Issues in implementing SNA2008: looking for the data

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A. Action plan

In Portugal, the implementation of the European System of Accounts (ESA2010) requires the coordination of actions between the Banco de Portugal (BdP) and the National Statistical Institute (NSI). The proposed action plan is staggered in four phases: coordinating methodologies and procedures; adjusting sources and methods; starting data compilation and regular production. Our aim is to have a "shadow" exercise before starting the official reporting, although knowing that some of the required data will only be available in 2011 (FDI Benchmark and Population Census). This study focuses on the main methodological changes in the field of financial accounts and on the initiatives to address them in the case of Portugal.

1. Coordinating methodologies and procedures between the BdP and the NSI

1.1 Redefining the boundaries of the institutional sectors

The redefinition of the boundaries of the institutional sectors entails a clear definition of the statistical authorities' main responsibilities, specifically between the BdP and the NSI. Moreover, the call for consistency between financial and non-financial accounts requires using the same delimitation of institutional units and entities (financial and non-financial sectors). The definition of the universe takes a major role in the compilation of statistics; therefore it will entail a significant part of the work regarding the implementation of the ESA2010.

1.1.1 Financial sector

The delimitation of the financial sector is much more detailed according to ESA2010 when compared to ESA1995. At the Central Bank, the accounts are compiled using internal data sources such as money and banking statistics, accounting data from the Banking Prudential Supervision Department and data regularly obtained through institutional agreements in more specific areas, as it is the case of insurance corporations and pension funds. In all this process revising the European Central Bank (ECB) Regulations and Guidelines in the light of ESA2010 is fundamental.

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Regarding our internal timetable, we intend to address the issue of the delimitation of the Financial Sector according to the timetable foreseen by the ECB Working Group on Monetary and Financial Statistics concerning the impact on monetary and financial statistics. Taking this timetable as a reference, we will start by identifying the reporting units and sectors, in particular the entities comprised in the new sub-sector "Captive financial institutions and money lenders" in the second half of 2011.

1.1.1.1 Holdings Corporations

On the basis of ESA2010, a holding corporation has the assets of subsidiary corporations but does not undertake any management activities. Therefore, the reclassification between head offices and holding corporations requires the evaluation of the activities performed by the entities that belong to the classes 6420 and 7010 of NACE-Rev.2².

The gateway involves identifying those entities that could potentially belong to this sub-category by taking the Statistical Units Register as the main data source. Following the identification of this sub-group, we assessed the significance of both the financial and the operational activities of each entity by taking use of the information available at IES^3 and at $CBSD^4$.

At this stage, we came across some problems regarding the significance of the operational activity of these corporations. ESA2010 leaves room for discretion by stating that holding corporations "do not provide any other service to the businesses in which the equity is held". Following this, we have a number of possible actions and therefore we could: i) exclude those entities which have net operational income and reclassify it as head offices; ii) define a threshold for the net operational income, above which they are considered to have a significant operational activity and should be excluded; iii) implement multi-period analysis of the net operational income figures to assess the regularity of those operations; iv) maintain the classification as holdings of those corporations which have operational income when measuring their output by the sum of costs. As these entities could have large cross-border financial operations, clear guidance on this subject is needed in order to have a harmonized treatment across countries.

Taking as reference the figures for 2009 in Portugal, our first assessment leads to the reclassification of 3498 entities from the non-financial sector to the financial sector, representing 167 205 million euro in terms of total assets. Nevertheless, excluding all entities which have operational activity leads to a total of 3292 entities, corresponding in 2009 to 100 511 million euro in terms of total assets. According to the current standards, at the end of 2009, taking supervisory data as the main data source, the financial holdings sector represented only 24 892 million euro in terms of total assets.

Moreover, according to the definition of Special Purpose Entities (SPE), holdings corporations which are controlled by a non-resident institutional unit should be classified as SPE within the captive financial sector (please see the next section). Simultaneously, SPE whose principal activity is the provision of goods or non-financial services are classified in the non-financial sector. Therefore, it should be stated clearly that those holding corporations which have operational activity and which are controlled by non-resident entities are classified in the non-financial sector.

In order to have balance sheet data for holdings corporations, the main data sources that are going to be used are: the Statistical Units Register for the identification of the entities, IES for business data and SSIS⁵ for statistics on securities holdings.

² Specifically classes 64201, 64202 and 70100 of CAE-Rev.3. CAE-Rev.3 is the Portuguese equivalent of NACE-Rev.2. The latter refers to the statistical classification of economic activities in the European Community, established by Regulation (EC) No. 1893/2006 of the European Parliament and of the Council of 20 December 2006.

³ IES is the Portuguese acronym for the new simplified reporting system for corporate information. IES is the electronic submission of information of accounting, fiscal and statistical natures that companies have usually to remit to the Ministry of Justice, the Ministry of Finance, Statistics Portugal and Banco de Portugal.

⁴ The CBSD is a database containing economic and financial information managed by the Banco de Portugal. The information is based on non-consolidated annual and quarterly data from a relevant sample of non-financial corporations in Portugal.

⁵ SSIS is the Securities Statistics Integrated System managed by the Banco de Portugal.

1.1.1.2 Special Purpose Entities

The effect of globalization on statistics is one of the issues that the new manuals aim to tackle. In this context, identifying special purpose entities (SPEs) flows assumes an important role, not in terms of the impact on Gross Domestic Product, but because SPEs are responsible for the intermediation of large amounts of financial flows.

ESA2010 provides more guidance on SPEs. SPEs can be created for different purposes: securitisation, risk sharing, competitive reasons, financial engineering, fiscal reasons or property investing. Those SPEs that "qualify as institutional units and raise funds in open markets to be used by their parent corporation" should be classified as captive financial institutions and money lenders (S.127). Although, sometimes SPEs could be owned by other entity than the one for which it was settled. For example, if a SPE was created for regulatory purposes the consolidation of the accounts within the group could vanish the analytical interest on these entities.

Intensive research has revealed that a variety of (overlapping) definitions of SPEs exist. As there is no single definition of SPEs, it is left to countries to identify such entities according to their own experience. Therefore, the exchange of country practices in this field is recommended to avoid adding asymmetries to balance of payments statistics.

The manuals do not provide a universal definition of SPE, but they give some guidance to help compilers identifying this type of entities. According to the BD4⁶, the main characteristics of SPEs are: few employees; no nonfinancial assets; little physical presence; relation with other corporations (often resident in a territory other than the territory of residence of related corporations); ultimately controlled by a non-resident parent, direct or indirectly; little or no production; group financing or holding activities as the core business.

At national level, by crossing data available from both IES and the International Investment Questionnaire, for the period between 1996 and 2006, it was possible to infer the profile of SPEs and to build a decision tree. This decision tree only applies for cases where we have data available. Nevertheless, qualitative criterions have primacy over the decision tree.



⁶ Fourth edition of the OECD Benchmark Definition of Foreign Direct Investment.

ESA 2010 also states that entities with no independence of action should be allocated to the sector of their controlling body. Therefore, clear guidance on the definition of "independence of action" and, in particular, in what is meant by risk and rewards, should be given.

It should be mentioned that one of the clarifications introduced by the ESA2010 is related with the treatment of government controlled SPEs abroad. ESA2010 states that when a SPE is set up by a non-resident government unit, their activities shall be shown in the government accounts. The European Financial Stability Facility (EFSF) is an example of a SPE controlled by the euro area member states. According to the Eurostat decision on the statistical recording of operations undertaken by the EFSF, the "EFSF is an accounting and treasury tool to enable the same conditions for access to borrowing for members of the euro area, acting exclusively on behalf of them and under their total control". Therefore, this decision states that "the debt issued by the EFSF for each support operation for a member of the euro area must be reallocated to the public accounts of States providing guarantees, in proportion to their share of the guarantees for each debt issuing operation."

1.1.3 Non-profit institutions serving households

The new ESA transmission programme establishes as mandatory the split between households and nonprofit institutions serving households (NPISHs). In order to compile the financial account of these sectors, the two major databases of micro data managed in the Statistics Department, the Central Credit Register (CCR) and the Securities Statistics Integrated System (SSIS).

The CCR⁷ is an administrative database created in 1978 by Banco de Portugal to provide credit-related information to the participants (financial institutions) and to help them in their assessment on the risks attached to extending credit. According to the latest information available in CCR we can see that, in 2010 the amount of loans granted to NPISHs represented 2% of the loans granted to Households, amounting to 2.1 EUR billions. In terms of deposits, according to the monetary statistics data sources, NPISH accounted for 3% of the total of NPISH and households in 2010, amounting to 2.9 EUR billions. This relative share has remained quite stable over time (1% in 1997, the first period for which data are available from monetary and financial statistics). As for external deposits, data is not currently available in the balance of payments and international investment position statistics.

The SSIS database⁸ is an information system created in 1999 and managed by the Statistics Department that stores data on securities issues and holdings on a security-by-security and investor-by-investor basis⁹.

There are more than 58000 entities classified as NPISHs, of which around 3000 entities have information stored in the SSIS database regarding securities portfolio. Out of these 3000 institutions, 25 account for 90% of total securities holdings of NPISHs. NPISHs are responsible for around 10% of total holdings of households and NPISHs; this distribution has remained quite stable over the last decade.

Total NPISH holdings are not significant and exhibited a dynamic similar to that of households. Nevertheless, a closer look leads to some interesting conclusions. For instance, in 2008, following the financial crisis, there was a significant decrease on shares holdings. However, this decrease was more significant in the case of NPISH, mainly due to the devaluations of quoted shares in which this sector invested.

⁷ The data reported to this database include, inter alia, amounts outstanding of loans granted to individuals and organisations, by type and purpose, potential liabilities, type and value of collateral or guarantee securing the loan, securitised loans, syndicated loans, loans used to back mortgage bonds and other, and credit defaults. The participants are both suppliers and users of CCR data.

⁸ It gathers in a single database detailed data on issues and securities holdings, and includes stocks and transactions of securities other than shares (short- and long-term) and shares and other equity. Information is acquired by ISIN code and afterwards is classified according to the European System of National and Regional Accounts (ESA 95) classification of financial instrument. ⁹ See Against et al. (2008) Against et al. (2009) and Laureder (2010) for more details

⁹ See Aguiar (2008), Aguiar et al. (2009) and Lavrador (2010) for more details.

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The analysis of the holdings by residence of the issuer (Charts 1-2) show that households invest mainly on domestic securities (80% of total) whereas NPISH holdings on securities issued by non-residents are above 50% at the end of 2010 and were even larger at the beginning of the decade.

1.1.4 General Government

ESA1995 quantitative rules for delimitating general government will continue to be applied in the context of ESA2010. These rules aim to translate the principle of economically significant prices which is the main criteria used to classify output and producers, as market or non-market. Similarly to SNA2008, there was the intention to apply predominantly a qualitative criterion in ESA2010 for deciding whether an entity should be classified inside the general government sector. However, the discussions among European experts lead to no changes regarding the option of applying the so-called "50% rule". A non-market producer included in the general government sector is a public unit where its sales do not cover the majority of its costs over a sustained multi-year period. This analysis is made on the basis of the accounting statements of each institutional unit.

However, some differences were introduced in the new manual. One of the existing differences between ESA1995 and ESA2010 is related with the composition of costs. Besides intermediate consumption, compensation of employees, consumption of fixed capital and other taxes on production, the costs will include the "net interest charge". There is the need to clarify in ESA2010 what is meant by "net interest charge". The term "net" indicates that this figure results from deducting the interest received to the interest paid which is similar to a Financial Intermediation Services Indirectly Measured (FISIM) approach whilst the Government is not a FISIM producer. Specifically, merely flows regarding loans and deposits vis-a-vis financial intermediaries should be considered as consumption of FISIM by the General Government. Therefore, considering the role played by securities on Government operations, a discussion on the composition of costs should be promoted.

Another of the existing differences is related to one of the requirements of ESA2010 (and of SNA2008) which is to include inside general government all the entities, which sell their output only to government not competing with private producers (ESA2010, §20.25). Whenever there are several suppliers, a public producer is a market producer if it competes with the other producers through tendering for a contract with government (§20.28). These references might imply reclassifying some entities from the non-financial sector to general government. This impact will differ across countries.

1.2 Encompassing all pension liabilities

ESA2010 foresees a new supplementary table on liabilities with pension schemes in social security covering an information gap in national accounts. It encompasses specific pension schemes such as government unfunded defined benefit schemes with government as the pension manager and social security pension schemes. Considerable work has already been done in this respect within the framework of the Eurostat/ECB Task Force on the statistical measurement of the assets and liabilities of pension schemes in

general government. One of the main objectives of the Task Force is modelling and estimating pension scheme data, and investigating possible methodological issues that may arise. Within this context, benchmark calculations have been carried out by the Research Centre for Generational Contracts of Freiburg University (RCG) for 19 EU member states.

On the basis of this experience the RCG developed a model to calculate pension entitlements for the social security and the government employee pension scheme in Portugal that will be used as a benchmark to the results of other Portuguese pension models that might be developed in the future. The Freiburg model was accommodated for the Portuguese case. Namely, labour productivity, employment rate and GDP growth were applied for the specific country case taken from the Ageing Working group assumptions. Moreover, a three annual per cent real discounted rate was used, which reflects the ten-year average of Euro area ten-year government bond yield. The estimation accounted also for the existence of two pension schemes. In fact, until 2005 two parallel pension schemes existed: the so called "*Regime Geral*" scheme that included the private sector and the "*Caixa Geral de Aposentações*" (CGA) for civil servants. However, since the beginning of 2006, new employees in the public sector are incorporated in the social security system and consequently, CGA is now a closed system. In this respect, pension entitlements for these two different pension schemes are calculated separately. In addition, with the challenges of an ageing society which put substantial pressure on the Portuguese system, some changes in the calculation formula for pension benefits and payments were introduced. This had also an impact on the model assumptions and final figures.

The implementation of the proposed supplementary table on pension entitlements is a complex task. It involves the collection of several data (both financial and demographic information) from various institutions (Ministry of Finance, Social Security schemes, etc.) and also the development and computation of numeric models. Institutional cooperation at national level is of utmost importance.

1.3 Extending the directional principle to fellow enterprises

Bearing in mind the new requirements of BPM6¹⁰ and BD4 in the field of Direct Investment Statistics, we would have two presentations for these statistics: the standard presentation of balance of payments and international investment position on an asset/liability basis and the breakdown by both economic activity and country according to the directional principle.

The presentation on an asset/liability basis is a step forward for the consistency between statistics since it follows the monetary and financial statistics data, as well as other balance sheets statistics. Additionally, this kind of presentation helps monitoring flows and stocks through information of counterpart sectors.

The directional principle¹¹ is built on the concept of influence and control, as this would capture the motivation behind a direct investment relation. This type of presentation is particularly helpful in a pass-through economy. Beyond the concept of direct and indirect relations, the new manuals also encompass the relations among fellow enterprises as direct investment operations. In particular, a direct investment relation comprises the investment of a direct investor in his direct investment enterprise, the reverse investment and the investment among fellow enterprises. Therefore, the embracement of the last category in the directional principal requires the identification of fellow enterprises, as well as their ultimate controlling parent.

In light of this, the Portuguese balance of payments Investment Questionnaire was restructured so as to incorporate the new Direct Investment requirements. In particular, the Questionnaire started inquiring the following data: a) designation, ITIN¹² and country of the ultimate owner; b) percentage of voting rights of the holdings of the UO (direct and indirect); c) number of horizontal subsidiaries; d) organizational charts of financial relations; e) additional information of the Direct Investor and horizontal subsidiaries; f) net income paid or to be paid by the resident entity; and g) net income received or to be received by the resident entity.

¹⁰ Sixth edition of the Balance of Payments Manual.

¹¹ Under the directional principle, direct investment abroad and direct investment in the reporting economy include both assets and liabilities, and thus, negative values may arise.

¹² ITIN is the individual tax payer identification number.

After the dissemination of the updated questionnaire, a quality control of the information under analyses has to be done, namely through the consultation of both the commercial data sources and the *Eurogroups Register*. In all this process, embracing more entities in the *Eurogroups Register* would be crucial. Moreover, in order to have some quality checks, conferring financial statements and annual reports publically available and obtaining data from financial supervisory sources would be fundamental.

1.4 Financial Intermediation Services Indirectly Measured

Regarding the FISIM methodology, ESA2010 already encompasses the following changes: i) discontinuation of the FISIM computation for Central Bank (CB) and the restructuring of the Central Bank non-financial account; ii) setting of the internal and external reference rates by considering namely the maturity and currency breakdowns in the computation; and, iii) excluding FISIM between financial institutions. Moreover, in the context of the European FISIM Task Force, there was some progress regarding implementation issues. The possibility of reflecting credit risk in the FISIM computation was also discussed but there is still work to be done.

The work developed in the context of the European FISIM TF advocates the use of different interbank reference rates conferring the maturity and currency of the operations under evaluation. Even in periods of financial markets turbulence the method foreseen lead to economical explainable results.

The interbank reference rates proposed in this approach are the Euribor/Libor for short term maturities and ISDAFIX rates for long term maturities. Alternatively, in the absence of income date by maturity and currency a weighted average of these interbank rates could be applied.

Regarding the Portuguese economy, the adoption of this methodology, as an alternative to the one based solely on Euribor, leads to the decrease of the FISIM produced internally (except for 2008), but to an increase of the impact on the GDP (from 1.13% to 1.37%) justified by the FISIM allocated to the final consumption of households. Moreover, the alternative approach confer some stability to the shares allocated to final demand and to imports allocated to intermediate consumption which causes more stable figures of FISIM allocation measured by the volatility index (from 30.5% to 23.1%).

1.5 Derivatives (excluding employee stock options)

According to ESA2010 financial derivatives represent an autonomous category. Moreover, according to the new manual it is clear that all financial derivatives should be covered by national accounts (e.g. credit default swaps and employee stock options) and that they should be registered in a harmonized way across statistics.

In light of this, an internal work is being carried out at the BdP in order to assess the consistency among different statistics and between statistics and accounting data. Although there is not a total harmonization between accounting standards and statistical regulations the discrepancies that were already identified do not have a significant impact. Therefore, by combining accounting data from supervisory data sources with statistical data from the monetary and financial statistics we are able to meet the new data requirements regarding the financial sector. For transactions of financial derivatives by non-financial entities, our data sources are the Financial Derivatives Questionnaire, which encompasses all the transactions between resident and non-resident entities, and information from counterpart sectors. The Financial Derivatives Questionnaire does not include derivative settled outside the resident banking sector and neither information about employee stock options. A possibility is adjusting data sources if business data or information from counterpart sectors reveals to be insufficient.

1.6 Employee stock options

At the time of the update of the 1993 SNA it was acknowledged that employee stock options (ESO) are a common tool used by companies to motivate their employees and that the 1993SNA did not provide explicit guidance on their treatment, though they were implicitly encompassed in the section on "wages and salaries in kind" (§7.37 – §7.42 of 1993 SNA).

The revised manuals clarify the treatment that should be followed by stating among others that employee stock option should be considered as compensation of employees, as counterpart to the transaction in the financial account, they should be estimated using fair-value pricing model, given the lack of observable market prices; they be valued at time of grant and accounted over the vesting period.

The implementation of the new manuals allows a further harmonization with international accounting standards, since from 2004 companies are required to use the fair-value-based method at the granting date and to record this amount over the vesting period. Before that, companies had the possibility to use the intrinsic value approach (stock market price less strike price) which leads to the underestimation of compensation expenses and to an overstatement of company profits as according to this approach the option value would have no value at the time of grant. Even so, in the intrinsic approach the amount corresponding to the employee stock option was implicitly recognized at the balance sheet through the net income, incorporating the own funds of the company. The setback comes from using, for the period between 2004 and 2016, both accounting and statistical data in the compilation of national accounts given that the mismatch between accounting and statistical standards could increase the discrepancies between non-financial and financial accounts.



Regarding the Portuguese economy, our proposal would be to include a memo item in the employeremployee data set – Quadros de Pessoal (QP) in order to know which part of employee benefits are employee stock options. QP is a mandatory annual employment survey collected by the Portuguese Ministry of Labor and Social Solidarity, which covers nearly all establishments with wage earners. Indeed, each year all institutions with wage earners are legally obliged to fill in a standardized questionnaire. The periodicity of this survey constitutes a drawback that needs to be surmounted through additional data sources.

1.7 Breakdown of insurances technical reserves

In the new ESA, the instrument insurance technical reserves was reshaped to give rise to insurance, pension and standardised guarantee schemes, which are divided into six subcategories: a) non-life insurance technical reserves (F.61); b) life insurance and annuity entitlements; (F.62) c) pension entitlements (F.63); d) claims of pension funds on pension managers (F64); e) entitlements to non-pension benefits (F65); and f) provisions for calls under standardised guarantees (F.66).

Insurance, pension and standardised guarantees schemes operate as a form of income redistribution mediated by financial institutions. While holding the funds, insurance corporations invest them on behalf of the participants. The part of the investment income that is distributed to the participants as property income is returned as extra contributions. In all cases, net contributions or premiums are defined as actual contributions or premiums plus distributed property income less the service charge retained by the financial institution concerned. Entries in the financial account, therefore, reflect the difference between net contributions or net premiums paid to the schemes less benefits and claims paid out. Significant other additions to the reserves of the schemes come via other changes in the volume of assets and especially holding gains. The novelty in

comparison to ESA95 lies with the last three sub-instruments referred above.

Claims of pension funds on pension managers (F.64) refer to the situations where an employer contracts with a third party to look after the pension funds for his employees. The pension manager and the administrator is the party who retains the risks (rights) in case of deficit (excess) funding. When the pension manager is a unit different from the administrator and the amount accruing to the pension funds falls below (exceeds) the increase in entitlements a claim (liability) of the pension fund on the pension manager is recorded. It is not clear whether the supervisory reporting templates for pension funds under Solvency II Directive will cover this data requirement.

Entitlements to non-pension benefits (F.65) are intended to capture the fact that the excess of net contributions over benefits represents an increase in the liability of the insurance scheme towards the beneficiaries. As it is written in the new ESA this item is likely to occur only rarely and 2008 SNA does not even separate this item from pension entitlements. As such, this should not cause much concern to the compilers.

Provisions for calls under standardised guarantees (F.66) are financial claims that holders of standardised guarantees have against institutional units providing them. Provisions relating to calls under standardised guarantees are prepayments of net fees and provisions to meet outstanding calls under standardised guarantees. Like provisions for prepaid insurance premiums and reserves, provisions for calls under standardised guarantees include unearned fees (premiums) and calls (claims) not yet settled. The rationale for having this sub-instrument in this category is that much like a non-life insurer, a guarantor working on, e.g. commercial lines will expect all the fees paid, plus the property income earned on the fees and any reserves, to cover the expected defaults and associated costs and leave a profit. Accordingly, a similar treatment to that of non-life insurance is adopted for these guarantees, described as standardised guarantees. Standardised guarantees cover guarantees on various financial instruments like deposits, debt securities, loans and trade credit. They may usually be provided by a financial corporation, including but not confined to insurance corporations, but also by general government.

Information on these guarantees should be found in balance sheet data; in the case of financial entities supervisory data should be used in order to avoid double reporting from the reporting agents.

Interestingly, the new manuals did not consider the breakdown of insurance reserves and pension entitlements according to the risk profile (unit-linked, non-unit linked) and type of plan (defined benefit, defined contribution, hybrid schemes), which is already contemplated in the case of insurance corporations and pension funds data reporting to the ECB and the Organisation for economic co-operation and development (OECD).

B. Conclusion

In the aftermath of the financial crises, the importance of having a set of harmonised and reliable guidelines for measuring economic activity across countries became more evident. In light of this, tackling the effect of globalization on statistics is one of the challenges of the revised manuals. In particular, consideration is given to the Direct Investment relations, namely through the extension of the directional principle to fellow enterprises, and to the prominent role that SPE are acquiring in the economies over time.

This article aims to assess the envisaged action plan for implementing ESA2010 in the Portuguese accounts. The foreseen plan is staggered into four phases: coordinating methodologies and procedures; adjusting sources and methods; starting data compilation and regular production. The coordination between statistical authorities, particularly regarding sharing data and settling a common universe for all institutional units is fundamental for the success of this plan.

Taking into account the differences between ESA1995 and ESA2010 special attention will be devoted to definition of the sectors, in particular for the following sub-sectors: holding corporations and SPEs, non-profit institutions serving households and general government. At Banco de Portugal, steps have been taken regarding both the split of the non-profit institutions serving households from the households sector and the

assessment of the composition of costs of entities for the delimitation of the general government sector. Concerning the new sub-sector "captive financial institutions", some clarifications are still needed in particular, regarding the operational activities of holding corporations and the identification of SPEs. Moreover, as much as possible a consistent treatment across countries should be ensured.

The new ESA also aims to measure other realities not elsewhere covered. For instance, it introduces a supplementary table with all pension liabilities, including government unfunded defined benefit schemes, with government as the pension manager, and social security pension schemes. In light of this, statisticians will tend to me more involved in modelling and estimating pension schemes figures.

Encompassing other instruments like employee stock options and credit default swaps is another goal of the new manuals. For the first time provisions for calls under standardised guarantees are recognized in the system. The insurance technical reserves also present a new breakdown identifying new categories for pension entitlements.

Regarding the Portuguese economy, the adoption of a new methodology for the computation of FISIM, as an alternative to the one based solely on Euribor, tends to recommend the use of different interbank reference rates conferring the maturity and currency of the operations under evaluation. An impact assessment of the foreseen methods for other countries is of utmost importance.

The evidence developed here suggests fostering cooperation and exchanging information among national producers of statistics in order to promote a harmonized treatment across countries and to avoid introducing international asymmetries.

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