s) by direct investment enterprise(s) abroad in their direct investor(s) in the RC
*plus*
Investments by resident fellow enterprises in fellow enterprises abroad where the ultimate controlling parent of the resident fellow enterprise is resident in the RC
*minus*
Investments by fellow enterprises abroad in resident fellow enterprises where the ultimate controlling parent of the resident fellow enterprise is resident in the RC

*Inward investment* =
Investment by direct investor(s) abroad in direct investment enterprises in the RC
*minus*
Reverse investment(s) by direct investment enterprise in the RC in their direct investors abroad
*plus*
Investments by fellow enterprises abroad in resident fellow enterprises where the ultimate controlling parent of the resident fellow enterprise is non-resident in the RC
*minus*
Investments by resident fellow enterprises in fellow enterprises abroad where the ultimate controlling parent of the resident fellow enterprise is non-resident in the RC.

101. Two main measures of "assets controlled by UCP" may be compiled.

102. The first measure consists of compiling **total assets controlled by the UCP** (see Table 3). Only the country of residence of the UCP would compile and report outward investment positions. Inward positions of controlled affiliates will be compiled and reported by their country of residence and allocated to the country of the UCP.

***Table 3*: TOTAL CROSS-BORDER ASSETS CONTROLLED BY THE UCP**

| Reporting country | Geographical allocation | Outward | Inward |
|---|---|---|---|
| **Country A** | Country B | 240 | |
| | Country C | 400 | |
| | Country D | 510 | |
| | Country E | 60 | |
| | Country F | 150 | |
| | Country G | 360 | |
| | Country H | 180 | |
| | Country I | 220 | |
| | **Total** | **2120** | |
| **Country B** | **Country A** | | 240 |
| **Country C** | **Country A** | | 400 |
| **Country D** | **Country A** | | 510 |
| **Country E** | **Country A** | | 60 |
| **Country F** | **Country A** | | 150 |
| **Country G** | **Country A** | | 360 |
| **Country H** | **Country A** | | 180 |
| **Country I** | **Country A** | | 220 |
| **Total** | | **2120** | **2120** |

103. The second measure consists of netting investments between affiliates of the group, i.e. subtracting, from total assets, the assets invested by subsidiaries in other subsidiaries controlled by the same UCP. For example (see Figure 5), the amount of total assets controlled in B is \$240, but, B owns equity in three subsidiaries indirectly controlled by A (in total \$150 or \$30 in E, \$40 in F and \$80 in G1) and lends \$50 to C. In total, B has invested, on behalf of its UCP A, \$200 in its subsidiaries which are ultimately (and indirectly) controlled by A. Finally, the amount of the assets controlled by the UCP in B and that are not invested in other controlled subsidiaries equals 40 \$ (\$240 - \$200). The underlying logic of this second measure is very similar to the one used to elaborate consolidated financial statements, by eliminating intercompany positions (in equity or in debt)[22]. We call this second measure "consolidated assets controlled by the UCP".

104. In fact, netting the assets invested by the subsidiaries in the other subsidiaries of the group (i.e. controlled by the UCP A) may impact net positions beyond the "capital in transit" phenomenon. It includes not only the capital that goes in and out of a subsidiary simultaneously, but it also includes the funds that have been invested by subsidiaries (controlled by a foreign UCP) in other affiliated enterprises, on behalf of the UCP.

[22] From this point of view, this exercise meets the concerns expressed by the exercise led by the Bank for International Settlements relating to a new demand for consolidated financial and economic data on non-financial corporations by nationality [FSB/G20 data gaps, Rec. 13&14].

***Table 4*: TOTAL CROSS-BORDER ASSETS CONTROLLED BY THE UCP NET OF "CAPITAL IN TRANSIT"**

**(Reporting country A)**

| Geographical allocation | Total assets controlled by A (1) | Capital in transit through controlled affiliates(2) | Assets of controlled affiliates net of capital in transit (3) = (1) – (2) |
|---|---|---|---|
| Country B | 240 | 200 | 40 |
| Country C | 400 | 400 | 0 |
| Country D | 510 | 300 | 210 |
| Country E | 60 | 0 | 60 |
| Country F | 150 | 0 | 150 |
| Country G | 360 | 240 | 120 |
| Country H | 180 | 40 | 140 |
| Country I | 220 | 0 | 220 |
| **Total** | **2120** | **1180** | **940** |

105. As demonstrated in Table 4, the amount of the total assets controlled by A in C and its subsidiaries is 400 $. But, C, which is the SPE for the MNE, has invested the whole amount of $400 in other controlled affiliates. In consequence, the consolidated assets controlled by the UCP A in its SPE C is completely netted out and is equal to zero. In other words, including SPEs in the population of the group may impact significantly the amount of total assets controlled by the UCP due to double counting of the capital in transit. The amount of consolidated assets controlled by the UCP in its foreign (and domestic) subsidiaries is likely to be much less significant due to the netting of intercompany transactions to eliminate capital in transit.

*4.2.4 The link between FDI data and the statistics of assets controlled by the UCP*

106. According to Table 4, the UCP A controls a total amount of assets of $2,120 in its non-resident subsidiaries[23]. When intercompany positions between subsidiaries are netted, the amount of consolidated assets controlled by A is $940 [Total assets $2120 minus intercompany positions $1180]. The starting point for the amounts controlled by the UCP A is its initial outward FDI of $240 in its non-resident subsidiaries (see Table 2 outward FDI according to the directional principle). The difference of $700 (Total outward FDI position of the group $940 minus outward FDI position of A $240) corresponds to own funds raised by controlled affiliates ("i.e. external financing").

107. Table 5 indicates the origin and the nature of this external financing. There are two main sources: minority participations that may exist in various affiliates controlled by A and the "other" liabilities (that are not provided by other affiliated enterprises).

[23] The example does not include resident subsidiaries of A. However, resident subsidiaries will also be included in the assets in line with the concepts of AMNE statistics.

***Table 5:*** **OWN FUNDS RAISED BY CONTROLLED AFFILIATES**

| Reporting country | Shareholders' equity | Debt | Total |
|---|---|---|---|
| Country B | | 40 | 40 |
| Country C | | 200 | 200 |
| Country D | 20 (1) | 160 | 180 |
| Country E | 20 (2) | 10 | 30 |
| Country F | 10 (3) | 100 | 110 |
| Country G | | 40 | 40 |
| Country H | | | |
| Country I | 80 (4) | 20 | 100 |
| Total | 130 | 570 | 700 |

(1) $100 equity liability of D minus $80 of equity invested by A
(2) $50 equity liability of E minus $30 equity invested by B
(3) $50 equity liabilities of F minus $40 equity investment by B
(4) $200 equity liabilities of I minus $120 equity investment by D

108. Table 6 is a synthesis of different parts described in Tables 3, 4 and 5 starting from total assets controlled by the UCP A and working the details down to outward FDI position of the UCP.

***Table 6:*** **ASSETS CONTROLLED BY THE UCP AND OUTWARD FDI POSITIONS OF THE UCP**

| Geographical allocation | Total cross-border assets controlled by A (1) | Capital in transit through controlled affiliates (2) | Assets of controlled affiliates net of capital in transit (3) = (1) – (2) | Own funds raised by controlled affiliates (4) | Outward FDI position of the UCP (5) = (3) – (4) |
|---|---|---|---|---|---|
| Country B | **240** | 200 | **40** | 40 | **0** |
| Country C | **400** | 400 | **0** | 200 | **-200** |
| Country D | **510** | 300 | **210** | 180 | **30** |
| Country E | **60** | 0 | **60** | 30 | **30** |
| Country F | **150** | 0 | **150** | 110 | **40** |
| Country G | **360** | 240 | **120** | 40 | **80** |
| Country H | **180** | 40 | **140** | 0 | **140** |
| Country I | **220** | 0 | **220** | 100 | **120** |
| **Total** | **2120** | **1180** | **940** | **700** | **240** |

109. As a matter of principle, the allocation of assets in the present exercise is limited to control relationships within the enterprise group. Therefore, the geographical breakdown of outward FDI positions of the UCP A in Table 6 is limited to those countries where controlled affiliates are resident (B, C, D, E, F, G, H and I). It does not include country J where company D owns a minority participation of 10% (but it would be recorded in FDI statistics which also includes minority participation)[24]. Company J is in turn controlled by another UCP which is the head of another MNE. Assets controlled by the UCP of J will be reported by the country of residence of that UCP.

[24] If we allocate 100 $ to J, the outward FDI of the UCP A in D would be equal to -70 $ (30 $ - 100 $). This geographical breakdown would be the same to the one used by Switzerland and Sweden to allocate their outward FDI position according to the countries of ultimate destination (see also the box 2 of the note DAF/INV/STAT(2011)4).

***Table 7:*** **TOTAL ASSETS OF THE ULTIMATE CONTROLLING PARENT (UCP): By type of assets**

**Reporting country A (UCP)**

| Host country | Total cross-border assets | | Capital in transit through controlled affiliates | Final destination of capital in transit | | | Assets of Controlled affiliates net of capital in transit | Own funds raised by controlled affiliates* | | | Outward FDI of A | | Own funds raised by non controlled affiliates* | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | of controlled affiliates | of non-controlled affiliates | | Back in UCP | In controlled affiliates | In non-controlled affiliates | | shareholder's equity | Debt | Total | recorded according to the immediate host country | recorded according to the ultimate host country | shareholder's equity | Debt | Total |
| | **1** | **2** | **3** | **4** | **5** | **6** | **7 = (1-3)** | **8** | **9** | **10= (8+9)** | **11** | **12** | **13** | **14** | **15= (13+14)** |
| A | | | | 50 | | | | | | | | | | | |
| B | 240 | 0 | 200 | | 0 | 0 | 40 | 0 | 40 | 40 | 200 | 0 | 0 | 0 | 0 |
| C | 400 | 0 | 400 | | 190 | 0 | 0 | 0 | 200 | 200 | -40 | -200 | 0 | 0 | 0 |
| D | 510 | 0 | 400 | | 250 | 0 | 110 | 20 | 160 | 180 | 80 | -70 | 0 | 0 | 0 |
| E | 60 | 0 | 0 | | 30 | 0 | 60 | 20 | 10 | 30 | 0 | 30 | 0 | 0 | 0 |
| F | 150 | 0 | 0 | | 40 | 0 | 150 | 10 | 100 | 110 | 0 | 40 | 0 | 0 | 0 |
| G | 360 | 0 | 240 | | 320 | 0 | 120 | 0 | 40 | 40 | 0 | 80 | 0 | 0 | 0 |
| H | 180 | 0 | 40 | | 180 | 0 | 140 | 0 | 0 | 0 | 0 | 140 | 0 | 0 | 0 |
| I | 220 | 0 | 0 | | 120 | 0 | 220 | 80 | 20 | 100 | 0 | 120 | 0 | 0 | 0 |
| J | 0 | 1800 | | | | 100 | | | | | | 100 | 900 | 800 | 1700 |
| | | | | | | | | | | | | | | | |
| **Total:** | **2120** | **1800** | **1280** | **50** | **1130** | **100** | **840** | **130** | **570** | **700** | **240** | **240** | **900** | **800** | 1700 |

Notes:

Total cross-border assets have been broken down between controlled and non controlled affiliates of the UCP

Capital in transit is equal to Total assets of A (the UCP) less the assets invested by the subsidiary (controlled affiliate) of A in other affiliates of A

Capital in transit = Total assets - Assets in Affiliate 2 which are invested by subsidiary 1 of the UCP.

Consolidation relates to statistical consolidation = Total Assets of A less Capital in transit

FDI of the UCP has been broken down between immediate counterpart and ultimate host country (columns 11 & 12

***Net of capital in transit and net of investment by UCP**

110. Based on a theoretical example (as illustrated in Figure 4), Table 7 articulates all the assets controlled by the UCP A. In other words, financial variables associated with balance sheets of individual enterprises within the MNE group, are summarized in Table 7 according to different measures that can be of interest to analyse financial aspects of MNEs. Since the focus of the exercise is to link AMNE and FDI statistics and for the sake of simplicity, the example is limited to total cross-border assets

111. The first column illustrates the total cross-border assets that are under the control of the ultimate controlling parent A (Total of column 1: $2120), not counting its own assets of $500 as illustrated in Figure 5. and of its resident affiliate $100. The second column also illustrates that the UCP might have some influence in a non controlled affiliate (total of column 2: $1800).

112. Column 3 shows that a significant portion of the total assets under the control of the UCP is channelled through controlled affiliates corresponding to "Capital in transit" (total of $1280). Contrary to the table 6, the table 7 includes controlled and non-controlled affiliates. So, capital in transit also includes $100 invested in the non controlled affiliate J because it passes through the affiliate D which is ultimately controlled by A. J is not controlled by A.

113. Columns 4, 5 and 6 illustrate the final destination of these funds in transit whether it is sent back into the parent or into a controlled or non-controlled affiliate.

114. It is interesting at this point to note that even though the UCP controls total assets of $$2120 (as shown in column 1) it only controls $840 (total of column 7) when you eliminate all the funds in transit.

115. The other interesting variables are illustrated in columns 8, 9 and 10. Each of the controlled affiliates of the UCP raised their own funds (illustrated as equity or "other" debt in Figure 5) for a total of $700.

116. Columns 11 and 12 show the links to Foreign Direct Investment presented on an immediate and ultimate host country basis. It is shown here that even though FDI is the key variable to measure international financial transactions between affiliates, it is only showing an incomplete picture (total of $240) of the overall financing activities of a group of enterprises. Total assets, funds in transit and own funds raised by the affiliates are also relevant variables when assessing the economic impact of a multinational group.

117. The last 3 columns (13, 14 and 15) demonstrate that non-controlled affiliates are part of the MNE group, showing some influence of the UCP without control.

118. In principle, local assets controlled by the UCP A in its country of residence should also be included in the total assets of A. In that case assets of A ($500) and of A1, controlled resident affiliate of the UCP, should also be included in total assets controlled by A ($2720 =Resident assets $600 plus cross-border assets $2120)

## 5. USES OF MNE STATISTICS

119. On the basis of consistent financial and operating data, a set of meaningful indicators can be put in place for policy and other types of analysis. Some of these indicators are already available but the lack of comparability of the underlying data is prohibitive. This section proposes existing and new indicators based on financial and economic measures of MNEs which can be used in tandem. Moreover, most of these indicators can be compared to indicators for national totals to measure the share of foreign controlled affiliates of the reporting economy, i.e. for inward investments (see *Handbook* Chapter 3, Box 3.1 Proposed indicators, p. 79). These indicators may be used to analyse different features of globalization.. They may contribute to a better understanding of the underlying motivations behind the choice of the

investor and the expected financial and economic impacts in the host country (country of residence of the foreign affiliate). Definitions are provided for each set of indicators, and furthermore possible example of uses and interpretation are described..

The analysis on indicators may be from different perspectives:

- comparison of the same indicators for inward and outward FDI/AMNE (FATS) of a single economy;
- comparison between the same indicators calculated both for domestic and foreign-controlled companies;
- comparison of the same indicator across different economic sectors and countries of destination (for outward), controlling or source countries (for inward) from the perspective of a single economy;
- comparison of indicators across different countries.

120. The suggestions and examples described herewith, regarding the use of the proposed indicators, have a purely explanatory purpose and do not aim to describe all the different types of analyses that may be carried out on the basis of these indices. Furthermore, for an overall analysis of global markets different types of indicators that are interconnected should be taken into account

***(i) Indicators related to the size of MNEs:***

121. For inward investment, these indicators provide information on the size of foreign-controlled enterprises resident in the reporting country. For outward investments, they measure the size of foreign affiliates controlled by the resident enterprise (which is also the ultimate controlling parent).

Employees per enterprise: $\frac{\text{Number of Employees}}{\text{Number of Enterprises}}$

Output value per enterprise: $\frac{\text{Output Value (or Sales)}}{\text{Number of Enterprises}}$

122. Relatively high values resulting from these two ratios indicate that internationalization in the destination country relate mainly to large companies. For example a relatively high value of the first indicator, if combined with a relatively lower value of the second one, may be associated with vertical FDI in low labour costs countries. A combined analysis of these two indicators couple of indicators may show a high volatility across economic sector (for example between manufacturing and trade and repairs sectors) and destination countries (developed countries and emerging countries).

### *(ii) Indicators of MNE productivity*

123. For inward investment, these indicators provide information on the productivity of labour in foreign-controlled enterprises resident in the reporting country and the gross value added per employee. For outward investments, they measure the productivity in foreign affiliates controlled by the resident enterprise (which is also the ultimate controlling parent).

Labour productivity: $\frac{Sales}{Number\ of\ Employees}$

Gross Value Added per Employee: $\frac{Gross\ Value\ Added}{Number\ of\ Employees}$

124. For example on the inward side the value of these indicators may be compared with the values assumed for the whole economy (foreign-controlled + domestic enterprises) for the same economic sectors in order to verify whether differences in productivity ratios may explain the attractiveness of some companies for foreign investors.

### *(iii) Indicators on the structure of MNE sales*

125. For inward investment, these indicators inform on the relative importance of imports/exports by the foreign-controlled enterprises resident in the reporting country as compared to the value it generates. For outward investments, they measure trade activities of foreign affiliates controlled by the resident enterprise (which is also the ultimate controlling parent). These ratios can also be applied to measure the relative share of intra-firm trade.

Share of exports: $\frac{Total\ (or\ Intrafirm)\ Exports}{Sales}$

Share of imports: $\frac{Total\ (or\ Intrafirm)\ Imports}{Sales}$

126. For example, a low share of intra-firm exports and a high share of intra-firm imports of the foreign affiliate may be linked to the presence of foreign investment mainly aimed at expanding or creating access to large foreign markets or to markets with fast growing domestic demand.

### *(iv) Indicators on the structure of MNEs' costs*

127. For inward investment, these indicators inform on the cost structure of foreign-controlled enterprises resident in the reporting country, namely from the view of labour intensity, material intensity and capital intensity. For outward investments, they measure the cost structure of foreign affiliates controlled by the resident enterprise (which is also the ultimate controlling parent).

Wage level: $\frac{\text{Personnel cost}}{\text{Number of Employees}}$

Material intensity: $\frac{\text{Material Input}}{\text{Sales}}$

Personnel intensity: $\frac{\text{Personnel Costs}}{\text{Sales}}$

Capital intensity: $\frac{\text{Fixed Assets}}{\text{Number of Employees}}$

128. Also in this case the value of these indicators for foreign-controlled enterprises may be compared with the corresponding results for the whole economy or for the purely domestic enterprises in order to highlight specific characteristic of foreign controlled companies (for example lower average cost of employees)..

***(v) Penetration of MNEs in foreign markets***

129. For outward investments, these indicators measure the impact of foreign affiliates in the host economy controlled by the resident enterprise (which is also the ultimate controlling parent). These indicators provide an indication of both economic and financial impact.

Outward investment: $\frac{\text{Sales by Foreign Affiliates}}{\text{Total Sales of UCP (or Group total)}}$

$\frac{\text{Employment by Foreign Affiliates}}{\text{Total Employment of UCP (or Group total)}}$

$\frac{\text{FDI by UCP}}{\text{Total Assets Controlled by UCP (or Group total)}}$

$\frac{\text{FDI by UCP}}{\text{Capital in Transit of UCP (or Group total)}}$

$\frac{\text{FDI by UCP}}{\text{External Financing of UCP (or Group total)}}$

***(vi) Financial structure***

Equity ratio:

$$\frac{Equity}{Balance\ Sheet\ Total}$$

$$\frac{Fixed\ Assets}{Balance\ Sheet\ Total}$$

External financing ratio:

$$\frac{Balance\ Sheet\ Total - External\ Financing}{Balance\ Sheet\ Total}$$

***(vii) Liquidity***

130. For both inward and outward investments, these indicators measure the extent to which an enterprise is liquid or can rapidly liquidate its assets to cover short-term liabilities. Quick assets are cash and cash equivalents, marketable securities and accounts receivables.

Absolute liquidity ratio:

$$\frac{Liquid\ Assets}{Short\ Term\ Debt}$$

Net quick ratio (acid test):

$$\frac{Current\ Assets - Inventory - Advance\ Received}{Balance\ Sheet\ Total}$$

Current ratio:

$$\frac{Current\ Assets}{Short\ Term\ Debt}$$

131. Relatively high liquidity ratios indicate that foreign-controlled affiliates are able to cover their short-term liabilities. Also, the indicators related to the financial structure and the liquidity of foreign affiliates may be compared with those calculated for the whole host economy or for the subset of purely domestic enterprises. The comparison may highlight meaningful differences between these different sets of companies.

132. For outward investment significantly low values of liquidity indicators (for example in foreign-***controlled affiliate*** of a specific economic sector) may have impacts on the country of the ultimate controlling parent..

***(viii) Indicators of profitability***

This set of indicators allows an analysis of profitability regarding the foreign affiliates.

Return on equity:

$$\frac{Pretax\ Profit}{Equity}$$

Return on FDI equity:

$$\frac{FDI\ Equity\ Income_{t}}{FDI\ Equity\ Stock_{t-1}}$$

Return on assets: $\frac{Pretax\ Profits + Interest\ Paid}{Balance\ Sheet\ Total_{t}}$

Return on FDI $\frac{FDI\ Income_{t}}{FDI\ Stock_{t-1}}$

Profitability of the MNE $\frac{Pretax\ Profits}{Balance\ Sheet\ Total_{t}}$

Profit margin $\frac{Pretax\ Profit}{Sales}$

Capital turnover $\frac{Sales}{Balance\ Sheet\ Total_{t}}$

133. For example for outward FDI, the comparison between the resulting value of indicators for various investor countries may provide information on the performance of each country under similar condition (for example for the same country of destination and the same economic sector of the foreign affiliates). Higher values indicate more profitable FDI.

134. For inward FDI the comparison between indicators calculated for various host countries could be taken into account by potential foreign investors as a rough measure of attractiveness, of each destination in terms of profitability ratios.

***(ix) Financing activities of MNEs***

135. These indicators focus on how MNEs, with the UCP resident in the reference country, (i) finance their activities abroad; and (ii) analyse the relationship of the capital invested by UCP in the foreign activities (the amount of its outward FDI) (a) with the amount of total assets controlled abroad , (b) with the extra-group financial provision and (c) with capital in transit. These last indicators measure the contribution of a specific host country J (for example for local favourable funding or tax conditions ) to the extra-group financing and capital in transit of MNEs[25]

External financial expansion ratio $\frac{Total\ financial\ assets\ controlled\ abroad\ by\ UCP}{Total\ outward\ FDI\ by\ the\ UCP}$

Extra-group financing of MNEs ratio $\frac{Total\ extra-group\ financing\ of\ affiliates\ abroad}{Total\ outward\ FDI\ by\ the\ UCP}$

Capital in transit ratio $\frac{Capital\ in\ transit\ of\ UCP}{Total\ outward\ FDI\ by\ the\ UCP}$

[25] The examples provided in Section 4.2. *Example of total financing (including capital in transit)* may help to interprete the variables and the meaning of the proposed indicators.

Contribution of the host country J to extra-group financing

$$\frac{\textit{Extra - group financing in country J}}{\textit{Total outward FDI by the UCP}}$$

Contribution of the host country J to total capital in transit

$$\frac{\textit{Capital in transit of UCP in country J}}{\textit{Total outward FDI by the UCP}}$$

***(x) Economic impact of FDI***

136. These indicators quantify, from the point of view of UCP in the reporting country, the economic impact in the host economies (in terms of amounts of outward AMNE variables of the UCP) for the UCP's FDI abroad. The first two indicators refer to the total amount of outward FDI and to activities of all the affiliates abroad.

$$\frac{\textit{Outward AMNE total turnover or gross output of the UCP}}{\textit{Total outward FDI by the UCP}}$$

$$\frac{\textit{Outward AMNE total value added of the UCP}}{\textit{Total outward FDI by the UCP}}$$

137. The following indicators similarily measure the economic impact in a specific host country J

$$\frac{\textit{Outward AMNE total turnover or gross output of the UCP in country J}}{\textit{Total outward FDI by the UCP in ultimate host country J}}$$

$$\frac{\textit{Outward AMNE total value added of the UCP in country J}}{\textit{Total outward FDI by the UCP in ultimate host country J}}$$

138. These indicators establish links between the stock of capital invested abroad by the ultimate controlling country with its economic impact in host countries in terms of amount of turnover, gross output or value added of the controlled affiliates. Higher ratios indicate greater economic impact of FDI in the host countries The third and fourth indicators of this group require the breakdown of FDI by ultimate investing country according to the methodology proposed in Section 4.2. For example low values of these two indicators show that the capital mainly transits in country J without real economic impact

***(xi) Contribution to ultimate host country***

139. These indicators quantify the contribuion of the investments in the ultimate host country J of total outward FDI by the UCP.

$$\frac{\textit{Total outward FDI abroad by UCP in ultimate host country J}}{\textit{Total outward FDI of the UCP}}$$

140. The application of this indicators also require the breakdown of outward FDI by ultimate host country.

## 6. REVISIONS OF THE OECD HANDBOOK ON ECONOMIC GLOBALISATION INDICATORS

141. In its introduction, the Handbook gave a frank and transparent vision of future challenges: "*The Handbook is only an initial foray into a vast area and does not pretend to provide answers to all questions. It rather seeks to provide an initial foundation which can serve as a basis for further work. Notwithstanding these shortcomings, notably certain problems relating to data comparability which largely reflect the need to harmonise the definitions of the concepts used in this field, it was the belief of the contributors to the Handbook that progress on these issues would benefit from experience gained through the use of this initial version. Given this, and the changing nature of what constitutes "globalization", this Handbook is intended to be dynamic rather than static. It will have to be revised at regular intervals and enriched with the most recent experience and trends by incorporating the suggestions of the users and producers of basic data.*"

142. To be more specific, at the end of the first chapter (in section 1.5) the Handbook provides a list of areas for further analysis in a future edition. These are some important areas concerning the driving forces of economic globalization which could not be incorporated in the first edition. They are:

- role of financial markets, and particularly portfolio investment
- international migration of persons
- treatment of intellectual property, such as patents
- impact of e-business processes, such as electronic commerce

143. To be more inclusive, one should also include other areas for further investigation such as: mergers and acquisitions; greenfield investments; investment of extension of existing capacities; relocation of activities abroad; enterprise group statistics; co-operation agreements; strategic and technological alliances; international sub-contracting (outsourcing abroad). It is noted that BMD4 makes recommendations for M&A type FDI and Greenfield investments and financial restructuring are on its research agenda.

144. Revising the Handbook may require important resources. Therefore, the present report proposes to limit the revision to financial and economic variables. In other words, it is proposed to revise (i) Chapter 2 on FDI to bring it up to date on the basis of BMD4 and to broaden its scope to include total financing discussed in the present document; and, (ii) Chapter 4 on the activities of MNEs to align the concepts to SNA2008 as well as BPM6 and BMD4. Should other groups envisage revising other chapters or adding new chapters, the *Handbook* could be reissued in multiple standalone volumes by subject.

145. As a working method, it is proposed that this work should be carried in close co-operation between statistical experts of FDI and AMNEs. To this end, one could bring together the experts of both domains in an Electronic Discussion Group: MNE Technical Expert Group[26](MNETEG). The EDG would establish a list of issues to be reviewed and an outline of the two chapters proposed for review.

[26] During the revision of BPM6 and BMD4, IMF and OECD had created Direct Investment Technical Expert Group which facilitated consistency of recommendations.

## 7. CONCLUSION AND WAY FORWARD

146. This report was prepared in response to the Council instruction to harmonise and integrate OECD's statistics to measure foreign direct investment and the statistics on the economic activities of multinational enterprises. Any analysis of global markets can no longer dissociate local and cross-border financial and economic aspects of multinational enterprises. FDI is key to globalisation since such investments allow establishing durable links between economies and between enterprises in different economies. For statistical purposes, a multinational enterprise is an entity with at least one non-resident affiliate. The acquisition of an existing enterprise abroad or the establishment of a new entity is achieved through foreign direct investment. FDI, on the other hand, does not represent all financial assets of an enterprise even though it is the main link within a multinational group of enterprises. FDI is the starting point for long-term cross-border relationships enabling MNEs to access other sources to finance their local or foreign activities and to control the production as well as the governance of the group.

147. The financial capacity and the risk exposure of a multinational enterprise are measured by the amount of assets it controls. Assets under the control of MNEs are far beyond the amounts represented by their initial or subsequent FDI. The present report, based on a theoretical example, demonstrates the importance of assets other than FDI in order for a multinational group to develop its activities, i.e. to create wealth, value added, employment etc. The report also shows the significance of funds in transit which is a widely used practice by MNEs. Such funds pass through financial or operating affiliates of the group but they have no direct economic impact in the jurisdiction hosting these affiliates. Finally, the report establishes links between FDI and AMNE statistics and provides a statistical framework according to which both financial and economic variables of MNE should be measured for a reliable analysis of MNEs and global markets and proposes a number of indicators.

148. This report also highlights the importance of co-operation between various statistical domains. It calls for a close co-operation between experts on FDI and AMNE statistics. Moreover, the statistical framework proposed in this report sets preliminary elements which could be used for G20 Data Gaps Initiative, Recommendation #13, which aims at developing statistics to measure the cross-border exposure of non-financial corporations.

149. If the report is endorsed by the Investment Committee, the Working Group on International Investment Statistics will prepare compilations guidance during 2013-2014. WGIIS proposes that this work be carried out as a collaborative project with the OECD Working Party on Globalisation of Industry.

## ANNEX 1: A SYNTHETIC PRESENTATION OF THE BALANCE SHEETS UNDER DIFFERENT RECORDING PRINCIPLES

1. Individual balance sheets
2. According to Asset/Liability principle
3. According to Directional Principle

| Figure 1 | Individual Balance sheets | | | | | Table 1 | FDI According to Assets / Liabilities | | | | | | | | Table 2 | FDI According to directional Priciple | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | *Assets* | *Liabilities* | | | *Rep C* | *Geo* | *Equity* | *Loans* | *Total* | *Equity* | *Loans* | *Total* | | | *Rep C* | *Geo* | *Equity* | *Loans* | *Total* | *Equity* | *Loans* | *Total* |
| A | Shares in B | **200** | 300 | Equity | | A | B | **200** | | 200 | | | 0 | | | A | B | **200** | | 200 | | | 0 |
| A | Shares in C | **10** | 50 | RevLn from C | | A | C | **10** | | 10 | | 50 | 50 | C | Reverse | A | C | **10** | -50 | -40 | | | 0 |
| A | Shares in D | **80** | | | | A | D | **80** | | 80 | | | 0 | | | A | D | **80** | | 80 | | | 0 |
| A | Other | 210 | 150 | Other | | A | | | | 0 | | | 0 | | | A | | | | 0 | | | 0 |
| *A-Total* | | *500* | *500* | | | *A-Total* | | *290* | *0* | *290* | *0* | *50* | *50* | | | *A-Total* | | *290* | *-50* | ***240*** | *0* | *0* | *0* |
| B | Shares in E | **30** | | | | B | E | **30** | | 30 | | | 0 | | | B | E | **30** | | 30 | | | 0 |
| B | Shares in F | **40** | 200 | Equity | 100% | B | F | **40** | | 40 | | | 0 | | | B | F | **40** | | 40 | | | 0 |
| B | Shares in G1 | **80** | | | | B | G | **80** | | 80 | | | 0 | | | B | G | **80** | | 80 | | | 0 |
| B | Loan to C | 50 | | | | B | C | | 50 | 50 | | | 0 | | | B | C | | | 0 | | -50 | -50 |
| B | Other | 40 | 40 | Other | | B | A | | | 0 | **200** | | 200 | | | B | A | | | 0 | **200** | | 200 |
| *B-Total* | | *240* | *240* | | | *B-Total* | | *150* | *50* | *200* | *200* | *0* | *200* | | | *B-Total* | | *150* | *0* | *150* | *200* | *-50* | *150* |
| C | RvLoan to A | 50 | 10 | Equity | 100% | C | A | | 50 | 50 | **10** | | 10 | | | C | A | | | 0 | **10** | -50 | -40 |
| C | Loan to D | 250 | 50 | Loan from B | | C | D | | 250 | 250 | | | 0 | | | C | D | | | 0 | | -250 | -250 |
| C | Loan to G1 | 100 | 100 | RevLn from G2 | | C | G | | 100 | 100 | | 100 | 100 | G | Reverse | C | G | | | 0 | | 0 | 0 |
| C | | | 40 | RevLn from H | | C | B | | | 0 | | 50 | 50 | B | Felllow | C | B | | | 0 | | 50 | 50 |
| C | | | 200 | Other | | C | H | | | 0 | | 40 | 40 | H | Reverse | C | H | | | 0 | | 40 | 40 |
| *C-Total* | | *400* | *400* | | | *C-Total* | | *0* | *400* | *400* | *10* | *190* | *200* | | | *C-Total* | | *0* | *0* | *0* | *10* | *-210* | *-200* |
| D | Shares in H | **180** | 100 | Equity | 80% | D | H | **180** | | 180 | | 250 | 250 | C | Felllow | D | H | **180** | | 180 | | 250 | 250 |
| D | Shares in I | **120** | 250 | Loan from C | | D | I | **120** | | 120 | | | 0 | | | D | I | **120** | | 120 | | | 0 |
| D | Shares in J | **100** | 160 | Other | | D | J | **100** | | 100 | | | 0 | | | D | J | **100** | | 100 | | | 0 |
| D | Other | 110 | | | | D | A | | | 0 | **80** | | 80 | | | D | A | | | 0 | **80** | | 80 |
| *D-Total* | | *510* | *510* | | | *D-Total* | | *400* | *0* | *400* | *80* | *250* | *330* | | | *D-Total* | | *400* | *0* | *400* | *80* | *250* | *330* |
| E | | | **50** | Equity from B | 60% | E | B | | | 0 | **30** | | 30 | | | E | B | | | 0 | **30** | | 30 |
| E | Other | 60 | 10 | Other | | E | | | | 0 | | | 0 | | | E | | | | 0 | | | 0 |
| *E-Total* | | *60* | *60* | | | *E-Total* | | *0* | *0* | *0* | *30* | *0* | *30* | | | *E-Total* | | *0* | *0* | *0* | *30* | *0* | *30* |
| F | | | **50** | Equity from B | 80% | F | B | | | 0 | **40** | | 40 | | | F | B | | | 0 | **40** | | 40 |
| F | Other | 150 | 100 | Other | | F | | | | 0 | | | 0 | | | F | | | | 0 | | | 0 |
| *F-Total* | | *150* | *150* | | | *F-Total* | | *0* | *0* | *0* | *40* | *0* | *40* | | | *F-Total* | | *0* | *0* | *0* | *40* | *0* | *40* |
| G1 | Shares in G2 | | **80** | Equity from B | 100% | G | B | | | 0 | **80** | | 80 | | | G | B | | | 0 | **80** | | 80 |
| G1 | | | 100 | Loan from C | | G | C | | | 0 | | 100 | 100 | C | Felllow | G | C | | | 0 | | 100 | 100 |
| G1 | Other | 60 | 20 | Other | | G | | | | 0 | | | 0 | | | G | | | | 0 | | | 0 |
| *G1-Total* | | *200* | *200* | | | G | | | | 0 | | | 0 | | | G | | | | 0 | | | 0 |
| G2 | Loan tó C | 100 | | Equity from G1 | 100% | G | C | | 100 | 100 | | | 0 | | | G | C | | | 0 | | -100 | -100 |
| G2 | Other | 60 | 20 | Other | | G | | | | 0 | | | 0 | | | G | | | | 0 | | | 0 |
| *G2-Total* | | *160* | *160* | | | *G2-Total* | | 0 | 100 | 100 | 80 | 100 | 180 | | | *G2-Total* | | 0 | 0 | 0 | 80 | 0 | 80 |
| H | Loan tó C | 40 | **180** | Equity from D | 100% | H | C | | 40 | 40 | | | 0 | | | H | C | | | 0 | | -40 | -40 |
| H | Other | 140 | | | | H | D | | | 0 | **180** | | 180 | | | H | D | | | 0 | **180** | | 180 |
| *H-Total* | | *180* | *180* | | | *H-Total* | | *0* | *40* | *40* | *180* | *0* | *180* | | | *H-Total* | | *0* | *0* | *0* | *180* | *-40* | *140* |
| I | | | **200** | Equity from D | 60% | I | D | | | 0 | **120** | | 120 | | | I | D | | | 0 | **120** | | 120 |
| I | Other | 220 | 20 | Other | | I | | | | 0 | | | 0 | | | I | | | | 0 | | | 0 |
| *I-Total* | | *220* | *220* | | | *I-Total* | | *0* | *0* | *0* | *120* | *0* | *120* | | | *I-Total* | | *0* | *0* | *0* | *120* | *0* | *120* |
| J | | | **1,000** | Equity from D | 10% | J | D | | | 0 | **100** | | 100 | | | J | D | | | 0 | **100** | | 100 |
| J | Other | 1,800 | 800 | Other | | J | | | | 0 | | | 0 | | | J | | | | 0 | | | 0 |
| *J-Total* | | *1,800* | *1,800* | | | *J-Total* | | *0* | *0* | *0* | *100* | *0* | *100* | | | *J-Total* | | *0* | *0* | *0* | *100* | *0* | *100* |
| | Total | **2,620** | **2,620** | | | | Total | 840 | 590 | 1,430 | 840 | 590 | 1,430 | | | | Total | 840 | -50 | 790 | 840 | -50 | 790 |
| Assets under Control | | **2,120** | **2,120** | | | | | | | | | | | | | | | | | | | | |

## ANNEX 2: MNE VARIABLES

### Financial variables

***Equity***: comprises: (i) equity in branches; (ii) all shares in subsidiaries and associates (except non-participating, preferred shares that are treated as debt securities and included under direct investment, debt instruments); and (iii) other contributions of an equity nature. Ownership of equity is usually evidenced by shares, stocks, participations, depositary receipts or similar documents. Shares and stocks have the same meaning while depositary receipts are securities that represent ownership of securities by a depositary. This category includes proprietors' net equity in quasi-corporations, as well as shares and equity in corporations. It also includes preferred stocks or shares that provide for participation in the residual value on dissolution of an incorporated enterprise. Reinvestment of earnings comprises the claim of direct investors (in proportion to equity held) on the retained earnings of direct investment enterprises. Reinvestment of earnings represents financial account transactions that contribute to the equity position of a direct investor in a direct investment enterprise.

***Deposits:*** Typical forms of deposits include savings deposits, term deposits, transferable and non-transferable deposits in local or foreign currencies. (See the SNA guidelines for a more specific definition of deposits).

***Debt securities*:** include non-participating preferred shares, bonds, debentures, commercial paper, promissory notes and other non-equity securities.

***Loans:*** Loans are financial assets that are created when a creditor lends funds directly to a debtor through an instrument that is not intended to be traded. This category includes all loans and advances (except accounts receivable/payable which are treated as a separate category of financial assets). It also covers the treatment of financial leases and repurchase agreements.

***Trade credit (receivables and payables)*** between FDI related enterprises. It represents short-term credit in the ordinary course of business by suppliers/buyers of goods and services. These credits are registered from the time the goods or services are provided until payment is received (or vice versa).

***Other accounts receivable/payable*** includes advances and deferred payments in respect of exchange of non-produced assets.

### Economic variables

***Sale****s* and *turnover* are used interchangeably to mean the same thing. Sales measures gross operating revenues less rebates, discounts, and returns. Sales should be measured exclusive of consumption and sales taxes on consumers, and value-added taxes. Although lacking the duplication-free quality of value added, the sales variable generally presents fewer collection difficulties and thus is likely to be more widely available than value added. Also unlike value added, "sales" indicates the extent to which foreign affiliates are used to deliver outputs to customers, irrespective of the extent to which the output originated in the affiliates themselves or in other firms. Further, sales

are more comparable than value added with regard to variables such as exports and imports, which themselves mainly arise from sales.

***Output:*** Following the *SNA*, output differs from sales because it includes changes in stocks of finished goods and work in progress and because of differences in measurement applicable to activities involving trade or financial intermediation. Output is a superior and more refined measure of activity for most purposes and is recommended as the preferred variable for compilation. However, sales data are easier to collect and may present more options for disaggregation. Thus, there may be a continuing role in AMNE statistics for both measures.

***Employment*** would normally be measured as the number of persons on the payrolls of foreign affiliates. Employment data are sometimes converted to a "full-time equivalent" (FTE) basis, in which part-time workers are counted according to the time worked (e.g. two workers on half-time schedules count the same as one full-time worker). Data on employment by affiliates can be used in several ways. They can be used in determining the share of foreign affiliates in host country employment, or in attempts to determine the extent to which employment by foreign affiliates complements or substitutes for domestic (home country) employment by parent companies or other domestic firms. An industry breakdown of affiliates' employment can yield further insights into the impact of foreign-owned enterprises on specific parts of the economy.

***Value added****:* The *SNA* defines "the gross value added of an establishment, enterprise, industry, or sector" as "the amount by which the value of the outputs produced . . . exceeds the value of the intermediate inputs consumed". A related concept, "net value added", is defined as gross value added less the consumption of fixed capital. Gross value added can provide information about the contribution of foreign affiliates to host country gross domestic product, both in the aggregate and in specific industries. For this reason, and because it may often be easier to compute (because it does not require estimation of capital consumption) and is thus more widely available, the higher priority should be accorded to the gross measure of value added. Although it is defined in terms of outputs and intermediate inputs, value added also is equal to the sum of primary incomes generated in production (compensation of employees, profits, etc.).

***Exports and imports of goods and services:*** International goods and services transactions of foreign affiliates are another basic indicator of activity. Both balance of payments data and data provided by parent enterprises and affiliates in separate questionnaires may be appropriate sources for such information. To a large extent, the possibilities for disaggregating total exports and total imports may depend on the sources used to obtain the data. Where the data are obtained through linkages with primary data sources for balance of payments transactions, breakdowns by product and by origin or destination will often be possible. In this event, exports and imports might be disaggregated, not only by the primary activity of the affiliate according to ISIC, but also by product.

***Number of enterprises***: The number of enterprises meeting the criteria for coverage by AMNE statistics is a basic indicator of the prevalence of majority ownership by foreigners in the host economy. This number may be compared with the total number of firms (or establishments) in the economy. It may also be assessed in relation to the other AMNE variables because it allows the computation of ratios – such as value added or number of employees per enterprise – that may be compared with the same ratios for domestically owned firms, thus giving an indication of the behaviour of foreign affiliates.

***Compensation of employees***: The total remuneration, in cash or in kind, payable by an enterprise to an employee in return for work done by the employee during the accounting period.

***Net worth:*** The difference between the value of all assets – produced, non-produced, and financial – and all liabilities.

***Net operating surplus****:* Measured as value added (gross), less compensation of employees, consumption of fixed capital, and taxes on production, plus subsidies receivable.

***Gross fixed capital formation****:* Measured by the total value of a producer's acquisitions, less disposals, of fixed assets during the accounting period plus certain additions to the value of non-produced assets realised by productive activity. (Fixed assets are defined as produced assets that are themselves used repeatedly, or continuously, in processes of production for more than one year.)

***Taxes on income:*** These consist of corporate income taxes, corporate profit taxes, corporate surtaxes, and so forth, and taxes that accrue to owners of unincorporated enterprises as a result of the income of those enterprises. Taxes on income include only taxes in the host country of the affiliate and not any taxes paid by the parent in the home country as a result of income earned or distributed by the affiliate. Taxes on income are usually assessed on the total income of corporations from all sources and not simply profits generated by production.

***Research and development expenditures:*** Expenditures for activities undertaken for the purpose of discovering or developing new products (goods and services), including improved versions or qualities of existing products, or discovering or developing new or more efficient processes of production.

## REFERENCES

OECD Benchmark Definition of Foreign Direct Investment, 4th edition (2008)

OECD Handbook of Economic Globalisation Indicators (2005)

OECD "Foreign Direct Investment stocks: Financial versus Economic Measurement", WGIIS, DAF/INV/STAT(2007)6

OECD "Harmonising financial and economic measures of multinational enterprises", WGIIS, DAF/INV/STAT(2011)4

International Investment and Multinational Enterprises: Recent international direct investment trends, OECD (1981)