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VALUATION OF FOREIGN DIRECT INVESTMENT POSITIONS

FINAL REPORT

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TASK FORCE ON VALUATION OF FOREIGN DIRECT INVESTMENT POSITIONS

Task Force on Valuation of Foreign Direct Investment (FDI) Positions
This report was drafted by an ad hoc task force set up by the Working Group on External Statistics and requested by the Statistics Committee of the European System of Central Banks. The task force was chaired by Valeria Pellegrini, while Rodrigo Oliveira-Soares and Beatriz Ruiz González acted as Secretaries. The full list of members of the task force is as follows:

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ABSTRACT

The mandate of the Task Force on Valuation of Foreign Direct Investment (FDI) Positions was to review the methods to value direct investment positions stated in Annex III of the Guideline ECB/2011/23 on External Statistics. In particular, the work of the Task Force was focused on reviewing recent developments that may justify amendments to the current method and assessing whether new methods to be applied in the national contributions to the euro area aggregate would lead to a more reliable international investment position (i.i.p.), in particular by increasing the consistency in the valuation of FDI assets and liabilities.

The report concluded that in some cases where the use of own funds at book value (OFBV) data would lead to significant biases in the national net i.i.p., other valuation methods than OFBV could be used, adding that national compilers shall exchange information on those positions with the other relevant Member State(s). National compilers should then consider, on a case-by-case basis, adjusting the valuation of those positions in order to strive for a consistent recording of these investments by counterpart EU countries.

The Task Force's final report was considered and approved by the Working Group on External Statistics at its meeting on 30 and 31 October 2012.

Keywords

Foreign direct investments statistics, own funds at book value, market value, FDI valuation, balance of payments statistics

JEL-codes

A39, C82, F21

NON-TECHNICAL SUMMARY

BACKGROUND AND SUMMARY OF THE MANDATE

Foreign direct investment (FDI) is a way of creating direct, stable and long-lasting links between economies. It promotes the development of international trade, encourages the international transfer of know-how and technology and is an important source of capital for many countries. The demand for FDI statistics has increased following the need for a better understanding of the benefits and risks of cross-border investment. Internationally harmonised, timely and reliable statistics are essential to assist policy-makers in dealing with the challenges of global markets. Moreover, the usefulness of FDI statistics depends on their level of compliance with internationally agreed standards.

The Guidelines (ECB/2004/15 and ECB/2011/23) state that, in the case of unlisted direct investment companies, Member States should value equity positions on the basis of a common definition of own funds at book value (OFBV). This harmonised approach for the estimation of market values was added to the Guidelines after careful research. The Statistics Committee (STC)[1] of the European System of Central Banks (ESCB) was consulted about a possible amendment to the valuation of FDI positions in unlisted equity. Consequently, the Task Force on the valuation of FDI positions was created to review the current method. It was asked to focus on recent developments and findings that may justify possible amendments. According to the mandate, the changes proposed by the Task Force should lead towards increased consistency in the valuation of assets and liabilities in order to improve the reliability of net international investment position (i.i.p.). The STC agreed that if the deliberations lead to changes being made to the FDI valuation method, a regular or simplified procedure could be followed in amending Annex III of the ECB Guideline on External Statistics (ECB/2011/23).

An interim report of the Task Force was presented to the Working Group on External Statistics[2] in May 2012, and a draft of the final report was completed in October 2012. The Task Force carried out a theoretical analysis of the problems generated by the adoption of OFBV and, more generally, of the pros and cons of other possible valuation methods. The analysis started from the findings of previous work carried out by international groups of experts, and took into account the recent problems experienced by the members of the Task Force.

EMPIRICAL EVIDENCE

In order to identify problematic cases and to assess the relevance of distortions due to the current valuation system, the Task Force carried out three independent studies: (i) an analysis of the European FDI statistics broken down by listed/unlisted direct investment company, along with a modelling exercise (to assess the impact of the different valuation methods applied to these two categories of FDI); (ii) an ad hoc survey asking the compilers' views on the

[1] The Statistics Committee (STC) mainly advises on the design and the compilation of statistical information collected by the ECB with the assistance of the NCBs.

[2] The Working Group on External Statistics reports to the Statistics Committee and assist the latter in the fulfilment of its mandate as far as external statistics are concerned.

importance of valuation problems; and (iii) an analysis of the results of the FDI Network's bilateral comparison exercise, with reference to the exchange of positions. The main empirical findings are the following: (i) since the share of listed enterprises in euro area FDI statistics is low (only 4.1% of gross direct investment positions in 2010), the difference between OFBV and market value is not likely to generate a sizeable bias in net i.i.p. at euro area level in terms of percentage, but these problems may have a relevant impact at national level in specific situations; (ii) the results of the ad hoc survey, conducted in all Member States, showed that the problem of inconsistencies between assets and liabilities due to the application of OFBV seems to be relevant only for the few countries hosting many special purpose entities (SPEs) (with an impact of between 5% and 20% of total FDI assets abroad), whereas these problems are irrelevant in other countries; and (iii) the analysis of the results of the FDI Network exercise on the exchange of positions showed that inconsistencies due to valuation problems are one of the main causes of asymmetries[3]. The relevance of mismatches due to valuation problems varies significantly across countries.

RECOMMENDATIONS ON HOW TO PROCEED IN PROBLEMATIC CASES

OFBV has been confirmed as a good benchmark for the valuation of FDI positions in unlisted companies, despite its shortcomings in specific cases. The Task Force identified three main problematic cases for which the application of OFBV distorts net i.i.p. and consequently an adjustment on assets or liabilities may be required in order to eliminate the inconsistency. All these cases regard a holding company in the middle of an FDI chain for which the value of liabilities is dominated by the value of assets held abroad. Consequently, their contribution to the net i.i.p. should theoretically be very close to zero, whereas inconsistencies in measurement between the valuation of assets and liabilities produce unreliable net i.i.p. (significantly different from zero). The first case concerns the i.i.p. imbalance in a holding company that has most of its assets and liabilities vis-à-vis non-residents, and is in the middle of a chain of listed and unlisted companies. The i.i.p. imbalance results from different valuation methods being applied to its assets and liabilities, namely one side according to an observed market price (for the listed company) and the other side according to OFBV (unlisted company)[4]. The second case concerns the fact that the net position of the intermediate enterprise may become distorted when substantial amounts of goodwill are recorded in its balance sheet (determining FDI equity liabilities), but are not reflected in the OFBV of the direct investment enterprise (determining FDI equity assets), since OFBV of the direct investment enterprise ignores the value of goodwill[5]. The third case involves the accounts of companies belonging to the same chain being located in different economies and denominated in different currencies; exchange rate changes

[3] Regarding this problem, the incidence of "not matched" positions on the total amount exchanged can be roughly estimated as 13%, while 8% is a proxy for the incidence of the particular case of the use of historical cost versus OFBV.

[4] The empirical evidence provided by Member States shows that the most relevant case concerns resident, foreign-owned, listed companies (valued at market prices) which hold an unlisted company abroad (valued according to OFBV on the asset side). The opposite case of a foreign-owned resident unlisted company holding a listed company abroad is practically irrelevant.

[5] According to the accounting rules, goodwill can only be recorded on the balance sheet of the acquiring company.

can lead to valuation conflicts between FDI equity assets and the liabilities of SPEs/holdings[6] (this case mainly affects positions outside of the European Union (EU)).

If a compiler introduces a relevant adjustment to OFBV in order to eliminate the bias on net i.i.p. in a position within the EU, he/she should exchange information with the EU partner country. The FDI Network has been proposed as the possible mechanism for exchanging the required data[7]. The aim of sharing information would be to eliminate or reduce the impact of unilateral adjustments which may generate bilateral asymmetries. The compiler in the partner country would, on a case-by-case basis, consider voluntarily making a similar adjustment taking into account the trade-off between data quality/reduction of asymmetries and the burden of the work involved. The rules guiding the exchange of data through the FDI Network in each of the three special cases have been defined in the context of the fourth FDI Network workshop held in September 2012. A specific field will be added to the template used for exchanging positions within the FDI Network, in order to identify positions that correspond to any of the three special cases. Based on this information, Eurostat/ECB will review the specific relevance and impact of these cases and will report back to the relevant groups. This will allow for an assessment and, if necessary, a review of the recommendations of the Task Force.

RESEARCH AGENDA

The Task Force identified proposals and issues related to FDI that may be analysed by groups and task forces in the future. The first aspect concerns the analysis of minor cases that pose problems due to the application of the current valuation method, which the empirical analysis identified and may become more important in the future. The Task Force therefore recommends monitoring the size and frequency of these cases in the future and, if necessary, analysing their implications. The second aspect regards the future development of the tools for exchanging and sharing data. As a matter of fact, the analysis performed by the Task Force highlighted that the application of OFBV is currently costly and difficult for countries hosting many SPEs, since they have serious problems in obtaining the relevant information from enterprises in the counterpart countries. In general, asymmetries of information do exist, since the balance sheet data on resident enterprises are very complete, whereas those regarding non-resident enterprises may sometimes be incomplete or difficult to collect. The Task Force tried both to identify other means of exchanging and sharing the available information, and to think of possible ways to improve the existing tools. A short-term solution could be to extend the list of available public national databases of balance sheets, and to improve their accessibility for FDI compilers (harmonisation of concepts, description of contents etc.). In the long term, creating a section within the EuroGroups Register (EGR) that contains balance sheet data and information, which may become an additional and common data source for FDI valuation and compilation, could help to reduce the asymmetries and increase the quality of FDI statistics.

6 According to the accounting rules, the exchange rate fluctuations do not necessarily reflect on the OFBV of the holding company.

7 According to the empirical analysis in Case 2 concerning the recording of goodwill, the EU positions involved may be numerous, so the exchange of data may not solve the problem of the lack of information on OFBV, or guarantee a significant reduction of asymmetries.

I INTRODUCTION

Foreign direct investment (FDI) is a way of creating direct, stable and long-lasting links between economies. It promotes the development of international trade, encourages the international transfer of know-how and technology and is an important source of capital for many countries. The demand of FDI statistics has increased following the need for a better understanding of the benefits and risks of cross-border investment. Internationally harmonised, timely and reliable statistics are essential to assist policy-makers in dealing with the challenges of global markets. Moreover, the usefulness of FDI statistics depends on their level of compliance with internationally agreed standards. In recent years, different issues related to the valuation of FDI equity positions have been considered in several fora. Following a thorough investigation, in 2001 the Statistics Committee (STC) of the European System of Central Banks (ESCB), assisted by the Working Group on Balance of Payments and External Reserves Statistics, reached a conceptual agreement on the valuation of FDI positions in the euro area international investment position (i.i.p.).

On that occasion, the STC agreed on the advantage of all countries using OFBV for the valuation of unlisted equity. The adoption of a unique valuation method was expected to reduce bilateral asymmetries in FDI positions within the euro area/EU and, at the same time, provide a sound and reliable valuation of FDI equity capital.

The Task Force on Foreign Direct Investment, whose main objective was to identify "best practices" with a view to minimising inconsistencies within the euro area/EU, was mandated to investigate the practicality of the conceptual agreement reached by the STC concerning FDI valuation. This harmonised approach was introduced in ECB Guideline (ECB/2004/15) after careful investigation by the Task Force.

At the end of 2011, when the draft of the new ECB Guideline on External Statistics was circulated to the STC, a possible amendment to Annex III was proposed concerning the valuation of FDI positions in unlisted equity. The rationale behind this proposal was that valuing unlisted FDI equity solely using OFBV may have drawbacks. Furthermore, it has been recognised that changes brought about by globalisation, as well as any new aspect of the current scenario in which FDI statistics are compiled by Member States and analysed by users, may justify an investigation into possible shortcomings of the current standards, in order to revise and improve them.

In that context, the STC instructed the Working Group on External Statistics to set up a Task Force to review the methods used to value direct investment positions. The STC agreed that if the outcome of the deliberations led to changes in the FDI valuation method, a regular or simplified procedure could be followed in amending Annex III of the ECB Guideline on External Statistics (ECB/2011/23).

In particular, the Task Force was mandated to review the methods used to value direct investment positions stated in Annex III of the ECB Guideline on External Statistics:

With regard to the valuation of direct investment positions, the equity stocks listed in stock exchanges are valued at market prices. Conversely, in the case of unlisted direct investment

companies, equity stocks are valued on the basis of book values using a common definition comprising the following accounting items:

(i) paid-up capital (excluding own shares and including shares premium accounts);

(ii) all types of reserves (including investment grants when accounting guidelines consider them as company's reserves);

(iii) non-distributed profits net of losses (including results for the current year).

The work of the Task Force focused on the following dimensions:

- reviewing recent developments that may justify amendments to the current method;
- assessing whether new methods to be applied to the national contributions to the euro area aggregate would lead to a more reliable i.i.p., in particular by making the valuation of assets and liabilities more consistent.

The Task Force was chaired by Ms Valeria Pellegrini (Banca d'Italia); Annex 2 contains the full list of participants. While much of the work of the Task Force was conducted via electronic means, it did meet twice, in Frankfurt on 18 and 19 January 2012 and in Rome on 19 and 20 April 2012.

Following the mandate (see Annex 1), the Task Force delivered an interim report to the Working Group on External Statistics by mid-May 2012, and a final report in October 2012. The STC approved the report in December 2012.

This report has the following structure. Chapter 2 reviews the methods accepted in the international manuals. Chapter 3 reviews the motivation to reconsider the current method in the ECB Guideline on External Statistics. Chapter 4 presents evidence of cases where different valuations may introduce a bias in results. Chapter 5 includes some empirical findings. Chapter 6 elaborates on recommendations on how to proceed in special cases and proposes a research agenda to identify issues that may be further analysed in the future.

2 METHODS IN INTERNATIONAL STANDARDS FOR VALUATING UNLISTED DIRECT INVESTMENT POSITIONS

The underlying principle for the valuation of equity is market price (BPM6 3.84, BD4 288). In the absence of observable market prices (stock exchange, other financial market), other alternatives are permitted. The methods recommended by the international manuals (Sixth Edition of the IMF's Balance of Payments and International Investment Position Manual – BPM6, OECD Benchmark Definition of Foreign Direct Investment – 4th Edition – BD4) for approximating market value of unlisted equity can be split into two groups: absolute and relative valuation models[8].

In absolute valuation models, the value of each company is determined by its specific characteristics. On the other hand, in relative valuation models, a company is valued at the same price as companies with identical characteristics since, for arbitrage reasons, similar assets must trade at similar prices.

2.1 ABSOLUTE VALUATION MODELS

The underlying idea of an absolute valuation model is that each company has its own specificities and the company's value should reflect that.

2.1.1 OWN FUNDS AT BOOK VALUE (OFBV)

This method for valuing equity is based on the value of the enterprise recorded in the books of the direct investment enterprise. According to this method, the book value should be understood as the percentage of ownership of the direct investor times the value of the direct investment enterprise based on its volume of own funds.

This method defines "book value" as the sum of:

- paid-up capital (net of own shares);
- all types of reserves identified as equity in the enterprise's balance sheet, including cumulated reinvested earnings (as part of the reserves);
- holding gains or losses included in own funds in the accounts, whether as revaluation reserves or profits or losses;
- profits or losses of the current year.

The concept of OFBV represents an attempt to standardise the concept of book value, which can be defined in multiple ways.

[8] The chapter is based on Balance of Payments and International Investment Position Manual 6th edition – BPM6, OECD Benchmark Definition of Foreign Direct Investment - 4th Edition and on the IMF Working Paper 09/242 on the Valuation of Unlisted Direct Investment Equity (Kumah, E., Damgaard, J. and Elkjaer, T.).

There are several advantages of the concept of OFBV. It is a method which can be applied on both sides of the direct investment relationship in the same way. For outward FDI, direct investors need to gather the information of their direct investment enterprises. For inward FDI, the information is taken from the resident bookkeeping of the direct investment enterprises. Additionally, the use of common definitions/accounting rules is a straightforward method which avoids asymmetries between countries. Taking accounting rules as given, it is an objective method without individual estimations, etc. This is why the International Monetary Fund (IMF) requires the use of OFBV to value the positions reported for the Coordinated Direct Investment Survey (see CDIS Guide).

One disadvantage is that book values do not necessarily reflect the market value, since accounting rules do not recognise certain intangible assets such as goodwill. In addition, book values may not fully reflect changes of value due to direct investment relationships below the first relationship (in a chain of investments). An underestimation of market value may be possible, particularly for those companies/industries in which intangible assets are a major component of the market value. Moreover, countries hosting a large number of special purpose entities (SPEs) may face difficulties in collecting data according to a rigid method. Finally, there is the shortcoming that different accounting methods are used in different countries, which could lead to different valuations of comparable direct investment enterprises.

2.1.2 RECENT TRANSACTION PRICE

The recent transaction method suggests that, if unlisted direct investment enterprises were recently traded, the transaction price reported for balance of payments (b.o.p.) purposes can be used as a good indicator of current market value. However, since market value can change rapidly with market conditions, the manuals recommend that the transaction price should only be used if the transaction has occurred within the past year, otherwise recent transaction prices may be misleading.

This method, by definition, equals market price at the time of transaction. Another important advantage is that it is easy to implement for traded equity. Recent transaction prices constitute an objective method that does not rely on individual estimations. However, for most unlisted direct investment enterprises, transaction prices may only be irregularly observed and quickly become obsolete, which means that this method can hardly be used as a general method for valuating equity in unlisted direct investment enterprises.

2.1.3 NET ASSET VALUE

Fair value of unlisted equity can be estimated as total assets (including intangible assets) minus total liabilities (excluding equity) at book value[9]. Under this valuation method, appraisals of

[9] This method can be seen as being close to OFBV and also has the shortcoming that different accounting rules may be used in different countries, which may lead to asymmetric recording.

assets and liabilities are performed by independent auditors. Appraisals should be conducted within the past year.

The underlying idea of this method is that, as independent auditors are close to the company, they can perform a valuation based on accounting rules, which may include acquired goodwill. Independent auditors regularly assess whether the recent transaction price used in the books of a company (historical cost) is higher than the fair value of the investee. If so, impairment is introduced to bring the historical cost close to the fair value. In other words, as long as the historical cost of the investee exceeds OFBV, an independent auditor holds the opinion that the historical cost does not overestimate the fair value.

This method implies leaving the valuation process in the hands of reporting units which could mean that it would be very difficult for compilers to guarantee consistency across companies. Moreover, companies could deliberately provide incorrect estimates for tax reasons or shareholder protection.

2.1.4 PRESENT VALUE OF EARNINGS

The value of equity can be estimated as being the present value of the forecast stream of future earnings. According to this method it is up to FDI/i.i.p. compilers to forecast future earnings and determine the appropriate discount rate by assessing risk factors.

The main advantage of this method is that, theoretically, it is the best way to estimate the fundamental value of an asset, although, in practice, making reliable earnings forecasts at company level is extremely time-consuming. An FDI compiler would need a reliable forecast organised by country and by economic sector, which is not practical. Additionally, this method would assume that all competitors in the same country and the same sector have the same forecast. This is a mathematical method but not a good representation of reality. Another drawback of this method is that fundamental value does not always equal market value, as the existence of asset price bubbles shows us. Even when determining the fundamental value of a specific asset, it is hard to reach a consensus among equity analysts, since different expectations would produce different estimates.

2.1.5 APPORTIONING GLOBAL VALUE

According to this method, if equity of a particular direct investment enterprise is unlisted, but the enterprise belongs to a global enterprise group whose equity is listed, the current market value of the global enterprise group can be calculated and apportioned to the operations in each economic territory, on the basis of an indicator. The key to this method is the selection of an appropriate apportioning indicator (sales, net income, assets or employment).

This method is based on the actual market value of a specific group and, once the best apportioning indicator has been found, it is straightforward to make the estimations. However, this method is not a general method, since many unlisted direct investment enterprises are not part of a listed group.

2.2 RELATIVE VALUATION MODELS

The relative valuation models are based on the assumption that similar assets must trade at similar prices; otherwise there is scope for arbitrage.

2.2.1 PRICE TO EARNINGS (P/E)

According to this method, P/E ratios can be calculated for listed companies and then applied to unlisted companies. In order to recognise certain industry-specific differences, manuals suggest that these ratios should be calculated for industry groups.

An important advantage of this method is that it is easy to implement. Moreover, it uses actual market values rather than economic fundamentals meaning that the estimations are expected to be in line with stock market trends.

On the other hand, this method does not take company-specific characteristics into account. Thus, for instance, this method is not able to capture different expectations of growth among companies. It assumes that a model based on listed enterprises can be transferred to unlisted enterprises. Additionally, for precise estimations the compilers need a lot of basic information organised by country and economic sector, which will be unavailable in less developed countries.

2.2.2 PRICE TO BOOK VALUE (P/B)

The underlying idea of this method is that book values reported by enterprises can be adjusted at an aggregate level by the compiler, by applying a P/B ratio from listed equity to unlisted equity.

The advantages and weaknesses of this method are broadly similar to those of the previous method. This method is also easy to implement and is based on actual market values. However, it does not take company-specific characteristics into account. In addition, as with P/E ratios, in order to achieve precise estimations the compilers need a lot of information about industries, accounting standards, etc. It assumes that a model based on listed equity can be transferred to unlisted equity.

The essential difference between the two relative valuation models is that P/B uses a stock variable (book value) while P/E is based on a flow variable (earnings). Thus, since stock variables tend to be more stable while flow variables are usually more volatile, the P/B method would produce more robust results than the P/E method.

Table 1 Overview of the advantages and disadvantages of the different methods[10]

Method	Advantages	Disadvantages
Own funds at book value	Available for all direct investment enterprises (listed and unlisted) Symmetric recording if used by all countries Objective method (independent from individual estimations)	Book values do not entirely reflect market values Accounting principles may differ from country to country Difficulties for countries hosting a large number of SPEs
Recent transaction price	Easy to implement for traded equity Equals market price by definition Objective method (independent from individual estimations)	Unlisted equity is infrequently traded Observed market prices can become obsolete
Net asset value	First-hand information about a company's value Takes company-specific characteristics into account Objective method (independent from individual estimations)	Accounting principles may differ from country to country Individual estimations driven by tax reasons, etc. Net asset value is difficult to obtain
Present value of earnings	Theoretically best valuation method Captures expectations of future earnings	Time-consuming Individual estimations driven by individual expectations Problem of internal transfer prices Approximates fundamental not market value
Apportioning global value	Based on actual market value	Only applicable in cases where the group is listed Individual component: difficult to find the apportioning indicator
Price to earnings	Theoretically easy to implement Based on actual market values	No company-specific characteristics Assumes that listed and unlisted companies have similar characteristics Results are only possible for a certain level of aggregation, not at enterprise level
Price to book value	Theoretically easy to implement Based on actual market values	No company-specific characteristics Assumes that listed and unlisted companies have similar characteristics Results are only possible for a certain level of aggregation, not at enterprise level

[10] Table 1 is based on the IMF's Working Paper 09/242.

3 MOTIVATION FOR RECONSIDERING CURRENT METHOD IN ECB GUIDELINE

This Chapter provides an overview of recent changes in the statistical and economic context which may influence the choice of valuation method. Some of these aspects are deserving of a thorough analysis and will be covered in specific chapters of the report.

3.1 THEORETICAL AND PRACTICAL PROBLEMS RAISED BY COUNTRIES CONCERNING THE APPLICATION OF THE CURRENT VALUATION METHOD

The main motivation for reconsidering the valuation of FDI positions in unlisted equity at OFBV, and the reason why this Task Force was set up, relates to the fact that, according to three Member States, using this valuation method and no other could have a negative effect on statistics. The three Member States which promoted the amendment to Annex III of the new ECB Guideline on External Statistics (ECB/2011/23) shared the view that the current valuation method has some drawbacks that can produce inconsistent results in data and biases in FDI position and net i.i.p. These problems can be more prominent in the case of countries hosting many holding companies and SPEs (SPEs should have a net i.i.p. value of close to zero).

These countries maintain that the use of OFBV can result in positions that are economically meaningless, due to the fact that it combines liabilities and assets derived from two different balance sheets based on different valuation principles: resident balance sheet for inward direct investment position and non-resident balance sheet for outward direct investment position. In addition to this, OFBV of the direct investment enterprise ignores the value of goodwill. In this way, in the case of a chain of FDI investments, goodwill paid by the acquiring company is included in its balance sheet and consequently reflected in its inward position, but not in its outward position. A knock-on effect of this is that it generates undesirable results in the inward and outward position and national net i.i.p., and may also cause undesirable results in euro area i.i.p. aggregates.

Moreover, an imbalance in the i.i.p. may be introduced by using OFBV when the top company in a group is listed and its subsidiaries abroad are unlisted. In such cases, according to the standard rules defined in the Annex III of the Guideline, the liability to the foreign investor (inward direct investment or portfolio depending on the share held in the equity capital of the domestic company) will be recorded at market value, based on the listed share price, while the equity positions of the outward direct investment asset will be valued at OFBV. Therefore, an imbalance will appear if the increase in the market valuation of the top level company exceeds the change in the OFBV of the outward direct investment asset. A similar inconsistency may occur in the case of unlisted domestic companies holding listed companies abroad. The details of all these problems will be described in full in Chapter 4.

Finally, there are problems related to the practical implementation of this valuation method. In particular, countries hosting many SPEs have difficulty in applying the common definition of OFBV in the case of FDI abroad, due to a lack of access to the balance sheets of FDI enterprises

(sometimes data are available with a time lag of more than a year). In these cases, the application of the current valuation method is particularly costly and time consuming.

3.2 REVISION OF BPM6 AND BD4 AND THE RESULTS OF THE DISCUSSIONS IN INTERNATIONAL STATISTICAL GROUPS

Following the completion of the analysis carried out by the Task Force on Foreign Direct Investment over the past decade, discussions have been reopened concerning the valuation of FDI positions in the context of updating BPM6, BD4 and the System of National Accounts (SNA). The BPM6, BD4 and SNA 2008 all confirm the valuation of FDI equity position at the market value. Previous versions of the Benchmark Definition Manual and the BPM recommend using market value or, where market value is not available for statistical purposes, taking into account the book value derived from the balance sheets (see BD3 page 12); no explicit distinction was made between listed and unlisted equities as regards valuation methods. The valuation issue has been deeply analysed and discussed on the occasion of the revision of the international standards. The new versions of the manuals list the valuation methods that should be considered unacceptable, and give a number of alternative valuation methods that may be used to approximate the market value when market price is not available or is unobservable, as in the case of unlisted equities. These acceptable methods have not been ranked; the best one to use depends on the specific circumstances. A specific annex of BD4 also describes the pros and cons of each of these methods, which have been clearly illustrated in Chapter 2.

According to the new manuals, OFBV is one of the recommended methods for valuing unlisted companies and is the reference valuation method required for the compilation of FDI stock data in the CDIS. The EU Balance of Payments Regulation does not give a specific indication of acceptable methods to be applied by national compilers. In this context, some countries have developed, or are in the process of applying, different methods for the valuation of their national i.i.p. at market value (including unlisted equities) that are modelled on the acceptable methods identified by the new manuals, whenever they deem that methods other than OFBV may provide a more realistic picture of their FDI statistics and net i.i.p. In this new context, compilers benefited from the outcomes of the international discussions and improved both their conceptual knowledge and practical experience in this field. Therefore, it is reasonable to consider whether the new elements emerging from the current scenario may warrant a revision of the current standard valuation criteria.

3.3 THE IMPLICATIONS OF THE INTRODUCTION OF THE INTERNATIONAL FINANCIAL REPORTING STANDARDS (IFRS) IN EUROPE FOR THE COMPILATION OF FDI POSITIONS USING OFBV

The main advantage of using OFBV as the valuation method for unlisted FDI equity positions is that it promotes symmetric recording if it is used by all countries. OFBV involves valuing an enterprise at the value appearing in its books using a common definition described by the international manuals, which includes paid-up capital, all types of reserves and net value of non-

distributed profits and losses (including results for the current year), and is based on the books of the direct investment enterprise. The IFRS creates a common framework of high-quality global accounting standards, and guarantees that financial statements are transparent, understandable and comparable in all of the countries they operate in.

If access is available to the books of the direct investment enterprise, the use of this method by all countries would promote symmetric bilateral recording. However, the application of the IFRS is only mandatory in the case of consolidated accounts of European listed companies. Unlisted groups can choose to use IFRS or national Generally Accepted Accounting Principles (GAAP); the applied accounting standards depend on the country where they are located. In practice, most unlisted companies which consolidate their financial statements and also belong to a listed group follow IFRS, as their accounts are used to draw up the accounts of the entire group. Regarding non-consolidated accounts of companies, they are still allowed (or even obliged) to use national GAAP, whose rules in many countries may differ from the IFRS.[11]

The main valuation method used in the IFRS for both assets and liabilities is fair value, defined as *"the amount for which an asset could be exchanged, or a liability settled, between knowledgeable, willing parties in an arm's-length transaction."* This value is considered by BPM6 as the best estimation of market value for financial assets and liabilities that are not traded in financial markets, or that are traded only infrequently. In addition, the IFRS require most assets and liabilities to be revalued on at least an annual basis. Under this approach, the closer the accounting principles follow the IFRS, the better the approximation of market value.

Even though the goal of the IFRS is to approximate market values, there is still some scope for distortion from the market valuation. The most relevant conditions in the IFRS are the following.

- The IFRS prohibit the recognition of certain intangible assets internally produced by a company (e.g. brands, mastheads, publishing titles, customer list), which often can be a major component of the market value. Since many intangible assets are excluded from the IFRS, book values may underestimate market values. Moreover, the IFRS require goodwill acquired in a business transaction to be recognised by the acquirer as an asset from the acquisition date. This means that goodwill can only be bought, it cannot be internally generated.
- Assets in some asset classes may be valued at nominal or historic cost (i.e. some elements of fixed assets used by the company, assets held to maturity and non-trading liabilities).

For the reasons described above, we can conclude that the outcomes of the analysis of the current accounting standards, and the level of application of the IFRS across different countries, may influence the discussion of the valuation principles of unlisted companies. Annex 5 is dedicated to accounting standards.

[11] In the Netherlands, the IFRS are also frequently used for non-consolidated accounts.

3.4 CHANGES IN NATIONAL DATA COLLECTION SYSTEMS AND THE AVAILABILITY OF NEW TOOLS FOR EXCHANGING INFORMATION

In the past, the previous Task Force on Foreign Direct Investment was mandated to focus on how to apply the valuation criteria approved by the STC on practical grounds. Their feasibility analysis was carried out on the basis of the valuation data which were available to the compilers at that time from national data collection systems or from external sources. Since constraints on the availability and timeliness of information, as well as problems related to the burden on compilers and reporting companies, may affect the choice of the standard valuation criteria, it is necessary to monitor the changes which have recently occurred in national data collection systems. The analysis should focus on the available information, valuation and consolidation criteria that are currently applied. As a matter of fact, in the last decade many countries changed their data collection system and moved to direct reporting for FDI, or revised the existing surveys in order to take account of the outcomes of the international debate and widespread best practices.

In order to apply valuation criteria to equity positions, data available from the national data collection system can be integrated with data derived from external data sources. Recently, at European level, initiatives were put in place to provide compilers with additional infrastructural tools for exchanging and sharing data. These initiatives aim to reduce the asymmetries between compilers concerning the available information, and consequently they are expected to improve the quality of the statistics produced.

One new initiative is the FDI Network, whose aim is to tackle asymmetries in FDI statistics through a secure bilateral exchange of micro data concerning FDI involving two counterparts. This exchange initially only regarded flow data, but recently it has been extended to positions. Consequently, the FDI Network may exchange data which can be used to improve valuation practices by filling the possible information gaps. Another new initiative is the EuroGroups Register (EGR), which consists of a network of registers involving Eurostat and the statistical authorities of Member States, which facilitates the exchange of data on multinational enterprise groups (MNEs) and their constituent units. The integration of these data may be helpful whenever a more accurate description of intragroup relationships and a precise classification of foreign counterparts (identification of SPEs, listed/unlisted companies) are required to correctly value FDI position.

The potential of these new tools is described in detail in Annex 4.

3.5 ASYMMETRIES AND ISSUES ARISING FROM THE ANALYSIS OF THE RESULTS OF THE PILOT FDI NETWORK ON THE EXCHANGE OF FDI POSITIONS

The test exercise on the exchange of FDI positions through the FDI Network took place in the second quarter of 2011. It was promoted by Eurostat to address bilateral asymmetries and, as a consequence, to improve the quality of data regarding FDI positions. Three Member States volunteered to be involved in the exercise: Spain, Italy and the Netherlands. Each country delivered the three main FDI outward equity positions held in each of the other two

participating countries on 31 December 2008, and checked the six corresponding FDI inward equity positions.

The exchange of FDI positions was useful in solving problems related to missing information, reporting errors and harmonisation of methodology. In fact, the results of the reconciliation procedure, presented by the countries participating in the FDI Network workshop in June 2011, revealed some asymmetries in the positions, which could be explained by the fact that different methodologies were used by the counterparts. Specifically, the reasons for potential discrepancies centred on the different valuation methods (OFBV, historical cost, net asset value and fair value), different accounting bases (consolidated versus unconsolidated data), different accounting principles and a different treatment of branches.

The most significant asymmetries that came to light during this exercise were detected for equity investment positions of the Netherlands in Italy and Spain. These were caused by a difference in valuation method. The outward equity positions of the Netherlands were valued at historical cost and the inward equity position of Italy and Spain were valued at OFBV. In most cases, valuation at historical cost resulted in a higher figure than valuation at OFBV.

The results of this pilot exercise showed the great importance of the methodology in the method used to valuate FDI positions.

More evidence of the size of the asymmetries due to differences in valuation criteria has been obtained as a result of the general exercise on the exchange of positions through the FDI Network, which took place in the second quarter of 2012 (see Chapter 5).

3.6 INCREASING IMPORTANCE OF THE INTERNATIONAL INVESTMENT POSITION (I.I.P.)

External statistics, specifically b.o.p. and i.i.p. statistics, are among the primary statistics on which policy-making bodies and markets rely as a basis for their decisions in globalised economies. Globalisation reflects the growing interdependency of national economies, and since b.o.p./i.i.p. statistics record such interdependency, as globalisation increases so does the interest in such statistics. B.o.p statistics and, increasingly, i.i.p. statistics are the subject of in-depth analysis to support the conduct of monetary, foreign exchange and economic policies and are of growing importance for financial stability analysis. For all these reasons, the relevance of these statistical aggregates rose markedly after the recent crisis, since persisting current account imbalances and the worsening of net external indebtedness are among the signals of unsustainable economic unbalances and potential risks. One key lesson from the crisis has been that more attention needs to be paid to macroeconomic imbalances and divergences in competitiveness between EU countries. Consequently, monitoring these data and enhancing their quality, timeliness and comparability becomes a core issue.

The European Commission recently presented its first annual Alert Mechanism Report. This is the starting point for the Macroeconomic Imbalance Procedure, a new surveillance tool that helps to detect and correct risky macroeconomic developments in the EU and the euro area, and as a consequence strengthens the economic pillar of the Economic and Monetary Union. The

tool is based on a scoreboard of ten macroeconomic indicators with indicative thresholds which should not be exceeded by Member States. Based on these indicators, the European Commission identifies Member States that show signs of potential macroeconomic imbalances, or face challenges in adjusting to imbalances and should, therefore, be investigated in further depth. One specific indicator is the net investment position in terms of percentage of national GDP, with a threshold of -35%.

The inclusion of the i.i.p. as one of the indicators of external imbalances in the scoreboard for the assessment of macroeconomic imbalances has brought external statistics into the limelight of economic governance and, therefore, some aspects of the compilation of the i.i.p. may need to be revisited, since it becomes more and more important to obtain reliable and easily interpreted results in this field. In this new context, those cases where the current method of valuation in unlisted companies adversely affects the quality of the Member State's net i.i.p. should be carefully identified and their relevance accurately assessed. National i.i.p. biases may also be reflected in the net euro area/EU i.i.p. Furthermore, the choice of national i.i.p. as one of the crucial economic indicators also emphasises the need for comparable i.i.p. data at EU level, which may not be achievable using very different valuation methods. The analysis of the Task Force, focusing on aspects related to the impact on net i.i.p., suggests that improvements could be made to the current valuation method, thus increasing both the quality and comparability of i.i.p. aggregates.

4 VALUATION ISSUES AND SPECIAL CASES WHERE OFBV MAY INTRODUCE A BIAS IN THE RESULTS

The current international methodologies (BPM6 and BD4) prescribe that asset and liability instruments should be recorded at market value. In the case of unlisted FDI equity, the manuals allow for a variety of options to approximate market value. The current (and previous) ECB Guideline[12] states that, in the case of unlisted FDI equity, OFBV is the valuation method that should be applied by all Member States (as the best approximation of market value and to ensure harmonised reporting). If applied uniformly[13], and under the assumption of perfect coverage, this would avoid any bilateral asymmetries arising from valuation.

However, in certain cases the application of this methodology can cause biases in the national net i.i.p., and these can have an impact on the net i.i.p. of the euro area. The size of biases is highly country-specific. Member States that host relatively large numbers of listed enterprises and/or holding companies are affected the most (for an explanation see examples 1 and 2). Both types, listed enterprises and holding companies, are not evenly distributed in Europe. A relatively small number of Member States host relatively large numbers of holding companies. This can largely be explained by different tax policies in different countries. Additionally, the country of residence of listed enterprises is sometimes determined by differences in tax regimes.

4.1 VALUATION ISSUES IN SIMPLE INVESTMENT CHAINS

Using OFBV for valuating a single investment position cannot by itself lead to inconsistent reporting by the two relevant countries. However, it can lead to biases.

Even in the simplest case, inconsistencies may arise. The most obvious and probably most frequently observed inconsistency stems from the fact that transactions and positions can be valued differently, e.g. if an unlisted enterprise is sold to a foreigner, the "price actually paid", which may provide an indication of the "market value", may deviate significantly from the OFBV which was previously used to value the enterprise. Most of this difference can be explained by goodwill, which is included in the "price actually paid" but is not included in the OFBV of the direct investment enterprise. This difference is recorded in the "other changes" in the stock-flow reconciliation.

A similar inconsistency may arise when an enterprise is listed for the first time, or delisted from a stock exchange. Again, entering the difference as an "other change" is the only solution if OFBV is applied to the unlisted enterprise.

[12] ECB/2011/23 (http://www.ecb.europa.eu/ecb/legal/1005/1022/html/index.en.html).

[13] The Task Force 2004 concluded that, among other things, the "coverage of at least indirect links of ownership is above 50%". By applying accounting consolidation or statistical consolidation this criterion is covered. In practice, countries partly apply the indirect-ownership approach.

In addition, the methodology used to approximate the market value of unlisted companies can potentially cause a "bias" in the net i.i.p. for the following reasons. In general, for listed companies valuation based on OFBV leads to lower results than the prices observed in the market. If OFBV underestimates the hypothetical market value of unlisted companies, countries with a one-sided FDI position (dominant assets or dominant liabilities) would generally underestimate their assets or liabilities respectively. For countries with a more balanced FDI position, the issue is probably less relevant, as measurement issues usually cancel out (however with specific countries or groups of countries as a counterpart it may still be a one-sided FDI position).[14] Chapter 5 includes an assessment of the size of these potential problems based on empirical findings.

Another possible bias on the macro level may arise from the different average *age* of assets and liabilities. This argument was raised in a 1991 US study which tried to estimate market value for FDI positions, thus replacing the historic cost approach[15]. A similar result was found in an Austrian investigation using price to earnings ratios to infer market prices.[16]

4.2 SPECIAL CASES OF COMPLEX INVESTMENT CHAINS

The number of possible problems increases as soon as we extend the investment chain to three or more partners. While in the simple case we had only one measurement (measuring the value of the investee, either by OFBV or the actual market price), and conflicts could only arise with respect to transactions or on the macro level, we now have two (or more) measurements in the investment chain.

The most obvious case is probably the case of SPEs or, more generally, holding companies in the middle of the chain. In fact, conflicts of valuation may arise in the extent to which the value of the intermediate is dominated, or even partly determined, by the value of its direct investment enterprise(s). The inconsistency is evident not only between Member States, but also within one data collection system. Assets and liabilities at the level of a company, country or the euro area are not valued consistently, creating a "gap in the balance sheet" which is attributable to the net i.i.p. of the intermediate company. This may lead to a distortion in the net i.i.p.

The following examples describe cases in which OFBV valuation can cause biases in net i.i.p. In addition, the case of large complex groups is discussed in Annex 6. Situations similar to Case 1 and Case 3 were addressed in the ad hoc questionnaire (see Chapter 5).

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14 The Banque de France and De Nederlandsche Bank calculate additional estimates of market value for unlisted companies based on the behaviour of listed companies. Available at http://www.banque-france.fr/fileadmin/user_upload/banque_de_france/Economie-et-Statistiques/Balances_des_paiements_et_Economie_Internationale/quarterly-selection-of-articles-spring-2010-17-etude_5.pdf and http://www.dnb.nl/en/binaries/artikel%20def_tcm47-270375.pdf.

15 Landefeld, Steven and Lawson, Ann, "Valuation of the U.S. Net International Investment Position", available at http://www.bea.gov/scb/pdf/internat/bpa/1991/0591bop.pdf.

16 Dell'mour, Rene: "Das Marktwertkonzept in der österreichischen Direktinvestitionsstatistik", OeNB: Berichte und Studien 4/1995

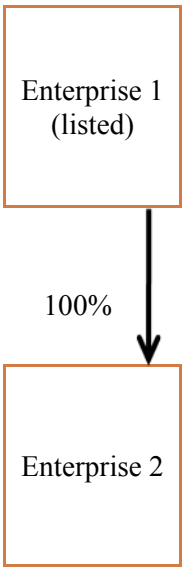
Case 1

This is likely to happen if one or more enterprises in the chain are listed on stock exchanges, while at least one is not. The OFBV may differ from the measured market price.

Example 1

Enterprise 1 is listed on the stock exchange. The market value is 4,000 and the corresponding equity capital is 2,000. To simplify the example it is assumed that 100% of the shares (portfolio investment) are held by non-residents. Country A is a member of the euro area and Country B can either be a euro area or non-euro area country (in practice, Country B can represent a number of countries). The balance sheets are the following.

Applying OFBV, the i.i.p. would be reported as:



I.I.P. Country A

Assets		Liabilities	
DI	Equity	PI	Equity
1,500		4,000	
(OFBV shares of enterprise 2)		(market value of listed shares)	

I.I.P. Country B

Assets		Liabilities	
		DI	Equity
0		1,500	
		(equity capital - Enterprise 1)	

If the outward investment is valued according to OFBV (1,500), this will result in a net i.i.p. of Enterprise 1 of -2,500 (1,500 – 4,000), which moves with the market value of its shares on the stock exchange. The reason for this is that the value of Enterprise 2 is generally stable in the accounts of Enterprise 1. However, the contribution of Enterprise 1 to the net i.i.p. in terms of economic value should be close to zero because it is a holding company.

The amount of the bias (-2,500 – the contribution of Enterprise 1 to the net i.i.p. of its country) would be less clear if Enterprise 1 also ran a business locally. In that case, it would be difficult to apportion the difference between the market value (4,000) and equity capital (2,000) to Enterprise 1 and Enterprise 2. However, it is likely that a part should be attributed to Enterprise 1 and a part to Enterprise 2, according to the reported book values of the enterprises and subsidiaries.

A positive difference between the (observable) market value and OFBV of a company indicates that, according to investors, the market value of the assets of a company is higher than the corresponding book value of the assets, or that certain assets of the company are not recorded on

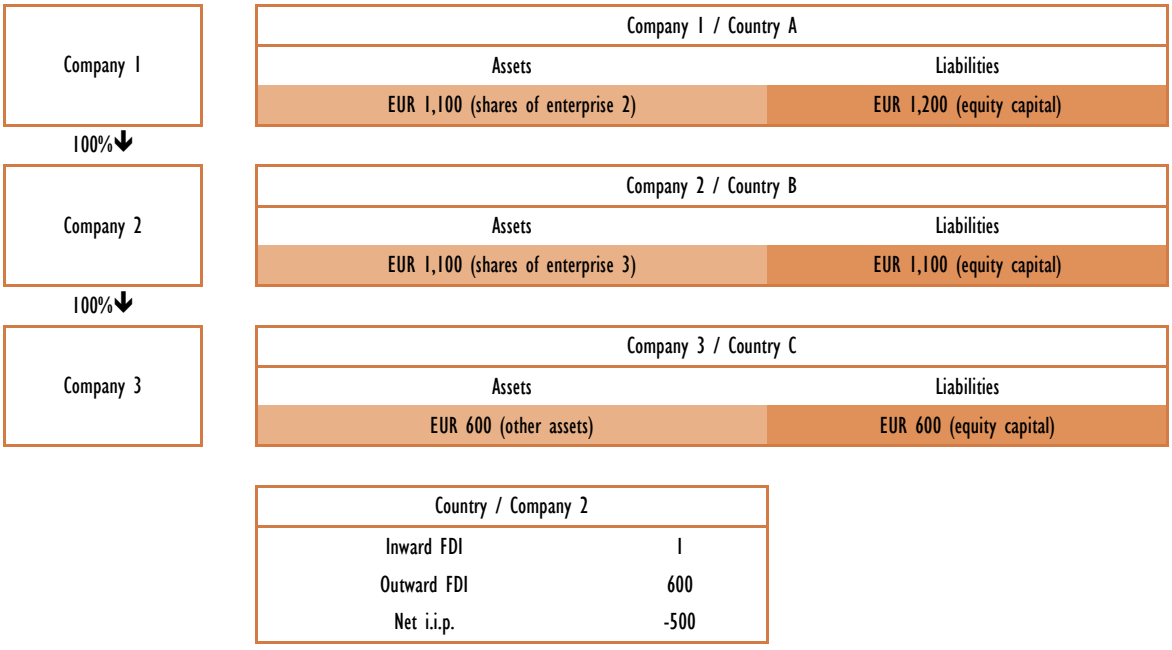
the balance sheet at all. This does not necessarily imply that investors have a different opinion on the value of a company than accountants. The difference may be explained by the fact that, for example, goodwill which is internally generated by an entity is not permitted to be recognised as an asset by accountants under the IFRS (another reason could be that accountants have to comply with strict rules for the valuation of assets). A proxy for the internally generated goodwill is the difference between the market value of a listed company and the book value of its shareholders' equity (this difference is the "value gap"). This value gap is completely attributed to the net i.i.p. of the country of the listed enterprise. It is not captured in outward direct investments, despite the fact that in example 1 it is clear that the premium (value gap) that investors are willing to pay does not reflected in the net i.i.p. of Country A.

If the difference between the market value and equity capital is substantial, and the listed enterprise has large subsidiaries abroad, it might be necessary to deviate from OFBV to compile i.i.p. figures that reflect the economic reality.

Case 2

Differences in recording acquired goodwill along a chain of investments.

Case 2 represents an FDI chain of three companies in three different countries. The net position of the intermediary enterprise (Company 2 in the example below) may be distorted when substantial amounts of goodwill are recorded on its balance sheet, but are not reflected on the balance sheet of the direct investment enterprise (Company 3).



Country / Company 2	
Inward FDI	1
Outward FDI	600
Net i.i.p.	-500

Company 3 has been acquired by Company 1 via an intermediary enterprise (Company 2). Company 2 pays 1,100 for Company 3, which is worth 600 at OFBV. The difference is

attributable to goodwill, which according to the accounting standards can be included as an asset of the purchasing company, but cannot be reflected as a liability of the purchased company.

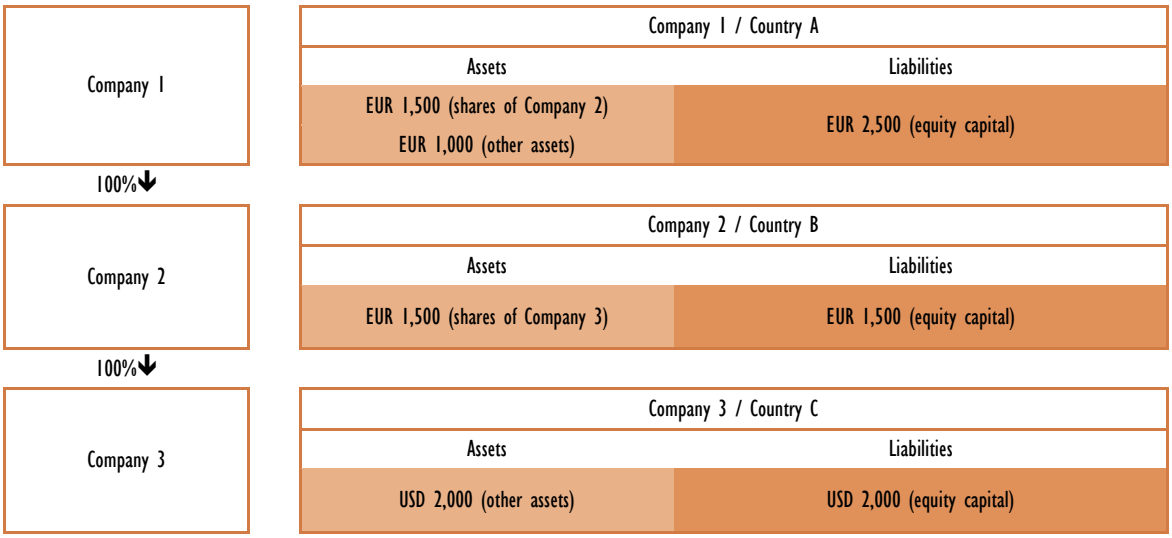
While the outward direct investment position of Company 2 equals 600 based on the OFBV of the direct investment enterprise (Company 3), the inward direct investment position of Company 2 equals 1,100, based on its own OFBV.

So, if OFBV were fully applied the resulting contribution of Company 2 to the i.i.p. of Country B would be -500. Nonetheless, as Company 2 is only passing through funds, one would expect its contribution to the net i.i.p. to be close to zero. The treatment of goodwill explains the difference: goodwill is recorded in the books of Company 2, but does not appear in the books of Company 3.

In contrast to internally generated goodwill, acquired (purchased) goodwill must be recognised under the IFRS as a non-current asset at acquisition on the balance sheet of the purchasing entity. The value of purchased goodwill refers to the value of the purchased entity. Even though this goodwill is not reflected in the OFBV of the *purchased* entity itself, it is part of the OFBV of the *purchasing* entity (i.e. in the inward investment in Company 2). The creation of a new direct investment enterprise (greenfield investment), or additional capital injections, do not themselves have any impact on goodwill, and do not create biases. It is only the purchase of the target company that leads to recognition of acquired goodwill by the acquiring firm (holding company), and it is only the intermediate holding company that has acquired goodwill on its non-consolidated balance sheet.

Case 3

When the accounts of group companies, located in different economies, are denominated in differing currencies, exchange rate changes can lead to valuation conflicts between two units which should have the same value. This may especially affect the assets and liabilities of an SPE that solely channels funds from one economy to another and whose contribution to the net i.i.p. is supposed to be close to zero.



The value of Company 3 converted from USD to EUR will change from year to year. However, the value according to the books of Company 2 does not necessarily change, and therefore the value of the inward investment of EUR 1,500 will not increase, but it may decrease according to prudential accounting. Exchange rate fluctuations will consequently result in a discrepancy between the outward position of Country B and the inward position of Country C when OFBV is used, and in a change of the net i.i.p. of Country B.

The issues described in cases 1, 2 and 3 are most obvious in the case of SPEs, which by definition should have a net value of close to zero, as their function is only the "passing-through" of capital. The situation is similar for holding companies which also exert management functions. The situation is less clear if the intermediate, apart from owning subsidiaries, runs a significant business locally. In that case, the local business has a non-observable market value. Because this market value is non-observable (and is not equal to zero as in the case of SPEs), it is not possible to say that a certain net i.i.p. is wrong.

Large differences in the value of intermediate and investee may be acceptable if the value of the investee accounts for only a small share of the intermediate's assets. As a consequence, it is not possible to assess whether differences in price are real or only reflect measurement problems.

On the macro level, once again there are arguments which may mitigate the problem. If OFBV is an unbiased estimate of market value, individual measurement errors would, on average, cancel out. But, as said earlier, using OFBV makes underestimating the hypothetical market value more likely than overestimating it. Even so, errors could still disappear, for example if inward and outward direct investment positions are approximately equal in size. However, this should also apply to lower levels of aggregation, for example on the level of groups of countries (for instance the FDI position vis-à-vis the euro area or EU). Problems in the overall net i.i.p. may arise when huge individual cases dominate the result, or when many smaller errors do not cancel each other out.

As a result of a survey conducted in Member States (see Chapter 5), the Task Force has also encountered several other "problematic cases" which could also cause valuation problems.

Currently, they do not seem to require specific treatment because they are not very relevant or frequent. Nevertheless, these cases are interesting from a theoretical point of view, and might gain importance in the future. One of the most relevant cases is that of unlisted international banking institutions held by foreign investors and investing mostly in foreign assets. Here, the net i.i.p. may be distorted due to the methodological differences between the valuation method for portfolio assets (market value), and valuation according to OFBV for FDI liabilities of unlisted companies/institutions, if a relevant share of their assets is invested in foreign bonds held to maturity (not valued at market price according to the accountancy rules). The liabilities valued according to OFBV may differ significantly from the portfolio assets calculated on the basis of the market value according to the standard defined in Annex III of the ECB Guideline.

Another relevant case is that of round-tripping, which theoretically should have a net value of zero. This case refers to physical persons or companies which hold resident listed companies through unlisted SPEs or holding companies located abroad. When the balance sheet of the SPEs or holding companies is dominated by the assets held in the listed company, the net position of the holding company should be equal to zero, and the impact on the net i.i.p. of the country hosting the listed company should theoretically be equal to zero as well. According to the standard, the FDI liabilities of the listed company should be valued at market price, whereas the assets held in the foreign holding or SPE should be valued at OFBV. Consequently, assets and liabilities should be valued on the basis of different criteria, and the impact on the net i.i.p. of the country hosting the listed company may be significantly different from zero.

5 EMPIRICAL FINDINGS

In order to assess the size of the potential problems, the Task Force carried out three independent studies, which are presented in this Chapter. The first study aimed to define the overall role of listed enterprises in European FDI statistics, and included a simplified modelling exercise on their possible impact on the overall i.i.p. (see Annex 8). In addition, the Task Force carried out an ad hoc survey asking the compilers' view on the importance of valuation problems. Finally, the Task Force analysed the results of a bilateral comparison exercise of FDI positions initiated by the FDI Network.

5.1 THE ROLE OF LISTED ENTERPRISES IN RECENT FDI STATISTICS

The ECB Guideline requires reporting the OFBV in addition to market value for enterprises listed on a stock exchange. The idea behind collecting the OFBV for listed enterprises was a possible calculation of "factors", which could be used to estimate market values for unlisted enterprises. This estimation has, in fact, never been implemented, not least because at the end of 2010 listed enterprises contributed only 4.1% to gross direct investment positions (assets and liabilities). For non-euro area positions only, the share is 5.1% for assets and 3.4% for liabilities. Of course, the shares vary significantly between Member States, ranging from close to zero to up to 20% for outward positions in Spain, Finland and Slovenia, with an extraordinary maximum of 60% for inward positions in Greece (see chart in Annex 7).

The availability of this dataset provided an opportunity to calculate the possible bias of using OFBV for the national i.i.p. in such cases, where the compiler is confronted with a "holding company in the middle of the chain of listed and unlisted companies" (a similar situation to Case 1 described in Chapter 4), based on some illustrative hypotheses that are described in Annex 7. The outcome of this exercise suggests that the overall net bias for the euro area due to this specific problem lies somewhere between €25 billion and €50 billion. The amount of bias is not relevant if compared with the overall figures, but it is significant (a fraction of one per cent of total assets or total liabilities) if compared with the low share of listed companies in FDI. There are, of course, a number of caveats related to this exercise: it only covers the case of "holding companies in the middle", it assumes that assets and liabilities are affected in the same way, the factor of two as an indicator of measurement errors in valuation (OFVB represents only 50% of the hypothetical market value) may be too conservative, and the relative error for individual countries may be relatively larger. Finally, there may be other sources of valuation errors which are not covered by this exercise. On the other hand, if listed enterprises are relatively balanced and account for €200 billion or €250 billion in assets and liabilities, it would be surprising to have a measurement error that amounts to multiples of the total stocks. Taking into account the total amount of assets and liabilities of the euro area, which was between €15 trillion and €16 trillion at the end of 2010, the error caused by FDI in listed companies would still be "small".

5.2 THE RESULTS OF AN AD HOC SURVEY IN MEMBER STATES

A short questionnaire distributed to Member States, concerning the possible impact of using OFBV for unlisted equity in a situation where listed holding companies own unlisted affiliates, or vice versa, concluded that, for the overwhelming majority of the 20 countries who received the questionnaire, this problem:

(a) does not exist at all;

(b) is practically negligible (with an impact of less than 5% of stocks);

(c) cannot be judged because of a lack of data.

In fact, it seems that only those three countries which were crucial for setting up the Task Force, namely the Netherlands, Ireland and Austria, encounter serious problems with the current method for valuing FDI positions. The problems are highly country specific and may have a sizeable impact on the national i.i.p. Several Member States mentioned situations which were not covered by the questionnaire, but could still pose statistical problems, like the appropriate definition of the observational unit (enterprise vs. enterprise group), cases of highly complex group structures, stock-flow inconsistencies, etc.

The questionnaire focused on three situations. In the first, foreign-owned resident holding companies are listed on a stock exchange and valued at the market price (FDI liabilities), while their non-resident affiliates (FDI assets) are not listed and consequently are valued at OFBV. Seven out of 20 countries explicitly indicated that this situation either does not exist or that the Member State was not able to give an estimate. For 11 countries this situation was quantitatively irrelevant[17] (less than 5% of the total position). Accordingly, no measures were necessary to correct the positions. Portugal has a few large intra-EU situations of this type, which might lead to action in the future, though the bias induced by OFBV was considered less than 5%. Other countries indicated that there were more cases, but these were small and therefore had no impact on the statistical results. Only in two countries (Ireland and the Netherlands) did this situation have a significant impact on the i.i.p. (between 5% and 20% of total FDI assets abroad). While for the Netherlands this represents a likely undervaluation of its assets caused by a large number of cases without any regional focus, for Ireland the outcome depends on the developments in the stock exchange, but an overvaluation of assets might also happen. In Ireland, the problem is mainly caused by a small number of large enterprises which are mainly located outside the EU, while the Netherlands had many such cases of different size with no regional focus. In Ireland, corrective measures had already been taken; such measures were under consideration in the Netherlands and have been implemented in the meantime.

In the second case, foreign-owned resident holdings are not listed and are valued at OFBV (FDI liabilities), while their foreign affiliates are listed and are valued at the market price (FDI assets). This situation does not pose any problems to any of the 20 participating countries. Only

[17] Due to the design of the questionnaire, we cannot distinguish between "not relevant" and "little or no impact".

Hungary reported one case of this type; nevertheless, no action was required since the quantitative impact was limited.

Finally, SPEs might pose valuation problems e.g. because of exchange rate changes for their foreign affiliates, which are not properly reflected in the accounts of the resident SPE, or create problems of inconsistent valuation of assets and liabilities (combining liabilities and assets derived from two different balance sheets). While SPEs do not exist in all Member States, three respondents (Austria, Denmark and the Netherlands) reported a sizeable impact of this kind of problem on their statistics. All three of them report a possible measurement error of up to 20% of their positions. Whether it is an over- or undervaluation depends on the development of exchange rates. While Austria reports a small number of very large cases, in the Netherlands and Denmark this situation affects a considerable number of enterprises (both small and large). The countries have already taken corrective action and, at least in the case of exchange rate changes, the focus of the problems is related to countries outside the euro area.

5.3 FINDINGS FROM THE FDI NETWORK

In spring 2011 Italy, Spain and the Netherlands carried out a pilot exercise within the framework of the FDI Network in order to identify bilateral inconsistencies in their respective FDI positions.[18] Theoretically, there should be none caused by valuation according to the existing rules. On the other hand, it is a well-known fact that bilateral asymmetries are highest in FDI positions.

As described in Annex 4 (new tools for reconciling information between compilers and eliminating asymmetries), the outcome of the pilot exercise showed that the valuation rules are not always being followed (e.g. historical cost was still used in the Netherlands, and in some cases only direct relationships were covered). Other reasons for asymmetries are the use of different accounting principles (IFRS vs. national GAAP), different statistical units (consolidated vs. unconsolidated), the treatment of branches and, simply, incomplete coverage.

More evidence of the size of the related asymmetries has been obtained as a result of the general exercise on the exchange of positions through the FDI Network, which took place in the second quarter of 2012. This exercise focused on exchanging positions as of the end of 2010, following some agreed rules. In the context of this exercise, 214 FDI positions were exchanged, with an aggregated gross value of more than €1.3 trillion. The large majority of them were equity positions. The value of the individual positions exchanged varied significantly, from €1 million to €75 billion. The rules defined for the exercise indicated that all inward and outward equity and other capital positions valued at more than €10 billion should be exchanged. Smaller positions could be exchanged based on an analysis of their relevance in terms of bilateral asymmetries, and within the limit of exchanging the top inward and the top outward position with three participating partner countries.

Regarding the results of the exercise, roughly half of the positions exchanged were reconciled, in some cases resulting in corrections from one of the partners, although with no significant

[18] The main purpose of this exercise was to check the feasibility of the foreseen systematic exchange of positions.

impact on the pre-existing figures. For the other half, the reconciliation failed or is still in progress. In order to assess the importance of the differences that were caused by the adoption of different valuation methods, the Task Force on the valuation of FDI positions recommended adding specific fields in the data exchange template to identify the mismatches generated by this problem.

In general, the main reasons for the differences encountered were:

- a lack of information, or incorrect information, provided by reporting entity;
- the use of different valuation methods to record the positions vis-à-vis the partner country;
- the use of data from different accounting bases (consolidated versus non-consolidated data);
- other reasons, such as misclassifications, wrong counterpart country, different statistical coverage in the partner countries, wrong ownership information, etc.

Concerning the differences due to the use of different valuation methods, despite the inclusion of specific fields in the data exchange template, it is only possible to have a partial picture of those situations because the countries involved have not always declared the valuation method used.

Table 2 Gross amount not match (in EUR billion) and causes of non-reconciliation (in %)

	Gross amount not matched (EUR Billion)	Valuation method				consolidated versus non consolidated data	Recording in different periods	Lack or incorrect information from reporter	Other reasons or reconciliation in progress
		OFBV versus estimated market price	OFBV versus historical cost	OFBV versus net asset value	Other valuation differences				
Austria	9	25%	5%		40%		5%	25%	
Belgium	6.4							100%	
Bulgaria	0.6							50%	50%
Cyprus	12.1		35%			15%		20%	30%
Denmark	16.4	32%	11%			6%		37%	13%
France	45.3		21%			24%		6%	49%
Germany[1]	65								
Greece	4.7				27%			63%	10%
Hungary	6.2		11%						88%
Italy	52		45%		46%	3%			6%
Lithuania	0.6					100%			
Netherlands	210	4%	22%		6%			66%	2%
Poland	6.2	36%	5%		9%	10%		23%	17%
Portugal	6.7	59%						41%	
Romania	0	100%							
Slovenia	0.4								100%
Spain	34		58%			9%			33%
Sweden	19		20%			40%			40%

1 Not possible to differenciate between the reasons for the differences

Table 2 shows the relevance, in terms of shares, of the observed causes of differences on the basis of the available data. Based on these shares, it can be estimated that roughly 35% of "not matched" positions are due to differences in the valuation method. The incidence of the related asymmetries in the total amount exchanged can be roughly estimated as 13%, while 8% is a proxy for the incidence of the particular case of the use of historical cost versus OFBV.[19]

The data reported in the summary table show that the relevance of mismatches due to the adoption of different valuation methods varies significantly among countries. The main sources of discrepancies due to valuation methods come from the use of OFBV versus historical cost.

[19] The calculation of these percentages has not taken into account the possible impact of the double counting of the same positions reported by two partner countries, both in the total amount of positions exchanged and in the shares shown in the table.

6 RECOMMENDATIONS AND RESEARCH AGENDA

Despite the shortcomings occurring in specific cases, and the disadvantages described in Chapter 2, OFBV has been confirmed as a good benchmark for the valuation of FDI positions in unlisted companies. Nevertheless, the Task Force agreed that there are special cases in which a strict application of the current standard valuation method may create net i.i.p. imbalances. The size of the biases generated in these special cases is highly country specific. In particular, the empirical findings presented in Chapter 5 showed that, in these cases, the potential impact on net i.i.p. is significant for countries hosting many holdings and SPEs, whereas it is negligible for the other countries. The analysis focused accordingly on how to proceed as regards the three cases identified in Chapter 4 of the report, in light of the dimensions to consider in the choice of valuation criteria and methods (see Annex 3) for the treatment and adjustment of net i.i.p. imbalances. The first paragraph of this chapter contains recommendations concerning these special cases. The second paragraph regards the research agenda and the open issues. The first part of the research agenda contains a short list of further problematic cases identified on the basis of the national experiences. Regarding these cases, the Task Force did not provide any special recommendations for different reasons (the case is infrequent, the required adjustment would be too complex etc.), but these problematic issues may merit further analysis in the future. The second part of the research agenda regards proposals concerning the future development of the EGR and of the current tools used to exchange and share information for FDI valuation. This is a crucial aspect because the application of OFBV is currently onerous and difficult to apply for countries hosting many SPEs, because they have problems in obtaining the relevant information from enterprises in the counterpart countries.

6.1 RECOMMENDATIONS ON HOW TO PROCEED IN SPECIAL CASES

This paragraph focuses on the recommendations of the Task Force on how to proceed as regards the special cases. These recommendations are based on the idea that, if a compiler introduces a relevant adjustment to OFBV in order to eliminate the bias on net i.i.p. in an intra-EU position, he/she exchanges information with the EU partner country. The FDI Network has been suggested as the possible mechanism for exchanging the required data. The objective of sharing the information when intra-EU positions are involved would be to eliminate or reduce the number of unilateral adjustments which generate bilateral asymmetries. The rules and criteria guiding the exchange of data through the FDI Network in each of the three special cases have been defined in the context of the fourth FDI Network workshop. The specific criteria for the exchange of data in each of the three special cases, and the outcomes of the workshop, are described in Annex 4.

Furthermore, in order to follow up on the recommendations of the Task Force, a specific field will be added to the template used to exchange positions within the FDI Network, where the initiator will have to indicate whether the position corresponds to any of the three special cases. Based on this information, Eurostat/ECB will review the specific relevance and impact of these

cases and will report back to the relevant groups. This will allow for the recommendations of the Task Force to be assessed and, if necessary, reviewed.

Many countries highlighted the need to maintain the burden related to the exchange of micro data on the valuation of positions at an acceptable level. The proposed approach takes into account the trade-off between data quality/reduction of asymmetries, and burden for compilers. In cases in which adjustments are made without exchanging micro data, countries could periodically supply, at an aggregated level, data describing the relevance of the corrections to the i.i.p.

Case 1 Observed market value versus own funds at book value

In Case 1, the i.i.p. imbalance concerns a company where most of its assets and liabilities concern non-residents. The i.i.p. imbalance results from different valuation methods applied to its assets and liabilities, namely one side applying observed market price and the other side applying OFBV.

For instance, let us consider that the equity of a listed company with subsidiaries abroad is mostly held by non-residents, either in the form of direct investment (participations higher than 10% of the equity capital) or portfolio investment (participations lower than 10%). As the company is listed, the observed market price is used to value its equity.

In that case, the Task Force agreed that the market price observed on the liabilities side could constitute an indicator of the market price on the assets side. Therefore, it was considered acceptable for the market price observed on one of the sides (in this case, the liabilities) to be used as a proxy for the market price on the other side (in this case, the assets), in order to increase consistency between assets and liabilities. The allocation of the estimated market price to each of the individual investments in subsidiaries may be performed by using a factor, such as the positions in each of the subsidiaries, valued at OFBV. The difference between the valuation at OFBV and the estimated market price may lead to an adjustment of the outward position.

Furthermore, the Task Force recommended that, if a compiler introduces a relevant adjustment to OFBV, in a position held vis-à-vis EU counterparts, he/she should exchange information with the partner country through the FDI Network. Then the compiler in the partner country would, on a case-by-case basis, consider voluntarily making a similar adjustment in order to improve the data by avoiding intra-EU asymmetries. In the case of a very long ownership chain, this procedure could imply subsequent exchanges of information by the partner country, which may increase the overall burden of the procedure. Therefore, the compiler in the partner country would need to assess the implications of adjusting the data, taking into account the trade-off between the reduction of asymmetries and the burden on the compiler.

Case 2 Recent transaction prices and other valuations including goodwill versus own funds at book value

Case 2 also refers to i.i.p. imbalances stemming from a different valuation of assets and liabilities. In particular, the investment from Company A to Company C is channelled through Company B (the intermediary), which is located in a third country. On the one hand, the liabilities of the intermediary Company B, when valued at OFBV, may reflect the historical cost of acquiring participations in subsidiary C. Such historical cost reflects recent transaction prices, including elements of acquired goodwill. On the other hand, the OFBV valuation of the participation in Company C would solely be used on the balance sheet of Company C, which does not reflect goodwill in any way. As a result, the net i.i.p. of Company B, which only passes funds through, may become significantly different from zero.

In this case, the Task Force examined the possibility of exchanging the OFBV of Company B. However, it considered that the transactions in FDI equity (or appraisals by independent auditors) may happen at irregular intervals, and therefore historical cost may not be a proxy for the market price in the following periods. Thus, the lack of availability of transaction prices over time discourages their regular use for estimating market prices.

The Task Force also examined the possibility of introducing an adjustment in the liabilities of the intermediary company based on the OFBV of its direct investment enterprise. If not already collected by the compiler where the intermediate is located, the information on the OFBV could be obtained through the FDI Network from the corresponding compiler (in the case of an EU counterpart), or from public data sources (see Annex 4 on new tools for reconciling information between compilers and eliminating asymmetries, and paragraph 2.5 on future exercises on the exchange of FDI positions through the FDI Network).

However, Case 2 was considered to be rather frequent, and the exchange of information may raise the burden on compilers to very high levels. Positions under Case 2 will be exchanged in the FDI Network within the framework of the annual general exercise on the exchange of positions, due to their potentially high frequency and the subsequent burden they could represent. Consequently, when positions related to Case 2 are numerous, the exchange of data may not be able to guarantee a significant reduction of the existing asymmetries.

When the exchange of data through the FDI Network or access to public data are not feasible, Case 2 may imply, depending on circumstances, a bilateral asymmetry or an imbalance in net i.i.p.

Case 3 Assets and liabilities reported in different currencies

For Case 3, it was agreed to proceed as in Case 1, i.e. exchanging information on those positions.

6.2 RESEARCH AGENDA

6.2.1 PROBLEMATIC CASES

The Task Force encountered a number of minor problematic cases which could also cause valuation problems, but were outside its original mandate or exceeded the capacity of the Task Force given the time constraints. It has not always been clear whether a specific case already has enough weight to require specific treatment, or if a special case might become more important in the future. The Task Force therefore recommends monitoring the size and frequency of the following cases and, if necessary, analysing their implications via task forces, workshops or other groups dealing with these topics. The most relevant problematic cases which may be related to biases in net i.i.p. are:

1) a large complex group where the imbalance between the value of assets and liabilities is visible at the level of the whole group, rather than for each individual company (see Annex 6);
2) unlisted international banking institutions held by foreign investors and investing mostly in foreign assets (see Chapter 4);
3) round-tripping (see Chapter 4).

6.2.2 FUTURE DEVELOPMENT OF THE TOOLS FOR EXCHANGING AND SHARING DATA

Asymmetries of information for compilers of external statistics can be clearly identified. While the quantity and quality of information on resident enterprises is very high, the information on non-resident enterprises may sometimes be incomplete or difficult to collect. Access to the official balance sheet information of non-resident companies is inadequate. In particular, countries hosting many SPEs have severe problems in obtaining the relevant information from enterprises in the counterpart countries. In order to reduce the asymmetries of information, the available data can be shared among compilers, subject to confidentiality constraints. Apart from the proposed solutions, which take into account the tools which are currently available (the FDI Network and the EGR), the Task Force tried to identify other ways to exchange and share the available information, and attempted to envisage possible enhancements to the existing tools. These proposals may be starting points for the research agenda of groups and task forces dealing with issues related to these aspects in the future. The Task Force on the valuation of FDI positions highlighted both simple short-term proposals and possible medium-term/long-term solutions which would require accurate and specific investigation.

6.2.3 PROPOSALS

To overcome the problem of a lack of information on the balance sheets of non-resident companies, a first draft of a list with relevant (non-confidential) national databases is included in the final report of the Task Force on the valuation of FDI positions (see Annex 4).

The list of websites of national databases could be considered as a flexible and temporary solution, but not as an optimal one. As a matter of fact, in many countries free and public databases containing balance sheet data do not exist, or only contain a subset of the required information. Moreover, the use of other languages and different accounting principles could present further obstacles. Monitoring the changes in definitions and contents of a group of heterogeneous databases would be problematic. For these reasons, the creation of a section of the EGR containing balance sheet data and information, which may be used for FDI valuation and compilation, would help to reduce the asymmetries and increase the quality of the FDI statistics.

The EGR is going to enter Phase 2, in which active contribution by Member States is foreseen as a crucial source of input and a way of steadily improving quality. As FDI and foreign affiliates statistics (FATS) compilers are considered to be prime users, FDI compilers should be active in enriching the EGR by reporting mistakes and proposing corrections to the information stored therein, where they have sufficient evidence of a mistake. Furthermore, introducing a unique identifier and a flag to identify SPEs in the EGR would be extremely useful in facilitating the exchange of information within the FDI Network. This shall, of course, not anticipate any national institutional arrangements of how the EGR should be updated from a technical point of view.

ANNEX 1: MANDATE OF THE TASK FORCE

SPECIFIC ISSUES TO BE INVESTIGATED

The Task Force shall review the methods used to value direct investment positions stated in Annex III of the draft ECB Guideline on External Statistics:[20]

With regard to the valuation of direct investment positions, the equity stocks listed in stock exchanges are valued at market prices. Conversely, in the case of unlisted direct investment companies, equity stocks are valued on the basis of book values using a common definition comprising the following accounting items:

(i) paid-up capital (excluding own shares and including shares premium accounts);

(ii) all types of reserves (including investment grants when accounting guidelines consider them as company's reserves);

(iii) non-distributed profits net of losses (including results for the current year).

In particular, the work of the Task Force would focus on:

- reviewing recent developments that may justify amendments to the current method;
- assessing whether new methods to be applied in the national contributions to the euro area aggregate would lead to a more reliable i.i.p., in particular by increasing the consistency of the valuation of assets and liabilities.

[20] The same method is stated in the current Guideline ECB/2004/15 (Annex III).

ANNEX 2: COMPOSITION OF THE TASK FORCE

Nationale Bank van België / Banque Nationale de Belgique	Roger De Boeck
Deutsche Bundesbank	Sebastian Hügelschäffer
Central Statistics Office Ireland	Stephen McDonagh
Banco de España	Patricia Portero
Banque de France	Dominique Nivat
Banca d'Italia (Chair)	Valeria Pellegrini
Magyar Nemzeti Bank	Erika Veitzné Kenyeres
De Nederlandsche Bank	Rini Hillebrand
Oesterreichische Nationalbank	René Dell'mour
Banco de Portugal	Márcio Filipe Mendes Mateus
Office for National Statistics United Kingdom	Ciara Williams-Fletcher Neil Bannister
European Commission – Eurostat	Luis de la Fuente Layos
European Central Bank (Secretary)	Rodrigo Oliveira-Soares Beatriz Ruiz González

ANNEX 3: DIMENSIONS TO CONSIDER IN THE CHOICE OF VALUATION METHOD FOR FDI POSITIONS IN UNLISTED COMPANIES

METHODOLOGICAL SOUNDNESS/ECONOMIC ACCURACY

It is vital that the common method of valuation be one or a combination of the methods recommended by BD4 and BPM6 (the methods recommended by these two manuals are summarised in Chapter 2 of this report).

The method of valuation must deliver meaningful results from an economic perspective and avoid extreme and implausible levels or variations between two successive positions.

In the case of the euro area direct investment position, it is important to ensure that the valuation method does not create or enlarge bilateral asymmetries between euro area countries.

HOMOGENEITY AND COMPARABILITY OF NATIONAL DATA USED AS AN INPUT FOR THE CALCULATION OF THE EURO AREA DIRECT INVESTMENT POSITION

From a statistical point of view, an aggregate is meaningful and interesting for users only when primary data are based on the same or similar documents and sources, when its components are similar and comparable, and when global data are elaborated with the same or similar statistical treatments, valuation methods and so on.

In the case of the euro area direct investment position, this has some practical implications.

- As each country compiles its own data before sending its national contribution to the ECB, the valuation method has to be applied by a large majority of, if not all, euro area member states. It would not be appropriate to choose a method that only a few countries could apply.
- Therefore, the common method of valuation needs to be simple. It should rely on data and statistical treatments that can be accessed easily and reproduced by compilers and users of statistics. It was recognised by the participants of the Task Force meeting on 18 and 19 January 2012 in Frankfurt that there is a need to achieve results for European aggregates that do not depend on the holding structure of a group; for example, the valuation of a group of FDI enterprises resident in the euro area should not change if the holding company changes its residence from one country to another.

Regarding this dimension, a key criterion is transparency, specifically:

- the availability of enough meaningful information from accounting statements or public sources;
- the accessibility and clarity, for respondents and users, of documentation describing the common method of valuation and the methods used by some countries in special cases;
- the ability to exchange information on valuation results and methods with other compilers through the FDI Network, as the valuation method should provide sound

results not only for the totals of national contributions to EU/euro area aggregates, but also for the breakdown vis-à-vis geographical counterparts.

BURDEN ON THE COMPILERS AND RESPONDENTS

Another criterion to take into account is the burden on the compilers and respondents. For example, it would be important to assess:

- respondents' access to information which is needed to evaluate positions abroad, where information is typically harder to obtain, as well as the potentially increased reporting effort;
- the effort and cost implications that compilers may face in integrating information from respondents in order to apply the common standard valuation method;
- the synergies between the compilation of national data and the contributions to the European aggregates, although it should be mentioned here that there is no obligation to use the same method to value the national direct investment positions and the national contributions to European aggregates;

the synergies between surveys of FDI positions and valuation with other surveys of enterprises, e.g. FDI income.

INTERNAL CONSISTENCY

Another important dimension is the internal consistency of FDI positions. This means the consistency of FDI positions themselves, and their consistency with other information recorded in the b.o.p. and the i.i.p. In response to this, three points could be considered essential.

- Consistency in the valuation of assets and liabilities. This consistency is desirable at the level of companies, countries and the EU/euro area.
- Consistency of results over time. This implies that global positions are based on regularly observed data, and means that the sources for data on positions should also be able to provide data according to a specific, recurring time frame, and not only occasionally or on a one-off basis.
- The consistency of FDI positions with other information recorded in the b.o.p. and the i.i.p., in particular portfolio investment flows and positions.

EXTERNAL CONSISTENCY

The last key dimension is external consistency. External consistency refers to the consistency of FDI positions with other countries and other sets of data, e.g. national financial accounts data. The following four points must be considered:

- the impact of the valuation method on the comparability of global results among EU countries;

- the impact of the valuation method on the comparability of bilateral data between EU countries;
- the impact of the valuation method on the comparability of the EU/euro area global FDI position with other countries like the United States, Japan, Switzerland, etc.;
- the ability to reproduce and extend the valuation method to assets and liabilities between resident sectors, e.g. to the national financial accounts.

ANNEX 4: NEW TOOLS FOR RECONCILING INFORMATION BETWEEN COMPILERS AND ELIMINATING ASYMMETRIES

This chapter describes additional infrastructural tools for improving the quality of the statistics produced.

First, in several EU countries there are publicly available databases that include information about the balance sheets of enterprises, as well as their affiliates.

Second, there is the FDI Network which provides a secure platform for exchanging micro data between the participating countries and, therefore, reducing bilateral and aggregated asymmetries.

Third, there is the EuroGroups Register (EGR) which provides an interactive data repository on multinational enterprise groups (MNEs) and their constituent units.

1 PUBLICLY AVAILABLE DATABASES CONTAINING INFORMATION ABOUT BALANCE SHEETS OF ENTERPRISES[21]

To overcome the problem of a lack of information concerning the balance sheets of non-resident companies (to compile outward investment according to OFBV), the following list of national databases could be used.

For example, if there is information missing about balance sheet items of direct investment enterprises in Germany, statisticians could use the German Bundesanzeiger. The following table contains relevant data sources which are available in the countries of Task Force participants.

[21] The situation in some other EU countries is covered in the report "Stocktaking exercise on accounting and legal deposit requirements in Europe" by the Working Group on IFRS Impact and CBSO Databases (2009).

Table Databases with balance sheet information

Country	Data source/ institution	Link	Type of source	Availability	Content
AT	No publicly available balance sheet database				
DE	Bundesanzeiger	www.bundesanzeiger.de	Official	Free	Balance sheets, profit and loss accounts, subsidiaries of all German enterprises over a certain threshold
ES	Commercial Registers of Spain	www.registradores.org	Official	Not free of charge	Consolidated and unconsolidated financial statements of Spanish companies
	National Commission of the Stock Market	www.cnmv.es	Official	Free	Financial statements of listed companies
FR	Public register	http://premedd.latribune.fr/	Commercial	Free	Balance sheets, profit and loss accounts of all French companies
HU	Ministry of Public Administration and Justice	http://e-beszamolo.kim.gov.hu/	Official	Free	Balance sheets, income statements, supplementary notes, audit reports and management decisions on the distribution of profit after taxation for every firm since 2008
IE	Companies Registration Office (CRO)	www.cro.ie.	Official	Not free of charge	Companies' accounts
IT	Supervisory authority	http://www.consob.it/mainen/issuers/listed_companies/index.html#	Official	Free	Information about listed companies only e.g. ownership, share capital, board members, new major shareholdings
NL	Chamber of Commerce	http://www.kvk.nl	Official	Not free of charge	Official names and addresses of all Dutch enterprises (free of charge), annual accounts (if mandatory) and all 100% links
PT	Einforma	http://www.einforma.pt/	Commercial	Not free of charge	Balance sheets of the last three years, profit and loss accounts, several financial ratios, address attributes, legal form, etc.
	Portuguese Securities Market Commission	http://www.cmvm.pt/	Official	Free	Consolidated and non-consolidated accounts (only for listed companies)
	Commercial register	www.empresaonline.pt	Official	Not free of charge	Balance sheets, profit and loss accounts, income statements, shareholdings
UK	-	http://wck2.companieshouse.gov.uk	Commercial	Not free of charge	Companies' accounts

2 FDI NETWORK

2.1 BACKGROUND

The FDI Network is a joint ECB/Eurostat initiative which has been developed in close cooperation with FDI compilers from all Member States. Its aim is to tackle asymmetries in FDI statistics and, as a consequence, to improve their quality. To achieve this objective, the FDI Network facilitates a secure exchange of information between national compilers.

Participation in the FDI Network is based on the following principles.

- Participation in the FDI Network takes place on a voluntary basis.

- FDI compilers participating in the Network undertake to follow the rules and provisions laid down in the FDI Network manual which is produced by ECB/Eurostat and updated regularly.
- EU legislation, in particular Article 8(3) of Regulation (EC) No 184/2005 and Article 8a of Regulation (EC) No 2533/98, provides the legal support for this exchange of micro data.
- Confidential data exchanged through the FDI Network have to be used exclusively for statistical purposes. The FDI Compilers shall treat confidential data exchanged through the FDI Network with at least the same level of protection as that applicable to protection of confidential data from national statistical units.

Although the project covers FDI transactions, reclassifications and positions, since its implementation in June 2009 the exchanges have been concentrated on FDI transactions. However, a specific exercise on the exchange of positions took place between May and June 2012 (see Section 2.3).

2.2 EXPERIENCE ACQUIRED IN THE EXCHANGE OF TRANSACTIONS

According to the rules defined in the FDI Network Manual:

- all transactions or reclassifications higher than €2 billion can be exchanged;
- if an FDI Compiler has recorded very few or no transactions exceeding €2 billion, up to five transactions below €2 billion can be exchanged each quarter.

All 27 EU Member States have joined the FDI Network. All of them have been involved in the exchange as initiators, counterparts or both. Moreover, some participating countries are very active in the Network and have integrated it into their FDI compilation system in some way as a regularly used tool. In any case, the users' perception of the usefulness of the Network is very positive.

Since the Network was implemented in 2009, there has been a clear trend of increased use in terms of transactions exchanged. By the end of February 2012, 398 transactions had been exchanged, with a gross value of more than €1.39 trillion.

Regarding the impact on FDI asymmetries, the analysis of the available data shows no particular trend at aggregated level in intra-EU FDI asymmetries. However, when looking into the bilateral asymmetries between the most active country pairs using the Network, in the majority of cases a significant decrease is observed between 2008 and 2010.

The experience gained since the Network has been running has been used to implement some recent initiatives to make it more widely used, to further reduce asymmetries and to better monitor its results. These initiatives include:

- a procedure to involve countries with low-value transactions;
- a recommendation to instigate the exchanges provided by the asymmetries tables in the balance of payments annual quality reports;

- a regular exercise to monitor the results of the reconciliation process through a questionnaire, including information such as basic (non-confidential) information about the transaction, the type of transaction, the status of the reconciliation and other information related to the reconciliation process.

2.3 EXTENDING THE EXCHANGE OF POSITIONS

Traditionally, it has been considered more difficult to reconcile FDI positions at a certain point in time than to reconcile individual transactions recorded throughout the year. Therefore, the possibility of exchanging FDI positions was not included in the original implementation of the project.

However, the FDI Network Manual includes positions in the framework of the project and incorporates some provisions applicable to them. In particular, it states that any exchange of positions should be organised within the framework of ad hoc voluntary exercises. Moreover, it recommends that, as a minimum requirement, all inward and outward equity and other capital positions with a value of more than €10 billion should be exchanged. Eligibility for the exchange of further positions should be based on their relevance, following an analysis of the bilateral asymmetries.

The positive results obtained from the exchange of transactions, along with the willingness of the participants, has pushed forward the implementation of a first general exercise on the exchange of positions in 2012. This decision was the result of a thorough discussion with the participating countries that included, as an essential source of information, the analysis of the results of a test exercise performed by three countries (Italy, the Netherlands and Spain) in spring 2011.

The test exercise consisted of the exchange by each country of the three main FDI outward equity positions held in each of the other two participating countries at the end of 2008. Then, each country checked the six corresponding FDI inward equity positions. Actually, the final exchange included five more positions than was foreseen. The amounts transmitted during this test exercise totalled approximately €170 billion. Concerning the distribution of the amounts exchanged, of the 23 positions, 15 had a value of below €10 billion, five were worth between €10 billion and €20 billion and three were equal to or over €20 billion.

The test exercise proved the usefulness of the exchange of bilateral data and demonstrated that the template proposed for delivering the information was operational. Regarding the results of the reconciliation process, the text exercise showed that different valuation criteria are used in some cases. The differences encountered can also be explained by the use of different accounting bases (consolidated versus non-consolidated), the manner in which branches were treated and incomplete coverage of one of the partners. Apart from the correction of errors in the analysed positions, a positive side effect of the exercise was the exchange of detailed information related to the entities involved, such as identification of the residency of the ultimate controlling parent, consideration as an SPE, etc.

The general exercise on the exchange of FDI positions was conducted in the second quarter of 2012, taking 31 December 2010 as a reference period. 22 Member States agreed to participate, three of them only as recipient countries. The eligible positions were defined according to two principles.

- Each country (except those participating only as recipients) shall exchange all inward and outward equity and other capital positions with a value of over €10 billion.
- The decision to exchange other positions should be based on their relevance, following an analysis of the bilateral asymmetries tables provided in the b.o.p. annual quality report. Based on the results of this analysis, each country (except those participating only as recipients) can exchange the top inward and the top outward position with three partner participating countries.

Each recipient country will try to reconcile the positions received. To help in this process, any additional information useful to facilitate the reconciliation of the data will be provided by the initiating country, in particular information about the valuation method and the accounting principle used to record the position.

The fourth FDI Network workshop was fully committed to discussing the results of the first voluntary exercise on the exchange of FDI positions that took place in the second quarter of 2012, and to debating how to proceed as regards future exercises on the exchange of FDI positions.

2.4 RESULTS OF THE 2012 EXERCISE ON THE EXCHANGE OF FDI POSITIONS

The discussion about the results of the exercise concluded that, overall, it was a very useful activity. The technical arrangements worked fairly well, and the burden of the exercise was judged to be reasonable.

Regarding the results of the exercise, roughly half of the positions exchanged were reconciled, in some cases resulting in corrections from one of the partners. For the other half, the reconciliation failed or is still in progress. The main reasons for the differences encountered were:

- a lack of information, or incorrect information from the reporting entity;
- using different valuation methods to record the positions vis-à-vis the partner country, with the two main sources of discrepancies coming from the use of OFBV versus estimated market value or versus historical cost;
- using data from different accounting bases (consolidated versus non-consolidated data);

other reasons, such as misclassifications, wrong counterpart country, different statistical coverage in the partner countries, wrong ownership information, etc.

Concerning the differences due to the use of different valuation methods, it is not possible to have a fully detailed picture of those situations, because the countries involved did not always declare the method used. Moreover, several countries indicated in their responses that they do not plan to review the system for valuating positions as long as it corresponds to international

recommendations. So, in these situations, the only possible conclusion is that the reason for the difference has been identified but the bilateral asymmetry will still remain.

2.5 FUTURE EXERCISE ON THE EXCHANGE OF FDI POSITIONS THROUGH THE FDI NETWORK

Future exchanges of FDI positions will take place according to three scenarios.

A General exercise

- Once a year between May and June.
- The reference period of the positions is not defined, so the initiator of the exercise will determine it.
- Scope: two criteria are to be used for the selection of the positions to be exchanged.
    - Quantitative: a general threshold of €3 billion.
    - Qualitative: based on the analysis of the bilateral asymmetries tables provided in the b.o.p. annual quality report, each country could exchange one relevant position (inward or outward) with partner countries with larger asymmetries. In this regard, another relevant factor is the annual paper prepared by Eurostat on persistent b.o.p. asymmetries.

The two criteria are to be combined with the objective of giving priority to explaining, and possibly reducing, bilateral asymmetries. This means that if a position is larger than €3 billion, but there is not a relevant problem of asymmetries with the concerned partner country, the exchange might not be necessary.

- Rotation: in order to reduce the burden of future exercises and avoid unnecessary repetition of exchanges, those positions reconciled in one exercise will not be exchanged again within the next three years. Regarding the cases where reconciliation was not possible, but the reason for the difference was identified, further exchanges should not take place within the same time frame, unless there are justifiable reasons for these further exchanges to occur.

B Special cases identified in the report of the Task Force on the valuation of FDI positions

- Situations covered by Case 1 (observed market value versus own funds at book value) and Case 3 (assets and liabilities reported in different currencies) should trigger an ad hoc exchange of information through the FDI Network at any time of the year.
- Situations covered by Case 2 (recent transaction prices and other valuations including goodwill versus own funds at book value) should be acted upon within the framework of the annual general exercise on the exchange of positions, due to the potential for cases such as this arising frequently, and the subsequent burden they could represent.

C Exceptional bilateral exchanges

Exceptional bilateral ad hoc exchanges of positions between two participating countries may take place, provided that, beforehand, the two countries have agreed to this, and Eurostat has given its technical agreement as facilitator of the exchanges.

Regarding the actions required by the initiator and the recipient of the position, Chapter 2 of the FDI Network manual should be consulted, which describes the corresponding roles and actions involved. However, due to the specific nature of the FDI positions when compared with transactions, it is recommended that the counterpart is given three months to respond to the positions received.

As is currently the case, the decision about possible corrections to the national FDI figures remains at the discretion of each party involved in the exchange. In particular, in the special cases identified by the Task Force on the valuation of FDI positions, the compiler in the counterpart country will decide whether or not to make the adjustments transmitted by the initiator of the exchange.

Corrections to EU/euro area aggregates will be decided by Eurostat/ECB based on the available information from the exchanges, but without modifying detailed country figures that have already been published.

The results of the exchange of FDI positions will be regularly monitored by Eurostat/ECB. This will be implemented in a similar way as for transactions, so the participating countries will be asked to check and complete a pre-filled table with the results of the exchange that will include, in particular, relevant information about the reconciliation process. Eurostat/ECB request that all participating countries, either as initiators or as recipients, provide their feedback on the reconciliation results. They specifically request an explicit statement about which valuation method has been used, when this is the reason for the difference.

In order to follow up on the recommendations of the Task Force, a specific field will be added to the template used for the exchange of positions, where the initiator will have to indicate whether the position corresponds to any of the three special cases. Based on this information, Eurostat/ECB will review the specific relevance and impact of these cases and will report back to the relevant groups. This will allow for an assessment of the recommendations of the Task Force.

3 THE EUROGROUPS REGISTER

3.1 BACKGROUND

Setting up the EuroGroups Register (EGR) was foreseen in the Community Statistical Programme 2008-2012. The objective was to establish a network of registers between Eurostat and the statistical authorities of the Member States through the exchange of data on MNEs and their constituent units. The Business Register Regulation (EC) No 177/2008 provides the legal base for the necessary data exchange between Eurostat and the Member States.

The methodology used to create the EGR is based on Eurostat collecting data on MNEs from different sources (commercial providers and all national registers). Then, Eurostat consolidates and redistributes consistent data sets to the Member States according to their national needs. The EGR produces population frames of MNEs.

The EGR started to operate in 2009, and produced the first EGR population frame based on the data for reference year 2008. It contained the structure and economic characteristics of the largest 5,000 groups in Europe and their constituent legal units. In 2010 the EGR population frame was updated with the data for reference year 2009 and, in 2011, it was extended to the largest 10,000 groups for reference year 2010.

3.2 FROM EGR VERSION 1.0 TO 2.0

The starting point of the EGR production cycle is based on the integration of two commercial data providers (Dun & Bradstreet and Bureau Van Dijk), from where sets of preliminary information are obtained. Then, under EGR version 1.0, the following step includes three data exchanges between the central EGR system and the National Statistical Institutes (NSIs) in the network.

(1) Data exchange concerning legal units belonging to the groups included in the EGR: NSIs have to check their activity status and characteristics and send them back to the EGR system.

(2) The EGR system creates the pair-wise control relationships between legal units: NSIs have to compare such information with their national registers, amend it, and send it back to the EGR system. The EGR system consolidates the pair-wise relationships amended by the NSIs and creates the preliminary enterprise groups.

(3) Those remaining inconsistencies are sent to the NSIs again, for further checking and for attaching economic characteristics. Finally, the EGR consolidates the information once more, and creates the population frame of multinational enterprise groups.

This methodology will be updated in the coming years under EGR version 2.0. The main change will be the adoption of the "concept of authenticity". This means that when a Member State has its own business register containing good quality data on the domestic portion of a multinational enterprise group included in the scope of the EGR, it can decide to be an authentic source for it. In practice, this means that NSIs that comply with the quality requirements set up for being an authentic source for the EGR can send their data at the beginning of the production process. The EGR rules would not overwrite such domestic information, but would only operate as a connector of cross-border relationships between different countries, making possible the assembling of all different domestic parts of a multinational enterprise group contained in different national business registers.

The two commercial data providers will continue to be used for those Member States not complying with the quality requirements, or if it is necessary to rapidly update information that Member States are not able to provide without delaying the entire process.

Moving from EGR version 1.0 to 2.0 will largely benefit Member States, since it will allow them to save a lot of time and resources that are currently required for checking the sets of preliminary information received by the EGR under version 1.0. The new model, by drastically reducing data processing time, will also allow for the possibility of having multiple frames available during the calendar year, characterised by levels of information of different quality.

3.3 INFORMATION AVAILABLE IN THE EGR

The EGR intends to support three main levels of unit:

(1) The **multinational enterprise group,** which can be broken into two structures: the economic structures and the legal structures. The enterprise groups are identified through the links of control between their legal units (parent and its subsidiaries).

(2) The **enterprise** is the economic unit in the frame of the group. An enterprise is the smallest combination of legal units that makes up an organizational unit producing goods or services that benefits from a certain degree of autonomy in decision-making, especially for the allocation of its current resources. An enterprise can also be a single legal unit if it has the above requisites.

(3) The **legal unit** is the smallest unit that creates, through a combination of financial links between legal units, the legal structure of the group. The legal units are the basic building blocks for the construction of the groups' legal structure. They are recognisable and identifiable in each country and it is possible to observe and measure their shareholdings in order to define control relationships among them.

The EGR frames include those MNE clusters which have at least three legal units which are located in at least two countries. Consequently, not all domestic groups are covered by the EGR. The frames refer to particular reference years and contain the following information on enterprise groups:

- group structures and relationships between the constituent legal units;
- characteristics of the legal units of the groups (identification and stratification characteristics);
- consolidated group-level data (e.g. group employment, assets, consolidated turnover, main activity code);
- information on the ultimate controlling institutional unit (UCI) and the reporting unit.

Because the frames integrate the confidential micro data of NSIs, strict confidentiality rules must apply. Therefore, all data in the frames are considered confidential and shall be exclusively used for statistical purposes.

The EGR version 2.0 data model will contain not only the multinational enterprise groups and their constituent legal units, but also the statistical unit "enterprise" and the new concept of the "global enterprise". The concept of the "global enterprise", which is not yet an official one but for the time being only a pilot concept used for profiling multinational groups, aims to describe those enterprises whose activity and complexity extends across different countries; multinational enterprise groups are global entities and do not organise themselves according to geographical or administrative borders. The "global enterprise" is therefore the same as the "enterprise", apart from the fact that the "global enterprise" can carry out its economic activity in more than one country, regardless of geographical borders.

The EGR aims to provide a frame for statistics on globalisation. This means that the EGR should not only serve statisticians at the beginning of their production process, by providing a basis for the composition of the survey population, but should also provide them with coordinated solutions for problems of quality during the whole production process, right up until the final revision of statistical output. Therefore, the EGR intends to provide an initial population frame at the start of a statistical production cycle, followed by regular updates during the statistical production cycle.

In this regard, an interface designed to consult the EGR survey frame for FATS compilers is under testing and should be available in November 2012 (pending the implementation of the secure infrastructure at Eurostat for confidential data access and sharing). Concerning FDI statistics, an interface will not be ready before 2014. In any case, the FATS interface will already have some features which will be helpful for FDI purposes.

3.4 NCBS' ACCESS TO THE EGR

Another important innovation of the EGR is the integration of the national central banks (NCBs) into the production process and data exchange flows. The Commission Implementing Regulation No 1097/2010 specifies the format, the confidentiality and security measures, and the procedures for this data transmission. In addition, all Member States have provided their authorisation to share the EGR data with the NCBs and the ECB according to the regulatory dissemination rules. This opens the possibility for the NCBs that are responsible for producing FATS and FDI statistics to use the EGR population frames.

NCBs will first be provided with an initial frame referring to the 2010 MNE population. Several updates may be provided until a final frame is released later in 2012. All frame files have the same structure and format and are transmitted as flat text files. However, in the future, the international Statistical Data and Metadata eXchange (SDMX) format will be used for this data exchange.

The country-specific frames will also be available via an offline interface which provides search and display functions including the tree structures of the groups. This standalone Java application will first be provided to the NCBs when the final 2010 frame is be released.

The installed eDamis Web Application, or the eDamis Web Portal, will be used for transmitting data to NCBs. The files are first zipped due to their size, then encrypted and finally sent.

Each NCB should nominate one recipient person in their institution to receive the EGR data. The recipient person should be the main user of the EGR data and may forward the data to other statistical users in his or her institution (after decryption). The recipient person needs a CIRCA[22] username in order to obtain access rights to the "EGR datasets".

Further information is available on the EGR website: http:\\egr.istat.it.

[22] Eurostat's Communication and Information Resource Centre Administrator.

ANNEX 5: ACCOUNTING STANDARDS[23]

VALUATION OF EQUITY PARTICIPATIONS ACCORDING TO SPANISH FINANCIAL ACCOUNTING STANDARDS

The common definition of "own funds at book value" (OFBV) is: the value of the direct investment enterprise based on its volume of own funds. This should include:

- paid up capital (net of own shares);
- all types of reserves (including shares premium accounts and investment grants);
- net value of non-distributed profits and losses (including results for the current year).[24]
- BPM6 gives the same definition of OFBV and makes an additional distinction in the last bullet point, stating that "cumulated reinvested earnings" and "holding gains or losses included in own funds in the accounts, whether as revaluation reserves or profits or losses", should be included (7.16).

OFBV of a direct investment enterprise cannot reflect a transaction price up the chain (paid goodwill for the direct investment enterprise at the end of the chain is not included), but does reflect investments down the chain according to the accounting standards applied by the companies. Retained earnings deriving from direct ownership links are always reflected in the equity valuation of the direct investment enterprise, while retained earnings generated by indirect ownership are not necessarily included in the reserves recorded on the balance sheet of the direct investment enterprise, depending on the accounting standards applied. When *consolidated* accounts based on the IFRS are applied, retained earnings generated down the chain by indirect ownership are included in the valuation of the direct investment enterprise. In *Standalone* accounts the retained earnings generated by indirect links are not necessarily reflected in the value of the equity capital recorded on the balance sheet. The valuation of equity capital based on an unlisted company in standalone accounts may deviate from the OFBV standard definition when not all types of reserves and non-distributed profits and losses are taken into account.[25] As a matter of consequence, OFBV (stocks) based on standalone accounts may be adversely affected under these circumstances. Furthermore, the income account of an intermediate holding company based on standalone accounts may be structurally overstated in a chain of investments when the profits of the direct investment enterprise are not distributed to the direct investor (the holding company). In this case, these retained earnings are recorded by the holding company as credits, whereas they are not recorded in the debits because they are not included in the profits recorded in the standalone accounts of the holding company itself.

The accounting standards and the degree of application of the IFRS may vary from country to country. For these reasons, knowledge of the prevailing accounting standards is important in order correctly to define the contents of OFBV reported in the balance sheets used for statistical purposes in the EU, and to understand how goodwill is treated in accountancy. As mentioned,

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23 This annex is based on information from www.icac.meh.es (Spanish GAAP) and www.ifrs.org (IFRS).

24 This definition can also be found in the OECD Benchmark Definition of Foreign Direct Investment (fourth edition).

25 This is discussed in the "Foreign Direct Investment Task Force Report 2004". If only the first level of the chain of affiliates is covered, it is referred to as the "direct-ownership approach".

each country applies its own specific accounting rules, but many similarities and common principles exist. The following part of the annex contains a summary of accounting standards concerning the valuation of equity participation which are completely harmonised with the IFRS, making particular reference to Spain. The different valuation methods for investments in standalone and consolidated financial statements are explained. To illustrate the different valuation methods and the treatment in the balance sheet and according to the accountancy rules, a numerical example dealing with equity valuation is also described.

1 LEGAL FRAMESWORK

The financial accounting standards currently applied in Spain are the following.

- The Spanish Generally Accepted Accounting Principles (GAAP) were recently harmonised with the IFRS, aligning the valuation criteria and allowing for the application in most cases of only one of the accounting alternatives offered by the IFRS. The current Spanish financial accounting standards comprise:
    - the New General Accounting Plan of 2007;
    - the New General Accounting Plan for Small- and Medium-Sized Entities of 2007;
    - the New Regulation of Consolidated Financial Statements of 2010.
- International Financial Reporting Standards (IFRS). In some cases these are directly applied by companies.

The different accounting standards applied depend on the type of company and financial statements drawn up.

- Standalone financial statements:
    - listed and unlisted companies apply national GAAP (new general accounting plan of 2007).
- Consolidated financial statements:
    - listed groups are obliged to use the IFRS for their consolidated financial statements;
    - non-listed groups can choose to apply the IFRS or national GAAP (new regulation of consolidated financial statements of 2010).

2 RELATED UNDERTAKINGS

2.1 GROUP OF ENTITIES

- A group requires a **parent entity**, which directly or indirectly controls one or more other entities (subsidiaries).
- **Control** is the power to govern the financial and operating policies of an entity so as to obtain benefits from its activities. Control is presumed when the parent acquires more than half of the voting rights of the entity, directly or through a contractual arrangement with others, or is empowered to appoint or dismiss most of the members of the board of

directors. The acquisition by a parent of the control over a subsidiary constitutes a **business combination**.

- A **business combination** is a transaction or event in which an acquirer obtains control of one or more businesses. A business is defined as an integrated set of activities and assets that is capable of being conducted and managed for the purpose of providing a return directly to investors or other owners, members or participants. This includes:

1) mergers and demergers;
2) the acquisition of all of a company's asset items, or of a portion thereof comprising one or more businesses;
3) the acquisition of the shares or equity participations of a company;
4) other operations or events in which an entity acquires control over another entity without investment, whether it previously owns a participation in the capital of that entity or not.

2.2 MULTI-GROUP COMPANIES

These are companies, other than subsidiaries, which are managed by one or several companies in the group under the joint control of another person (or persons) not belonging to the group.

Joint control exists when, in addition to participating in the capital, there is a statutory or contractual agreement under which the strategic financial and operating decisions relating to the activity require the unanimous consent of the controlling companies.

2.3 ASSOCIATES

These are entities in which one or more entities of a group have a holding and significant influence, and the power to participate in the financial and operating policy decisions, but not to control them. A holding of 20% or more of the voting power (directly or through subsidiaries) will indicate significant influence, unless the absence of such influence can be clearly demonstrated.

3 VALUATION UNDER SPANISH GAAP

The general valuation method under Spanish standards is that of fair value.

Fair value is the amount obtainable from the sale of an asset in an arm's length transaction between knowledgeable, willing parties (IAS 39).

An active market is a market in which transactions for the asset or liability take place with sufficient frequency and volume to provide pricing information on an ongoing basis.

- Quoted market prices in an active market are the best evidence of fair value and should be used, where they exist, to measure the financial instrument.
- If a market for a financial instrument is not active, an entity establishes fair value by using a valuation technique that makes maximum use of market inputs and includes

recent arm's length market transactions, reference to the current fair value of another instrument that is substantially the same, discounted cash flow analysis, and option pricing models. An acceptable valuation technique incorporates all factors that market participants would consider in setting a price, and is consistent with accepted economic methodologies for pricing financial instruments.

- If there is no active market for an equity instrument, and the range of reasonable fair values is significant and these estimates cannot be made reliably, then an entity must measure the equity instrument at cost less impairment.

3.1 VALUATION OF INVESTMENTS IN UNCONSOLIDATED (STANDALONE) FINANCIAL STATEMENTS

All companies must draw up their own financial statements without considering the whole group (in case they hold equity investments). The standards applied in this case (GAAP of 2007) are harmonised with IAS 39, IAS 36 and IFRS 3.

3.1.1 INVESTMENT IN EQUITY OF SUBSIDIARIES, MULTI-GROUP COMPANIES AND ASSOCIATES

- *Initial measurement:*

Initially, these financial assets are measured at cost.

1) **Subsidiaries**. The cost is equivalent to the cost of the business combination, which includes:
   a. the acquisition-date fair value of the assets delivered, the liabilities assumed, and the equity instruments issued by the acquirer;
   b. the fair value of any contingent consideration that depends on future events or on certain conditions being met.

   The transaction costs are not included in the cost. They are charged as an expense to the profit and loss account.
2) **Multi-group companies and associates**. The cost is equivalent to the fair value of the consideration and the transaction costs.

- *Measurement subsequent to initial recognition:*

They are recorded at cost less, if appropriate, the cumulative amount of the value correction due to impairment of net worth. These corrections are made by the end of the year if there is evidence that the book value of an investment will not be recoverable.

The amount of the value correction will be the book value less the recoverable amount, the latter being understood as the higher of:

- fair value less sales costs;

- the current value of future cash flows arising from the investment (dividends, income).

  Value corrections due to impairment and, where appropriate, their reversal, are charged as expenses or income to the profit and loss account.

3.1.2 MERGERS, DEMERGERS AND THE ACQUISITION OF A COMPANY'S ASSET ITEMS

- *Initial measurement:*

  In these cases an investment is not recognised, but the company's asset items are integrated into the acquirer's balance sheet. The acquisition method is applied, which implies:

  - the recognition and measurement of the identifiable assets acquired and the liabilities assumed, at their acquisition-date fair value;
  - the recognition and measurement of goodwill, or a gain from a bargain purchase;
  - that goodwill is an intangible asset measured as the amount by which the cost of the business combination exceeds the acquisition-date fair value of the identifiable assets acquired, less the liabilities assumed;
  - that if the difference between the cost of the business combination and the acquisition-date fair value of the identifiable assets acquired less the liabilities assumed is negative, the resulting gain is recognised as an income in the profit and loss account.

- *Measurement subsequent to initial recognition:*

  Broadly, the liabilities and equity instruments issued as a cost of the combination, and the identifiable assets acquired and liabilities assumed in a business combination, will be valued on the basis of the nature of the equity item. Goodwill is not amortised, but its depreciation must be verified at least annually.

3.2 VALUATION OF INVESTMENTS IN CONSOLIDATED FINANCIAL STATEMENTS

The consolidated accounts should include all of the parent's subsidiaries, both domestic and foreign. Spanish GAAP applied in these cases is based on IAS 27, IAS 28, IAS 31 and IFRS 3.

3.2.1 OBLIGATION TO CONSOLIDATE

The parent company of a group is obliged to draw up consolidated financial statements except in certain cases, for example if a small- or medium-sized entity is involved. The obligation to present consolidated financial statements does not exempt all the members in the group from drawing up their own financial statements (unconsolidated or consolidated, should they own subsidiaries).

3.2.2 CONSOLIDATED ENTITIES

Companies whose accounts shall form part of the consolidation are:

- subsidiaries;
- multi-group companies;
- associates.

3.2.3 CONSOLIDATION METHODS

1. Full consolidation method

This is the method of accounting for business combinations whereby all assets, liabilities, income and expenditure of the company acquired are integrated into the financial statements of the parent company (including the portion attributed to shareholders unrelated to the group).

- *Consolidation at the time of acquisition:*
  (a) balance sheets are homogenised (they must refer to the same date and currency, and have the same structure and applicable valuation rules);
  (b) the balance sheets and profit and loss accounts of the parent company and the subsidiary are aggregated (on the basis of their book value);
  (c) adjustments are made to eliminate internal operations between both companies (transactions, loans, delivery of dividends, etc.);
  (d) the assets and liabilities of the subsidiary are recorded at fair value;
  (e) the parent company's investment in the subsidiary is eliminated, taking the proportional share of the subsidiary's net equity items;
  (f) goodwill or gain resulting from a business combination, and the share of external partners are recognised.

- *Subsequent consolidations:*
  The same procedure is followed as for the first consolidation and the previous adjustments are retained. Potential adjustments for the impairment of assets and liabilities are made (including goodwill).

2. Proportionate consolidation method

This method is used for consolidating multi-group companies. It involves integrating the assets, liabilities, income and revenue of the acquired company attributable to the group in the financial statements of the parent company. Consolidation is conducted in the same way as under the full consolidation method, with the exception that external partners do not feature.

3. Equity method

This is the method applied to the consolidation of investments in associates (and for multi-group companies to which the proportionate consolidation method is not applied) in the consolidated financial statement of the parent. Under this method, investment in the company is initially

recorded at cost, and subsequently increases or decreases to recognise the percentage corresponding to the investor in the change in net equity of the investee arising after the acquisition date.

4 STUDY CASE

A) *On 1 April in year 1, Company A:*

- acquires 60% of the equity of Company B for 24,000;

- acquires 20% of the equity of Company C for 10,000.

On that date, the fair value of the equity items of Company B coincide with the book value, except for the item of land, for which a difference of 5,000 is estimated between book value and market value

Balance sheet on 1 April year 1 after operations

	A	B
Land	32,000	25,000
Investments in subsidiaries	24,000	
Investments in associates	10,000	
Other assets	4,000	5,000
TOTAL ASSETS	**70,000**	**30,000**
Capital	55,000	28,000
Reserves	10,000	1,000
Profit and loss	2,000	
Financial liabilities	3,000	1,000
TOTAL LIABILITIES	**70,000**	**30,000**

Initial measurement on 1 April year 1:

On 1 April in year 1, the operations of acquisition are registered in the standalone and consolidated accounts of Company A because, having acquired control of a company, as a general rule the obligation to consolidate ensues. It would not only be necessary to consolidate the subsidiary (Company B), but also the associate (Company C).

Company B consolidates using the full consolidation method and Company C using the equity method. Therefore, the latter features in the aggregate balance sheet as an investment and it is not necessary to integrate its equity items.

Individual accounts for Company A:

	Debit	*Credit*
Investments in subsidiaries	24,000	
Investments in associates	10,000	
Cash		34,000

Consolidated accounts for Company A:

Calculation for net equity

- Capital	28,000
- Reserves	1,000
- Land (fair value adjustment)	5,000
Net equity of B at fair value	34,000

Calculation for external partners and goodwill

Net equity of B at fair value	34,000
To parent (60%)	20,400
To external partners (40%)	13,600

Calculation for goodwill

Cost	24,000
Net equity of B at fair value	20,400
Goodwill	3,600

Investment-net equity elimination adjustment

	Debit	*Credit*
Capital	28,000	
Reserves	1,000	
Land	5,000	
Goodwill	3,600	
Investments in subsidiaries		24,000
External partners		13,600
TOTAL	37,600	37,600

The investment in B (24,000) is eliminated against net equity at book value, the capital and the reserves of B are derecognised. Furthermore, the value of land is adjusted to its fair value, increasing it by 5,000, and goodwill and external shareholders are recognised.

The consolidated balance sheet is the result of aggregating the individual balance sheets of A and B and making the aforementioned adjustments.

Balance Sheet on 1 April year 1 after operations

	A	B	A + B	Adjustments Credit	Adjustments Debit	Consolidated
Goodwill				3,600		3,600
Land	32,000	25,000	57,000	5,000		62,000
Investments in subsidiaries	24,000		24,000		24,000	
Investments in associates	10,000		10,000			10,000
Other assets	4,000	5,000	9,000			9,000
TOTAL ASSETS	**70,000**	**30,000**	**100,000**	**8,600**	**24,000**	**84,600**
Capital	55,000	28,000	83,000	28,000		55,000
Reserves	10,000	1,000	11,000	1,000		10,000
Profit and loss	2,000		2,000			2,000
External partners					13,600	13,600
Financial liabilities	3,000	1,000	4,000			4,000
TOTAL LIABILITIES	**70,000**	**30,000**	**100,000**	**29,000**	**13,600**	**84,600**

B) *31 December in year 11:*

10 years later, Company B has built up gains of 20,000 (2,000 each year) and Company C has built up gains of 3,000 (300 each year).

- ***Subsequent consolidations (on 31 December year 11):***

Company C:

An increase in the value of the investment attributable to the profits accumulated is recognised against profit and loss (prior years' profits will have been set aside to reserves).

Investment adjustment (20% of gains)

	Debit	*Credit*
Investments in associates	600	
Reserves		540
Profit and loss		60

Company B:

The net equity items generated since the purchase are attributed to external shareholders and to the parent.

Attribution of reserves and profit and loss

Reserves generated by B	18,000
To parent (60%)	10,800
To external partners (40%)	7,200
Profit and losses of B	2,000
To parent (60%)	1,200
To external partners (40%)	800
TOTAL	
External partners	8,000

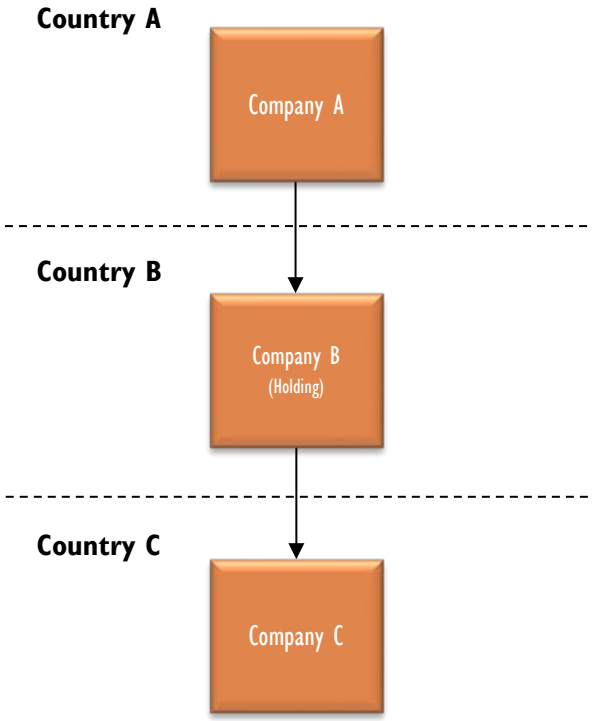
Investment-net equity elimination adjustment

ANNEX 6: CASE OF A LARGE COMPLEX GROUP WHERE THE IMBALANCE BETWEEN THE VALUE OF ASSETS AND LIABILITIES IS VISIBLE AT THE LEVEL OF THE WHOLE GROUP RATHER THAN FOR EACH INDIVIDUAL COMPANY

Nowadays, multinational enterprise groups are organised in very complex ways, trying to adopt the structure that best fits their industry type and organization philosophies, and seeking to exploit and potentiate competitive advantages.

In Chapter 4, we analysed three special cases where using OFBV valuation may introduce a bias in the results. This simplified analysis is based on a "holding companies in the middle of the chain" approach (see diagram 1). This approach is based on an investment chain involving three companies in three different countries, as well as on the assumption that the value of the intermediate company is dominated by the value of the company at the end of the chain. In these three cases, assets and liabilities at the level of the intermediary company are not valued consistently, causing a bias in the net i.i.p. of the intermediary country.

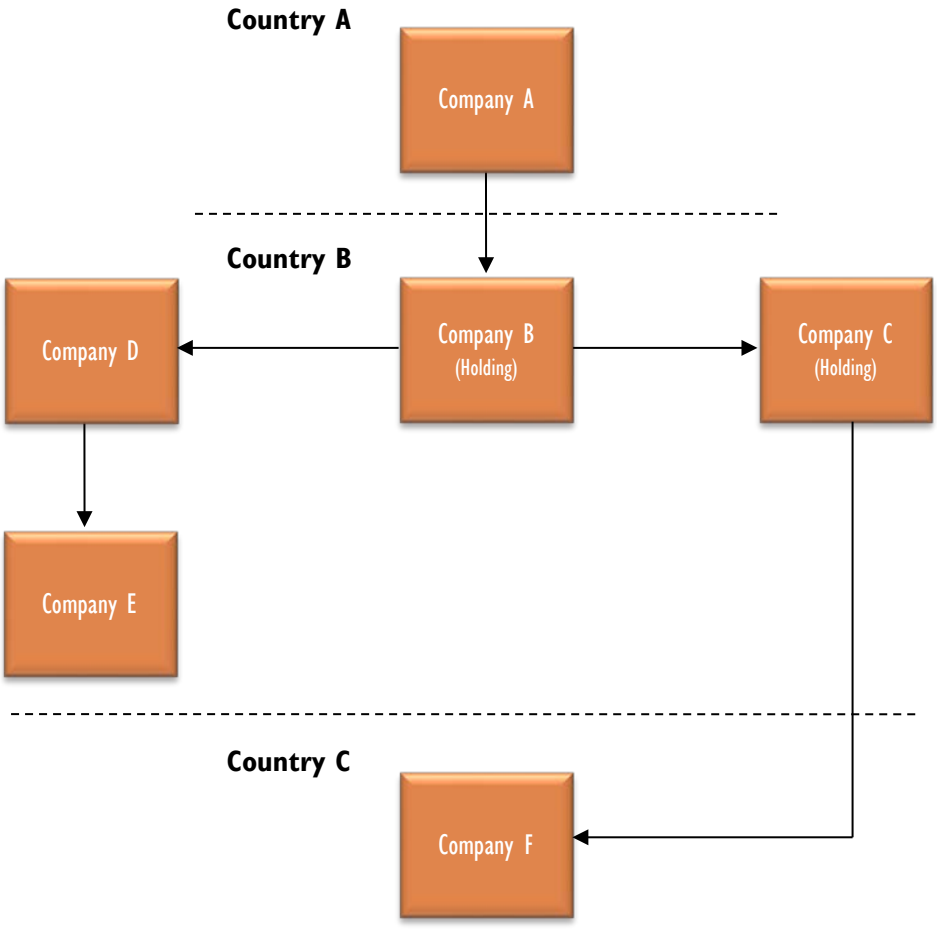
Diagram 1 Holding company in the middle of the chain (company-based analysis)



In addition to this simple case, other cases can arise in practice, where the bias between assets and liabilities cannot be seen at the level of the company but only at the level of the group as a whole.

Taking diagram 1 as a starting point, and introducing an additional level of complexity, we will assume that Company B does not directly hold any affiliates abroad, although it holds two affiliates inside its own country (see diagram 2): Company D which, runs a business locally; and Company C, which runs the foreign affiliates of the group.

Diagram 2 Holding in the middle of the chain (group-based analysis)



Assuming that Company B is listed on the stock exchange, that 100% of its shares (either in the form of direct investment or portfolio investment) are held by non-residents, and that all other companies are not listed and are all fully owned by its direct investor, the bias between assets and liabilities is not evident at the company level.

In fact, the investment link between Company A and Company B does not cause any bias per se, since we have a simple direct investment relationship between a direct investor and a listed

direct investment enterprise. The same is also applicable to the investment link between Company C and Company F.

Nevertheless, when we analyse the group as a whole, it is clear that there is a bias since the liabilities of Company B (and Country B) are recorded at market value, while its assets are valued at OFBV. The magnitude of the bias will always depend on the contribution of Company F to the value of Company B. The larger the contribution of Company F to the value of Company B, the larger the bias would be.

Please note that, in this simple case, it might theoretically be possible to use market prices observed on the liability side as a proxy for the market price on the assets side, in order to increase consistency between the assets and liabilities of Country B. However, the more complex the group structure, the harder it is to allocate fairly the estimated market value to each individual company. Indeed, the use of a factor, to fairly allocate the estimated market value to each company of the group, by compilers through a long chain of control, sometimes involving internal and external investment links, may significantly increase the statistical burden.

Additionally, the use of factors implies knowing the complete group structure, including internal links, and having access to the bookkeeping of the companies throughout the investment chain, since factors are based on accounting data.

In this sense, even though it is theoretically possible, in the case of large complex groups it can be very difficult in practice to make adjustments to avoid bias between assets and liabilities at the group level.

ANNEX 7: A SIMPLE MODELLING EXERCISE

The starting point of the modelling exercise is data on the role of listed enterprises in overall FDI positions. Charts 1 and 2 respectively show inward and outward FDI in unlisted companies for both the total (national) position and the position vis-à-vis counterparts outside of the euro area (extra). Unlisted enterprises account for the lion's share of FDI positions. Usually, the share of listed enterprises ranges from 0% to 5%, reaching close to 20% only in a limited number of countries.

Chart 1 Inward FDI in unlisted companies as % of total position (listed + unlisted) at end-2010

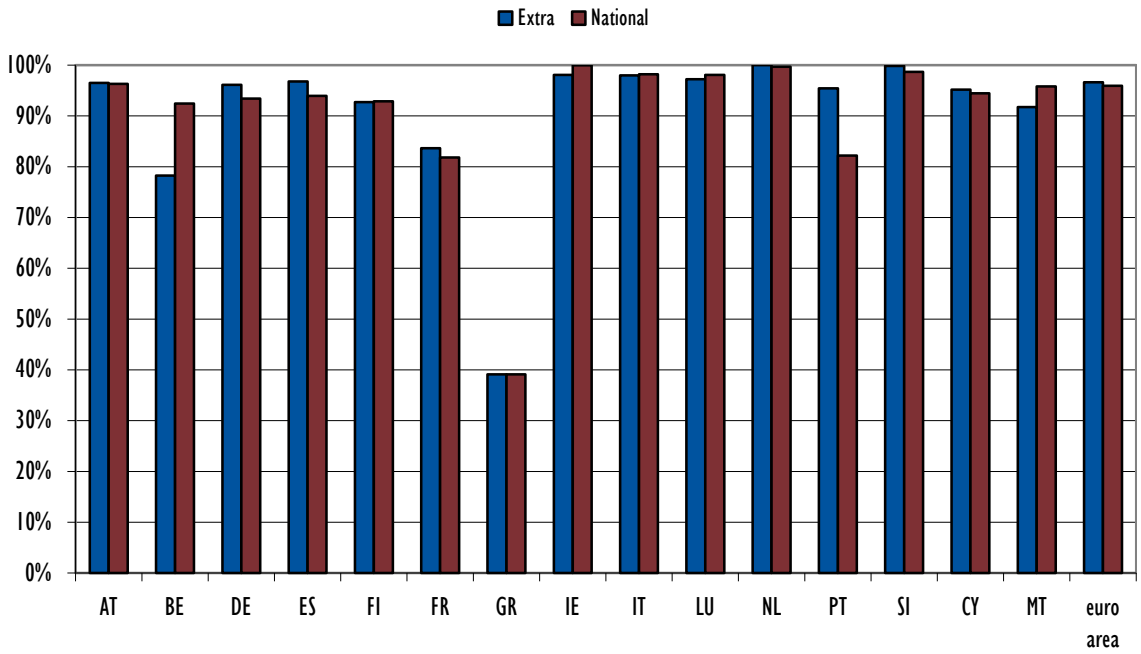
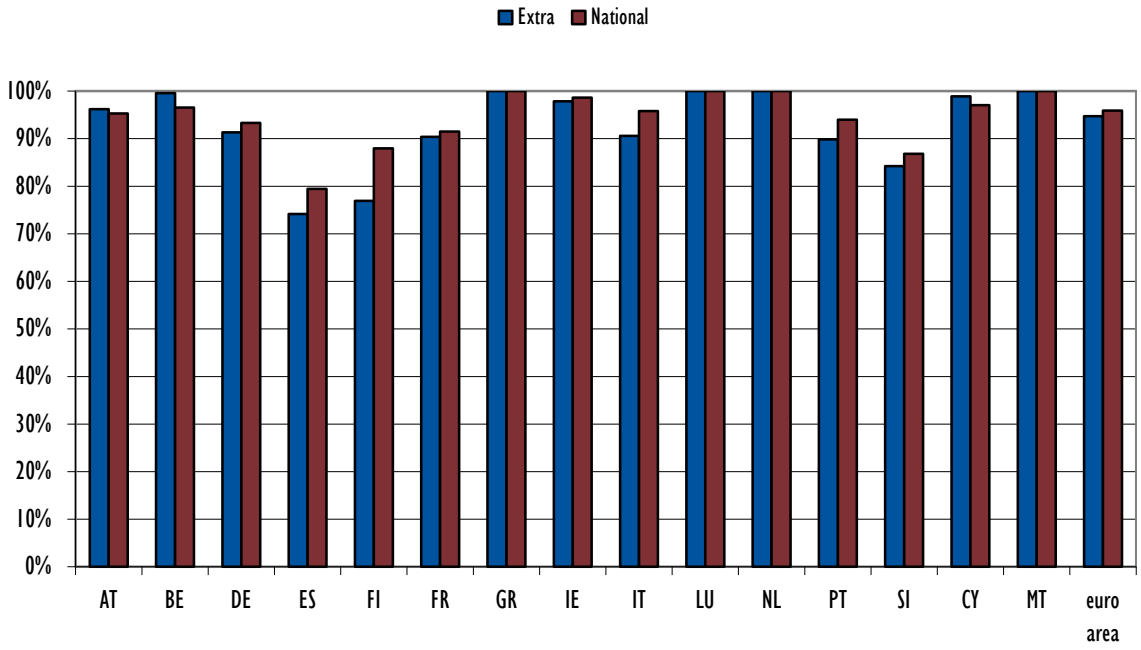


Chart 2 Outward FDI in unlisted companies as % of total position (listed + unlisted) at end-2010



Apart from the actual numbers for the value of listed enterprises, the modelling exercise has to operate by making some rather strong assumptions.

1) All listed enterprises in European FDI statistics are related to "holdings in the middle" (this assumption is symmetrical, which means it is true for both assets and liabilities).
2) OFBV represents only 50% of the hypothetical market value (this assumption is a direct result of comparing the OFBV of listed enterprises with their observed market value, but only for one point in time).

As a first step, we calculate the corresponding undervaluation of the affiliates held by those "holding companies in the middle". As an example, we start with Austrian listed enterprises on the liabilities side. These resident holdings have a value of €6.3 billion (see Table 3). If all their foreign affiliates were valued at OFBV (which is only half of the market value), they would be valued at only €3.15 billion in the existing outward statistics, an undervaluation of Austrian assets abroad of €3.15 billion. At the same time, Austria reports assets worth €9.3 billion, which are listed enterprises abroad. This is now the case when the resident holding is unlisted, while (some of the) affiliates are listed. Again using the factor of two, we arrive at an undervaluation of liabilities (the resident holding companies) of €4.65 billion (50% of €9.3 billion). The result for the Austrian i.i.p. would be an increase of €3.15 billion in assets and of €4.65 billion in liabilities, which would altogether make the Austrian net i.i.p. €1.5 billion less favourable.

Table 3 Positions in FDI unlisted equity at the end of 2010

2010 Unlisted at book values					Listed at market values					Listed at book values				
PERIOD 2010	Credit / Net assets		Debit / Net liabilities		PERIOD 2010	Credit / Net assets		Debit / Net liabilities		PERIOD 2010	Credit / Net assets		Debit / Net liabilities	
EUR billions	Extra J6	Total AI	Extra J6	Total AI	EUR billions	Extra J6	Total AI	Extra J6	Total AI	EUR billions	Extra J6	Total AI	Extra J6	Total AI
	8.514	8.514	8.564	8.564		8.513	8.513	8.563	8.563		8.516	8.516	8.566	8.566
AT	148.4	186.9	87.5	163.9	AT	5.8	9.3	3.2	6.3	AT	4.3	6.7	2.2	4.6
BE	32.6	138.4	64.8	311.7	BE	0.1	5.0	18.0	25.5	BE	0.1	3.8	1.3	11.7
DE	415.5	791.0	146.0	371.0	DE	39.4	56.7	5.9	26.2	DE	8.3	19.2	5.9	15.6
ES	215.1	339.4	87.8	248.0	ES	74.9	87.7	2.9	16.0	ES	42.0	52.5	4.1	11.3
FI	38.8	85.1	34.2	49.4	FI	11.6	11.6	2.7	3.8	FI	7.8	7.8	1.8	2.3
FR	376.8	708.6	115.8	295.4	FR	40.2	65.9	22.6	65.6	FR	20.0	43.4	6.8	36.3
GR	18.1	30.2	2.2	9.0	GR	0.0	0.0	3.4	14.0	GR	0.0	0.0	2.2	9.7
IE	121.4	190.7	129.2	224.2	IE	2.7	2.7	2.5	0.0	IE	1.1	1.1	1.8	0.0
IT	80.4	315.1	44.7	163.9	IT	8.4	13.8	0.9	3.0	IT	5.6	9.6	0.7	2.8
LU	583.6	1,139.1	859.7	1,237.8	LU	0.0	0.0	24.4	24.4	LU	0.0	0.0	18.7	18.8
NL	1,255.0	1,976.7	939.3	1,652.4	NL	0.0	0.0	0.0	4.9	NL	0.0	0.0	0.0	0.0
PT	18.8	38.7	20.9	55.7	PT	2.1	2.5	1.0	12.0	PT	1.3	1.6	1.4	7.0
SI	2.6	3.2	2.0	7.2	SI	0.5	0.5	0.0	0.1	SI	0.4	0.4	0.0	0.2
CY	26.1	29.4	27.7	35.8	CY	0.3	0.9	1.4	2.1	CY	0.2	0.3	0.8	4.9
MT	0.2	0.3	3.3	10.9	MT	0.0	0.0	0.3	0.5	MT	0.0	0.0	0.2	0.4
euro area	3,333	5,973	2,565	4,836		186.0	256.5	89.2	204.4		91.0	146.3	48.0	125.6

This calculation can be done for the available euro area countries, which in total have €256 billion of listed assets and €204 billion of listed liabilities. Consequently, the undervaluation of unlisted assets would amount to €102 billion, while the value of the unlisted liabilities would be increased by €128 billion, thus resulting in an i.i.p. which is €26 billion (€128 billion – €102 billion) more negative. In relation to the overall assets and liabilities of the euro area, which amount to €15.2 trillion and €16.5 trillion respectively, and a net position of €1.2 trillion at the end of 2010, the measurement error can be considered negligible.

As expected, the results differ across euro area countries. If unlisted companies taken into account in the exercise were all valued at market price, the "winners" would be the countries where listed enterprises dominate on the liabilities side, i.e. Luxembourg, Belgium, Greece and Portugal, with an improvement in their i.i.p. of €12 billion, €10 billion, €7 billion and €5 billion respectively. Conversely, the main "losers" would be Spain (€36 billion), Germany (€15 billion), Italy (€5 billion) and Finland (€4 billion). The same calculation, applied to the positions vis-à-vis countries outside the euro area, leads to a deterioration of the i.i.p. of the euro area of €48 billion, representing 1% of the average of inward and outward FDI euro area i.i.p.

ABBREVIATIONS

BD4 OECD Benchmark Definition of Foreign Direct Investment – 4th Edition

b.o.p. balance of payments

BPM6 Sixth Edition of the IMF's Balance of Payments and International Investment Position Manual

CDIS Coordinated Direct Investment Survey

ECB European Central Bank

EGR EuroGroups Register

ESCB European System of Central Banks

EU European Union

FATS foreign affiliates statistics

FDI foreign direct investment

GAAP Generally Accepted Accounting Principles

IAS International Accounting Standard

IFRS International Financial Reporting Standards

i.i.p. international investment position

IMF International Monetary Fund

MNE multinational enterprise groups

NCB national central bank

OECD Organisation for Economic Co-operation and Development

OFBV own funds at book value

SNA System of National Accounts

STC Statistics Committee

SPE special purpose entity

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