APPROVED/FINAL VERSION

D.1 Greenfield Investment and Extension of Capacity

D.1 Greenfield Investment and Extension of Capacity[1]

Direct investment (DI) can be considered a significant force for development and an important engine of growth. In their present form, DI statistics do not separately identify investments that represent the creation of new business enterprises in the host economy and additional injection of funds to existing ones. This guidance note (GN) discusses ways to compile greenfield investment and extensions of capacity of existing businesses statistics that could allow policymakers and users to better understand the economic impact of DI in the host economy. Greenfield investment (GI) is an investment that brings new and additional resources and assets to the enterprise and leads to gross fixed capital formation (GFCF). The GN highlights two different concepts—the transaction approach and the capital approach—and pros and cons of each of them. The GN[2] recommends, for inclusion in the BPM7*, guidance on the definition and collection of data on GI and extension of capacity (EC) based on the results of the survey of compilers. In addition, greenfield investments and extension of capacity data collection should cover both equity (other than reinvestment of earnings) and debt instruments, excluding the "pass-through" funds, if possible, and the recording should be on net inward DI. Further, the GN recommends using the transaction approach for a supplemental series on GI and EC under DI as it is consistent with the balance of payments framework, while the capital approach could be considered in a broader context of analyzing multinational enterprises.*

SECTION I: THE ISSUE

BACKGROUND

1. **As multinational enterprises (MNEs) can bring capital, technology, management know-how, and improved market access, foreign direct investment (DI) can be a significant force for development and an important engine of growth.** However, in their present form and in the face of a changing world, the current DI statistics can be seen as somewhat limited in their capacity to address some questions on the impact in the host economy.

2. **Progress can be made in measuring the impacts of DI, especially on capital formation, employment, and value added, as part of the collection of Activities of Multinational Enterprises (AMNE) statistics.**[3] While some work has been undertaken in this domain, one area where additional information could be of help to policymakers is to separately identify DI transactions by their purpose. These purposes could be the creation of new foreign-owned affiliates as well as injection of funds to existing affiliates, as opposed to those investments that involve the purchase of existing assets—financial

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[2] This GN was discussed at the February 2021 Committee meeting, See Summary of Discussions: Paper by IMF (BOPCOM VM1 21/12). Further to the Committee's request, the DITT, in collaboration with the OECD's Working Group on International Investment Statistics (WGIIS), conducted a survey to test the different approaches for compiling greenfield investment and extensions of capacity statistics and seek views on their analytical usefulness.

[3] The reconciliation between DI and AMNE statistics could also provide information on greenfield investments (see D.9 "Reconciling BPM-based Direct Investment and AMNE Statistics").

and nonfinancial—through cross-border mergers and acquisitions (M&As) or other types of DI flows for "restructuring" purposes.

3. **Among the types of DI flows, a cross-border merger occurs when two (or more) companies in different economies agree to merge into a new single company to create business synergies.** A cross-border acquisition is a business transaction between unrelated parties in different economies where the acquiring enterprise purchases the assets and liabilities of the target enterprise.

4. **Greenfield investment (GI) refers to an investment that brings new and additional resources and assets to the enterprise and often leads to gross fixed capital formation (GFCF).** This new investment (fresh capital) typically leads directly to increased output, employment, and improvements in productivity (though company acquisitions may also lead to improved efficiency and increased output). Therefore, measures of GI that capture new affiliates and extensions of capacity (ECs) of existing affiliate can be of much interest to policymakers and economists to understand better the economic impact of DI and to measure the impact of specific policy initiatives.

5. **Despite the importance of GI, there are few countries that collect such data due to two factors:**

a. The lack of a clear and harmonized definition of GI in international standards on macroeconomic statistics might complicate compilation by making it difficult to communicate to respondents the exact information being requested. In addition, different interpretations of the term GI might lead to a lack of comparability between countries that disseminate such data.

b. Countries might not collect this breakdown due to respondent burden—that is, possible extra cost and difficulties that companies may face in separating each type of transaction (GI and EC from other types of DI) and due to the demand on resources at the compilation agency.

6. **In terms of measuring GI, two approaches can be mentioned: *the transaction approach* and *the capital approach.*[4]** While in the *transaction approach,* the DI transactions would be broken down by their type (cross-border M&As; GI; extension of capacity; and a residual category that includes financial restructuring), the *capital approach* measures fixed capital formation of newly created direct investment enterprises (DIEs) and the expansion of existing affiliates regardless of the source of funding, which is outside the concept of DI as described in the *Balance of Payments and International Investment Position Manual, sixth edition,* (*BPM6*).

7. **The fourth edition of OECD *Benchmark Definition of Foreign Direct Investment* (*BD4*) has recommended a supplemental series for DI equity flows only for M&As.**[5] Further research is planned for GIs, extension of capacity, and financial restructuring, all of which are considered part of foreign direct investment (FDI) (section 2.4.2, page 32). The existing definition in *BD4* is "…greenfield investments refer to altogether new investments (ex nihilo investments). Extension of capacity relates to additional new investments as a physical expansion of an established business; conceptually and in terms of economic

[4] There is a third approach used by the United States to measure greenfield investment by directly collecting information on total expenditures by foreign investors to establish new businesses or expand existing ones. This approach is resource intensive and is not aligned with the concept of DI by collecting total expenditures and not only those funds provided by the foreign parent group.

[5] *BD4* defines M&A and provides compilation guidance for this recommendation in Annex 9.

impact, it is similar to greenfield investments" (*BD4*, page 87). Therefore, the main focus is the "purpose" and "final destination/use of investments".

8. **The United States Bureau of Economic Analysis (BEA) collects data on new foreign DI in the United States that provides information on the acquisition and establishment of U.S. business enterprises by foreign investors (since 1980) and on the expansion of existing U.S. affiliates of foreign companies to establish new production facilities (since 2014).** These annual statistics provide information on the amount and characteristics of new investments in the United States by foreign investors. GI has been defined as expenditures, regardless of the source of funding to establish new business and to expand existing foreign-owned business. The information is collected by a mandatory survey.

9. **In 2019, Eurostat conducted a pilot study to determine whether it is feasible to obtain DI statistics distinguishing greenfield DI transactions from cross-border M&As.**[6] According to the study, participants indicated that collecting GI statistics would be a departure from their existing collection processes. The methodology developed for the pilot study incorporated both approaches (a) the DI *transaction approach* and (b) the *capital approach*. Given the limited time the pilot was in operation, the *transaction approach* was recommended, but in the longer-term, compilers argued that the *capital approach* might be preferred. As regards the incremental resource costs of developing and then producing greenfield investment data on an ongoing basis, there was considerable variation, being significantly greater or more difficult to estimate for countries new to the exercise.

ISSUES FOR DISCUSSION

10. **The definition and the collection of data on GI could take into consideration the injection of resources into a DIE (i.e., the funding *transaction approach*) and the expenditures of those funds (*capital approach*).** The *transactions approach* and the *capital approach* are related, but the relationship is not precise. While the *transactions approach* identifies one source of funds for capital formation, it does not provide a complete picture of capital expenditure and is, therefore, a limited measure of the impact. On the one hand, part of the funding measured in the *transaction approach* can be used for working capital rather than capital expenditures. On the other, capital expenditures can be larger than the funds registered through the *transaction approach* because of additional sources of funds.

11. **Both approaches have additional shortcomings:** In the *transaction approach* providing geographical or industry detail for the narrow measure of GI data (excluding EC) can pose a problem due to smaller amounts and severe confidentiality constraints. In addition, it can be difficult for compilers to classify a DI transaction according to a single purpose or to even get information on the purpose from reporters in a survey (which would also add to reporters' response burden).[7] In the *capital approach,* challenges include defining ECs from, for example, maintenance, replacement, or upgrading of existing capacity, tracking previous foreign ownerships, and dealing with specific cases such as holding companies and real estate. Finally, companies might not be able to separate the GI amount from

[6] In total, 25 countries (24 EU members and Iceland) participated in the study.

[7] A newly created enterprise might not serve the purpose of greenfield investment. For instance, a new enterprise could be created to carry out a corporate restructuring operation or an M&A.

company accounts regardless of the approach because the transactions and capital expenditures might have more than one purpose.

SECTION II: OUTCOMES

12. **DITT members discussed the scope of GI statistics and the use of both the *transaction* and *capital approaches*.** In particular, it was emphasized **that the *capital approach* includes funding outside the scope of DI and therefore goes beyond the balance of payments/international investment position (IIP) framework.** It was argued that the *capital approach* could be more appropriate to measure the impact of DI in an economy and that it could be interesting to relate such data to other data, such as GFCF, which could give an indication of the importance of foreign-owned firms' contribution to an economy. In contrast, the *transaction approach* is within the scope of the balance of payments/IIP framework although the classification of DI transactions according to a single purpose could be a concern and also more difficult to collect information from reporters than using the *capital approach*.

13. **For the *capital approach*, the DITT members proposed that besides physical assets, research & development (R&D) expenditures should also be included.** In industries where value is created largely by intellectual property, such as those engaged in digital activities, physical assets would not be sufficient as a measure of GI.

14. **There were different views in the DITT whether the narrow measure of GI statistics including only newly established affiliates or also EC into existing businesses, would be the best to measure.** In considering the definition for GI, it was argued that clear definitions of all types of DI transactions: cross-border M&As, GI, extension of capacity, and financial restructuring are needed. Further DITT members emphasized the need for guidance on the breakdowns and presentation of the data, including templates and the need to discuss whether the data should include equity and debt. Feedback also noted that respondents might be unable to isolate the specific purpose of transactions, particularly on extensions of capacity.

15. **The IMF's Committee Balance of Payments Statistics (the Committee) requested that the DITT, in collaboration with the OECD's Working Group on International Investment Statistics, test the different approaches for compiling greenfield investment and extensions of capacity statistics and seek views on their analytical usefulness.** The testing was carried out through a survey (full results of the survey are presented in Annex V). The survey results show that the majority of respondents indicated that GI and EC statistics would be beneficial to their data users. However, regarding which approach (the transaction approach or the capital approach) would produce higher quality statistics or would be more preferred by users, the majority of respondents did not offer an opinion. Overall, just over half of respondents can provide a full or partial breakdown of DI inflows by type: GI, EC, M&As, and a residual "other" category. While more countries currently use or plan to use the *transaction approach* than the *capital approach*, the majority of respondents nevertheless felt it important to continue to develop both approaches and would like to see clear definitions and clarifications on the scope of GI and EC under both approaches included in the BPM update. The majority would also like to see practical compilation guidance in the updated *BPM6 Compilation Guide (BPM6 CG)*.

16. **The recommendation is to include guidance in the updated BPM on the definition and collection of data on GI and EC.** It is recommended that a supplementary series for GI and EC be

added under DI. These supplemental statistics on DI for GI and EC should be included in the updated manual using the *transaction approach* because this approach is within the framework of balance of payments and is already described in *BD4* for M&A transactions (foreign DI by type). In addition, it is recommended that a description of the capital approach also be included in the updated manual given the interest of compilers and users in further developing this approach. Given that the capital approach goes beyond the balance of payments/IIP framework, its discussion should be included in the broader context as part of the analysis of the activities of MNEs. The updated *BPM6 CG* should include practical guidance on how data should be collected and compiled by economies through both approaches.

17. **Definition: A broader definition of greenfield DI is proposed: greenfield DI is both investment in new DIEs (narrow definition) *and* new capital injections/extension of** capacity **(broader definition) into existing DIEs.** The rationale for including new capital injections/extension of capacity into the GI definition is that a capital injection which is used to extend the capacity of an existing DIE would have a similar effect on the host economy as a traditional GI would have. When collecting the GI statistics according to the broader definition, compilers will have to deliver separate information for both narrow and broader GI concepts. A three-year time frame after the first investment should be applied to distinguish between new and existing DIEs and hence between the two groups. In regard to new DIEs, any acquisition of new shares, or injection of foreign DI funds increasing the asset base and not designated to debt repayment or loss reduction should be considered as a GI.

18. **Collection of Data for the transactions approach: Compilers would be encouraged to collect information on inward GI and EC as part of DI transactions.** Compilers should report separately statistics for GIs and ECs even though we acknowledge respondents may find it difficult to separate GI transactions. Proposed components:

Greenfield investments and extensions of capacity (=i+ii). Of which

i. Greenfield investments (investments in newly established FDI enterprises)

ii. Extension of capacity (expansion of business activities)

Annex IV gives an illustrative example on how to address GIs based on a classification of DI transactions by impact of capital injections.[8]

19. **Countries should collect GIs and ECs for both equity (other than reinvestment of earnings) and debt instruments and exclude the "pass-through" funds, if possible.** The recording should be on net inward DI. GI and EC statistics should ideally collect breakdowns by industry of the DIE as well as geographical breakdown of the (ultimate) investor to deepen our understanding of these investments. Compilers should also provide additional information on reinvested earnings (RIE), if possible.

20. **If countries have difficulties collecting GI data directly, other methods could be used as a good approximation to develop the *transaction approach* without direct data collection:**

i. *administrative data* sourced from investment approvals projects, economic development offices, press reports, or commercial databases.

[8] This classification is used in Eurostat's GI data collection starting in March 2022.

ii. *residual approach*, eliminating other types of DI transactions, in particular cross-border M&As.[9]

OUTCOME OF THE DISCUSSION AT THE FEBRUARY 2021 COMMITTEE MEETING

21. **The IMF Committee on Balance of Payments Statistics recommended including in the *BPM7* a clear definition of the GI and EC, clarifying the scope of their coverage (i.e., equity/debt or both), and recording (gross or net basis) to ensure comparability across countries**. Members proposed that testing be undertaken on the approaches for GI measurement and the results, including the analytical usefulness of the transaction approach, be presented. This version of the GN incorporates the results of the testing as well as the recommendations.

[9] The Bank of Canada and Office of National Statistics (ONS) of United Kingdom use the *residual approach*. In the Canadian case, GIs are derived from existing surveys which collects inward foreign DI flows on a gross basis, by instrument and type of investment. Greenfield/new investments = Gross inward non-M&A equity + Gross inward debt instruments. Cross-border M&As (as they relate to the acquisition of existing as opposed to new entities) and trade credits are excluded. As a result, these residual flows can be seen as capital received by the Canadian affiliate for the purpose of expanding activities. In the case of United Kingdom, ONS estimates GI by (a) linking FDI microdata with GFCF microdata; (b) by removing cross-border M&As and financial restructuring; and (c) by using equity capital.

Annex I. Referenced Documents

Anderson, Thomas W. *Expenditures for New Foreign Direct Investment in the United States in 2014*

European Commission Staff Working Document (2019), *Findings of the Pilot Studies on Annual FDI Statistics Based on the Ultimate Ownership Concept and on FDI Statistics That Distinguish Greenfield FDI Transactions from Takeovers* (November).

OECD (2018), *New Foreign Direct Investment: Acquisition and Greenfield.* Presentation by the United States DAF/INV/STAT/WD (March).

Annex II. List of Chapters to Update

OECD *Benchmark Definition of Foreign Direct Investment, fourth edition*, 2008, Chapter 2, Chapter 4, and Annex 9

Annex III. The *Transaction* and *Capital Approaches*

1. **Two practical and complementary measures of GI**—the *capital approach* and the *transaction approach*—can be used, depending on policy-analytic needs as well as the available statistical capacity and degree of cooperation among compilers. This is drawn on the extract of the methodology used in the EU pilot studies on annual DI statistics based on the ultimate ownership concept and on DI statistics that distinguish greenfield DI transactions from takeovers.

The Transaction Approach

2. **This approach can be thought of more specifically:** DI transactions-based source of funds to the DIEs, after eliminating M&A and restructurings (unless these give rise to a source of funds for capital). It will be assumed that the residual DI funds are mainly used for GFCF purposes, accounting for all or part of DIEs GFCF financing. In this sense, it is not as precise as the *capital approach*. However, it does largely articulate the role of DI in providing capital funds for DIEs.

3. **It should ideally be separated into DI injections into newly created DIEs (narrow DI transactions measure of GI) and existing DIEs (broad DI transactions measure of GI).** It should also be ideally stratified between control transactions (the core variable) and influence DI transactions, although the former is expected to dominate in most economies.

4. **The upshot of this approach is segregating DI transactions by purpose**, in order to ensure that the funds are mainly used for GFCF. The basic breakdown is the following:

DI purpose transactions (excluding reinvested earnings (RIE))

M&As transactions, as well as transactions related to restructurings

Inflows into newly created DIEs

Inflows into existing DIEs

5. **A complicating factor is that some M&As as well as some restructurings,** which tend to be reflected in DI asset side transactions (that is transactions among investors), can result in injections of funds into existing (and, in rare cases, new) DIEs. Therefore, an additional calculation would ideally be required to identify any such DIE inflows and reallocate these to existing DIEs in the breakdown specified above.

6. **Some countries may opt for a slightly different purpose breakdown than specified above, depending on source data and existing collection/compilation methods.**

7. **The most important issue is the time frame, and it relates to how long is a newly created DIE actually a new enterprise?** For existing DIEs, there is no time frame. It is advisable for countries to use a one- to three-year time frame for newly created DIEs with the specific recommendation in the pilot study for a three-year time frame. After this point, the newly created DIEs become existing DIEs. If the focus is on the *transaction approach*, the estimates are broken down between newly created DIEs and existing DIEs.

The Capital Approach

8. **The *capital approach* can be more specifically described as the total GFCF of the DIE.** This is equivalent to Foreign Affiliates Statistics (FATS) variable approach, where the compiler adds GFCF as a FATS variable (using either a survey or a record linkage methodology). This approach gets at the total GFCF of the DIEs, classified by control relationships. Arguably, the FATS concept of control (majority ownership) is appropriate, as the controlling parent decides on the DIEs GFCF; and the FATS approach would capture all of the GFCF undertaken by the domestic subsidiary, regardless of funding.

9. **This method includes the DIE GFCF** of (i) newly established subsidiaries as well as (ii) existing subsidiaries (including GFCF of their domestic majority-owned subsidiaries) and these could be sub-stratified into these respective components by using the DI frame.

10. **This approach adds precision to the calculation, as the total GFCF of the foreign controlled DIEs is a target measure.** This approach could be supplemented by a similarly constructed GFCF related to DI influence relationships, though (based on the dominance of control relationships in many economies) this is expected to be a relatively small supplementary measure.

Annex IV. Classification of DI Transactions Based on Impact of Capital Injections

1. Table 1 shows the criteria for presenting GIs by direct investor characteristic. Firstly, it is checked whether the investment is a first-time investment by the direct investor in the specific DIE. Helpful information is provided at the project level, including information when the DI project started, the name of the investing company, the source and destination addresses of the investment, the estimated amount of the capital invested, and the economic activity breakdown level.

2. By obtaining the answer (in line 2) to the first question (in line 1), the investment is classified into initial/new investment if the answer is yes (right box: yes), or into additional investment if the answer is no (left box: no).

3. It is asked whether the injected capital is used for the acquisition of shares newly (line 3B) or already issued (line 3A) by existing DIE (line 3). By obtaining the answer to this question (line 4), the initial investment (line 3B) is classified into “Mergers & Acquisitions” or “financial restructuring” (acquisition of already existing shares) for the box: no, and into “Greenfield investments” (acquisition of newly issued shares) for the box: yes.

4. It is asked whether the capital is used for the acquisition of shares already issued in DIE in line 3A, left box. By obtaining the answer to this question, follow-up or subsequent investment is classified into “Investment leads to an increase in the asset base of an existing enterprise” for box: no, and into “Mergers & Acquisitions” for box: yes.

5. It is asked whether the investment leads to an increase in the asset base of an existing enterprise (line 5, left box). By obtaining the answer to this question, additional investment is classified into “Financial restructuring” for box: no (line 6 and line 7, respectively). In line 7, it is asked whether the Invested DI capital or debt is used for the acquisition of tangible fixed assets of an existing enterprise (excluding the acquisition of tangible fixed assets via mergers & acquisitions). In line 8, other types of investments are classified into “Greenfield investments” for box: yes, and into “Mergers & Acquisitions” for box: no.

6. A similar process should be launched on existing enterprises (> 3 years) which would, in that case, lead to the identification of extension of capital.

Table 1. Classification of Foreign Direct Investment (DI) Transactions Based on Impact of Capital Injections*

<table>
<tr><th>Lines</th><th colspan="7">Questions/Answers</th></tr>
<tr><td>1</td><td colspan="7">Is it the first time foreign DI by the direct investor in the direct investment enterprise (DIE) (established from scratch or already producing) during the first 3 years after the first investment?</td></tr>
<tr><td>2</td><td colspan="4">NO</td><td colspan="3">YES</td></tr>
<tr><td>3</td><td colspan="4">As a follow-up or subsequent investment, is investment of capital to purchase shares already issued by an existing enterprise?</td><td colspan="3">Are Investment of capital to purchase shares issued by an existing enterprise?</td></tr>
<tr><td>4</td><td colspan="3">NO</td><td>YES</td><td>NO</td><td colspan="2">YES</td></tr>
<tr><td>5</td><td colspan="3">Does investment lead to an increase in the asset base of an existing enterprise?</td><td rowspan="5">Mergers & acquisitions</td><td rowspan="5">Greenfield investments**</td><td rowspan="5">Mergers & acquisitions</td><td rowspan="5">Financial restructuring</td></tr>
<tr><td>6</td><td>NO</td><td colspan="2">YES</td></tr>
<tr><td>7</td><td rowspan="3">Financial restructuring</td><td colspan="2">Is Invested foreign DI capital or debt used for the acquisition of tangible fixed assets of an existing enterprise (excluding the acquisition of tangible fixed assets via mergers & acquisitions)?***</td></tr>
<tr><td>8</td><td>NO</td><td>YES</td></tr>
<tr><td>9</td><td>Mergers & acquisitions</td><td>Greenfield investments**</td></tr>
</table>

* Disinvestments are not further analyzed.

***Information shown in cells in green is to be released as experimental statistics on greenfield investments, in its broader definition. If possible, these items should be compiled separately.*

Greenfield investments cover also extension of capital in existing DIEs (>3 years).

****Purchases of intellectual property products (IPP) are considered as tangible fixed assets. If feasible, this should be presented as a separate component.*

Annex V. DITT Survey on Greenfield Investment and Extensions of Capacity[10]

1. **The DITT conducted an online survey as part of the update of the *Balance of Payments and International Investment Position Manual, sixth edition* (*BPM6*). The outcomes of this survey will also feed into the update of the *Benchmark Definition of Foreign Direct Investment, fourth edition* (*BD4*).** It was two-pronged (i) to evaluate the need for countries to produce supplementary statistics on Greenfield investment (GI) financed by direct investment (DI), and (ii) to assess practical issues related to multinational enterprises (MNEs) and associated statistics.

2. **The survey was posted on the IMF webpage** on December 2, 2021, with an initial deadline of January 11, 2021, which was extended to January 17, 2021. There were 83 respondents from 76 economies to the survey—34 from Europe (EUR); 16 from the Asia and Pacific (APD); 12 from the Western Hemisphere (WHD); 11 from the Middle East and Central Africa (MCD); and 10 from Africa (AFR).

SURVEY RESULTS

GREENFIELD INVESTMENT AND EXTENSION OF CAPACITY

3. **Guidance note (GN) D.1 "Greenfield Investment (GI) and Extension of Capacity (EC)" proposes the collection of data on GI financed by DI.** GI refers to an investment that brings new and additional resources and assets to the enterprise and often leads to gross fixed capital formation (GFCF). This new investment (fresh capital) typically leads directly to increased output, employment, and improvements in productivity (though company acquisitions may also lead to improved efficiency and increased output). Therefore, measures of GI that capture new affiliates and Extension of Capacity (EC) of existing affiliates could be of significant interest to policymakers and economists to understand better the economic impact of DI and to measure the impact of specific policy initiatives. GN D.1 discusses two approaches for compiling GI and EC in DI statistics—the *transaction approach* and the *capital approach*—and the advantages and disadvantages of each.

The Transaction Approach

4. **The *transaction approach* measures GI and EC based on information on the purpose of DI inflows** into direct investment enterprises (DIE) in the reporting economy. See Box 1. For additional reference about the four types, see the *OECD Benchmark Definition of Foreign Direct Investment, fourth edition, 2008* (*BD4*), paragraphs 272–274.

[10] The objective of this survey is not only to assess practical issues that compilers of External Sector Statistics may face in implementing these recommendations but also to assess their perceptions of how well the proposals put forward within the scope of the update meet user needs. The survey results included four sections: (i) Greenfield investment (GI) and Extensions of Capacity (EC), (ii) Statistical Definition of MNEs, (iii) Trade Statistics by Ownership, (iv) Investment Income by Ownership, and (v) Harmonizing DI Statistics with Statistics on AMNE statistics and FATS.

Box 1. DI Inflows According to Purpose

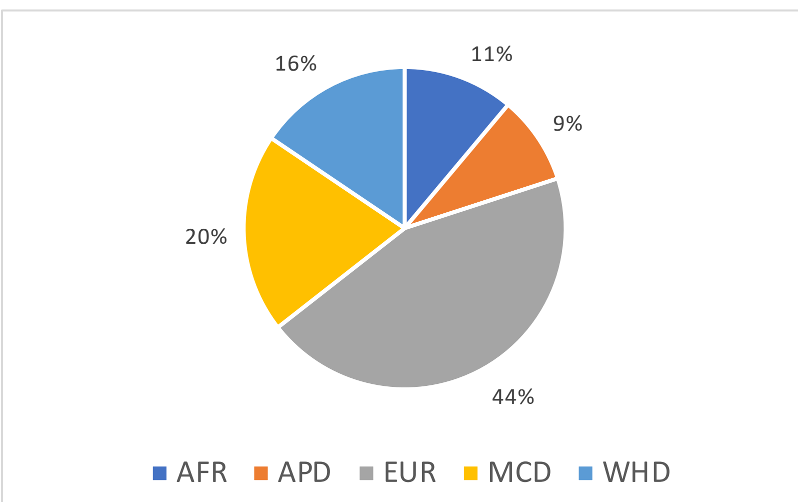
Inward DI equity and debt flows for a given reference period x (that is, excluding reinvestment of earnings) can be broken down into:

- **Mergers and Acquisitions (M&A):** A foreign investor purchases existing shares issued by a target company (DIE) from its shareholders Summed across all transactions in period x.
- **Transactions Related to Newly Created DIE's:** A foreign investor establishes a new DIE (within the last 3 years) Summed across all transaction values for period x.
- **Extensions of Capacity (EC):** A foreign investor injects funds into an existing DIE Summed across all transaction values for period x.
- **Other DI Flows:** A foreign investor injects funds for any other purpose, such as financial restructuring, can be derived as a residual for period x once all of the other types have been identified.

Survey Outcomes: Current Compilation Practices Using Transaction Approach

5. **Only a minority of respondents (15 percent) can currently apportion their total DI inflows according to the four purposes described in Box 1. However, 40 percent of the respondents indicated that they could do so partially.** Forty four percent (44 percent) of respondents that can identify partially or completely these four purposes are from EUR and 20 percent from MCD (see Figure 1). The most commonly cause cited for not being able to separate DI inflows by purposes is lack of data sources (cited by 32 respondents), followed by lack of existing methodology (11 respondents), and training (6 respondents). A few respondents (4 respondents) also mentioned increases in the response burden as another challenge.

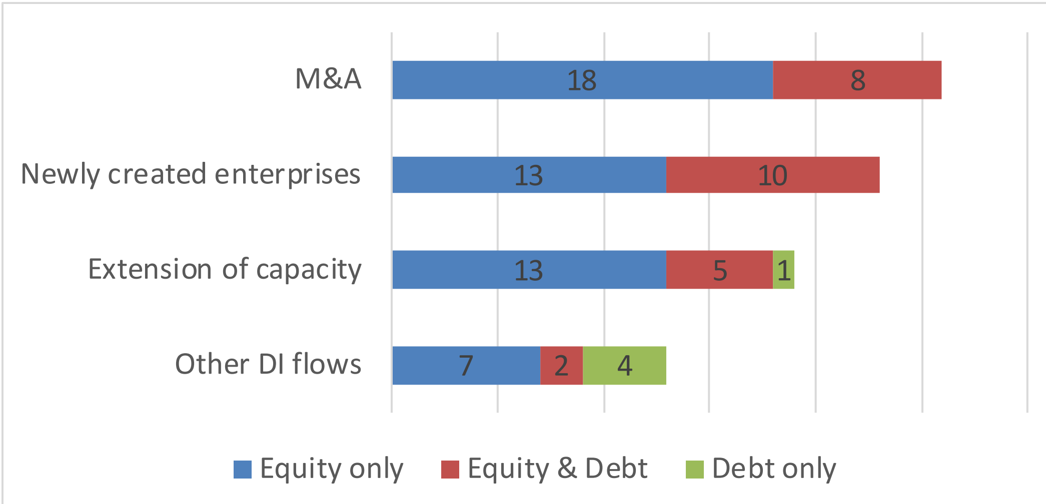
Figure 1. *Transaction Approach*: Ability to Divide (Fully or Partially) Total DI Inflows by Purpose



6. **Among respondents who can divide DI inflows by purpose fully or partially, a majority can do so for equity flows only** (Figure 2). However, almost half of the respondents who identify

transactions related to newly created DIEs can do so for both equity and debt components. In addition, a non-negligible share of respondents who identify other DI flows (such as financial restructuring) can do so for debt flows only.

Figure 2. *Transaction Approach*: DI Inflows by Purpose and by Financial Instruments



7. **The majority of respondents (74 percent) do not currently compile GI according to the *transaction approach*.** Respondents from 11 economies indicated that they already compile these statistics; of which, four publish them. Respondents from eight economies indicated that they do not currently compile these statistics but will be able to do so in the next few years.

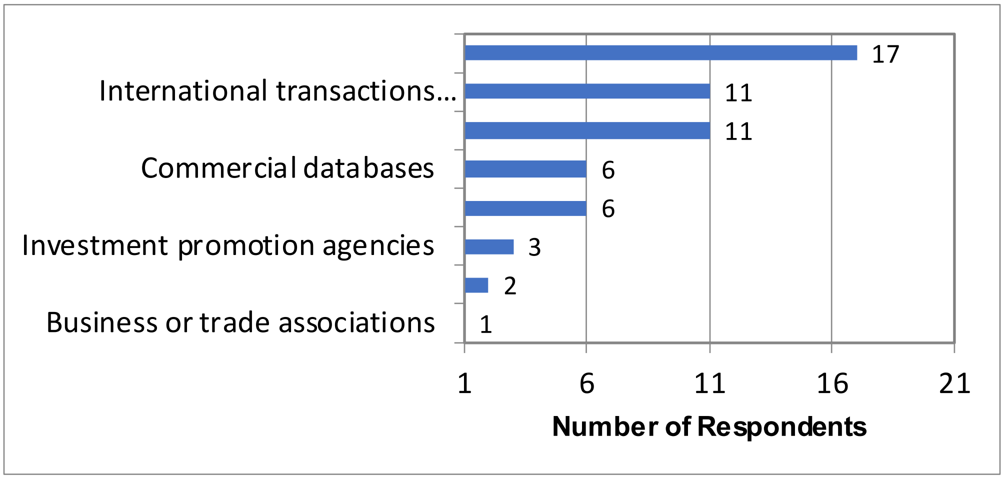
8. **Similarly, the majority of respondents (77 percent) do not currently compile EC statistics for inward DI flows based on the *transaction approach*.** Respondents from 10 economies indicated that they already compile these statistics; of which, four publish them. Respondents from seven economies indicated that although they do not currently compile those statistics, they will be able to do so in the next few of years.

9. **Among the few (15) respondents that provided details on major challenges or practical difficulties in compiling GI and EC statistics based on the transaction approach, many indicated lack of availability of information, increased respondent burden, concerns about the quality of the information collected, and confidentiality concerns.** Some indicated that their current data collection system is designed to collect the necessary information for equity transactions only. Several respondents indicated that it is impossible to differentiate EC from the initial investment or from other extensions of capital.

10. **A combination of sources is typically used to compile GI and EC inward DI flows.** FDI Surveys are the most commonly cited source (by 17 respondents[11], Figure 3). Business registers (BR), ITRS, and commercial databases were commonly cited as useful data sources (by 11 respondents for BR and ITRS, and six respondents for commercial databases).

[11] Based on both the respondents that indicated they currently compile GI statistics and/or EC, or that will be compiling these statistics in the near future.

Figure 3. Data Sources Used to Compile GI and EC Statistics for Inward DI Flows



11. **As regards outward DI flows, respondents from six economies indicated that they compile GI statistics based on the *transaction approach* but only one country publishes these statistics.** Respondents from two economies indicated that they will be able to compile those statistics in the near future.

12. **Respondents from five economies indicated that they compile EC statistics for outward DI flows based on the *transaction approach* but only one country publishes these statistics.** Respondents from two economies indicated that they will be able to compile those statistics in the future.

The Capital Approach

13. **The *capital approach* for estimating GI and EC uses information on the activities of companies rather than using the movements of funds** (as in the *transaction approach*). There are two main ways that this information can be collected:

- Survey questions collecting information on the activities of MNEs that specifically ask companies to report values for new cross-border investments and/or extensions of capacity.
- Linking DI microdata with other sources of information, such as foreign affiliates statistics, business registers, gross fixed capital formation, enterprises surveys, and commercial sources

Survey Outcomes: Current Compilation Practices Using Capital Approach

14. **A large majority of respondents (85 percent) indicated that they currently do not have sufficient available information to estimate GI using the *capital approach*.** Respondents from six economies indicated that they can currently compile these statistics although two countries do not publish them. Respondents from six economies indicated that they will be able to produce these within the next five years.

15. **Similarly, a large majority of respondents (89 percent) indicated that they currently do not have sufficient available information to estimate EC using the *capital approach*.** Respondents from five economies indicated that they can currently compile these statistics although one of them does not

publish them. Respondents from four economies indicated that they will be able to produce these in the near future.

16. **DI surveys and administrative data sources were the most commonly cited sources (by eight respondents) that are used or that will be used to compile GI and EC statistics based on the *capital approach*.** Five respondents also indicated that they are using or will use other existing surveys within their institution.

17. **Nine respondents provided more details on major challenges or practical difficulties that they encounter or may encounter in compiling DI statistics based on the *capital approach*.** Some indicated the lack of available data sources to apply the *capital approach*. One respondent stressed the need to ensure coherence among the various survey data used to compile the GFCF estimates and to benchmark them with estimates produced according to the System of National Accounts (SNA) concept. One respondent from EUR indicated that given the prevalence of M&A type of equity transactions in the economy, it is not a priority to compile GI and EC, but information is, however, available should they wish to compile those under both approaches. Another respondent stressed the need to agree upon a number of years for which establishments and expansions of DI should be defined.

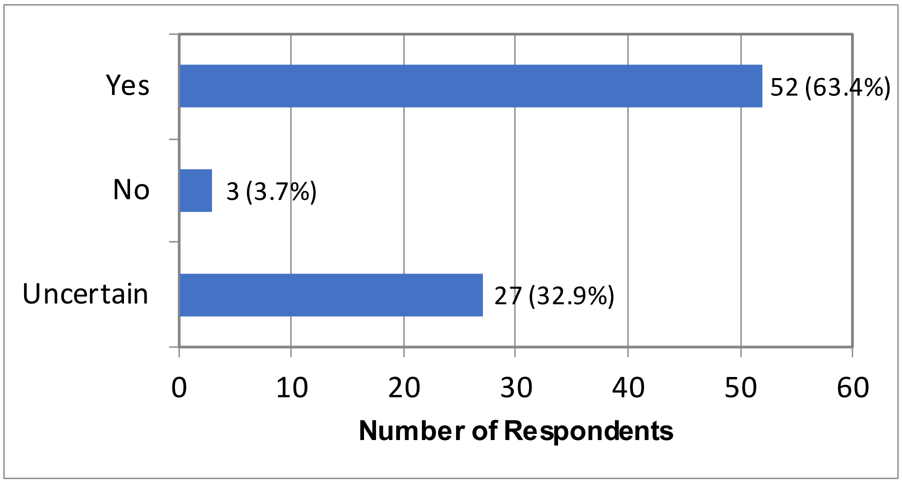
Survey Outcomes: Views on the Usefulness and Quality of the Statistics

18. **The majority of respondents (63 percent) consider that it will be useful to compile GI and EC statistics for their economy, while 33 percent are uncertain (Figure 4). Most respondents (77 percent) have not yet evaluated their users view of the usefulness of DI statistics on GI and EC** for research or policy purposes, although seven respondents plan to do so in the future.

19. **Respondents from 10 economies did consult their users:** five of them are from EUR, three from WHD, and two from MCD region. Six of those respondents indicated that users, including a mix of policy makers and researchers, find those statistics useful. One respondent stressed that data users find the statistics on new DI compiled using the *capital approach* very useful and that employment statistics for newly established, expanded, or acquired foreign-owned companies, both nationally and by state, are very much used by policy makers and in particular by economic development organizations at the national, state, and local levels. Two respondents from EUR mentioned that information on GI was considered to be relevant for either policy or research purposes as emerged from country-specific surveys conducted in the context of the 2018 ECB/Eurostat FDI Task Force pilot study on extended measures of DI.[12] In addition, most respondents to one of those country-specific surveys preferred measures that capture only gross fixed capital expenditures, while there was no consensus on whether to consider the entire investments of the foreign company or only the portion financed by its parent.

[12] This survey was conducted in the context of the pilot study on extended measures of DI and was addressed to representatives from policy institutions, business community, academic researchers, and statisticians.

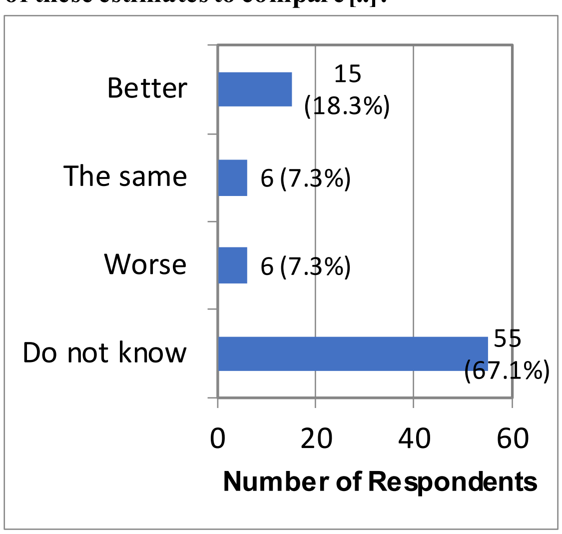
Figure 4. Usefulness of GI and EC Statistics According to Respondents



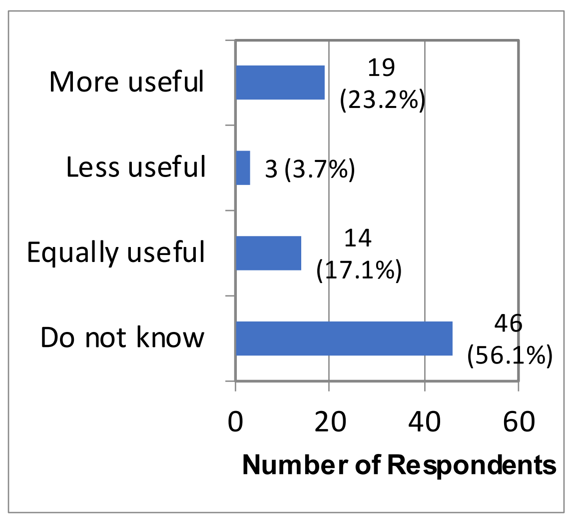
20. **The vast majority of respondents (67 percent) did not have an opinion on how estimates of GI and EC would compare under either approach (Figure 5.a).** Eighteen percent (18 percent) of the respondents expected the quality of estimates that would be obtained with the *capital approach* to be better. All regions were represented among the respondents who thought the quality would be better (Figure 6.a). However, a similar share of respondents expected that the quality of estimates between the two approaches to be the same or worse with the capital approach.

Figure 5. Perceived Quality of GI and EC Estimates Using the *Capital Approach* Versus the *Transaction Approach*

a) Question 14 [..] how would you expect the quality of these estimates to compare [..]?



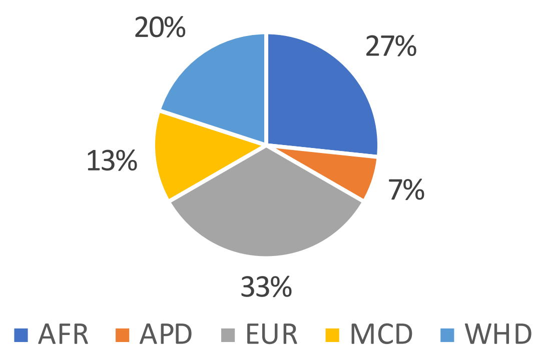
b) Question 15 How would you expect <u>users</u> [..] to view the quality of the data collected as [..]?



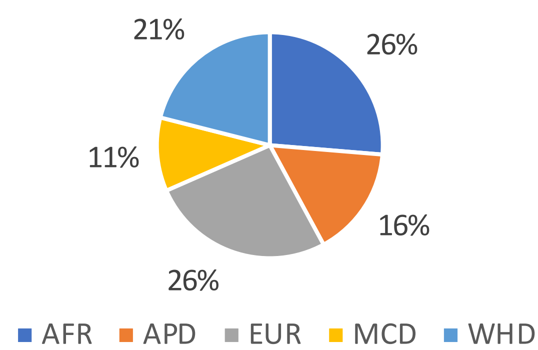
21. **When asked about the eventual appreciation of their data users, 23 percent of the respondents thought users may find data collected using the *capital approach* more useful; 17 percent thought users may find these estimates as useful as those obtained with the *transaction approach* (Figure 5.b).** Also, in this case, all regions were well represented among the respondents who thought users may find the data collected under the *capital approach* more useful (Figure 6.b).

Figure 6. Respondents who Think the Quality of Estimates Using the *Capital Approach* Would be Better or More Useful by Region

a. From their own perspective

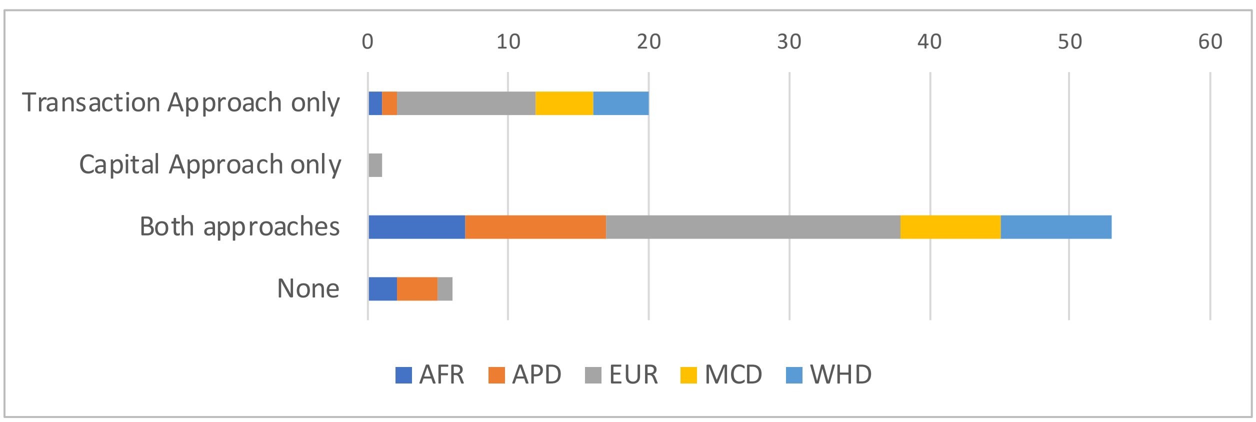


b. From a possible user perspective



22. **A majority of respondents (64 percent) would like to see clear definitions of GI and EC and clarifications on the scope of their coverage included in *BPM7* for both the *transaction* and *capital approaches* (Figure 7).** One-fifth would like to see those included for the *transaction approach* only. One respondent would like to see those included for the *capital approach* only, and six respondents do not want to include any definition of GI and EC in *BPM7*. Most of the respondents in favor of including more information on the *transaction approach* or both approaches in the updated manual were from EUR countries.

Figure 7. Inclusion of Clear Definitions of GI and EC in *BPM7*, Positive Responses by Region



23. **Among respondents who would like to see more details on both approaches included in *BPM7*, many said that it would offer flexibility to the compilers, as they can understand the pros and cons of each approach and assess which one is more appropriate based on the data available to them.** Some also stressed that having more details on both approaches can support compilers in getting familiar with this new topic. Some respondents said that both approaches can serve different analytical needs hence it would be useful to describe both, even if the *capital approach* goes beyond the balance of payments framework. In fact, one respondent suggested the *capital approach* could be presented on a supplemental basis. Another user indicated that a clear methodology for the *capital approach* would allow compilers who cannot yet collect such estimates to adapt their sources and link FDI from balance of payments and GFCF information from national accounts (NA). Finally, one respondent indicated that they use a hybrid approach, with higher dependency on *transaction approach*, hence clear definitions based on both approaches would be beneficial.

24. **Among respondents who wanted to include more details in *BPM7* on the *transaction approach* only, many put forth the comparability across countries,** given that the *transaction approach* is within the balance of payments framework and likely to be implemented by more countries.

25. **A majority of respondents (74 percent) supported the inclusion of practical guidance on the collection and compilation of GI and EC statistics in the updated *BPM7 Compilation Guide*.** Many stressed the need to further clarify specific cases, to include more examples and to have more guidance to produce those statistics, which can be challenging.

26. **Nine respondents from various regions indicated that they would be willing to participate in a testing exercise in the second half of 2022**.

Conclusion

27. **In summary, the majority of respondents indicated that GI and EC statistics would be useful to their data users** but were less sure about whether the *capital approach* would produce better estimates or be more useful to users than the *transaction approach*. Overall, just over half of respondents can provide a full or partial breakdown of DI inflows by type: GI, EC, M&A, and a residual "other" category. More countries are able to produce GI statistics than EC statistics and more of these countries use or plan to use the *transaction approach*. Nevertheless, the majority of respondents felt it important to continue to develop both approaches and would like to see clear definitions and clarifications on scope of GI and EC under both approaches included in the *BPM7*. The majority would also like to see practical compilation guidance on GI and EC statistics in the *BPM7 CG*.