

**IMF COMMITTEE ON BALANCE OF PAYMENTS STATISTICS AND OECD WORKSHOP ON
INTERNATIONAL INVESTMENT STATISTICS**

DIRECT INVESTMENT TECHNICAL EXPERT GROUP (DITEG)

BACKGROUND DOCUMENTS

FOR

DITEG ISSUES PAPER # 1 (A):

VALUATION OF DIRECT INVESTMENT EQUITY

**VALUATION OF DIRECT INVESTMENT EQUITY STOCKS: OUTCOME OF THE
QUESTIONNAIRE AND FOLLOW-UP PROPOSALS**

**The views expressed in this paper are those of the authors and do
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**WORKING GROUP ON BALANCE OF PAYMENTS AND
EXTERNAL RESERVES STATISTICS**

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EXTERNAL RESERVES STATISTICS

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• **VALUATION OF DIRECT INVESTMENT EQUITY
STOCKS: OUTCOME OF THE QUESTIONNAIRE AND
FOLLOW-UP PROPOSALS**

For consideration and approval of the Statistics Committee

INTRODUCTION

1. The valuation of foreign direct investment (FDI) stocks in equities was first undertaken by the Working Group on Balance of Payments and External Reserves Statistics (WGBP&ER) and the Statistics Committee (STC) in June 2000. The main outcome of those discussions was the commitment to provide the ECB with national foreign direct investment (FDI) positions on the basis of book values without any further adjustment, for positions corresponding to end-1999 and end-2000.

2. The valuation criteria for euro area FDI positions as from end-2001 onwards were not decided. Against that background, the STC commissioned the WGBP&ER to further investigate on the following topics:

- i) potential discrepancies in current practices amongst member states;
- ii) common understanding on the concept of “book value”; more specifically, whether it referred to the valuation of FDI equities in the balance sheet of direct investors (mostly their acquisition price) or to the volume of “own funds” of the direct investment companies multiplied by the percentage of direct investors’ ownership. In this second case, it was also deemed necessary to check whether all countries were using the same accounts for the valuation based on own funds;
- iii) possible methods for estimating the market value of unlisted companies.

3. In order to seek out an overview on current practices as well as on these other related aspects, a questionnaire was addressed to the WGBP&ER members, whose results were presented in the last November meeting of the WGBP&ER. Starting from the common points shared by most of the answers to the questionnaire, the ECB's Balance of Payments Statistics and External Reserves Division (BP&ERD) elaborated a follow-up proposal, which was fully endorsed by the WGBP&ER.

4. The present document is in two parts: the first one comprises a summarised overall picture of the replies to the questionnaire, focusing on current practices as well as on ideal valuation methods for the euro area FDI stocks in the future. The second part of the document reveals some conclusions and addresses some proposals for the solution of the main problems detected through the questionnaire.

PART I

Outcome of the questionnaire

Current practices

5. Regarding current practices, the fourteen responses to the questionnaire fall into five categories:
- i) Historical values with no adjustment for price changes: one country.
 - ii) Book values: six countries¹.
 - iii) Market values estimating the price of unlisted companies from market prices of listed companies by means of ratios: two countries.
 - iv) Accumulation of flows adjusted for price movements using stock exchange indexes: two countries
 - v) Combination of (i) market values (listed companies); and (ii) book values (unlisted companies): three countries

Concept of "book value"

6. Book values were also referred to as "net asset value". The following three conclusions derived from the answers to the questionnaire:

- a) The general understanding is that this method relies on the use of information on "own funds" from the direct investment companies' balance sheet²

¹ In one case, estimated market values are produced as well.

² Only one country currently records direct investment abroad on the basis of the value of these investments in the balance sheet of the resident direct investors

- b) Though there are slight differences among countries, the concept of “net asset value” of a company comprises, in general, the following items:
- i) Nominal capital
 - ii) All types of reserves
 - iii) Non-distributed profits (net of losses)³
- c) As regards how information on non-resident companies’ own funds may be collected (in the case of direct investment abroad), in most of the countries it can only be obtained *via the resident direct investors*. Only two countries currently receive this information directly from the non-resident affiliates.

Risk of asymmetries on the euro area net external position detected through the questionnaire

7. Resulting from the replies to the questionnaire, two sources of discrepancies that are likely to generate asymmetries in the net euro area i.i.p. compiled so far have been detected:

- a) Although the practical rules endorsed by the STC in June should ensure the application of a single valuation method for the euro area FDI stocks (book values) under step 1, the answers to the questionnaire have revealed still quite heterogeneous practices among MSs at the national level, and that the concept of “book values” is subject to quite different interpretations. These two aspects are likely to increase the level of asymmetries in the euro area aggregate compiled by adding up national net external positions, since intra-euro area FDI positions will not cancel out.
- b) Regarding the consistency, at national level, between valuation methods for inward and outward foreign direct investment respectively, five MSs recognised that current valuation methods might generate asymmetries in the net external position of their countries. In addition, even though four more MSs reported consistent methodological criteria for the valuation of inward and outward FDI, they could not completely rule out the possibility of asymmetries in practice. These imbalances in the national i.i.p. between FDI in the reporting economy and FDI abroad will consequently be reflected in the aggregation of national net positions as well.

Valuation practices for the euro area aggregate as from end-September 2002

8. From a *pure theoretical point of view*, the members of the WGBP&ER revealed the following preferences:

³ This concept encompasses net profits brought forward, including current year’s results

- a) Book values: three countries supported the valuation of FDI stocks in the future on the basis of book values. The most important arguments were practical reasons (data availability), avoiding asymmetries between inward and outward FDI and international comparability.
- b) Market values: four countries favoured a full marked-to-market valuation for FDI stocks. The most important arguments were consistency with international standards and significance for macroeconomic analysis.
- c) Combination of market values and book values: seven countries supported the use of market values in the case of listed companies and book values for the valuation of unlisted companies. The main arguments supporting this solution coincide with the strongest points of the other two groups, namely availability of data, international comparability, reduction of asymmetries, consistency across countries and coherence of the i.i.p. as a whole.

Summary of pros and cons of the three methods⁴

	Market valuation	Book valuation	Market / Book
Consistency with international standards (BPM5, ESA95, SNA93, OECD Benchmark definition)	X	partially	X
Appropriateness for economic analysis	X	-	partially
Availability	-	X	X
Avoid distortions on the net external position due to asymmetries between assets and liabilities	-	X	X
Consistency between flows and stocks	X	-	partially
International comparability ⁵	-	X	X
Correspondence with the valuation rules applied to other i.i.p. captions	X	-	partially
Consistency with financial accounts	X	-	partially
Consistency with the same phenomenon as reflected in accounting statements	-	X	partially

9. The most important practical problem revealed by almost all the answers to the questionnaire was the *valuation of unlisted companies*. On the contrary, the collection of information from the balance sheet

⁴ Marked with a X when the argument reinforces the use of the specific method.

⁵ The estimation of market values for unlisted companies would likely create more asymmetries due to the different levels of information to which compilers of inward and outward FDI have access. Compilers of inward FDI would normally get access to the whole domestic population of listed companies whereas the compiler of outward FDI would normally retrieve information from a reduced number of foreign companies with a quotation in the concerned foreign markets through their resident reporting investors. Both estimations would normally bring about quite dissimilar results.

of non-resident enterprises was not seen as a major problem, since this information can be collected via the resident direct investors.

10. Regarding the ideal valuation method for unlisted companies, a wide majority of those who preferred a combination of market and book values favoured the consideration of their “net asset value” (i.e. their own funds or “book value”). One country preferred the method based on the “*stream of net future profits discounted to the present*”, although some difficulties for its practical implementation were recognised as well. As regard those replies entirely focusing on market values, two alternatives were expressed:

- i) Three countries revealed a preference for the application of the *ratio market value/book value* of listed companies to the book value of unlisted companies. One of them suggested that the ECB should centralise such a calculation.
- ii) Another country favoured the application of the *ratio price/earnings* of listed companies to the value of unlisted companies. However, the ratio price/book value, as expressed in the former bullet point, was also satisfactory for this MS.

PART II

Conclusions and follow-up

11. In the last STC meeting there was a common agreement to provide the ECB with national FDI positions on the basis of book values without any further adjustment to estimate market values for positions referring to end-1999 and end-2000. This agreement has reduced intra-euro area asymmetries. However, as explained in the first part of this document, problems in the net FDI of the euro area aggregate (FDI abroad minus FDI in the euro area) still derive from two sources:

- i) Different practices among MSs and application of different concepts of “book value”.
- ii) Asymmetries at the national level between the valuation methods for inward and outward FDI.

The Working Group on Balance of Payments and External Reserves Statistics approved the application of a common definition of “book values” in the contribution to the euro area i.i.p. from now on, even under step-1 (for positions corresponding to end-2000), to the greatest extent possible. This definition encompasses the following items:

- i) Nominal capital**
- ii) All types of reserves**
- iii) Non-distributed profits net of losses (including results for the current year)**

Therefore, the Statistics Committee is hereby invited to endorse this proposal.

Follow-up proposals

12. With regard to the guidelines for the contribution to the euro area i.i.p. from positions corresponding to end-2001 onwards, though the views of MSs about the possible way forward did not fully converge, some statements were supported by a majority of respondents in each part of the questionnaire. Taking these common ideas as starting point, an overall proposal has been set up and is presented hereby to the STC. This proposal is founded on the following general principles:

- a) Direct investment in listed companies would be valued on the basis of their ***price in stock exchange markets***.

In the case of listed equities, this option would comprise most of the supportive arguments considered so far: practicality (its availability could be ensured via either the domestic market or the direct investor), compliance with international standards, significance for macroeconomic analysis, international comparability, reduction of asymmetries at international level, consistency with other statistics, etc.

- b) Direct investment in unlisted companies would be valued on the basis of the ***book value of the direct investment company***. The book value of unlisted companies would cover the concepts listed above, namely nominal capital, all types of reserves and non-distributed profits.

The only alternative for the valuation of this kind of securities that received broad support in the replies to the questionnaire was the application of a ratio market value/book value based on listed companies to unlisted companies. The final recommendation is based on the following arguments:

- i. The application of this ratio relies on a strong assumption: listed companies present a relationship between market price and own funds quite similar to that of unlisted companies receiving FDI. This assumption has proved to be not completely straightforward, since the structure of these two types of companies might be considerably different.
- ii. This assumption would be especially weak in those markets in which the majority of companies do not have a quotation in the stock exchange.
- iii. The correct application of this method requires a great amount of information on individual companies and the market in which direct investment companies are located, which is not symmetrically available for resident and non-resident companies. This information may be especially difficult to obtain in the case of direct investment abroad (in particular outside the EU).

- iv. Crossed information by sector and counterpart country cannot easily be obtained.
- v. Asymmetries between different countries would be considerably bigger due to the use of dissimilar information. The compiler of inward FDI would have access to the whole population of listed companies whereas the compiler of outward FDI would normally have access to only a reduced number of foreign companies through their resident investors. For this reason, the extrapolation of results on the basis of a limited amount of foreign listed companies to those foreign unlisted companies receiving FDI might be particularly suspect.

13. Notwithstanding the proposed valuation method for unlisted companies on the basis of both practical and theoretical reasons, the analytical significance of estimating the market value of this kind of securities has been broadly recognised in the answers to the questionnaire. The possibility of producing these supplementary figures in the longer term leaves room for further investigation by the WGBP&ER in collaboration with the Working Group on Monetary Union Financial Accounts (WGMUFAS), especially on how a full market valuation of the euro area FDI should be estimated. Along these lines, this additional information could be published as a memorandum item together with the euro area i.i.p.

The Working Group on Balance of Payments and External Reserves Statistics approved the following points:

- 1. The valuation of euro area FDI stocks as from end-2001 on the basis of:**
 - **Market prices for direct investment in listed companies.**
 - **Net asset value of the direct investment company comprising nominal capital, all kinds of reserves (including goodwill) and non-distributed profits net of losses (including results corresponding to the current year) for direct investment in unlisted companies**
 - 2. As a longer-term task, instruct the WGBP&ER to study, in liaison with the WGMUFA, the feasibility of estimating the market value for the euro area FDI in unlisted companies and how to produce this supplementary information for analytical purposes.**
- Therefore, the Statistics Committee is hereby invited to endorse these conclusions.**