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**DEALING WITH COMPLEX AND CHANGING COMPANY STRUCTURES AND
TRADING PRACTICES IN COMPILING FOREIGN DIRECT INVESTMENT AND
BALANCE OF PAYMENTS RELATED STATISTICS IN IRELAND**

Prepared by John Fitzpatrick¹, Central Statistics Office (CSO), Ireland

INTRODUCTION

1. This paper examines a small number of practical issues encountered by CSO, Ireland in compiling its foreign direct investment (FDI) and balance of payments (BoP) related statistics. In order to facilitate this examination, a short description of the importance to Ireland of inward foreign direct investment, as well as other types of investment, is given first. This is followed by a very brief reference to Ireland's FDI and BoP collection and compilation system. The selected issues which are the main focus of this paper are then described.

BACKGROUND AND CONTEXT

2. Over the last thirty years or so, the Irish Government has operated a very successful policy of attracting foreign investment into Ireland and it continues to do so. As a result of tax incentives, simplified and effective administrative procedures, the availability of a young and

¹ Head of Balance of Payments Analysis and Dissemination Division, Central Statistics Office (CSO), Ireland

well-qualified work force and other relevant factors (Ireland's membership of the European Union and access to its markets, geographical location, etc.), many multinational enterprises set up operations in Ireland. The resulting investment has essentially resulted in the development of three major sectors: manufacturing, non-financial services and financial services, with a consequent positive impact on the scale and quality of employment.

3. To date a significant portion of the capital inflows into Ireland have taken the form of what is known internationally as foreign direct investment (FDI). This is a type of investment whereby a foreign investor – the direct investor (DI) establishes a long-term interest in, and a significant degree of influence over an enterprise – the direct investment enterprise (DIE) - located in a different economy to that of the DI. Under the international statistical standards, a minimum of 10% equity investment by the DI in the DIE is taken as evidence of the existence of direct investment. Most of the foreign-owned DIEs in Ireland are engaged in hi-tech manufacturing or service technology. This covers manufacture of computers and computer components as well as production of software, provision of internet services etc. Also included is the manufacture of pharmaceuticals and other chemicals (mostly in bulk form) as well as drinks concentrates.

4. Over the last twenty years there also has been increasing direct investment into financial service enterprises operating from the International Financial Services Centre (IFSC). The IFSC was established in Dublin under specific legislation in 1987 with a view to creating a significant international financial services industry for Ireland. The enterprises set up to engage in international financial service activity cover the following broad activities:

- collective investment (e.g. mutual funds, unit trusts, and related vehicles for pooling of investment)
- banking
- life and non-life insurance and re-insurance
- treasury and risk management
- asset financing, leasing, securities trading, derivatives trading, brokerage, etc.

5. While some of the foreign capital inflows into IFSC-based enterprises was in the form of direct investment, much of it was in the form of portfolio investment and other investment, as defined in the IMF's Balance of Payments Manual, 5th Edition (BPM5). Some enterprises also engage in financial derivative transactions. In the case of collective investment enterprises (mostly IFSC-located mutual funds, unit trusts, etc.), the inward flows of capital resulted from the pooling of investments by a large number of investors, none of whom met the 10% equity threshold for FDI. The acquisition of fund units/shares by these non-resident investors was therefore recorded as portfolio investment. As the outward investment of these Irish-resident funds was almost exclusively concentrated on the acquisition of foreign equity and debt (bonds and notes and money market instruments), and as individual funds did not meet the fundamental criteria for (outward) FDI, the outflows of this capital were recorded as outward portfolio investment.

6. Other types of foreign-owned financial enterprises operating in Ireland (engaged in banking, insurance services, asset financing, leasing, etc.) have been regarded as inward FDI enterprises but, apart from inward equity transactions/positions liabilities, they may also have loan or deposit liabilities as well as trade payables and other liabilities. Their inward non-equity

transactions and positions are categorised as other investment. On the outward side, the investments of these enterprises may be categorised to direct investment, portfolio investment, other investment and financial derivatives as appropriate.

7. Table 1 shows Ireland's international investment position (IIP) liabilities (i.e. its end-year stock of liabilities to non-residents), broken down by type of investment.

Table 1. Ireland's International Investment Position (IIP) Liabilities, 2005
(€billion)

| | |
|-----------------------|-------|
| Total IIP Liabilities | 1,642 |
| of which: | |
| Direct Investment | 141 |
| Portfolio Investment | 948 |
| Other Investment * | 554 |

* Including financial derivatives

8. It should be stressed that Ireland also exhibits very strong outward investment overall and its IIP assets at the end of 2005 were of a similar magnitude at €1,598 billion.

9. Table 2 shows Ireland's total IIP liability status at end-2005 compared to a selected subset of countries, when referenced against GDP.

Table 2. International Investment Position (IIP) Liabilities, 2005 as a ratio of GDP – Selected countries

| Country | Ratio |
|----------------|--------|
| Luxembourg | 106.47 |
| Ireland | 10.19 |
| Netherlands | 5.72 |
| Switzerland | 4.67 |
| United Kingdom | 4.11 |
| Belgium | 4.07 |
| France | 2.29 |
| Denmark | 2.08 |
| Spain | 1.80 |
| Germany | 1.71 |
| New Zealand | 1.44 |
| Norway | 1.42 |
| Italy | 1.18 |
| United States | 1.09 |
| Japan | 0.65 |

10. Table 3 shows Ireland's inward FDI position status compared to a selected subset of countries when referenced against GDP.

Table 3. Inward Foreign Direct Investment Position, 2005 as a ratio of GDP – Selected countries

| Country | Ratio |
|----------------|--------------|
| Luxembourg | 2.03 |
| Belgium | 1.32 |
| Ireland | 0.87 |
| Netherlands | 0.75 |
| New Zealand | 0.51 |
| Switzerland | 0.49 |
| Denmark | 0.47 |
| United Kingdom | 0.39 |
| Canada | 0.32 |
| France | 0.31 |
| Australia | 0.30 |
| Germany | 0.25 |
| Italy | 0.13 |
| United States | 0.13 |
| Japan | 0.02 |

11. As can be seen from these tables, the Irish economy has a strong propensity to attract various types of inward foreign investment.

CSO'S BOP COMPILATION SYSTEM

12. In order to compile the FDI, BoP and IIP statistics for Ireland, CSO uses a statutory survey system supplemented by internal and external administrative and other data. The latter includes:

- the official foreign trade (merchandise) statistics modified or adjusted by CSO's BoP Division for BoP statistical purposes,
- data from government departments on current and capital transfers, government services, the national debt and related income flows, data on compensation of employees, etc.

13. Data collected for enterprises by survey cover imports and exports of services, income and investment flows as well as the associated opening and closing financial stock positions for the reference period. Data on valuation and other changes which, together with transactions, account for the difference between the two positions are also collected. In addition, a geographical breakdown by country of residence of counterpart is collected. A standard form is sent to those manufacturing and non-financial enterprises surveyed. For financial enterprises, the collection forms are customised to reflect the activities and accounting arrangements of five broad categories of financial services: collective investment; life insurance and re-insurance; non-life insurance and re-insurance; stand-alone treasury; banking and other financial services. In essence, all survey forms are collecting the same type of transactions and stocks data on a comprehensive basis. Efforts are made to ensure in so far as possible that data are collected and compiled in accordance with the international statistical standards and a large degree of success is achieved. In addition, the data collected serve not only BoP related statistical needs but also those of National Accounts and Financial Accounts in that resident-to-resident transactions and

positions are also collected. In compiling all of these statistics across the statistical divisions responsible, the CSO ensures in so far as possible that the results for the larger multinational enterprises are consistent over the different domains (production, turnover, imports, exports and profits). In this way, the preparation of the GDP and GNI results are considered to be as robust as possible.

14. While the data provided by the great majority of survey respondents is considered to be of good quality, there are some problem cases. In the course of its work, the CSO has encountered a number of compilation issues which, in the first place, can be difficult to detect, and, secondly, can be difficult or slow to resolve.

SPECIFIC ISSUES ENCOUNTERED

15. This paper (and a related paper² for this Seminar) is largely focussed on a small number of specific practical issues experienced by CSO in compiling international trade, investment and income statistics in the context of increasing globalisation. The selected issues dealt with broadly cover:

- the existence and residency of statistical institutional units.
- interpreting and understanding the data provided by multinational corporations in terms of their ever-changing structures, trading practices and accounting practices
- treatment of goods for processing (tolling); commissionaire trading
- the expanding phenomenon of recording in the compiling country turnover generated abroad, expenses incurred abroad and profits arising; the issue of the treatment of merchanting.

1. Statistical institutional units and related matters

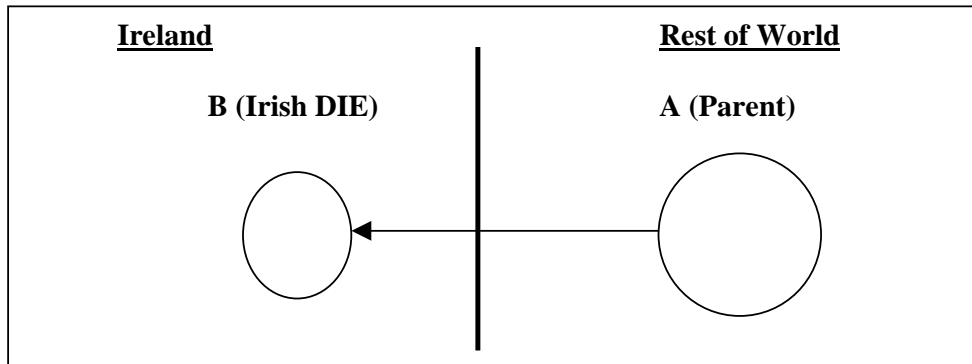
16. An effective statistical register of resident enterprises and the correct determination of the existence and residence of a statistical institutional unit are crucial to reliable BoP and FDI compilation. In Ireland, the incidence of foreign direct investment and inward investment generally has already been highlighted. The range of company structures that CSO has to deal with, and the statistical significance of these enterprises in terms of investment flows/positions, merchandise and service trade, and income flows, are important factors in the compilation of the statistics involved. The trading and income figures for even one large foreign multinational enterprise located in Ireland can have a major impact on the overall BoP, FDI and national accounts (GDP and GNI) aggregates. If the information available to the CSO for such a company is incorrect then the resulting distortive effect on the figures can be very significant.

17. While the international statistical standards (SNA, ESA) for the definition of an institutional unit are used by the CSO as objectively as possible, there are times when the final determination of the existence and residence of a statistical institutional unit is subjective to some degree. Traditionally, foreign multinational enterprises tended to set up relatively straight-forward structures whereby a foreign parent, A, established a physical manufacturing or service enterprise, B, in Ireland i.e. as evidenced by premises, plant and equipment, employment, etc. B

² The Irish approach towards treatment of merchanting and related transactions

could either be a branch of the foreign parent or a subsidiary (generally wholly owned). If B was set up as a branch it would not be incorporated in Ireland; if set up as a subsidiary it would normally be incorporated in Ireland. Figure 1 describes this simple situation.

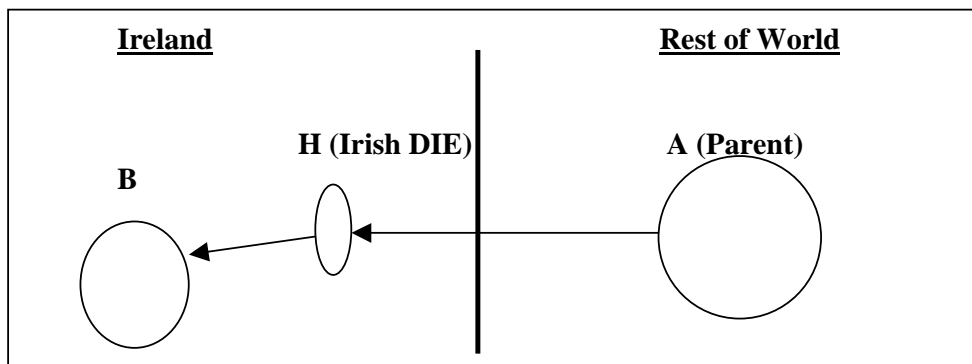
Figure 1. Simple example of inward FDI into Ireland



18. Assuming that the CSO's statistical register of enterprises was adequate and that the regular survey operation was effective, then the appropriate investment flows and positions as well as the relevant trading and income flows would be captured and correctly recorded with correct geographical attribution.

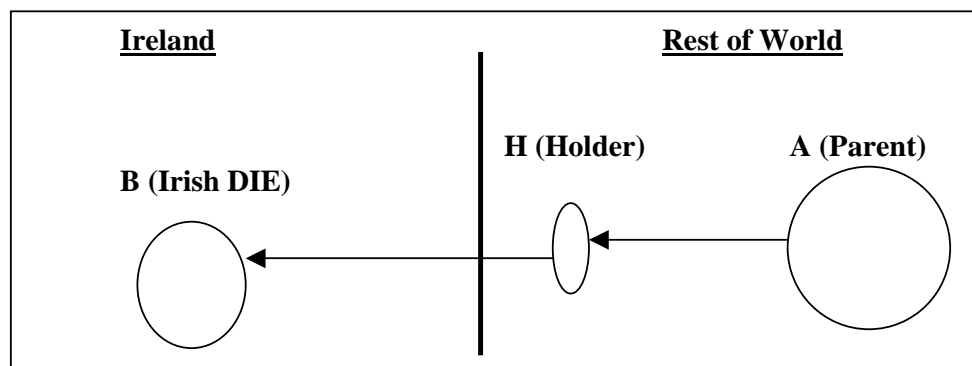
19. More recently, there has been a tendency to set up at least one intermediate holding company (H) in between the ultimate parent and the Irish operation(s). Different structural arrangements can apply to the holding company (ies) and to the physical DIE in Ireland. Figure 2(a) shows the scenario where the intermediate H is incorporated in Ireland and tax resident in Ireland.

Figure 2(a). Inward FDI into Ireland via intermediate Irish holding company



20. Figure 2(b) shows the same scenario but with the holding company located abroad (either in the same country as A or in another country).

Figure 2(b). Inward FDI into Ireland via intermediate foreign holding company



21. Again assuming both the statistical register and survey systems to be intact, the relevant data can be captured and recorded correctly with correct geographical attribution on an immediate counterpart basis.

22. Moving to a slightly more complex scenario, if H is incorporated in Ireland but is deemed to be tax resident abroad and H owns B, then the following issues (at least) arise:

- (i) Is H a statistical institutional unit resident in Ireland or abroad?
- (ii) If H is deemed to be resident abroad, what is the country of residence of H?

23. If H is deemed to be an institutional unit in accordance with the international standards, a decision must be made concerning the residency of H. If it is deemed to be a resident of Ireland, then the scenario reverts back to that of Figure 2(a) and the relevant data can be recorded and attributed. If H is deemed to be a non-resident of Ireland then the scenario in Figure 2(b) applies.

24. If an incorrect residency decision concerning H is made by the compiler, then the following possibilities arise:

A. If H is taken to be a resident of Ireland when it is not:

- then transactions/positions between B and H are assumed to be resident-to-resident, and are incorrectly excluded in BoP and FDI statistics of Ireland.
- transactions/positions between H and A (the parent) are assumed to be resident-to-nonresident, and are incorrectly recorded in BoP or FDI statistics of Ireland.

25. This may not be a major problem where H is simply an intermediate through which flows/positions between A and B occur. Incorrect geographical allocation will be the result if the foreign country of residence of H is different to that of A. However, if H acquires funding in Ireland or elsewhere and on-lends to B then greater complexities arise and the magnitude of incorrect recording in terms of the amounts involved and the geographical allocation increases.

B. If H is taken to be a foreign resident when it is a resident of Ireland:

- then transactions/positions between B and H are assumed to be resident-to-nonresident, and are incorrectly recorded in BoP or FDI statistics of Ireland.
- transactions/positions between H and A (the parent) are assumed to be nonresident-to-nonresident, and are incorrectly excluded from Ireland's BoP or FDI statistics.

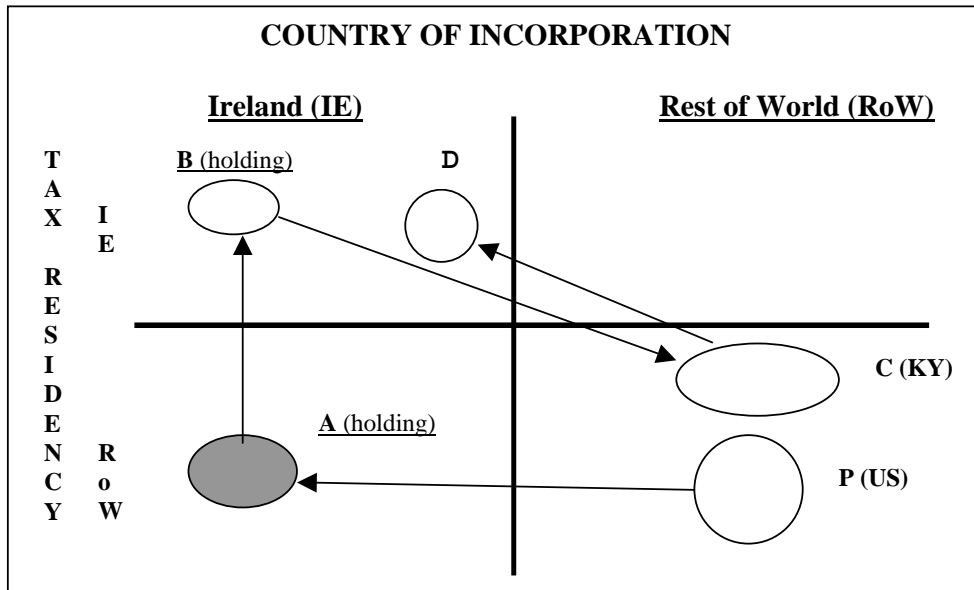
26. Again, this may not a major problem where H is an intermediate through which financial flows/positions between A and B occur. Incorrect geographical allocation will be the result if the foreign country of residence of H is different to that of A. However, as in the other scenario, if H acquires funding in Ireland or elsewhere and on-lends to B then similar complexities arise and the magnitude of incorrect recording in terms of the amounts involved and the geographical allocation increases.

27. The contrary situation where H is a tax resident of Ireland but is incorporated abroad can have corresponding consequences. In addition, the investment intermediate H may have extensive foreign direct investments, so its correct classification as resident or foreign is essential.

28. The situation can become slightly more complex if B (the manufacturing or service-producing FDI enterprise located in Ireland) is incorporated in Ireland but tax resident abroad or vice versa. However, the treatment generally resolves satisfactorily in that where B has premises, employment, activity, etc. it will be an institutional unit resident in Ireland and the relevant statistics can be recorded as appropriate. In saying this, the important assumption is made that the CSO is fully aware of the situation and has been provided with all the relevant information at the time the data are being collected and compiled. Despite regular and frequent contact with many large enterprises, a small number of cases occur where the correct information only comes to light at a much later date. This can be due to respondents' carelessness in failing to supply correct information at the outset or their not being fully aware of the situation until later. The consequence is that the distortive impact on the resulting statistics can be significant.

29. In the following example, A is a holding company owned by a US parent P. A is incorporated in Ireland but is tax resident in the Cayman Islands. A owns another holding company B, incorporated in Ireland and tax-resident in Ireland. B owns a company abroad, C, which is incorporated in the Cayman Islands and is tax-resident there also. C has a branch, D, in Ireland which has premises, employment, activity, etc. Figure 3(a) describes the situation.

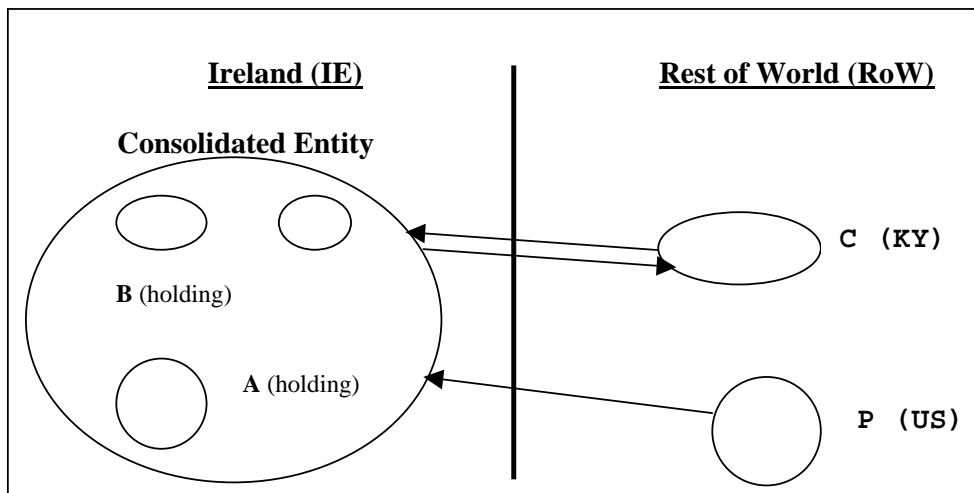
Figure 3(a). Inward FDI – Country of Incorporation/Tax-residency



30. Being able to correctly record the flows and positions here depends largely on how A is treated. Two scenarios can arise in compiling the data for Ireland:

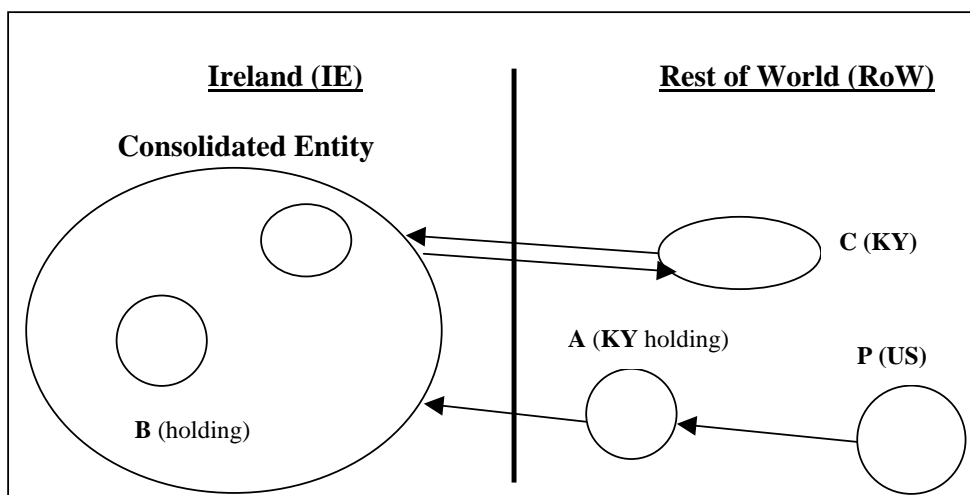
- **if A is treated as an institutional unit resident in Ireland** then it is an inward FDIE of P (US). A's Irish subsidiary B (an Irish-resident institutional unit) has a subsidiary (an outward FDIE), C, in Cayman. D (C's branch in Ireland) in turn is an inward FDIE of C. Reporting for A, B and D as individual resident enterprises may occur. However, as D (the Irish branch) has a real physical presence in Ireland, it and the two holding companies A and B might be consolidated to simplify reporting of the inward (from US and KY) and outward (to KY) FDI transactions and positions between Ireland and the RoW. Either approach should essentially lead to the same result (see Figure 3(b) for consolidated scenario).

Figure 3(b). FDI treatment (assuming consolidation in Ireland data)



- if A is treated as an institutional unit resident abroad then B, its Irish subsidiary, is an inward FDIE of A (KY) and indirectly of P(US). B (an Irish-resident institutional unit) has a subsidiary (an outward FDIE), C, in Cayman. D (C's branch in Ireland) in turn is an inward FDIE of C. Reporting for B and D as individual resident enterprises may occur. However, as D (the Irish branch) has a real physical presence in Ireland, it and the holding company B might be consolidated to simplify reporting of the inward and outward FDI transactions and positions between Ireland and the RoW. Either approach should essentially lead to the same result (see Figure 3(c) for consolidated scenario).

Figure 3(c). FDI treatment (assuming consolidation in Ireland data)



31. The difference between the two treatments of A basically seems to resolve to a difference in the geographical allocation of part of the inward investment into Ireland i.e. whether it is allocated to US or to the Cayman Islands. This is obviously important for any geographical analysis, particularly so when International Organisations are showing FDI results for the geographical areas which they cover. However, further significant complications can arise if A:

- provides funding (e.g. debt) to Irish residents or to non-residents of Ireland, or,
- receives funding from Irish residents or from non-residents of Ireland.

32. The correct recording and geographical allocation of such funding can present problems.

33. In the scenarios outlined, the major overall compilation issue is that the CSO may be unaware of the facts for quite some time. Statistics compiled in the absence of all the relevant facts are subject to some distortion. This can be significant at times and can give rise to sizeable revisions. However, if the actual facts never come to light then the distortions remain undetected and uncorrected.

2. Changing structures, trading practices, accounting practices, access to accounting data and related matters

2.1 Changing structures

34. Foreign-owned enterprises located in Ireland frequently change their legal structures. For example, a foreign-owned subsidiary called A incorporated in Ireland and with visible presence (premises, employment, activity, filing of accounts, etc.) can change its name to AA and enter into a partnership with a foreign affiliate B, the partnership being called A. The partnership A can then transfer all its assets and liabilities to AA. A later goes out of existence and AA changes its name back to A. Figure 4 describes this diagrammatically.

Figure 4(a). Inward FDI – changes in name/legal status - INITIAL SITUATION

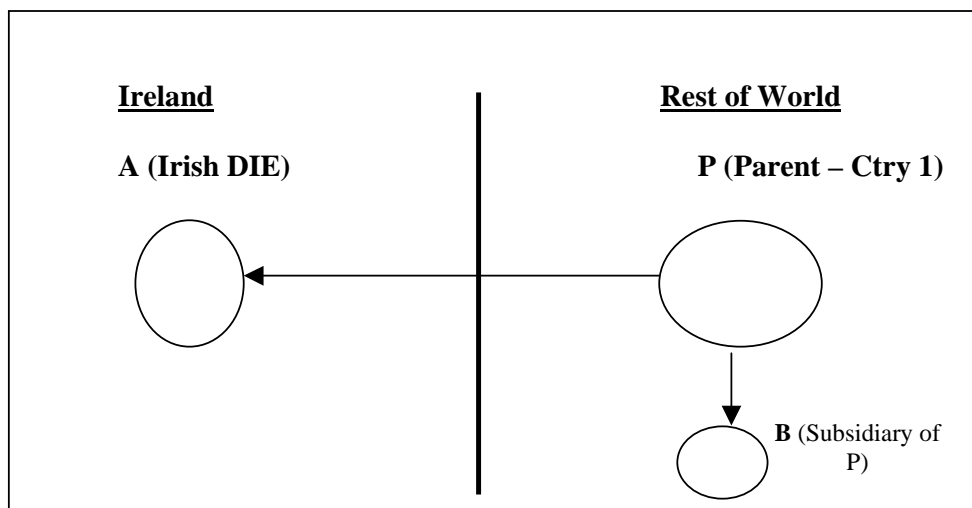
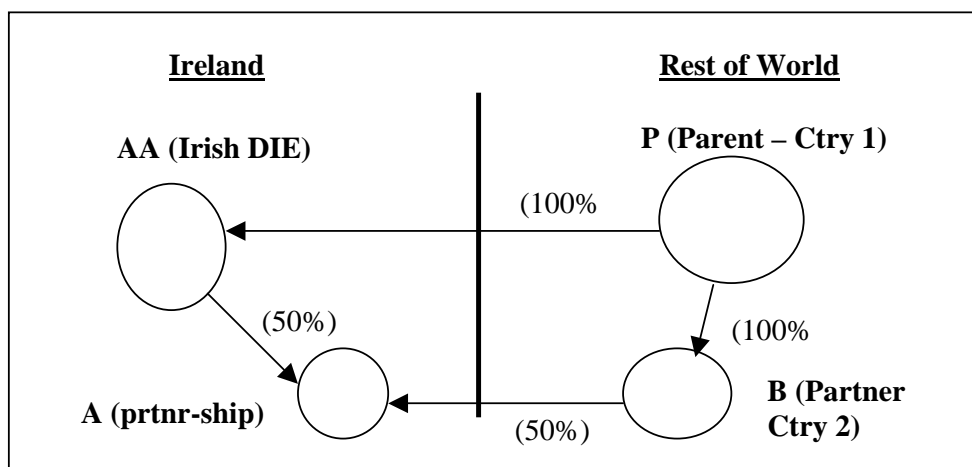
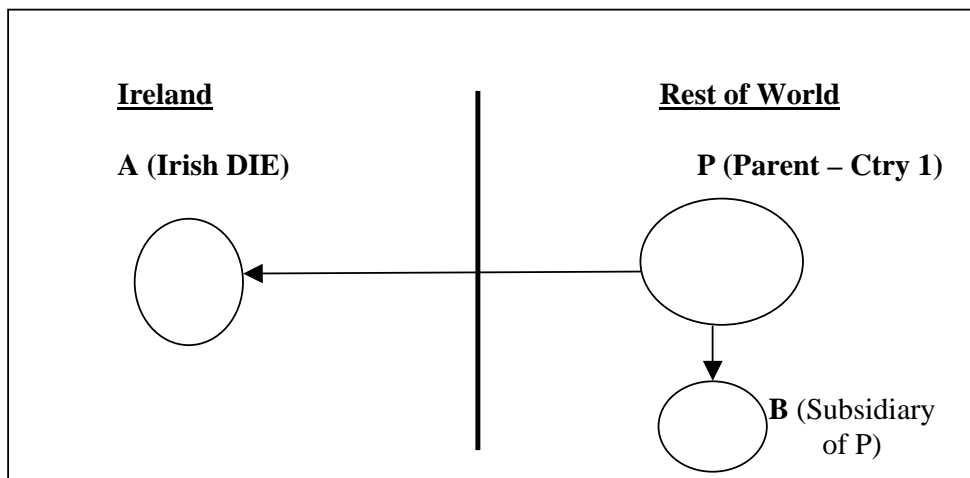


Figure 4(b). Inward FDI – changes in name/legal status - INTERMEDIATE SITUATION



35. Following the transfer of all A's assets and liabilities to AA, A ceases to exist and AA changes its name to A, i.e. the structure reverts to the original.

Figure 4(c). Inward FDI – changes in name/legal status – ‘FINAL’ SITUATION



36. It would appear that a possible reason for such a structural change is that a partnership may be a convenient and flexible arrangement for distributing not only its profits but also its equity if desired. Frequently, changes of this nature are decided outside Ireland and CSO's survey contacts may not be aware of the reasons.

37. If the transition shown above occurs within a very short period (say one quarter) and is not known to the compiler, the statistics for that period only will be affected. If it covers a longer period (say two years) and the transitional step is not known to the compiler until after the two years then the relevant statistics (investment flow, stocks and income) will be affected. The distortions caused (mostly geographical) can be very significant in some cases (hundreds of millions of euro for income, billions of euro for investment flows/positions).

2.2 Trading practices

38. Some FDIEs in Ireland use what they call a 'commissionaire' trading model. Generally, the Irish operation produces goods which it sells abroad to a final customer. One of the Irish FDIE's affiliates abroad acts as a selling agent but never takes ownership of the goods. The affiliate receives a fee (commission) from the Irish operation for its selling services. The value of the goods exported from Ireland reflect the production and other local costs in Ireland and also include the costs and margin of the selling agent. The Irish FDIE's margin is also included.

39. This scenario can reach extreme proportions in relation to software production. The Irish FDIE may employ relatively small numbers of staff duplicating the software but, as the 'principal' entity involved in an international market (often covering Europe, the Middle East and Africa) it records in its books all of the turnover and costs relating to that market. If this arrangement suddenly changes and an affiliate in another country becomes the principal, then there can be a major impact on the sales figures and the profits without necessarily any material change in employment levels or the physical dimensions of the enterprise. Such changes in

trading arrangements appear to occur for tax optimisation purposes.

40. Irish enterprises also engage in ‘tolling’ which involves the movement of goods across national boundaries for further processing (“tolling”) without the goods changing ownership until they are in a finished state. At this point the goods are sold to the final customer. Goods exported from Ireland for tolling generally cover chemicals and pharmaceuticals. The major difficulties for reporters are:

- knowing the country of the final customer, and,
- reporting when the processing and on-selling to the final customer phases have been completed.

41. The official trade statistics export values (pre-processing) have to be replaced by the BoP compiler with the sales value when change of ownership is known or assumed. The processing fee is recorded as a service import. The lack of full knowledge of this phenomenon and the timing effects can have distortive effects on the statistical data, particularly quarterly data. Similar reporting difficulties do not arise for Irish enterprises engaged in processing of imported goods.

2.3 Accounting practices and access to accounting data

42. Ultimate parents of Irish subsidiaries are usually US - based. The Irish subsidiaries prepare management accounts in accordance with the US accounting standards, Generally Accepted Accounting Practices (GAAP). The quarterly BoP (including FDI) data are generally reported on the basis of such management accounts. There is a statutory obligation to prepare audited accounts of Irish - incorporated entities in accordance with either Irish accounting practices or the International Financial Reporting Standards (IFRS), both of which can notably differ from the US GAAP. This obviously can lead to problems understanding and interpreting the data with a consequent impact on the compilation of the statistics. In the absence of a world-wide accounting standard it is difficult to see how this problem can be resolved.

43. Given the different types of legal forms that FDIEs operating in Ireland can take, it is frequently not possible to verify our survey data with accounts filed with the Irish Companies Registration Office (CRO) if the relevant entity:

- is a branch, as accounts for the entire company are filed,
- is an unlimited liability company, as there is no legal requirement to file accounts,
- has its debts guaranteed by another company, as the accounts for the latter company have to be filed, or,
- is a parent, as consolidated accounts can be filed.

2.4 Timing of company accounts data; company staff not familiar with company structure or operations

44. As multinational enterprises tend to have central accounting and taxation units, it can be very late in the accounting year before all receipts and expenditure are allocated to the various affiliates. Some costs may not be assigned until after the accounting year end. This can present serious problems for quarterly compilation and even for annual data.

45. In addition, cases arise where the reporting enterprise staff dealing with statistical reporting are not familiar with the company structure. This leads to incorrect reporting of the specific information required. For example, there may be a lack of knowledge concerning the identity of the immediate parent and sometimes of the ultimate parent. Reporters may not know precisely and fully the transactions undertaken or the counterparts. In addition, there have been incidences of reporting for the complete company rather than for the foreign-owned branch operation in Ireland. Such shortcomings can be difficult to detect at the appropriate time and revisions to the original statistical outputs are inevitable.

CONCLUDING REMARKS

46. The intention in preparing this paper was to highlight some practical issues encountered by the CSO in collecting and compiling external accounts data. Doing so may raise doubts about the overall quality of the FDI, BoP and IIP statistics compiled for Ireland. However, it is generally accepted that the results produced are of good quality overall. What is important to stress is that the results are not easy to compile, particularly where large multinational enterprises are so important. As compiler, CSO can never feel satisfied that the issues described in this paper, once dealt with, are completely and finally resolved. There is a need to maintain what is essentially regular and frequent contact with large companies. This contact can be in various forms including telephone, letter, e-mail, etc., but regular company visits with the necessary preparations made by both sides in advance are the most useful. Access to company accounts is extremely helpful in that the information contained therein can provide the compiler with a good insight into the company's structure and operations, and how these factors change. Accounting information can provide a very useful basis for raising questions of a probing nature during a company visit. In general, such visits prove more useful than contact by telephone or in writing in that company representatives can be a lot more forthcoming with important and relevant information, particularly when they know that it is being used for statistical purposes and that its confidentiality will be protected. While the maintenance of such contact is very resource demanding, it is essential in the interest of compiling useful statistical information in an ever-changing economic environment.

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