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For discussion

D.16 Treatment of Retained Earnings

Prepared by the Direct Investment Task Team (DITT)

INTERNATIONAL MONETARY FUND

D.16 Treatment of Retained Earnings[1]

This Guidance Note (GN) reflects on the treatment of retained earnings in external sector statistics. In particular, it presents the different methodological and practical challenges currently faced by compilers and analysts when dealing with reinvestment of earnings (RIE) in direct investment enterprises (DIEs). These challenges stem from the divergence between accounting and statistical definitions of income (net operating surplus) as well as the need to impute RIE generated along the direct investment (DI) ownership chain. Finally, and not only in the context of DI, the GN also addresses the implementation of the investment income attributable to investment fund shareholders following current guidelines in Balance of Payments and International Investment Position Manual, sixth edition *(*BPM6*) and concludes that if RIE should be applied to investment funds (institutional unit), it should be treated equally for all investment funds regardless of the fund characteristics. The note suggests three alternatives for recording the indirect fees paid by the shareholders via the investment fund and two of them require the introduction of a new component in the primary income that would cover an imputed distribution of income.*

SECTION I: THE ISSUES

BACKGROUND

Issue 1: Calculation of Reinvestment of Earnings (RIE)

1. **Direct Investment (DI) income on equity includes all the distributed and undistributed current operating earnings of a DI company.** Distributed earnings consist of dividends or withdrawals from income of quasi corporations, while undistributed earnings are imputed as reinvested earnings. Retained earnings of direct investment enterprises (DIE) are also attributed as transactions of the direct investors as if the retained earnings had been distributed in proportion to direct investors' shares in the earnings of the DIE and then reinvested by them in the DIE (*BPM6*, paragraph 3.18).[2]

2. ***BPM6*, paragraph 11.34 indicates that the retained earnings of an enterprise show:**

- the net earnings from production and primary and secondary income transactions before attributing reinvested earnings, or
- Net Operating Surplus (NOS)[3] plus primary income, current transfers receivable, and change in pension entitlements, and minus primary income (excluding RIEs payable to the enterprise's direct investors and owners of investment funds) and current transfers payable.

[1] Prepared by Carmen Picón Aguilar and Antonio Rodríguez Caloca (European Central Bank, ECB), Emma Angulo, Francien Berry, and Emmanuel Manolikakis (International Monetary Fund, IMF), Fernando Lemos (Banco Central do Brasil), Irene Madsen, and Matthias Ludwig (Eurostat).

[2] In June 2021, the Committee discussed and agreed (GN F.2 Asymmetric Treatment of Retained Earnings) to retain the current treatment of DI RIE.

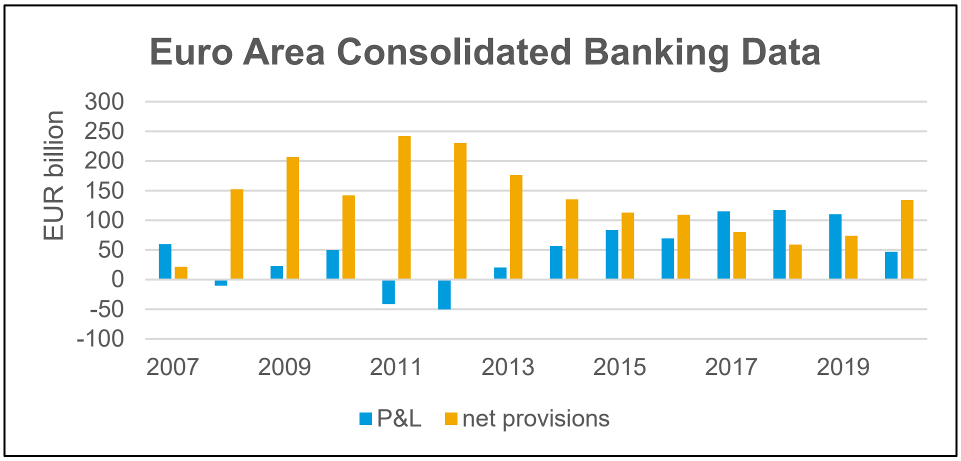
[3] Operating surplus is a measure of the surplus accruing from processes of production before deducting any explicit or implicit interest charges, rent or other property incomes payable on the financial assets, land or other natural resources required to carry on the production (paragraph 7.12, *2008 SNA*).

3. **To be consistent with international standards (*BPM6*, paragraph 11.44), NOS should exclude items that are not part of the production process and include those items that are.** Those items are not always standardized in the enterprises' accounting framework for instance, realized and unrealized holding gains and losses derived from valuation changes, including revaluation of fixed assets, changes in market prices of financial assets and liabilities, or exchange rate changes. It should also exclude gains or losses due to other changes in volume of assets, such as, write-offs, write-downs, and provisions, and should assure that research and development (R&D) and own-account production of software are treated as assets and not as expenses. In addition, certain items that are capitalized by corporations should be treated as operating expenses – large recurring expenses. It is not easy to find this complete and detailed information in the enterprise's financial statements and reports. Additionally, non-standardized forms of financial statements impose barriers to automation (each enterprise has its own format). Most of the companies follow national Generally Accepted Accounting Principles (GAAP), while a small number of companies follow more comparable International Financial Reporting Standards (IFRS). Furthermore, those details may be costly: while they can be accessible for resident DIEs via DI surveys, the complexity of obtaining that detailed information from foreign companies, even when they are controlled by the resident direct investor, can distort the calculation. Finally, commercial databases containing financial statements of listed and unlisted enterprises do not usually provide these details. While a corporation will generally report any material revenues and expenses it has incurred in the financial statements and accompanying notes, it can be more difficult to collect information that is only included in the notes. All these details and constraints are very relevant to operationalize the calculation of RIE in a consistent manner, in particular now that it has been agreed by the IMF's Committee on Balance of Payments Statistics (the Committee) (and subject to the System of National Accounts (SNA) Advisory Expert Group (AEG) opinion) to add supplementary information on portfolio investment RIE to the balance of payments.[4]

4. **The difficulties to measure and to analyze the current statistical concept of NOS are particularly relevant for financial corporations.** The activities and profits of these corporations are based on financial trading and, therefore, holding gains beyond normal trading margins could be included in their financial accounting data. In addition, their profits are limited by loan provisions that they have to separate by law. As a result, profits announced by the financial corporations may depart largely from the statistical recording, and the difference may be shown in the revaluation flows. (Figure 1 shows the relevance of provisions in the Euro Area).

[4] See outcome of the Committee meeting of June 2021: https://www.imf.org/external/pubs/ft/bop/2021/pdf/VM2/21-12.pdf, see paragraph 48 and the section of action for GN F.2. The recording of RIE in portfolio investment and domestically will be considered as part of the testing of F.2.

Figure 1. Relevance of Provisions in Euro Area Credit Institutions



Note: Profit and loss (P&L) already discounts the net provisions. In order to calculate COPC, the net provisions should be added to the P&L values.

Issue 2: RIE Treatment/Classification in the DI Ownership Chain

5. According to *BPM6,* paragraph 11.47, "In a chain of direct investment relationships, reinvested earnings need only be recorded between the direct investor and directly owned direct investment enterprises. The passing of retained earnings from indirect holdings should be taken into account through the chain of direct investment relationships."[5] Retained earnings of an enterprise in the chain would include reinvested earnings derived from its immediate direct investment enterprise […], which as a direct investor would receive reinvested earnings from its immediate direct investment enterprise, and so on. Therefore, reinvested earnings are passed on to the indirect direct investors through the chain indirectly...".[6] A similar recommendation is provided in the *2008 System of National Accounts* (*SNA 2008*) paragraph 26.63 *"Retained earnings are equal to the net operating surplus of the enterprise plus all property income earned less all property income payable (before calculating reinvested earnings) plus current transfers receivable less current transfers payable and less the item for the adjustment for the change in pension entitlements. Reinvested earnings accrued from any immediate subsidiaries are included in the property income receivable by the direct investment enterprise"*.

6. **Recording RIE from indirectly held enterprises is applicable for economies on the top or in the middle of multinational investment chains.** If the resident entity is on the top of the investment chain, RIE from indirectly held enterprises should be included in the resident entity's DI income (receivables). If the resident entity is in the middle of the investment chain, the receivables of RIE should be allocated to the foreign direct investor in addition to the payables of RIE of the resident entity.

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[5] The international chain may contain domestic enterprise groups in some host economies; however, SNA does not compile RIE for domestic groups. When imputed in the RIE of the DIE, it can generate inconsistencies in the DIE economy unless national accounts (NA) introduce some adjustment in the sectors involved. The SNA research agenda mentions it as an item for further elaboration (A4.29).

[6] See the *Benchmark Definition of FDI*, *fourth edition* (*BD4*) paragraphs 549 and 550 for a practical example of the calculation of RIEs along a chain of related DIEs.

7. **Calculating indirect RIE is particularly challenging for those economies where Special Purpose Entities (SPEs) or other pass-through entities play a significant role.** However, it should not be misunderstood as "I pass all the income that I get" without considering that the resident entity may also generate some income; therefore, those countries should not have debits equal to credits.

8. **On the asset side, long ownership chains have the potential to hinder the distinction between operational and non-operational earnings:** usually, DI income is requested from the immediate DIE. When the ownership chain is long and there are enterprises at different "layers" contributing to total income, it becomes harder to correctly measure the Current Operating Performance Concept (COPC) and non-COPC results for each enterprise. It is often easier to obtain the information needed to calculate RIE when the entity in the reporting economy is at the top of the investment chain; entities that are in the middle of the chain and that are foreign controlled often do not have this information or have difficulties in obtaining the required detailed information. The process is burdensome and time consuming for both compilers and reporters as it demands high expertise and the quality of the calculations depends highly on the information on the structure of the company, its complexity and the availability of details for every unit below the compiling economy in the chain. Challenges also arise because of accounting recommendations, which do not necessitate full line by line consolidation of revenues and expenses of subsidiaries or affiliates. For instance, the top company may choose another method to consolidate the operations of its subsidiary and or affiliate which may not provide the necessary alignment required by the accounts.

9. Triggered by the discussions in the Joint European System of Central Banks (ESCB) and European Statistical System (ESS) Task Force on Foreign Direct Investment (ESCB-ESS TF FDI) related to the complexity to calculate reinvested earnings through the chain of ownership as well as the large bilateral asymmetries shown between EU countries, the National Bank of Belgium together with Banco de España, Banque de France, Bundesbank, and the Office for National Statistics (UK) started an exercise (2019–2021) to test how reliable were those estimates based on accounting consolidated data. The study was based on companies of six multinationals that had a relevant presence in those countries. The outcome of the exercise was that a reliable calculation of the earnings generated down the DI ownership chain is usually infeasible for complex groups due to several factors: (i) difficulty in identifying the real structure of the group and shares of ownership; (ii) difficulty in identifying and covering domestic companies indirectly held by the direct investor (i.e., difficulty in covering the entire foreign-owned domestic enterprise group) because DI surveys often focus on the immediate foreign counterpart; and (iii) different, and sometimes inconsistent, income concepts applied depending on the degree of granularity available to calculate a proper COPC, in particular in consolidated group data. When comparing the income data across countries, the shared data already showed some differences for the immediate counterpart. However, when indirect income estimates were included in the study, the differences increased significantly, and the results became considerably less reliable.

10. On the other hand, US Bureau of Economic Analysis (BEA) collects sufficient information to be able to estimate and publish DI income through the chain of ownership and a change in the current standards would have a large impact in the current account balance as well as in the Gross National Income (GNI) figures.

Issue 3: Investment Income Attributable to Investment Fund Shareholders – Retained Earnings[7]

11. **Investment funds are collective investment schemes (CIS) that raise funds by issuing shares or units to the public that become shareholders (*BPM6*, paragraph 4.74).** As legal and institutional units, investment funds legally and economically own the financial assets in which the funds raised are invested. The shareholders of the investment fund are the beneficial owners of the assets in which the Fund invests. Some funds may be limited to certain investors only, whereas others are available to the public. Investment funds as institutional units should not be confused with firms that provide financial asset management services. Fund managers only manage the activities of the fund, without taking ownership of their assets or assuming their liabilities—and are separate institutional units from the investment funds.

12. **Investment funds do not generally have direct employees but rather engage the services of administrators, trustees and/or portfolio managers to manage the operations of the funds.** In turn, funds pay fees to these service providers, and make use of the required human resources to support the funds operations—buying and selling of securities, providing legal, accounting, and other services required to ensure that the fund is operating efficiently. The fund in turn charges a service fee to investors which is equivalent to the amount of operating expenses and is usually reported as an annual percentage of the assets in the fund. It is referred as the management expense ratio (MER).

13. **The MER does not include redemption fees, exchange fees imposed for transferring shares/units within the same fund group—managed by the same management company, or account fees.** These fees are imposed by the investment fund on shareholders for specific transactions and are therefore not part of the annual (recurring) operating expenses of the fund. However, they are part of the "shareholders fees"[8] charged by the investment fund to their shareholders, and therefore, output of the investment fund. Likewise, front-end/back-end load fees are imposed by the investment fund to the shareholder and passed onto the broker to compensate for their activities when purchasing or redeeming the investment fund shares. Additional entry/exit charges or purchase fees paid by the investor directly to the fund, when entering/leaving the fund, are also considered fees explicitly charged to the shareholders.

14. **Investment funds are institutional units which provide financial services to shareholders.** The services are measured as the sum of costs incurred by the fund.[9] The investment fund uses the collective pool of funds to invest in various types of assets based on the type of fund and the risk profile of the investors. In exchange, investors must pay a fee that covers the operating expenses of the fund and will vary depending on the market value of the assets under administration. Following *BPM6,* paragraph 10.124, these expenses can be explicitly charged to the investors as a fee or implicitly paid out of

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[7] The authors take the opportunity of this GN to address this issue, even though it mainly (if not fully) touches upon portfolio investment.

[8] See https://www.sec.gov/files/ib_mutualfundfees.pdf.

[9] The output of the fund is measured as the sum of costs incurred by the fund. The intermediate consumption (IC) is the operating expenses incurred to operate the fund. Like any other business, IC will include all the operating expenses excluding compensation of employees and any expenses not associated with production—donations, provisions for loan losses, etc. As a result, NOS and retained earnings will be derived in a similar fashion to other corporations in the *2008 SNA*.

investment income received or out of the assets of the fund. In case of expenses implicitly paid, *BPM6* states that it should be recognized as a service to the owners, however it is unclear if an imputed service should be included in balance of payments between the fund and the shareholder in case of a cross-border relation.

15. ***BPM6* explicitly clarifies the recording of undistributed earnings generated by investment funds as income.** *BPM6*, paragraph 11.38 notes that undistributed earnings of investment funds are imputed as payable to the owners and then reinvested into the fund. This is applicable to both DI and portfolio investment.[10] The consequence of this treatment, consistent with that of the *2008 SNA* on retained earnings of investment funds, is that net savings of investment funds is always zero. The net earnings of investment funds (investment income less operating expenses) ultimately belong to their shareholders, and are either distributed via dividends or reinvested into the fund.

16. **The treatment and calculation of investment funds' RIE are the same as for RIE of any other DIEs.** However, the standards note that *"….the shareholders' income from investment funds is defined as the investment income earned on the fund's investment portfolio after deduction of operating expenses"* (*BPM6*, paragraphs 10.124–10.125) without specific guidance on what should be considered operating expenses when calculating the investment fund's RIE. Specifically, it seems unclear whether operating expenses charged implicitly or indirectly from the fund to the investor should be similarly included as well as the payment of taxes, or how to exclude/include service charges paid directly by the investor to the fund manager.[11]

17. **In 2018, the ESCB initiated discussions to compile investment fund income attributable to shareholders in line with *BPM6* methodology on a security-by-security (SBS) basis.** An overview of the resulting compilation model is included in Annex II.

ISSUES FOR DISCUSSION

Issue 1: Calculation of RIE

18. ***BPM6* provides following guidance on the calculation of retained earnings and RIE:**

- **Reinvestment of Earnings** (paragraph 8.15): "It is the corresponding entry and equal to reinvested earnings".
- **Retained Earnings** (paragraph 11.34): "Retained earnings of an enterprise shows the net earnings from production and primary and secondary income transactions before attributing **reinvested earnings**".
- **Reinvested Earnings** (paragraph 11.40): "The reinvested earnings are the direct investors' share of the **retained earnings** of the direct investment enterprise".

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[10] In October 2020, the Committee discussed and agreed (GN D.3 Collective Investment Institutions (CIIs)) to modify the operational definition of DI to exclude certain investments in or by CIIs to overcome both conceptual and practical issues from existing guidelines. Further details can be found at: https://www.imf.org/en/Data/Statistics/BPM/DITT.

[11] Retained earnings of a DIE are measured after deducting corporate taxes charged on the income of the enterprise (*BPM6,* paragraph 11.45).

19. **The above guidance may be confusing to the compilers.** This note considers that the above explanation on the calculation of retained earnings should be modified as: "*Retained earnings of an enterprise shows the net earnings from current production and primary and secondary income transaction that has not been distributed*", removing the reference to reinvested earnings. Once the retained earnings are calculated, the reinvested earnings are the part of the retained earnings owned by the direct investor based on the percentage of ownership.

20. **Some aspects of RIE compilation require further clarification in the *BPM6* update or its compilation guide:** (i) change in pension entitlements are only mentioned in paragraph 11.34 and not included in other parts of the *BPM6* that discussed RIE; and (ii) the values of "Enterprise's share of RIE of any DIEs" are not included in the P&L statements of the enterprise.

21. **In particular, the concept of income generated by enterprises does not deduct the expenses related to the provisions for losses on long-term contracts as they are not considered as intermediate consumption (IC) of the sector.**[12] In the case of credit institutions, these expenses, which are necessary for the development of their ordinary activity and even mandatory from the regulatory authorities, are usually large and have a significant impact in its profitability.[13] The analytical use of the RIE and the stock/flow reconciliation for credit institutions are hampered by this treatment, as the overstatement of DI Income usually is corrected by negative price revaluations (i.e., they present significant and persistent differences with the financial accounting profitability of the sector).

22. **To reflect that obligatory provisions for bad loans cannot potentially be distributed to the direct investor, they could be deducted when calculating the RIE to be imputed to the direct investor, leaving them as savings of the DIE.** This would not change the treatment of provisions in macroeconomic statistics (i.e., the provisions would not be considered current expenses but would include the novelty that DIE may have savings different from zero).[14] However, this option would increase the GNI of the DIE's economy as part of the earnings of the DIE will stay as savings of that economy and would fail to recognize in the balance of payments and international investment position (IIP) the financing of provisions provided by the direct investor.

23. **A different option, that will not impact the measurement of GNI of the DIE's economy, would be to keep the current RIE imputation and present the provisions as a memorandum item.[15]** This would help the analyst to understand the statistical income figures, in particular in financial crisis times when the increase of provisions may drastically change the P&L of the banks (see Figure 1). From a practical point of view, the isolation of regulatory provisions should not generate any additional reporting

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[12] The treatment of provisions in the SNA was included in the research agenda of *2008 SNA* with a clear reference to the current SNA overestimation of the net worth of banks (by not taking into account impaired loans).

[13] See the relevance of provisions vs P&L accounts for the euro area credit institutions in Figure 1.

[14] See *2008 SNA*, paragraph 7.139.

[15] *2008 SNA*, in paragraph A4.42, mentions that liabilities and provisions relating to financial instruments are generally recognized in the main accounts only if there is a corresponding financial asset of equal value held by a counterparty. However, it is recommended that certain provisions that do not satisfy this criterion, such as those for non-performing loans, should be recorded as memorandum items. Thus, this proposal appears to be in line with the current treatment of provisions in the manuals; if there are changes to the treatment of provisions in the updated manuals, these would then be reflected in the guidance on DI statistics.

burden as it will be more consistent with the financial accounting and therefore less adjustments should be done by compilers or reporters.

Issue 2: RIE Treatment/Classification Along the DI Ownership Chain

24. ***BPM6* guidance is unclear on the implication of including RIE derived from its immediate DIE (*BPM6*, paragraph 11.47), in particular because the values of the RIE receivables from the immediate DIE are not included in its P&L statement.** The members of this drafting team have different interpretations about its practical implementation, and, therefore, they agree that further clarification and examples should be included in the updated manual. This statement is supported by the work done by US BEA and Eurostat in 2019 to explain large asymmetries in DI income between the EU and the US.[16]

25. **Incorrectly recorded DI income can have significant impacts on the level and partner economy allocation of income statistics and can impact global and bilateral asymmetries between economies.** This becomes very relevant for the compilation of economic union aggregates. Annex III shows examples of different practical implementations by compilers, including the options proposed in this GN, for an extended example included in *BPM6,* Box 11.1.

26. **It is noted that the recording of indirect DI income across the whole ownership chain implies the imputation of retained earnings between corporations having domestic equity links (for the sections of a global ownership chain transiting a domestic economy).** This partially answers the research question in GN F.2 “Asymmetric Treatment of Retained Earnings”, as it entails the recording of reinvested earnings for some domestic equity links in the core accounts. At the same time, the results of the discussion in GN D.17 “Identifying Superdividends and Establishing the Borderline Between Dividends and Withdrawal of Equity”, which might entail a change in the definition of dividends in the DI context, might have consequences for the definition of dividends for those domestic links as well if the change is intended to be implemented consistently across all steps of international ownership links.

27. **Due to the compilation challenge of implementing the imputation of the indirect DI income treatment, isolating this type of income from the immediate DI income could benefit the global analysis of DI income data.** In addition, from an analytical point of view, the drafting team considered it most relevant for the economy where the head of the company is resident; therefore, compilers in those economies will make an extra effort for good coverage that may not be possible for compilers in other economies. Specifically, three alternatives were considered: (A) the status quo (i.e., recognizing all of the earnings generated down the DI ownership chain in primary income (see example 1 in Annex III)); (B) recognizing all of the earnings generated down the DI ownership chain as primary income but reporting indirect income separately as an “of which” in the accounts so as to not impact the aggregates (see example 1a in Annex III); and (C) limiting the imputation of RIE to the P&L account of the immediate DIE (see example 2 in Annex III). Alternative A is the most conceptually and analytically sound although difficult to follow for compilers of economies in the middle of the chain. Alternative B would be complicated for countries that collect consolidated data and cannot separate the income of the immediate DIE from the income generated along the chain. However, it would be very transparent and would

[16] See BEA Working Paper Series, WP2019-6 https://www.bea.gov/system/files/papers/WP2019-6_0.pdf

enhance data comparability across countries. Alternative C could make data more comparable across economies and reduce asymmetries. On the other hand, for some countries, it would lead to a change in the measurement of the RIE and, therefore, of the current account balance and GNI. Part of the drafting team was in favor of including the imputation of the RIE generated through the DI ownership chain separated as an "of which" in the reported data to improve global comparability and increase analytical value, while others preferred the simplification offered by Alternative C.

28. Preliminary experimental estimates made by US BEA indicate a 7 percent annual reduction in the current account balance if only the income generated by the immediate entity in the ownership chain is considered in the DI income. On the other hand, one may expect that the estimation of the indirect DI income is one of the main sources of the current (US – EU) asymmetries in DI income (around €100bn in 2020), therefore, the inclusion of a similar estimate of indirect DI income in the EU figures would decrease the current account balance and consequently the GNI although the amount is difficult to estimate.

Issue 3: Investment Income Attributable to Investment Fund Shareholders – Retained Earnings

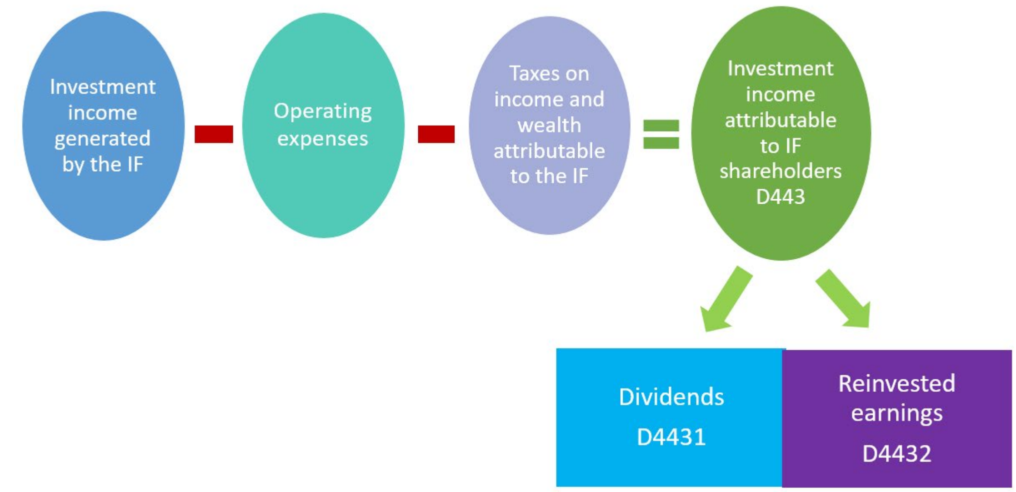
29. **Retained earnings generated by investment funds should always be compiled** regardless of its type (open-ended vs closed-ended), assets held (e.g., equity, real estate funds or government bonds), dividend distribution policy (distributing vs cumulative), level of liquidity, or even the law/statute of constitution.

30. **First, the income attributable to shareholders is calculated, then the retained earnings is defined as the residual part that is not distributed in the form of dividends to the collective investment fund shareholders** (D443) (see Figure 2). Reinvested earnings may be negative, for example, when a fund has paid dividends out of realized holding gains or out of previous periods earnings.

31. **Following *BPM6,* paragraph 11.38, retained earnings should be calculated as the investment income earned by the fund's investment portfolio after deducting operating expenses minus dividends distributed by the fund** (see figure 2). Investment funds earn different types of income: interests on debt securities and deposits (and eventually on loans taken);[17] dividends associated with equity securities; rents on real estate; investment income attributable to investment funds shareholders (only credits, e.g., for funds of funds); and other income received (e.g., income attributable to insurance policy holders, standardized guarantees and pension funds).

[17] Deposits and loans interest theoretically should be adjusted for financial intermediation services indirectly measured (FISIM) as investment funds are FISIM consumers, although this distinction is not relevant for the calculation of NOS.

Figure 2. Statistical Treatment Overview of Income Attributable to Shareholders*



***IF = Investment Funds**

32. **The investment income is recorded (i) on an accrual basis when referring to the interest received on debt instruments and rents (*BPM6,* paragraphs 11.49 and 11.89, respectively) and (ii) on ex-dividend date for equity related income (*BPM6*, paragraph 11.31).** In the case that the investment fund has got some temporal financing via loans, the accrual basis should also apply to the interest paid. Holding gains and losses are already excluded from the net income generated by the fund (*BPM6*, paragraph 11.39).

33. **Operating expenses are the sum of all costs incurred in the normal course of business.** It consists of all expenses (inputs) required to produce the output of the institutional units. For investment funds, the operating expenses include:

i. the investment management charges that cover the costs of hiring and retaining investment advisors that manage the funds' investment portfolios;

ii. the costs of executing investors' sales and purchases, maintaining accounts etc.; and,

iii. administrative costs related to marketing and distribution fees (which cover the costs faced by the fund for advertising, printing and distributing materials to investors and prospective investors), legal and accounting fees to prepare financial records as well as a number of other expenses such as custodian, central administration, distribution and audit fees.

34. Most of those services are provided by the management company, brokers, custodians, legal experts, printers, accountants and auditors, advertisers, or promoters, etc.—some of which are financial auxiliaries classified under "S.126". Table 1 below shows a summary of the types of fees borne by investment funds shareholders and their relationship with the fund's operating expenses. The direct fees are those paid directly by shareholders to the Fund Manager or other third party and therefore are not considered operating expenses of the Fund and do not have any impact in the reinvested earnings calculation. The indirect fees are generally charged by the Fund to the shareholders to cover the

operating expenses that the Fund has faced. Those fees are usually charged as a percent of the value of their investment fund shares and deducted from the income accumulated or from the shareholder's (Fund's) assets.

Table 1. Fees Borne by the Investment Fund Shareholders

Type of fees	**Description**	**Charges involved**	**Operating expense of the IF?**
Direct fees*	Specific charges paid directly by the shareholder to the fund manager or other service provider.	Service e.g., from fund manager to shareholder. These may include some brokerage commission	No These fees do not involve the accounts of the investment fund and do not have an impact in the RIE calculation. They are treated as consumption of the shareholders and output of the service providers (and exports/ imports of services if shareholders and service providers are resident in different countries)
Indirect fees*	Expenses paid by the investment funds to the third parties out of the investment income generated or out of the assets of the fund.	Charge e.g., from the fund manager to the investment funds Charge from the investment funds to the shareholder	Yes Treatment to be decided. Proposals for treatment are presented in this note.

BPM6, paragraph 10.124 refers to explicitly and implicitly charged while this table uses a terminology more common in the markets: directly and indirectly paid fees and expenses.*

35. **This guidance proposes to clarify in the update of the manuals how the operating expenses, which are ultimately borne by the shareholders, should be treated in macroeconomic statistics.** The clarification is needed only on how to treat those fees indirectly charged, and constituting the operating expenses of the fund, as those fees directly charged are unquestionably considered as services provided by the service providers directly to the shareholders.

36. **This note proposes three options to record the indirect fees. As a first option, the charges could be recorded as services provided by the original professional providers to the Fund, and then from the Fund to the investor.** However, as there is no cash payment between the investor and the Fund, this treatment requires additional imputations: the Fund would impute a property income payment to the shareholders by the amount of the operating charges to compensate the recording of revenues by the fund (for the services provided to the shareholders), otherwise the transaction would generate net errors and omissions. As a consequence, the total income attributable to the shareholders, including this additional imputation, would be equal to the net investment earnings, and the operating expenses and revenues booked by the Fund will be the same, leaving no value added or balance of trade for the investment fund. (See Tables 1 and 1A in Annex 1).

37. **As a second option, the service would not be imputed from the investment fund to the shareholders, and the income attributable to the shareholders would be calculated as the investment income generated by the investment fund minus the operating expenses.** However, from the NA perspective, this interpretation, which is the one that follows more directly the current wording of *BPM6,* paragraph 11.38, will result in a negative value added for the investment fund. (See Tables 2 and 2A in Annex 1).

38. **A third option would be to consider that all the costs incurred by the fund in its day-to-day operations relate to services provided directly from the original professional providers to the shareholders.** Following this proposal, the operating expenses, output, and intermediate consumption of the investment fund will be zero—for instance, the investment fund will not record any service as provider or consumer, and, similarly to the first option, all the net income generated by the fund excluding taxes would be attributable to the shareholders. The service would be paid by the investment funds on behalf of the shareholders to the service provider. (See Table 3 and 3A in Annex 1).

39. **In the first and third alternatives above, the total income attributable to the shareholders would include an amount corresponding to the operating expenses that would not be explicitly distributed or reinvested.** This imputed amount is then used by the shareholders to “purchase” services from the investment fund or the management company, depending on the option chosen (1 or 3). This part of the income would have an imputed nature as that of RIE. A possibility is then to redefine RIE to also cover the operating revenues. However, this might not be wanted as the counterpart entry of this non-paid charges is in services instead of in the financial account as the standard RIE is. An alternative could then be to introduce a new income component to be added to the existing D4431 (dividends) and D4432 (RIE).

40. **Investment fund income attributable to shareholders is measured after deducting corporate taxes charged on the income of the enterprise (*BPM6,* paragraph 11.45).** Those taxes are on income and wealth (attributable to the fund) and they should not be confused with those paid by the fund on behalf of the shareholders (the so-called “withholding taxes”). In some areas, for example in North America, funds are deemed as non-taxable entities, although they may generate profits, they redistribute any excess funds to their unitholders (return of capital) so that the taxable income will be below the taxable threshold.

41. **In all the instances, the identification of the residency of the different agents involved (e.g., the management company, the investment fund and the shareholders) is needed to correctly identify and allocate exports/imports of services.** Given the practical problems of attributing portions of the operating expenses to these services, the investment fund industry could provide some estimation guidelines based on available information that could be applied by statistical compilers.

SECTION II: OUTCOMES

Issue 1: Calculation of RIE

42. **To a certain extent, Direct Investment Task Team (DITT) members agree that the language of some paragraphs of *BPM6* should be improved to facilitate the understanding of RIE** and

retained earnings and to remove some inconsistencies with the current treatment of RIE as transactions (i.e., *BPM6*, paragraphs 3.4, 11.41, 11.34, and 11.43).

43. **All DITT members but one considered it relevant to clarify either in BPM or in the BPM Compilation Guide some aspects of RIE compilation.** In particular, the BPM Compilation Guide could include some useful examples, mapping with standard accounting terminology and country experiences to understand how modelling or other alternatives can be developed in place of data collection to avoid increasing reporting burden.

44. **The drafting team proposed to consider in the context of RIE a new interpretation of provisions, in particular regulatory provisions for bad loans in the definition of DI income, considering that provisions cannot be potentially distributed and therefore should remain as savings of the DIE, lowering the reinvested earnings.** This means that the income generated by the DIE would have three components: dividends (distributed), RIE, and savings that would be equal to the new provisions*.* While most DITT members agreed that the treatment of provisions could be re-considered in the revised BPM, they recognized that the issue needs to be more completely explored and discussed thoroughly with the AEG given its likely impact on the measurement of the GNI. Furthermore, some members understood that, although relevant for certain economies, for others, the amounts would not be significant, thus rendering the cost/benefit of changing the current reporting unworthy. After considering the different views expressed, the DITT members favored the new proposal of presenting provisions as a memorandum item. This recommendation will facilitate the analysis of the effect of provisions on the profitability of the credit institutions while keeping the general statistical framework applied to provisions and most importantly not changing the measurement of GNI.

Issue 2: RIE Treatment/Classification Along the DI Ownership Chain

45. **There were conflicting views among the DITT members regarding the imputation of RIE from all the subsidiaries of the DI ownership chain vs only RIE from the immediately held DIE.** The majority of members agreed that from a conceptual and analytical point of view, the attribution of all the earnings generated below the DI ownership chain as RIE should be kept although most of them acknowledged the practical challenge of estimation. Half of the DITT members recognized that imputing only the RIE from the immediately held DIE would be the best option in terms of simplicity and minimizing asymmetry issues, since compilers would not need to collect very detailed information on ownership chains, which may not be readily available for some countries, as well as avoid further complications related to interactions with the treatment of domestic equity links (see paragraph 26 in relation to GNs F.2 and D.17). However, a few members expressed strong concerns with this simplification from a conceptual point of view. Some members have much more experience and data available (e.g., the US), and it is suggested to include more detailed guidance as well as practical experience for compilers in the *BPM7 Compilation Guide*.

Issue 3: Calculation of RIE by Investment Funds

46. **The recording of the indirect fees charged by the Fund to the investors lacks clarity in the standards, in relation to how the operating expenses are allocated to the shareholders.** To add clarity, the following proposals are put forward: (i) the expenses incurred by the investment fund would be recognized also as a service provided by the fund to the owners and the counterpart financial entry for

that charge would be a reduction of the value of the investment. The amount of the investment income generated by the investment funds and attributable to shareholders would be “gross” (i.e., not reduced by the amount of operating expenses (Tables 1 and 1A in Annex 1)); (ii) the expenses incurred by the investment fund would be deducted from the attributable income imputed to the shareholder (i.e., income attributable to the investors would be calculated in “net” terms (Tables 2 and 2A in Annex 1)); (iii) the investment fund has no output or operating expense by definition, therefore the amount of the investment income generated by the investment funds and attributable to shareholders is calculated “gross”. However, the Fund will pay the service provided by third parties on behalf of the shareholder and the counterpart entry would be a reduction of the value of the investment (Tables 3 and 3A in Annex 1).

47. **The calculation of income attributable to the shareholders in gross terms (i.e., not deducting operating costs), would require either the redefinition of RIE or the inclusion of a new imputed income component.**

48. Depending on the preferred proposal to treat the expenses indirectly charged to the investors, the *BPM6* and *2008 SNA* should be updated to:

- Clearly state that the investment fund is a separate institutional unit from the fund manager.
- Include a clear definition of operating expenses (and revenues) regarding collective investment schemes as:
    a. Operating expenses of an investment fund should be defined as those costs necessarily incurred by the fund in its day-to-day operation (See paragraph 31);
    b. Operating costs of an investment fund will be recorded when those costs are indirectly (specifically or generally) charged by the IF to the shareholder.
- Clarify the different implications in the recording of the “indirect fees”, in particular the change in the definition of RIE or the introduction of a new income component: “imputed dividends”.
- Define the output of the investment fund and imputed transactions in the SNA.
- Clarify that “direct fees” are not operating expenses/revenues of the Fund and are not included in the calculation of RIE.

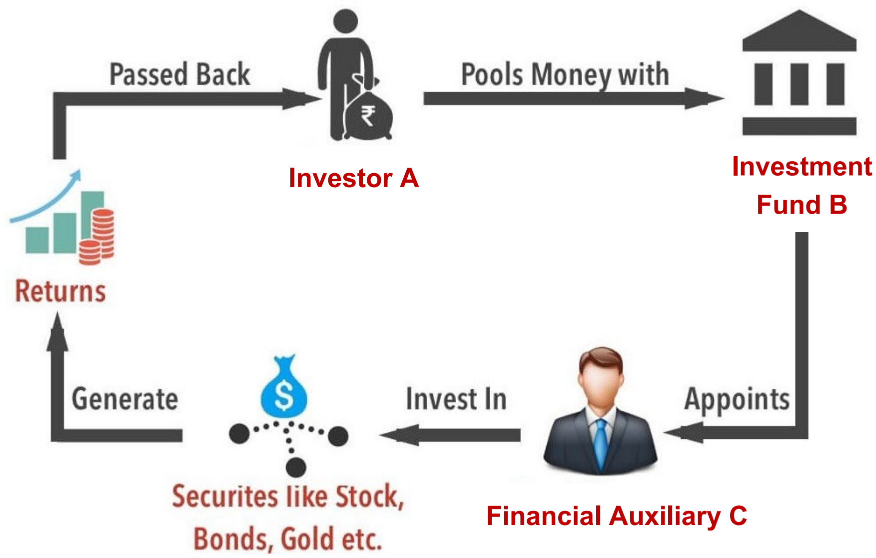
49. All DITT members agreed **that RIE and net income should be always compiled regardless the funds attributes.** Furthermore, DITT members largely supported the methodological approaches discussed in this GN, although it was recognized that any of them are challenging to implement in practice due to the unavailability of data, in particular on the indirect charged fees

50. In October 2021, the Committee and AEG Members broadly agreed that RIE and net income should always be compiled regardless of the fund’s attributes. Likewise, there was support for the originally proposed treatment of operating expenses charged indirectly in line with Option 1, although it was noted by some members that the proposed treatment would lead to the undesired outcome of investment funds being considered as producing units. There were also some concerns about practicality as investment funds may record the data differently.

51. It was suggested extending the GN to incorporate the implications of the proposed treatment for NA. To reflect implications of the different proposals on NA, the Committee and the AEG agreed that the GN should be updated in consultation with the IMF's Real Sector Division and it be sent again to the Committee and the AEG for final approval via written procedure. The current draft of the GN covers these requests and provides alternatives to Option 1.

Annex I. Agents Involved in the Activity of Investment Funds and the Suggested Statistical Treatment of Their Expenses (Fees)

Figure A1: The Sequence of flows and the functions of the fund and the manager.



1. In order to explain in practical terms how would be the reporting of the different proposals discussed under issue 3, we will assume that the investment income generated by an Investment Fund (IF) resident of the Country B (IFB) is 15 units of income (cash) for a particular period and the operating expenses incurred by the IF during this period are equal to 5. The resulting 10 units may be invested in other instrument or keeping as a deposit. The service provider to which these expenses are paid is a financial auxiliary, resident in Country C (S126 C). We also assume that all the shareholders are in a third country (investors A). IFB has not distributed any dividend to investors A.

2. IFB indirectly charged all the costs paid from the income generated by reducing the amount to be reinvested in the fund. This does not imply any cash movements between IFB and investor A and all the related entries are imputations. Three different treatments are proposed for consideration:

Option 1—Fees indirectly charged (by the Investment Fund) to the Shareholders: Gross Approach

In this option, the investment fund produces a service to the fund shareholders. The value of the service is the equivalent of the annual recurring fees (operating expenses), such as management fees, distribution and/or service fees and other fees based on a percentage of a fund's asset value. These fees are payable to the managers of the funds and are, in turn, charged to investors in the funds. Thus, from the example above the fund attributes the full amount of the investment income earned as property income to the shareholders (15). The shareholders indirectly pay service charges of 5 to the investment fund, which is then paid by the fund to the fund managers. This approach is in line with *BPM6,* paragraph 10.124 *"…expenses implicitly paid for should be recognized as a service to the owners"* and *BPM6,* paragraph 10.125 which notes that *"Implicit asset management service charges can be measured at cost. The corresponding entry is to increase the net value of investment income payable to the investor to the gross value before deduction of the expenses. Without the recognition of the output of such services, the costs incurred would lead to negative operating surplus for the asset management enterprises."* One key issue for discussion is how to record the property income to reflect distributed income and reinvested earnings accurately and intuitively.

Both the *2008 SNA*/*BPM6* note that "investment income attributable to the owners of investment fund shares includes dividends payable to them as well as retained earnings." This approach treats the amount of the expenses as being distributed to the shareholders in the form of income that is returned by the shareholder to pay for the service. In the table below this imputed income is treated as a new transaction (alternatively it could be considered as part of RIE)

Table 1. Balance of Payments Entries Assuming that the Operating Expenses are Indirectly Charged to Shareholders

Shareholders A					
	DR	**CR**		**NAFA**	**NIL**
Current Account		**10**	**Financial Account**	**10**	
Financial services *(imputed)*	5		Portfolio/Direct Investment		
Balance on trade in services		-5	Investment Fund Units	10	
Primary Income			*Reinvestment of earnings*	*10*	
Investment Income					
Investment income attributable to collective investment funds shareholders		15			
Dividends (imputed)		*5*			
Reinvested earnings		*10*			
Balance of primary income		**15**			
Investment Funds B					
	DR	**CR**		**NAFA**	**NIL**
Current Account		**0**	**Financial Account**	**10**	**10**
Financial Services	5	5	Portfolio/Direct Investment		
Balance on trade in services		**0**	Investment Fund Units		10
Primary Income			*Reinvestment of earnings*		*10*
Investment Income		**15**			
Investment income attributable to collective investment funds shareholders	*15*		**Portfolio investment/ Other investment**	**10**	
Dividends (imputed)	*5*		Miscellaneous assets (including deposits)	10	
Reinvested earnings	*10*				
Balance of primary income		**0**			
Fund Managers C					
	DR	**CR**			
Current Account		**5**	**Other investment**	**5**	
Financial services		5	Deposits	5	

Table 1A. SNA Entries Assuming that the Operating Expenses are Indirectly Charged to Shareholders

Shareholders					
	Uses	**Resources**		**NAFA**	**NIL**
			Financial Account	**10**	
Property Income					
Investment income attributable to collective investment funds shareholders		15	Investment fund shares/units	10	
Dividends (imputed)		*5*			
Reinvested earnings		*10*			
Balance of primary income / Disposable Income		**15**			
Final consumption expenditure	5				
Gross Saving	**10**				
Investment Funds					
	Uses	**Resources**		**NAFA**	**NIL**
Output		5			
Intermediate Consumption	5				
Gross value added / operating surplus	**0**				
Property Income			**Financial Account**	**10**	**10**
Investment Income		15	Investment fund shares/units		10
Interest		15	Miscellaneous assets (including deposits)	10	
Investment income attributable to collective investment funds shareholders	15				
Dividends (imputed)	*5*				
Reinvested earnings	*10*				
Balance of primary income / Disposable Income	**0**				
Fund Managers					
	Uses	**Resources**		**NAFA**	**NIL**
Output		5	**Financial Account**	**5**	
			Deposits	5	

*Table does not reflect the counterparty sector of the holdings for the IF.

Option 2—Fees Indirectly Charged (by the Investment Fund) to the Shareholders: Net Approach

This option shows an alternative reporting for indirectly charged fees. Following *BPM6, paragraph 11.38* which notes that *"…Shareholders' income from investment funds is defined as the investment income earned on the fund's investment portfolio **after** deducting operating expenses. The net earnings of investment funds after deducting the operating expenses belong to shareholders."* Therefore, in this approach, the cost incurred by IF B are paid by the fund to the fund manager and charged implicitly to the shareholders as a reduction in investment income. In this option, reinvested earnings (10) = net investment income generated by fund assets (15) – operating expenses (5). However, *this approach does not align with BPM6, paragraph 10.125 -"...the corresponding entry is to increase the net value of investment income payable to the investor to the gross value before deduction of the expenses."* Additionally, this approach leads to a negative value added/operating surplus for investment funds. Likewise, the system is inconsistent with gross value of property income being recorded as paid to the investment fund by counterpart sectors but only the net amount recorded by the investment fund.

Table 2. Balance of Payments Entries Assuming that the Operating Expenses are Indirectly Charged to the Shareholders

Shareholders A					
	DR	**CR**		**NAFA**	**NIL**
Current Account		**10**	**Financial Account**	**10**	
Goods and services			Portfolio/Direct Investment		
Financial services (imputed)			Investment Fund Units	10	
Balance on trade in services			*Reinvestment of earnings*	*10*	
Primary Income					
Investment Income					
Investment income attributable to collective investment funds shareholders		10			
Dividends (imputed)		*0*			
Reinvested earnings		*10*			
Balance of primary income		**10**			
Investment Funds B					
	DR	**CR**		**NAFA**	**NIL**
Current Account		**0**	**Financial Account**	**10**	**10**
Financial Services	5	0	Portfolio/Direct Investment		
Balance on trade in services		**-5**	Investment Fund Units		10
Primary Income			*Reinvestment of earnings*		*10*
Investment Income		**15**			
Investment income attributable to collective investment funds shareholders	10		**Portfolio investment/ Other investment**	**10**	
Dividends (imputed)	*0*		miscellaneous assets (including deposits)	10	
Reinvested earnings	*10*				
Balance of primary income		**5**			
Fund Managers C					
	DR	**CR**			
Current Account		**5**	**Other investment**	**5**	
Financial services		5	Deposits	5	

Table 2A. SNA Entries Assuming that the Operating Expenses are Indirectly Charged to Shareholders

Shareholders					
	Uses	**Resources**		**NAFA**	**NIL**
Property Income			**Financial Account**	**<u>10</u>**	
Investment income attributable to collective investment funds shareholders		10	Investment fund shares/units	10	
Dividends (imputed)		*0*			
Reinvested earnings		*10*			
Balance of primary income / Disposable Income		**10**			
Final consumption expenditure	0				
Gross Saving	**<u>10</u>**				
Investment Funds					
	Uses	**Resources**		**NAFA**	**NIL**
Output		0	**Financial Account**	**10**	**<u>10</u>**
Intermediate Consumption	5		Investment fund shares/units		10
Gross value added / operating surplus	**-5**		miscellaneous assets (including deposits)	10	
Property Income					
Investment Income		15			
Interest		15			
Investment income attributable to collective investment funds shareholders	10				
Dividends (imputed)	*0*				
Reinvested earnings	*10*				
Balance of primary income / Disposable Income	**<u>0</u>**				
Fund Managers					
	Uses	**Resources**		**NAFA**	**NIL**
Output		5	**Financial Account**	**5**	
			Deposits	5	

Option 3—Fees charged by Management Fund (through Investment Fund) to the Shareholders

A third alternative for reporting expenses indirectly charged to the shareholders is shown in Tables 3 and 3A. The operating expenses paid by IF B would still reduce the reinvestment of earnings, but the services provided by S126 C would be directly imputed by the management company to the investor – bypassing the investment fund. This alternative does not generate negative value added for IF B. The investment fund in this example has no output and no corresponding intermediate consumption. The total investment income attributable to shareholders is the total income generated by the fund, including then an imputation to cover for the operating revenues. In the table below this imputed income is treated as a new transaction (alternatively, it could be considered as part of RIE)

Table 3. Balance of Payments Entries Assuming that the Operating Expenses are Indirectly Charged to the Shareholders

Shareholders A					
	DR	**CR**		**NAFA**	**NIL**
Current Account		**10**	**Financial Account**	**10**	
Goods and services			Portfolio/Direct Investment		
Financial services (imputed)	5		Investment Fund Units	10	
Balance on trade in services		-5	*Reinvestment of earnings*	*10*	
Primary Income					
Investment Income					
Investment income attributable to collective investment funds shareholders		15			
Dividends (imputed)		*5*			
Reinvested earnings		*10*			
Balance of primary income		**15**			
Investment Funds B					
	DR	**CR**		**NAFA**	**NIL**
Current Account	**0**		**Financial Account**	**10**	**10**
Financial Services	0	0	Portfolio/Direct Investment		
Balance on trade in services	**0**		Investment Fund Units		10
Primary Income			*Reinvestment of earnings*		*10*
Investment Income		**15**			
Investment income attributable to collective investment funds shareholders	15		**Other investment**	**10**	
Dividends (imputed)	*5*		Deposits	10	
Reinvested earnings	*10*				
Balance of primary income		**0**			
Fund Managers C					
	DR	**CR**			
Current Account		**5**	**Other investment**	**5**	
Financial services		5	Deposits	5	

Table 3A. SNA Entries Assuming that the Operating Expenses are Indirectly Charged to the Shareholders

Shareholders					
	Uses	**Resources**		**NAFA**	**NIL**
Property Income			**Financial Account**	**10**	
Investment income attributable to collective investment funds shareholders		15	Investment fund shares/units	10	
Dividends (imputed)		*5*			
Reinvested earnings		*10*			
Balance of primary income / Disposable Income		**15**			
Final consumption expenditure	5				
Gross Saving	**10**				
Investment Funds					
	Uses	**Resources**		**NAFA**	**NIL**
Property Income			**Financial Account**	**10**	**10**
Investment Income			Investment fund shares/units		10
Interest		15	miscellaneous assets (including deposits)	10	
Investment income attributable to collective investment funds shareholders	15				
Dividends (imputed)	*5*				
Reinvested earnings	*10*				
Balance of primary income / Disposable Income	**0**				
Fund Managers					
	Uses	**Resources**		**NAFA**	**NIL**
Output		5	**Financial Account**	**5**	
			Deposits	5	

Annex II. The Compilation of Investment Funds' Income Attributable to Shareholders on a Security-by-Security Basis: the ESCB[18] Experience[19]

1. In 2018, the ESCB Working Group External Statistics (WG ES) and Working Group Securities (WG SEC) initiated discussions regarding the technical implementation in the ESCB's Centralised Securities Database (CSDB)[20] of the income information directly provided by some National Central Banks (NCBs), on a security-by-security (SBS) basis (hereinafter "SBS income data").[21] Such workflow followed an agreement on the methodological treatment of investment funds' income,[22] as well as substantial enhancements of the CSDB data for investment funds.[23] All these efforts aimed at enhancing the CSDB and the national practices to compile investment fund income attributable to shareholders (hereinafter "IFs' income") in line with *BMP6* methodology.

3. The WG ES suggested approach to compile IFs' income is based on the CSDB output files that are data snapshots at end-month reference date. The approach requires the reconciliation of the reference dates of the CSDB output files, SBS income data directly reported by NCBs to the CSDB system and of the quarterly balance of payments data transmissions' deadlines to the ECB and Eurostat. This task is quite a challenge one since NCBs' inputs of the IFs' income data to the CSDB differ across countries in terms of timeliness and frequency. For instance, for the compilation of the 2019-Q4 quarterly balance of payments data (transmitted on March 20, 2020), the following CSDB timeline applied: the CSDB output files with December 2019 data were produced first in January 2020 and then revised in February 2020, but SBS income data were only made available on March 10, 2020, in the so-called "February-2020 extract"; and still only for those countries where the data are provided monthly with a delay of two-months (e.g., Luxembourg). For other countries, with (for instance) quarterly data or longer reporting lags, data for reference December 2019 was available in the CSDB output files later in the year. Figure 6 below shows the timeliness and availability of investment funds data for Luxembourg,[24] which typically provides monthly SBS income data with a two-month time lag.

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[18] European System of Central Banks.

[19] This Annex II summarizes the guidance drafted in 2020 by the ESCB Working Group on External Statistics entitled "*A Compilation Model for Investment Funds' Income Based on the CSDB Output Files*". This guidance includes an exhaustive analysis of the relevant CSDB attributes data coverage and quality as well as detailed IFs' estimates for selected euro area countries both on a monthly and quarterly basis.

[20] See the document "The Centralised Securities Database in brief" for further details on the CSDB.

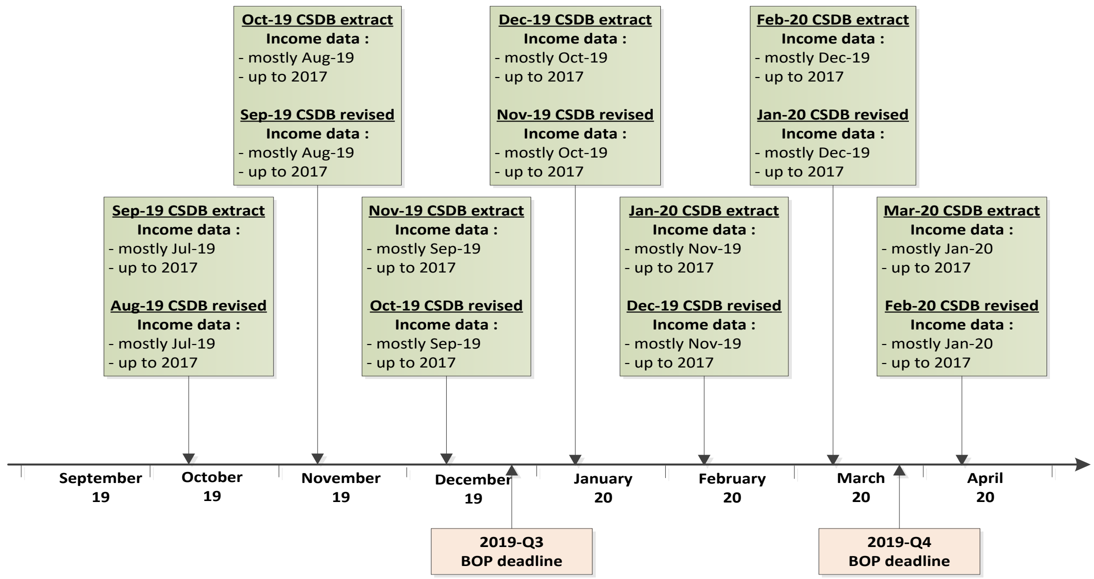
[21] The compilation details of SBS income data are rather heterogeneous across countries and based on national reporting templates where the funds detail the different sources of income generated as well as their expenses.

[22] This refers to the WG ES document drafted in 2018 and entitled "*Operating Expenses and Shareholders Fees of Investment Funds: Statistical Recording*", which covers the treatment of funds' explicit and implicit fees in line with the guidance included in this GN. Such WG ES document benefited from comments provided by the UN NA section.

[23] Such enhancements referred to the funds data coverage and quality with a focus on those attributes relevant for the compilation of their income.

[24] Luxembourgish and Irish funds' market capitalization jointly represented around 90 percent of the funds cross-border traded within the euro area at the end of 2020.

Figure 6. Timeliness of the CSDB Output Files with a Focus on Luxembourgish Monthly Income Data



4. The suggested WG ES compilation model overcomes the above "timelines" challenge merging in a single dataset all the available information (CSDB output extracts) and following a decision tree distinguishing those cases where the specific fund has available SBS income data (this applies to those EU funds for which NCBs submit SBS income data to the CSDB) or has to be estimated using the so-called "Accrued Income Factor" (AIF) attribute from the CSDB. The AIF attribute estimates the daily rate of income generated for each fund and based on the available SBS income data for funds with similar characteristics[25] (i.e., they are the same fund type (e.g., closed-ended funds) or asset structure (e.g., equity funds)). An important element addressed in this compilation model is the frequency of the IFs' income which vary from weekly to annual. Such information is either directly reported by NCBs (for those funds with SBS income data) or derived by the CSDB system (for those funds with only AIF information). In addition, and for those IFs' income estimates based exclusively on the AIF, a seasonality ratio is considered and based on the information provided for those funds with SBS income data and clustered by fund type.

5. The IFs' income estimates using the ESCB WG ES compilation provide robust results, in line with those submitted to the ECB and Eurostat by those EU countries already following a SBS compilation approach[26] and substantially improving the results in those cases where a macro statistics estimation model is in place.

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[25] For those funds with SBS income fund is also available the corresponding AIF.

[26] For these countries, the main benefit of the ESCG WG ES approach regards the use of the income frequency information as well as the suggested "enhanced" (i.e., considering seasonality) of AIF information.

Annex III. Calculating Indirect RIE: Example of Recording RIE Along an Ownership Chain

1. In the following company group, A is the head of the company and holds directly 100 percent of the equities of B; B is the full owner of C, and C of D. Each company is resident of a different economy, and the information available is generally limited to the balance sheet information of the immediate subsidiary; therefore, the compilers of A and B may have difficulty to know the reinvested earnings of company C and D, respectively. However, A may know the information of all the group and, therefore, be able to calculate the income generated by B, C, and D. Following the current standards, A should include as DI income the total NOS generated by the group (110) broken down by dividends (30) and RIE (80) and attribute it to the affiliate B even though not generated by it (see Table 1).

Table 1. DI Income Generated by Each Company in the Group

Ownership Share	Companies	NOS	+ Dividends Receivable	+ Enterprise's Share of RIE of any DIEs	- Dividends Payable	Non-Distributed
100%	A	-	30	80	-	-
100%	B	10	60	40	30	80
100%	C	80	15	5	60	40
	D	20			15	5
Total		110				

Note: the example assumes that the rest of the primary and secondary income transactions are zero and therefore do not have an impact in the DI income calculations of each company. Cells shaded in purple refer to information available for any immediate DIE.

2. B may only have the information available from the balance sheet of C and, therefore, miss the RIE of D that are imputed by compilers in C. This means that B would record in the Enterprise's share of RIE of C 35 instead of 40. The RIE payable to A would also be 35. It could be also assumed that if accounting standards require value assets at market value or it's approximation, retained earnings of D should be reflected in revaluation accounts of C, and therefore B may have access to a value that may not be COPC but could be a good proxy (all inclusive).

3. This Annex includes a few examples of different recording triggered by data availability and also different interpretations of *BPM6,* paragraph 11.47. These examples show the difficulty of symmetrical recording among economies, and how the current methodology may lead to incomplete and non-comparable figures across economies. Cells shaded in green are entries according to *BPM6*, while cells shading in yellow show proxies that depend on the information available and the method used to calculate RIE.

4. Example 1 below reflects the current guidance (Option A) (i.e., perfect recording of the DI income following *BPM6*). All the countries can collect the necessary information to include the imputations of the non-distributed income generated by the subsidiaries below the DI ownership chain and they are also imputed as payable to the direct investor.

Example 1 *BPM6 Recording*								
Countries	Dividends Received	Dividends Paid	RIE Receivable[1]	RIE Payable[2]	Total Income Credits	Total Income Debits	Total Income Net	Income used to estimate GNI
A	30		80		110	0	110	110
B	60	30	40	80	100	110	-10	-10
C	15	60	5	40	20	100	-80	-80
D		15		5	0	20	-20	-20
Total	105	105	125	125	230	230	0	

1) based on the accounts of the subsidiaries below the DI ownership chain.

2) based on the accounts of the subsidiaries below the DI ownership chain and those of the resident one.

5. Example 1a below reflects the current guidance from a methodological point of view with the presentation proposed in Option B (i.e., keeping the attribution of all the earnings generated below the DI ownership chain as RIE but reporting indirect income separately). Note that since the amount used in the estimation of GNI is based on the current methodology (i.e. total undistributed income along the chain of ownership), there will be no impact on the GNI.

Example 1.a – Option a										
Countries	Dividends Received	Dividends Paid	RIE Receivable[1]	*of which indirect*	RIE Payable[2]	*of which indirect*	Total Income Credits	Total Income Debits	Total Income Net	Impact on GNI
A	30		80	*40*			110	0	110	-
B	60	30	40	*5*	80	*40*	100	110	-10	-
C	15	60	5	-	40	*5*	20	100	-80	-
D		15			5	-	0	20	-20	-
Total	105	105	125		125		230	230	0	

1) based on the accounts of the subsidiaries below the DI ownership chain.

2) based on the accounts of the subsidiaries below the DI ownership chain and those of the resident one.

6. Example 2 reflects only the imputations related to the immediate DIE. This example corresponds to Option C under Issue 2. This alternative does not reflect all of the RIE receivables and payables for all entities in the DI ownership chain, however it is probably the most usual compilation and it is the best option in terms of minimizing asymmetries since compilers wouldn't need to collect very detailed information on ownership chains, which may not be readily available for some countries. Note from Example 2 that this method can significantly overstate or understate the GNI of an economy depending on: (i) how long the DI chain is; (ii) how far along the chain, the respective economy is; and (iii) the relative levels of inward and outward DI. Therefore, the total impact on the GNI would be most severe for economies towards the top end of the ownership chains where the receipts and payables would be understated. Most notably, for economies in the middle of the chain that are disproportionately DI recipients this methodology will grossly overstate the GNI while understating the GNI for economies at the top of the chain.

Example 2 Immediate Counterpart - Option C								
Countries	Dividends Received	Dividends Paid	RIE Receivable[1]	RIE Payable[2]	Total Income Credits	Total Income Debits	Total Income Net	Impact of method on GNI
A	30		40		70	0	70	↓ 40
B	60	30	35	40	95	70	25	↑ 35
C	15	60	5	35	20	95	-75	↑ 5
D		15		5	0	20	-20	--
Total	105	105	80	80	185	185	0	
1) based on the accounts of the immediate subsidiary.								
2) based on the resident accounts without making the connection of the DIE and Direct investor.								

7. Example 3 reflects a mixed approach by the reporting countries. In this example only the country where the head of the company is resident (A) can record the imputations of the non-distributed income generated by the subsidiaries below the DI ownership chain as described in *BPM6*. The rest of the countries are only recording the RIE generated by the immediate DIE. This example may explain the large asymmetries between the EU and the US in the current account.[27] The simplified Example 3 shows that the net RIE would be the same as the conceptual methodology applied in Example 1. However, the implication on the GNI described in Example 2 would hold for this example for all economies except the parent economy. If for example, Economy B reports only the RIE generated by the immediate DIE, the reported net income would be 25 as shown in Example 3 and not -10 as the "along the chain method" would suggest. Thus, option would also impact the GNI for a majority of economies.

Example 3 Only the Head of the Company Implement Those Implicit Earnings								
Countries	Dividends Received	Dividends Paid	RIE Receivable[1]	RIE Payable[2]	Total Income Credits	Total Income Debits	Total Income Net	Impact on GNI
A	30		80		110	0	110	-
B	60	30	35	40	95	70	25	↑ 35
C	15	60	5	35	20	95	-75	↑ 5
D		15		5	0	20	-20	-
Total	105	105	120	80	225	185	40	

1) based on the resident accounts without making the connection of the DIE and Direct investor.

2) based on the accounts of the immediate subsidiary for B and C; A makes the calculations based on the accounts of the subsidiaries in the DI chain.

8. Example 4 also reflects a mixed approach by the reporting countries. As in Example 3, the country where the head of the company is resident (A) can record the imputations of the non-distributed income generated by the subsidiaries along the DI ownership chain, while the rest of the countries impute RIE from the subsidiary below to the immediate parent together with RIE generated by the resident company. This mixed approach may also explain relevant bilateral asymmetries between economies, however, on a net basis, these asymmetries seem to cancel off.

[27] See BEA Working Paper Series, WP2019-6 https://www.bea.gov/system/files/papers/WP2019-6_0.pdf

Example 4 Mix of Immediate Counterpart and *BPM6*

Countries	Dividends Received	Dividends Paid	RIE Receivable[1]	RIE Payable[2]	Total Income Credits	Total Income Debits	Total Income Net
A	30		80		110	0	110
B	60	30	35	75	95	105	-10
C	15	60	5	40	20	100	-80
D		15		5	0	20	-20
Total	105	105	120	120	225	225	0

1) based on the accounts of the immediate subsidiary for B and C; A makes the calculations based on the accounts of the subsidiaries in the chain.

2) the receivable RIEI imputed from the subsidiary below is also imputed to the immediate parent (payable together with the RIE generated by the resident company).