Thirty-Fifth Meeting of the
IMF Committee on Balance of Payments Statistics

Washington, D.C.
February 22–25, 2021

BOPCOM VM1—21/04
For discussion

D.1 Greenfield Investment and Extension of Capacity

Prepared by the Direct Investment Task Team (DITT)

INTERNATIONAL MONETARY FUND

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 discusses ways to compile greenfield statistics and extensions of capacity of existing businesses that could allow policymakers and users to better understand the economic impact of DI in the host economy. Greenfield investment is an investment that brings new and additional resources and assets to the enterprise and leads to gross fixed capital formation. The note highlights two different concepts—the transaction approach and the capital approach—and pros and cons of each of these. Although the Direct Investment Task Team was divided on the preferred approach, the note recommends using the transaction approach as it will remain consistent with the balance of payments framework, while the capital approach could be considered in a broader multinational enterprises analytical context.
The note does not yet offer a definition, but it suggests developing further guidance for a definition and data collection on greenfield statistics and extension of capacity as supplementary DI series using the transaction approach.

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 (AMNEs).**[2] While some work has been undertaken in this domain, one area where additional information could be of help to policymakers could be to separately identify DI 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 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**

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[2] The reconciliation between DI and Activities of MNE (AMNE) statistics could also provide information on greenfield investments (please see D.9 Reconciling BPM-based direct investment and AMNE statistics).

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 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 greenfield investment that capture new affiliates and extensions of capacity 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 greenfield investments, there are few countries that collect such data due to two factors:**

a. The lack of a clear and harmonized definition of greenfield investment in international standards on national or international accounts might complicate compilation by making it difficult to communicate to respondents the exact information being requested. In addition, different interpretations of the term greenfield investment 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 (greenfield and extension of capacity from other types of DI) and due to the demand on resources at the compilation agency.

6. **In terms of measuring greenfield investments, two concepts can be mentioned: *the transaction approach* and *the capital approach.*[3]** While in the transaction approach the DI transactions would be broken down by their type (cross-border M&As; greenfield investments; extension of capital and financial restructuring), the capital approach measures fixed capital formation of newly created direct investment enterprises (DIE) and the expansion of existing affiliates regardless of the source of funding, which is outside the concept of DI as described in the *BPM6*.

7. The fourth edition of the OECD *Benchmark Definition of Foreign Direct Investment* (BD4) has recommended **a supplemental series for DI equity flows only for M&As.**[4] **Further research is planned for greenfield investments, extension of capital and financial restructuring, all of which are considered part of FDI** (section 2.4.2 page 32). The existing definition in the *BD4* is "…greenfield investments refer to altogether new investments (ex nihilo investments). Extension of capital relates to additional new investments as a physical expansion of an established business; conceptually and in terms of economic impact, it is similar to greenfield investments" (*BD4*, page 87). Therefore, the main focus is the "purpose" and "final destination/use" of investments".

[3] 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 business 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.

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

8. **The United States Bureau of Economic Analysis (BEA) collects data on new foreign direct investment 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. Greenfield investment 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, the Eurostat conducted a pilot study to determine whether it is feasible to obtain DI statistics distinguishing greenfield DI transactions from cross-border M&As.**[5] According to the study, participants indicated that collecting greenfield statistics would be a departure from their existing collection processes. The methodology developed for the pilot study incorporated both concepts (a) the DI transactions 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 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 greenfield investment could take into consideration the injection of resources into a direct investment enterprise, that is, the funding transactions 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 transactions 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 transactions 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 greenfield data (excluding extension of capacity) 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).[6] In the *capital approach,* challenges include defining expansions of capacity from, for example, maintenance, replacement, or upgrading of existing capacity, tracking previous foreign ownerships and

[5] In total, 25 countries (24 EU members and Iceland) participated in the study. The results of the pilot studies prompted Eurostat to explore the possibility of starting voluntary data collection on Greenfield Investment and, in 2020, EU Member States supported the introduction of voluntary data collections on Greenfield Investment as of March 2022 (T+15 months with limited geographical breakdown for reference years 2019–2020), followed by a second, more detailed data collection in September 2022 (T+21 months with breakdown by geographical and economic activity for reference years 2019–2020.

[6] 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.

dealing with specific cases such as holding companies and real estate. Finally, companies might not be able to separate the greenfield amount from company accounts regardless of the approach because the transactions and capital expenditures might have more than one purpose.

SECTION II: OUTCOMES

12. **The Direct Investment Task Team (DITT) members discussed the scope of greenfield 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 (BOP)/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 BOP/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 greenfield investment.

14. **There were different views in the DITT whether the narrow measure of greenfield statistics including only newly established affiliates or also extension of capacity into existing businesses, would be the best to measure.** In considering the definition for greenfield investment, it was also argued that clear definitions of all types of DI transactions: cross-border M&As, greenfield investments, extension of capital, and financial restructuring are needed. Further, the 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 recommendation of the Draft Team is to include guidance in the updated IMF's *Balance of Payments and International Investment Position Manual, sixth edition,* (*BPM6)* on the definition and collection of data on greenfield investments and extension of capacity.** This will be as a supplementary DI series under direct investment provided that clear definitions of greenfield and extensions of capacity can be developed. The Task Team recommends that supplemental statistics of DI for greenfield and extensions of capacity, be included in the updated manual using the transactions approach because this approach is within the framework of BOP and is already described in the *BD4* for M&A transactions (FDI by type). The Compilation Guide should include practical guidance on how data on this should be collected and compiled by countries.

16. **Definition: Greenfield investments refer to altogether new investments (ex nihilo investments).** These investments are expected to have a positive impact (either short, medium or long term) on the host economy such as rise in employment, increased tax revenues etc. Criteria for the expected impact on the host economy should be further developed in the guidance in the updated *BPM6*. In order to improve comparability between countries producing greenfield statistics the guidance in the

BPM6, a convention for the time period where investments in a newly established enterprise are considered greenfield investments, for example, the first three years after establishment, should be established. **Extension of capacity relates to additional new investments as an expansion of an established business.** These transactions increase the productive capacity of the economy. This makes them conceptually, and in terms of economic impact, similar to greenfield investments and are likely to fulfill the same criteria on impact on the host economy as greenfield investments.

17. **Collection of data: Compilers would be encouraged to collect information on inward greenfield investments and extension of capacity as part of DI transactions.** Compilers should report separately statistics for greenfield investments and extensions of capacity even though we acknowledge respondents may find it difficult to separate greenfield 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).

18. **Countries should collect greenfield investments and extension of capacity for both equity (other than reinvestment of earnings) and debt instruments, and exclude the “pass-through” funds, if possible.** Greenfield data and extension of capacity 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.

19. If countries have difficulties collecting directly greenfield data, 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.
- ii) *residual approach*, eliminating other types of DI transactions, in particular cross-border M&As.

Alternative Recommendation

20. **While the Task Team believes that the capital approach could provide valuable analytical information on the impact of newly established enterprises and extensions of capacity on the host economy, it acknowledges that this approach goes beyond the framework of BPM.** The capital approach could be further developed in a cross-cutting context with statistics on MNEs as recommended in the GN on D.9 or as part of the update of the *BD4*.

Questions for Discussion:

1. *Does the Committee agree that further guidance on the definition and collection of data on greenfield investments and extension of capacity according to the transactions approach (FDI by type) should be included in the update of BPM on a supplemental basis?*

2. *Does the Committee agree that both greenfield investments in newly established enterprises and extension of capacity into existing businesses should be collected as the impact on the host economy is expected to be similar?*

3. *Does the Committee agree that the capital approach should be explored as part of the development of a framework to reconcile DI and statistics on MNEs as recommended in the GN for D.9?*

4. *Does the Committee agree that a period of research and testing be undertaken to gather more experience in collecting such statistics using the transactions approach before detailed guidance is further developed?*

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*, 4th edition, 2008, Chapter 2, Chapter 4, and Annex 9.

Annex III. The Transactions and Capital Approaches

1. **Two practical and complementary measures of greenfield investment**—the capital approach and the transactions 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 FDI statistics based on the ultimate ownership concept and on FDI statistics that distinguish greenfield FDI transactions from takeovers

The Transactions Approach

2. **This approach can be thought of more specifically:** FDI transactions-based source of funds to the Direct Investment Enterprises (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 FDI funds are mainly used for Fixed Capital Formation (FCF) purposes, accounting for all or part of DIEs FCF financing. In this sense, it is not as precise as the capital approach. However, it does largely articulate the role of FDI in providing capital funds for DIEs.

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

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

- FDI purpose transactions (excluding reinvested earnings (RIE))
- Mergers and acquisitions (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 FDI 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 one, 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 create DIEs become existing DIEs. If the focus is on the transactions 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 FCF of the DIE.** This is equivalent to FATS variable approach, where the compiler adds FCF as a FATS variable (using either a survey or a record linkage methodology). This approach gets at the total FCF 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 FCF; and, the FATS approach would capture all of the FCF undertaken by the domestic subsidiary, regardless of funding.

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

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