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

TASK FORCE ON FOREIGN DIRECT INVESTMENT FULL REPORT [EXTRACT]

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• TASK FORCE ON FOREIGN DIRECT INVESTMENT

Full report

[Extract]

VALUATION OF FDI EQUITY STOCKS[1]

Introduction

In the recent years, different issues related to the valuation of foreign direct investment (FDI) equity stocks have been considered in several fora. Following thorough investigation, in 2001 the ESCB Statistics Committee (STC) and the Working Group on Balance of Payments and External Reserves Statistics (WG-BP&ER) reached some conceptual agreements related to the general rules that should guide the valuation of these stocks in the euro area international investment position (i.i.p.). Some practical difficulties to implement these decisions were recognised, inter alia, the time schedule for putting these agreements into practice.

Following its mandate, the TF-FDI exclusively considered the valuation criteria approved by the STC and, thus, solely focused on how to apply the agreements reached by the STC on practical grounds. Other valuation methods, such as macroeconomic revaluation indexes or current-cost methods as presented by the USA in the November 2002 IMF BOP Committee, are not considered in this chapter.

Within the above-described framework, the TF-FDI carried out an analysis of the current state of play. Based on this analysis, at the end of this chapter the TF-FDI addresses some conclusions and recommendations, putting special emphasis on their applicability. All issues related to the use of consolidated accounts for the valuation of FDI equity stocks (in particular, whether the common definition of OFBV should be applied on consolidated or on non-consolidated accounts of the direct investment enterprises) have been already tackled in the previous two chapters. In particular, the TF-FDI addressed recommendations on how to incorporate indirect links of ownership to the total book-value-based FDI equity stocks.

This chapter is in three sections. The first one contains a brief summary of the main related decisions adopted by the STC and the WG-BP&ER. The second section summarises the answers of the countries to the questionnaire on current practices and future prospects related to the valuation of FDI equity stocks (**Error! Reference source not found.** further illustrates the answers received from all countries). Finally, section three presents an overview of the results of the national feasibility studies carried out within the TF-FDI concerning the viability of producing separate figures for listed and non-listed companies and of collecting two different valuations (book values and market values) for FDI in listed companies. The compilation of FDI stocks at T+9 months is separately covered in **Error! Reference source not found.**.

1 The analysis in this chapter did not cover the valuation of FDI equity stocks arising from real-state investments. Due to the impossibility to send FDI surveys to the non-resident owners of real state in the country (nor to domestic households acquiring properties abroad), it was concluded that the accumulation of flows could be a reasonable solution for this specific case.

Related decisions adopted by the Statistics Committee and the Working Group on Balance of Payments and External Reserves

In the course of 2000, the STC considered the distortions exerted by the wide range of valuation criteria applied by European Union Member States for the compilation of FDI equity stocks. The lack of a single set of valuation rules was acknowledged as an important source for inconsistencies in the construction of the euro area aggregate. For this reason, the STC considered the provision of clearer guidance as a high priority, with a view to identifying common rules for the valuation of FDI equity stocks to which all Member States should converge in their contributions to the euro area aggregate.

At the time of deciding on the most appropriate valuation rules, the analysis of international standards was not fully conclusive. While both the IMF Balance of Payments Manual (5th edition) and the OECD Benchmark Definition of Foreign Direct Investment generally recommend the use of market (i.e. stock exchange) prices, in the absence of such market prices (i.e. for non-listed DI companies), other alternatives are admitted. Even the use of book values for the valuation of FDI in listed companies is not conclusively ruled out in either manual.[2]

Considering that most difficulties are linked to the valuation of FDI companies when their shares are not quoted on the stock exchange, the STC decided that the following criteria would be the basis for the valuation of the euro area inward and outward FDI equity stocks in the future:

- FDI in listed companies' shares shall be valued on the basis of stock exchange prices;
- FDI in non-listed companies' shares shall be valued on the basis of book values, assuming the lack of any appropriate market reference for these companies.

In defining these criteria, the STC felt that, whereas the concept of "stock exchange price" was straightforward, a common definition of "book values" was needed, notably to avoid asymmetries between assets and liabilities. Indeed, book values for outward DI could often be interpreted as accounting values in the investors' books (in many cases coinciding with "historical prices"), while for inward DI, stocks are usually valued on the basis of the domestic FDI company's own funds.

Therefore, the STC decided that the common definition would exclusively be based on the value of the FDI company's own funds. It was considered that the price recorded in the balance sheet of the direct investor (i.e. the acquisition/historical price) hardly reflects the evolution of the price of the company through time due to the strict valuation rules usually in place in accounting.

[2] Paragraph 377 of the BPM5 reads: *"Although this Manual, in concordance with the SNA, affirms the principle of using market price as the basis for valuation, it is recognized that, in practice, book values from the balance sheets of direct investment enterprises (or investors) often are used to determine the value of the stock of direct investment."*. This paragraph seems to implicitly admit this valuation and does not make any distinction between listed and non-listed companies.

The subsequent work consisted in finding out which accounts *on the liabilities side of the direct investment enterprise's balance sheet* should be considered when assessing the total value of the company based on its volume of own funds, i.e. its own funds at book value (OFBV). Then, the calculation of FDI equity stocks would consist of applying the percentage of ownership of each direct investor to the company's worth calculated this way. Following this approach, the valuation of DI stocks should show some consistency with the evolution of the true value of the company.

Book values should be understood as the % of ownership of the direct investor times the value of the DI company based on its volume of own funds, which should be calculated according to the following definition of OFBV:

- 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).

Moreover, in order to further improve euro area FDI statistics, the STC envisaged producing two memorandum items for the total (i.e. without sector or geographical breakdowns) inward and outward FDI equity stocks:

(i) FDI equity stocks on the basis of book values (for all types of FDI companies), mostly to ensure continuity in the time series; and

(ii) FDI equity stocks marked-to-market (for all types of FDI companies), mostly to provide users with some complementary information for analytical purposes and as a proxy for the reconciliation with financial accounts statistics (shares and other equities item).

For the practical implementation of all these proposals, euro area Member States should take the following steps: (i) split the reporting of the equities item within FDI in the euro area and FDI abroad between listed and non-listed companies; and (ii) report to the ECB FDI in equities of listed companies on the basis of both market and book values (following the agreed common definition of OFBV).[3] The valuation of FDI in listed companies on the basis of book values should be twofold: as direct input for the first memorandum item and for the calculation of ratios market value divided by book value, which could form the basis for the production of the second memorandum item.

After in-depth discussion, Member States identified several practical difficulties in carrying out these principles. Indeed, it was recognised that practical problems may already be affecting the compilation of FDI stocks at present. Some countries may have difficulties to apply the common definition of OFBV

[3] These requests only apply to step-2 aggregates. Step-3 breakdowns should only be provided using market values for listed companies and book values for non-listed companies. No rules have been specified for step-1 figures (i.e. national data).

especially in the case of FDI abroad due to the difficult access to the details required about non-resident FDI companies. The next section provides some indications on how other countries have managed to (or plan to) overcome such practical problems to implement these agreements.

Results of the questionnaire on valuation of FDI equity stocks

Following the fact-finding exercise on the collection of direct investment stocks (September 2000)[4], the sub-group designed a new questionnaire to investigate current practices of Member States and possible plans concerning the applicability of the STC decisions on valuation of FDI equity stocks. Twelve out of the thirteen participating countries sent the completed questionnaire. Ireland and Luxembourg, which did not participate in the work of the TF-FDI from its inception, were not questioned.

The main answers to the questionnaire are summarised in **Error! Reference source not found.**.

[4] See document ST/WG/BP/DISQUEST.DOC "Collection of direct investment stocks: outcome of the questionnaire", 30 October 2000

Table 1: Questionnaire on the valuation of direct investment stocks - Summary table

	Distinction between listed and non-listed companies		Application of some form of consolidation	Possibilty to provide stocks on a non-consolidated basis	Valuation of DI stocks in non-listed at book value	Application of the WG-BP&ER agreed definition of OFBV	Valuation of DI stocks in listed companies at market value	Source of information to compile marked-to market stocks
	Inward stock	Outward stock						
Belgium	Yes	No	Yes	Yes	Yes	Yes	Yes	Adjusted cumulated flows
Denmark	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Respondents
Germany	Yes (beginning with figures at end 2002)	Yes (beginning with figures at end 2002)	Yes	Yes	Yes	Yes	Yes (beginning with figures at end 2002)	Respondents (beginning with figures at end 2002)
Spain	Yes	No	Yes	No	Partially (inward stock in the MFI's sector)	Partially	Partially (inward stocks in the MFI's sector)	Stock exchange prices
France	Yes	Yes	No	-	Yes	Yes	Yes	Security database + other publicly available information
Italy	Yes	Yes	Yes	No	No (perpetual inventory method) Yes (FDI survey)	No (perpetual inventory method) Yes (FDI survey)	Yes/No (respondents can report book values if market values not available)	Perpetual inventory method + respondents
Ireland	Yes	Yes	Yes	No	No	Yes	Yes	Stock exchange prices
The Netherlands	No	No	Yes	No	Yes	Yes	Yes/No (respondents can decide for themselves wether they use book or market value)	Respondents
Austria	Yes	No	No	-	Yes	Yes	Yes (inward stock only)	Stock exchange prices
Portugal	Yes	Yes	No	-	Yes	Yes	No	-
Finland	Yes	Yes	Yes	No	Yes	Yes	Yes	Respondents
Sweden	No	No	Yes	No	Yes	Yes	No	-
United Kingdom	No	No	No	-	Yes	Yes	No	-
Greece	Yes	No	Yes	Yes	Yes	Yes	Yes	Stock exchange prices

Distinction between listed and non-listed companies

Nine countries (DK, ES, FR, IT, AT, PT, FI and GR) are able to (directly) distinguish between listed and non-listed companies for inward stocks and five countries (DK, FR, IT, PT, FI) for outward stocks. One country (DE) plans to make this distinction for both inward and outward stocks beginning with figures at end-2002. Three countries (NL, SE, UK) do not have any plans. One country (BE) uses a ratio based on the market capitalisation of listed companies compared to the total capitalisation of both listed and non-listed companies to provide inward stocks broken down between listed and non-listed companies.

Practical solutions

(i) Five countries, namely DK, IT, FI as well as FR and PT (for outward stocks) rely on information provided by respondents to make this distinction.

(ii) In the case of inward stocks, four countries (AT, PT, FI and GR) use registers of resident listed companies maintained by stock exchange authorities, at least for cross-checking purposes (FI).

(iii) Only two countries (IT, FR for inward stocks) use internal security databases to know about companies' status.

(iv) When the information is not provided by respondents and no register exists or is available (case of outward stocks), the distinction is made manually (e.g. AT) by means of internal security databases and publicly available sources (mostly financial press and stock exchange web sites) to identify listed companies

The TF-FDI considers that all these solutions may be deemed valid to obtain the split between listed and non-listed companies and, thus, no prioritisation among them is provided in this report.

As regards the proportion of listed companies out of the total direct investment stocks, few countries were able to provide data. The ratio of the number of listed direct investment companies to the total number of DI companies varies widely, from 0,7% to 12,2% at the end of 2000 (inward FDI stocks). In proportion of the total amount of the stock, the variance is even greater (from 0,8% to 25%). Similar results were found concerning the stock of outward FDI.

Application of the "consolidated system"

The possible use of consolidated accounts for the compilation of FDI statistics was extensively covered in the previous chapter. The questionnaire only raised the question of the application of the "fully consolidated system" or of any other form of consolidation by Member States.

Eight countries (BE, DK, DE, ES, IT, FI, NL, SE) say they apply, at least partially, the "consolidated system" as described in the OECD FDI Benchmark Definition of Foreign Direct Investment, but few give precise answers regarding their methodology. GR does not fully apply the FCS but, whenever indirect FDI relations are identified, they are taken into consideration in the FDI figures.

In some cases, consolidated data are compiled on the basis of accounting consolidation (e.g. for inward FDI in Finland). However, the extent to which this is the case, the principles underlying the concept of "consolidation" in each country and whether all these facts may constitute a problem of consistency in the European aggregates could not be investigated sufficiently in detail on the basis of the answers to the questionnaire.

Valuation of stocks in non-listed companies

All but three countries, namely IT, GR and ES (partially), say they are able to compile direct investment stocks in non-listed companies at book value, applying the WG-BP&ER agreed definition of own funds at book value. It was not clear to the countries though whether such a definition should apply to consolidated or to non-consolidated balance sheets. Hence different applications by countries may be a source of asymmetries. The clarifications provided through the previous two chapters should help overcome such asymmetries in the future.

Valuation of stocks in listed companies

Nine countries (BE, DK, ES, FR, IT, NL, AT, FI and GR) declare being able to compile, at least partially, direct investment stocks in listed companies at market value.

Practical solutions

(i) Four countries (ES for inward FDI stock in the banking sector, FR, AT and GR) use an individual valuation method based on stock exchange prices and, in the case of FR, the combination of an internal securities database + other publicly available information.

(ii) Four countries (DK, IT, NL and FI) rely on information provided by respondents to compile marked-to-market stocks, while one country (DE) plans to do so in the future.

(iii) In two cases though (IT, NL), it seems that respondents may report stocks at either book or market value depending on the available information, which could impede the compilation of consistent stocks using one or the other valuation method.

(iv) In three cases (BE, IT and ES partially), this valuation is made using a perpetual inventory method (stocks derived from adjusted cumulated flows).

The TF-FDI considers than (i) and (ii) can be deemed valid solutions, while (iii) and (iv) are not recommended

The two main obstacles for compiling marked-to-market stocks for listed companies are, first, the difficulty to identify listed companies among foreign direct investment companies and, second, the difficulty to gain access to stock exchange prices for these companies. The future Centralised Securities Database – CSDB – may however help to solve this problem, allowing an individual valuation of FDI stocks in listed companies.

Among countries that do not apply the STC decision to compile marked-to-market direct investment stocks for listed companies yet, three (BE, DE, ES) plan to change their collection systems. One country (PT) says it will rely on available sources and on new assessment exercises to comply. Other countries (NL, SE, UK) do not have any plans as regards this issue

Six countries (IT, BE, ES, NL, SE, UK) would have difficulties in providing FDI stocks on the basis of two different valuation principles, i.e. book value and market value, for listed companies. All of them stressed the additional costs such a requirement would imply. The next section presents a more detailed analysis on the feasibility of combining these two calculations for FDI in listed companies' shares.

National feasibility studies on how to compile FDI in listed companies' shares on the basis of both market values and book values

Introduction

One of the most significant difficulties declared by EU countries at the time of implementing the STC agreements on the valuation of FDI equity stocks was related to the collection of FDI in listed companies. The implementation of the STC agreements required that FDI in listed companies' shares should be valued twice, on the basis of both book values (based on the common definition of OFBV) and market values. For this reason, the TF-FDI investigated, on the one hand, how some countries may currently collect this information and, on the other hand, how the other countries would plan to change their collection systems to accommodate this request.

Some countries participating in the TF-FDI decided to carry out individual national feasibility studies (NFS) in order to determine whether collecting two valuations for FDI in listed companies was feasible and outline a tentative assessment of costs, if possible. For countries already collecting this information, the intention was to seek ideas on how this can be done and how costly/feasible it is.

Against this background, the countries which volunteered to carry out these feasibility studies were classified into three different categories, on the basis of their current state of play:

(i) Countries currently compiling FDI data for listed companies on the basis of both market values and book values. FI, DK, FR and GR (the latter for inward FDI) pertained to this group.

(ii) Countries not currently compiling both valuations, but with solid plans to do so in the near future. PT declared to be in this situation.

(iii) Countries neither compiling both values at present nor with concrete plans yet, but able to evaluate how feasible and costly it would be. BE and ES volunteered to prepare a joint assessment from this starting point.

The next subsections introduce the results of these NFS. At the end, a global assessment addresses some overall conclusions on the basis of the feedback reported by the participating countries.

(i) Countries currently compiling FDI data for listed companies on the basis of both market values and book values

Denmark

Implementation

When we began compiling book value as well as stock-exchange value (market value) for listed companies we only had to make a few changes in our procedures:

- add two fields in our database, one for direct investments in DK and one for Danish direct investments abroad
- add two fields in our questionnaire and our corresponding excel-file
- adapt the changes in guidelines concerning the questionnaire

In fact very small changes were necessary. The costs were small, because we produce an updated questionnaire, an updated excel-file and updated guidelines for the survey every year.

Practice

We ask the companies to provide us with information on the book value of FDI equities in all types of companies as well as on the market value of FDI equities if the company is listed. Information on ownership share, name of the stock exchange where the company is listed or the ISIN-code is not requested.

The questionnaire is sent to respondents in March every year.

Problems

We do not have very detailed information about the listed companies and where the company is listed. We rely on the respondents' information.

Future plans

We plan to change our collection system from reference year 2003 or 2004. Our plans include more detailed information about listed companies.

Finland

In the annual direct investment surveys, the data on both the book value and the market value of listed direct investment enterprises are collected. The published time series for FDI position data are still based on book values.

The data request for the market value was added to the inward and outward FDI surveys from the reference year 2000. The evaluation of the costs, related to the addition of market value data to the surveys, is not possible.

Inward investment

In the annual inward FDI survey, the resident listed direct investment enterprises report the total book value and the market value of equity capital and the direct investor's ownership percentage.

The survey is addressed only to the directly foreign-owned enterprises[5]. The equity capital at book value is based on the consolidated accounts of the directly foreign owned enterprise and the indirectly foreign owned enterprises are supposed to be covered this way. [6]

The register of resident listed companies maintained by the resident stock exchange authorities is used to check the quality of the survey data. Both the information publicly available on market prices of listed enterprises and their annual reports are used to check the quality of the survey replies. With a few years' experience, respondents seem to report the market value data with high quality.

As to inward investment for 2000, there were 23 resident direct investment listed companies which represented 8.3 per cent of the total inward equity stock at book value.

Outward investment

In the annual outward FDI survey, the resident direct investors report the total book value and the market value of the foreign listed direct investment enterprises and the direct investor's ownership percentage.

The survey covers both directly and indirectly owned direct investment enterprises and the data collection method gives us the opportunity to get data on the market value of both directly and indirectly owned listed direct investment enterprises.

The respondents can provide data on equity capital by individual foreign direct investment enterprise. They are also allowed to give consolidated sub-group replies, where one foreign direct investment enterprise is the parent enterprise of the sub-group. If the direct investment enterprise is listed, we insist on getting the sub-group reply with this listed enterprise as the parent company.

Within these few years, the respondents have not reported market value data with care. For the moment no appropriate quality control methods are available. We are dependent on how carefully the respondents want to reply. Only the quality of the data on very large investments mentioned in the financial press can be checked.

As to outward investment for 2000, there were 17 foreign direct investment listed companies which represented 7.9 per cent of the total outward equity stock at book value.

France

FR currently collects just book values from reporters. The compiler subsequently calculates market values using other publicly available sources. This method enables to compile two different values for FDI equity

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5 Therefore, it does not cover market value data of any possible foreign indirectly-owned listed enterprise. Such possible subsequent investments are supposed to be considered by the markets at the time of assessing the stock exchange price of the first-shot FDI company.

6 See previous chapter on consolidation.

stocks without increasing the reporting burden weighing on respondents. It however entails some shortcomings.

Current practices

The current process for compiling marked-to-market FDI stocks is not fully automated yet, but should be in the future. Methods differ for inward and outward FDI stocks.

● Inward stocks

Data on inward stocks are compiled using various databases, first to identify direct investment companies and then to get their accounting data. There is no specific stock survey.

The population of resident direct investment companies at the end of a given year is defined as the population at the end of the previous year, plus resident companies that have been acquired by non-resident direct investors during the year, minus direct investment companies that have been sold by their non-resident direct investors. A database of resident direct investment companies, including data on shares of ownership, is maintained by the Balance of Payments Directorate of the Banque de France.

Once the whole population of resident direct investment companies has been identified, balance sheet data are mostly downloaded from an internal database on French companies maintained by another Directorate of the Banque de France. These data are used to compile inward direct investment stocks at book value.

The distinction between listed and non-listed companies is currently made manually, by using a security database and other publicly available sources (mostly financial press). The possibility to use the national identification number of each French company (“SIREN”) in an automated way to search for the ISIN code of the company’s shares (when it exists) has been investigated and will be implemented in the data processing system in order to be operational at the end of 2004. When a company has been identified as listed, its market value is retrieved from the above-mentioned security database.

● Outward stocks

Outward direct investment stocks are collected via an annual survey conducted by Banque de France branches, which gather information on companies located within their respective areas. Respondents are asked to provide us with the book value of their foreign affiliates, following the common definition of OFBV agreed by the WG-BOPER.

The distinction between listed and non-listed companies is here again made manually, on the basis of the names of the foreign direct investment companies and using various sources (security database, financial press or stock exchange web sites). Since this method is both time-consuming and imperfect, the possibility to collect information on the status (listed/non listed) of the direct investment companies is currently under consideration.

When a company has been identified as listed, its market value may be obtained from the above-mentioned sources.

Advantages / shortcomings of these methods

● Advantages

The system enables to compile both book and market values for listed companies.

Very limited information is required from respondents. In fact, nothing is directly collected from resident companies to compile inward direct investment equity stocks.

● Shortcomings

The distinction between listed and non-listed companies is both time-consuming and imperfect. Because it is made manually, thresholds are applied.

Future plans: possible ways of improvement

● Inward stocks

The process of distinguishing between listed and non-listed companies will be automated in 2004, using the link between the identification number of French companies ("SIREN") and the ISIN code in the securities database.

● Outward stocks

The new survey (which will be operational as of 2004) will contain a question on whether or not the foreign direct investment company is listed. Moreover, the survey will ask directly two values.

Greece

In the annual direct investment survey (as of data corresponding to end-1997) the respondent enterprises provided information only on the basis of book values. GR started compiling both book and market values for inward FDI on listed companies from end-2001 positions.

The whole process is fully automated and consists of, firstly, the identification of listed FDI companies and, subsequently, a special computer program is applied taking into account the end of period stock exchange prices and the equity capital information provided by respondents.

The set-up cost and the operational cost for calculating market values were small since these changes were part of a general project of computerising the process of collecting and processing the i.i.p. data. So far there no special problems have been encountered in the whole process.

As far as outward FDI data is concerned, such information is also collected through an annual survey using a business register. The respondent enterprises report only book values and there is no distinction made between listed and non-listed companies but there are plans to manually identify listed companies.

(ii) Countries not currently compiling both valuations, but with solid plans to do so in the near future

Portugal

Annual information on both book and market values is collected through the FDI stocks surveys. Concerning the series available for market valuation, no stability can be found for the outputs obtained since the type of information requested has varied along the years. For the time being, no control has been made to the answers provided.

Recently, in the context of the joint-work developed within the Banco de Portugal for the Working Group on Unquoted Shares (WG-US), and with a view to obtaining a first assessment regarding the practical implementation of the STC recommendation the TF-FDI is dealing with, we have tried to develop a test exercise on the answers provided under the last surveys and some additional sources of information were evaluated as well.

Assets and liabilities were assessed differently, provided their specifications, namely by ranking in a different way the sources of information.

Inward direct investment

Information on the market value and the percentage of participation was asked in 2001, under the last inward stocks survey. Only banks and insurance companies were approached with this aim, for data concerning 1999 and 2000. Replies to these questions were never checked before, and therefore, for the time being, no use was made of them.

Recently, under the test exercise made for the WG-US, a new source of information was additionally tested for gathering the market value of direct investment enterprises: information on quotations made available by the Euronext Lisbon (Stock Exchange).

As a result of the comparison exercise made the last month, we can say that answers provided in the survey by banks and insurance companies for their market value are of quite good quality, when compared with information provided by the Stock Exchange.

• *Future plans:*

- This issue was only tested once;
- Quality control on the replies to this type of questions in the FDI survey must be improved;
- A methodology of production needs to be defined;

- This type of questions still need to be extended for non-financial enterprises and re-defined for banks and insurance companies;
- It requires the definition of new procedures in terms of regular production;
- Supplementary sources of information should be taken into account, namely news, annual reports of companies and publicly available information on market prices.

Outward direct investment

Through the outward stocks survey, the resident direct investors report information on the market value of their direct participation abroad, quotations, number of owned shares and percentage of participation. This information is supplied to the Banco de Portugal since 1998. For the time being, replies to these questions were not carefully checked, provided no supplementary information was available to this end.

Regarding the market valuation of direct investment enterprises located abroad, use was also made recently of the information available for some European Indexes, namely for the Stoxx 600 companies and the Stoxx 50 index companies, which were disseminated under the test exercise of the WG-US. Additionally, some further investigation was made on the information available for some stock exchange markets of countries where there is a significant stock of Portuguese direct investment.

Future plans:

- Further investigation is needed on the way how to proceed;
- Accessibility to additional stocks exchange markets should be studied. However, efforts will be concentrated on the most important markets evaluated in terms of Portuguese FDI;
- Quality control and check procedures have to be defined;
- Supplementary sources of information should be taken into account, namely news, annual reports of companies and publicly available information on market prices.

Additional comments (for both Inward and Outward)

The test exercise was performed on the direct participation in equity. According to the directional principle, there are reverse relationships on equity, which were, in the exercise, excluded. Being however insignificant, further definition is needed on this issue.

The information collected through the FDI stocks surveys is based on the accounts of the resident direct investment company, for inward FDI, and the non-resident direct investment company, for outward FDI, the last being reported by the resident direct investor.

The book value of either inward or outward FDI is calculated from the direct participation, as collected through FDI stocks surveys. No indirect relationship is covered. Consolidated accounts are also requested in the surveys for both outward and inward FDI, but no use is made of them.

(iii) Countries neither compiling both values at present nor with concrete plans yet

Belgium

Possibilities for the collection of the necessary information

- Direct Investment in BE

In the survey it could be questioned whether an enterprise is listed and if so, where it is listed, for instance: - Is the resident company listed? Yes ☐ No ☐ - On which stock exchange ☐ Euronext ☐ Nasdaq Europe ☐ Elsewhere namely....................

The market value can be calculated based on the number of shares (cf. CD-ROM "Data on standardised annual accounts") and the stock exchange value (financial papers).

- Direct Investment abroad

- Is the non-resident company listed? Yes ☐ No ☐ - On which stock exchange? .... - Number of shares? .... - Stock exchange value on the last day of the reference year ? ....

Timing

In April 2003, the survey is sent to collect data related to the reference year 2002.

Problems

It will be difficult to check whether or not a company is listed in the case of direct investment abroad.

Double reporting by listed companies

As mentioned before, the market value of listed companies can be calculated based on the extra data that will be asked in the future. In fact, listed companies do not really have to double report but report as in the past (just book values) and deliver some extra information so that we can calculate the market value ourselves.

Spain

- Direct Investment in ES

In the absence of an FDI survey, FDI stocks in ES for non-financial sectors are currently being compiled by accumulating b.o.p. flows.

Split between listed and non-listed companies:

"Other Sectors". We plan to use the information provided by our future new data collection system on tradable securities.
"MFIs". We already have this information available from accounting statements.

Double valuation:

"Other Sectors". Only the market value would be available.
"MFIs". Market value and book value would be available.

- Direct Investment abroad

Split between listed and non-listed companies:

"Other Sectors". We plan to use the information provided by our future new data collection system on tradable securities.
"MFIs". Information available from accounting statements.

Double valuation:

"Other Sectors". Only the market value would be available.
"MFIs". Market value and book value would be available.

Timing

For the MFI sector, the new sources of information will be available next year. The processing, checking and analysis of the new data would require additional time and effort. In the case of the new data collection system for tradable securities, the data will not be available before January 2004.

Problems

The new system for tradable securities will only provide information on market values. We have no survey implemented. This makes almost impossible to have information on book values related to the non-financial sector of the economy. The evaluation of the costs and timing of implementing an FDI survey is, at the moment, not possible.

Conclusions

The six countries which conducted the NFS may fairly represent the situation of all euro area countries concerning the eventual collection of data on FDI in listed companies on the basis of two different valuation methods. Some of them already collect this information, while some others will have to introduce some changes in their collection systems in order to cope with the need to produce the necessary data.

The main lessons from the countries currently compiling this information can be summarised as follows:

- FR is currently the only country trying to compile FDI stocks both at book value and market value without requesting two values from respondents and by using other available information (security database and financial press). This process of compiling FDI stocks at market value is however imperfect and time-consuming, as it is not fully automated. For that reason, FR will modify its collection system for outward FDI in order to collect directly the necessary information. For inward FDI, the treatment will be automated. Both systems will be available at the end of 2004.
- Two countries directly collect the information on both book and market values from reporters, by including additional questions in their FDI surveys. The cost of introducing such additional questions was not deemed too high (although FI could not provide a precise assessment).
- For inward FDI, information collected from reporters can be cross-checked with data gathered from the domestic stock exchange.
- Most difficulties are linked to the implementation of plausibility checks to the stock exchange prices collected from reporters for non-resident direct investment companies (i.e. for outward FDI in listed companies), due to the lack of direct access to information on foreign markets' quotations.

As regards the country not currently collecting this information but with plans to do so in the near future (namely PT), the main conclusions could be the following:

- Annual information on both book and market values can be collected through the FDI stock surveys.
- For inward direct investment, information on the market value and the percentage of participation can be collected as part of the surveys.
- The results can be checked with information on quotations in the domestic stock exchange. Such checkings have revealed that the answers provided in the survey are of good quality.
- For outward direct investment, the survey may get information on the market value of direct participation abroad, quotations, number of owned shares and percentage of participation.
- Answers are not so easy to check due to the lack of supplementary information. The use of European Indexes as well as information from additional stock exchange markets could be considered to this aim.

- Supplementary sources of information should be taken into account, namely news, annual reports of companies and publicly available information on market prices.
- Reverse relationships on equity could constitute a problem

Concerning countries neither currently collecting this information nor with concrete plans, the following conclusions may summarise the outcome of the NFS conducted by the participating countries:

- The use of current information sources should be promoted to the extent possible
- The most feasible way of compiling the additional information required could be the introduction of additional questions to the FDI surveys. For inward FDI, this additional information could be combined with data gathered from the domestic stock exchange.
- In the absence of FDI surveys, the use of MFIs' balance sheets may be an alternative solution for the MFI sector's FDI. Direct investment by the "other sectors" would still require an alternative solution, which does not seem straightforward without pure FDI surveys.

From the outcome of the NFS conducted by the three groups of countries, the TF-FDI adopted the following conclusions and recommendations:

- The collection of FDI equity stocks for listed companies on the basis of two different valuation methods (market values and book values on the basis of the common definition of OFBV) can be deemed feasible for countries running FDI surveys
- For those countries, it does not imply adding too much to costs
- The most feasible way to collect this information would be the addition of supplementary questions to the FDI surveys
- For outward FDI, where no access to quotations in foreign stock exchanges may be possible, resident reporters should be directly questioned through the FDI survey
- For those countries that, in the absence of FDI surveys, would require collecting additional information, the use of current information sources could be promoted to the extent possible as a temporary solution until FDI surveys may be introduced and produce alternative results.
- For inward FDI, the availability of stock exchange quotations could be used as either an additional information source aimed at reducing respondents' burden or to double-check the accuracy of the information gathered from respondents