



An
Phríomh-Oifig
Staidrimh

Central
Statistics
Office

Standard Report on Methods and Quality for Annual Financial Accounts

Quality report for the Annual Financial Accounts May 2018



A. INSTITUTIONAL ENVIRONMENT

A.1. CoP1 Professional Independence / PC1 Professional Independence

A.1.1 Legal Basis

Article 13 of the **Statistics Act (1993)** establishes the independence of the Director General and, more broadly, the Central Statistics Office of Ireland, in respect of the generation, production and dissemination of official statistics. More specifically, the Article 13 states that –

The Director General shall have the sole responsibility for and be independent in the exercise of the functions of deciding

- (a) the statistical methodology and professional statistical standards used by the Office;*
- (b) the content of statistical releases and publications issued by the Office; and*
- (c) the timing and methods of dissemination of statistics compiled by the Office.*

Article 40 of the same Act further consolidates the legal safeguards provided by this legislation in stating that -

Any person who wilfully obstructs the Director General (of the Central Statistics Office) or an officer of statistics in the exercise of his functions under this Act shall be guilty of an offence.

From a European perspective, the development, production and dissemination of statistics are governed by the statistical principles laid down in **Article 2** of the **Regulation (EC) No 223/2009** of the European Parliament and the Council on European statistics.

A.1.2 Statistics Work Programme

At national level the work programme covering the area of financial accounts is set out and determined, in consultation with, the *Statistical Liaison Committee (SLC)*. The SLC is a high-level group composed of directors/senior management from the areas of Macroeconomics and Statistics in the Central Statistics Office and the Central Bank of Ireland. National financial accounts work programmes are principally guided, at European level, by the work programmes of both:

- (i) Eurostat - ESTAT Annual Work Programme 2015, under Detailed Objective [04.1] *Macroeconomic accounts*, Activity Code [438] which outlines the objective – “Quarterly and annual National Accounts: Compliance monitoring and quality: Annual assessment of Member States' compliance with the transmission legal requirements, accompanied by regular checks of transmitted data and irregular country visits.”

<http://ec.europa.eu/eurostat/web/ess/-/the-european-statistics-annual-work-programme-2016>
<https://www.ecb.europa.eu/stats/pdf/2017escbstatisticsworkprogramme.en.pdf>

(ii) ECB – From a quarterly perspective the work programme for quarterly financial accounts is determined by the Working Group on Financial Accounts (WG FA) operating under a mandate from the ECB Statistics Committee (STC). This programme is reviewed and updated annually.

A.2. CoP2 Mandate for data collection/PC2 Mandate for data collection

A.2.1 Allocation of Responsibilities

The institutional arrangements for the production of national financial accounts statistics in Ireland are as follows –

- a) Quarterly Financial Accounts – Compiled and disseminated by the Central Bank of Ireland.
- b) Annual Financial Accounts – Compiled and disseminated by the Central Statistics Office.

A.2.2 Legal Basis

The **Statistics Act (1993)** provides the legal basis and mandate for the collection of data for statistical purposes. More specifically, **Article 10** of the Act states –

(1) The functions of the Office shall be the collection, compilation, extraction and dissemination for statistical purposes of information relating to economic, social and general activities and conditions in the State.

(2) The Office shall have authority to co-ordinate official statistics compiled by public authorities to ensure, in particular, adherence to statistical standards and the use of appropriate classifications.

(3) The Office shall have authority to assess the statistical potential of the records maintained by public authorities and, in conjunction with them, to ensure that this potential is realised in so far as resources permit.

The Act provides a comprehensive mandate for compiling official statistics on an independent and objective basis. The Act protects the confidentiality of the information provided to the CSO, which may only be used for statistical purposes; and confidential data may not be disseminated or otherwise communicated to third parties, including Government Departments or bodies.

A.3. CoP6 Impartiality and objectivity / PC6 Impartiality and objectivity

A.3.1 Advance Release Calendar

A four-month release calendar is produced by the Central Statistics Office which outlines the release schedule for all areas of statistical output, including financial accounts. In tandem with this there is a weekly release calendar which presents an explicit timeframe for statistical dissemination and publication.

A.3.2 Revision Policy

The CSO does not implement the CMFB revision policy in their compilation of the annual financial accounts.

The principal data sources for the production of annual financial accounts are (1) BOP statistics, (2) QFAGG, (3) Banking statistics and (4) administrative sources such as tax records and corporate balance sheet data from the Companies Registration Office.

Under normal circumstances, the nationally-published quarterly BOP, IIP and External Debt results and the related calendar year results are first revised at end-June of each year when the first quarter's results are published. They are revised for a second time one year later. At that point these

results are normally considered final. The nationally-published detailed annual results are normally revised once and are then considered final.

Revisions to Government data occur more frequently but any and all revisions are incorporated annually during the compilation phase of production.

The nature and occurrence of routine revisions, along with any exceptional revisions (for example, as a result of methodological changes), are communicated to users normally with the publication of the data itself.

B. STATISTICAL PROCESSES

B.1.1 General Remarks

The financial accounts are compiled in accordance, and are broadly consistent, with the principles, requirements and conceptual framework of ESA 2010. A revised version of national documentation, consistent with ESA 2010, detailing sources and methods is in production and is not available at present.

B.1.2 Residency and Territory

The principles of residency and economic territory as outlined ESA 2010 are applied throughout all stages of the statistical production process.

B.1.3 Institutional Unit Definition

The general concepts of the institutional unit as set out in ESA 2010 – the ability to compile a complete set of accounts, autonomy of decision-making, centre of economic interest – are broadly adhered to in the compilation of the financial accounts. Some element of the data sourced directly from corporate balance-sheets may contain transactions/positions which stray from this principle although the extent of this effect is considered to be relatively small.

B.1.4 Sectorisation and Sector Delimitation

The classification of institutional units into their appropriate institutional sectors follows the principles and recommendations laid out in the ESA 2010. No significant deviations from these requirements occur in the compilation/production process.

B.1.5 Instrument Identification

Financial transactions and positions are classified into their appropriate financial instrument in accordance with the principles and recommendations of ESA 2010.

In the case where corporate balances-sheet data from the Companies Registration Office is used in the compilation of an element of the S.11 sector some estimation is required, principally through a process of residual allocation, to derive positions for AF.89 – Other Accounts Receivable/Payable excluding trade credits and advances.

B.1.6 Valuation, including Derivation of Transactions and Other Flows

In principle BOP transactions are recorded on an accruals basis using market valuation. In practice the collection system is designed to adhere to this approach and, for the most part, the valuations

reported are either market values or a close approximation. Positions are generally valued at market price at the end of the reference period.

In the case where corporate balances-sheet data from the Companies Registration Office is used in the compilation of an element of the S.11 sector, transactions need to be estimated. This is achieved by approximating, in the first instance, using the change in stock position from end-year to end-year. The resulting estimate can be further refined using counterpart (normally banking data) information, if available, on revaluations or other volume changes.

B.1.7 Time of Recording (accrual accounting)

In principle, transactions coming from the BOP statistics are recorded on an accruals basis using market valuation. In practice the collection system is designed to adhere to this approach. In certain cases, income (interest) flows on debt securities may be reported on a cash basis rather than an accruals basis. All other principal data sources generally comprise of data which is compiled on an accruals basis.

B.1.8 Coverage Gaps

Information on the extent of resident Households' transactions and stock positions with non-resident counterparties is of relatively low quality. This gap is most significant for non-resident currency and deposit (AF.2) assets. We are not aware of any specific coverage gaps in relation to OFIs and derivatives in Ireland.

B.1.9 Non-consolidation/Consolidation at Sectoral Level as Required Under ESA 2010 Submission Programme

Both transactions and positions are compiled on a consolidated and a non-consolidated basis in the annual financial accounts. The data quality of the BOP surveys and corporate balance-sheets is sufficiently high in relation to counterpart detail for loans which permits a very good estimation of consolidated private sector debt.

The full and technically correct consolidation of the Total Financial Sector (S.12) has not yet been completed. Currently this is shown as the arithmetic sum of the consolidated sub-sectors of S.12. Work is ongoing to systematically address/resolve significant internal imbalances in the financial accounts matrix vis-à-vis the respective sub-sectors of S.12 which will, eventually, permit a proper estimation of the consolidated S.12 sector.

B1.10 Specific Issues for Instruments covered by MIP indicators

- Private sector debt
Household debt is considered to be well-based and is not usually revised by material amounts. NFC debt is extremely large in Ireland. It can be subject to significant revisions and trends in NFC debt can be quite volatile over time. This is largely due to the activities of MNCs which are very large relative to the size of the Irish economy. NFC debt is compiled using quarterly BOP surveys and annual administrative data sources. The former has at times been subject to large revisions due to multinational corporations (MNC) activities. The latter as outlined in section B2.3 is an annual data source which is collected at a time lag and therefore subject to revision. The CSO has published a number of supplementary releases and articles to inform users of the impact of MNCs on NFC debt.

- Private sector credit flow
As outlined above this indicator can be volatile and subject to large revisions due to the activities of large MNCs in the Irish economy. In addition, as outlined in B1.6 transactions for the administrative data source are not directly collected and must therefore be estimated.
- Total Financial Sector Liabilities
The total financial sector in Ireland is extremely large. This is partly due to the activities of large financial MNCs. This can make the financial sector liabilities data extremely volatile and subject to material revisions.

B.2. CoP8 Appropriate Statistical procedures / PC8 Appropriate Statistical procedures

B 2.1 Data source Map (reference to separate page)

B2.2 Description of Procedures and Methods (brief overall description to clarify the data source map)

B.2.3 Estimation of Missing Data

In respect of estimating for missing data, and in particular for missing latest data, we confine our broad comments to the S.11 sector. It is in this sector that the most significant estimation for data of this type happens. Most of the NFC sector is compiled using BOP survey data. However, there are some NFCs which are not BOP-relevant and therefore not covered in BOP surveys. These entities represent approximately 15 percent of the overall NFC balance sheet and are sourced from administrative sources such as tax records and corporate balance sheet data. These sources lag the latest year by one year. In other words, in estimating for 2016 data, only data for 2015 is available from these sources. The process for estimating the missing latest year involves using ratios of the BOP NFCs versus administrative NFCs not included in BOP for earlier years to derive an estimate for the latest year missing data. Transactions are then estimated using the change in position as an initial estimate, which is further improved, if required, by reference to various counterpart sources (such as banking and Government data).

B.2.4 Balancing procedures (horizontal and vertical)

In the balancing stage of the process of production the positions and transactions are allocated, to the extent possible, to counterpart sectors, based on original information or on preliminary allocation proportions. For many cells in the matrix this process yields two estimates, one from each side. Almost invariably the two estimates differ to some extent, because of differences in such factors as coverage, valuation and timing. Furthermore, for many other cells, only a single-sided estimate is available. This is the case, in particular for the Household Sector, for which no direct or primary data are available, and which must be compiled entirely on the basis of counterpart data and estimations.

In the next stage of balancing, discrepancies are identified (significant imbalances, if any, are recorded, investigated and resolved before the formal balancing process begins) and the matrix is balanced. This is done predominantly by means of a mechanical process via an application of a set of balancing rules, together with judgemental processes, to bring about compliance with several accounting identities and conventions. A key requirement is that the sum of all holdings by residents and non-residents of financial assets of a given class should be equal to the sum of all liabilities of that class (also by residents and non-residents). In this operation, priority is given to retaining, as far as possible, consistency with other well-based statistics such as official banking and International Investment Position and Balance of Payments statistics, and Government finance statistics.

Some of the imbalances which come to the surface inevitably therefore get allocated to sectors or instruments for which the primary statistics are less well based, such as S.11 (certainly for the latest year where significant estimation for this sector occurs), S.125+S.126+S.127 (due to its relatively large size, heterogeneous nature and potential coverage gaps), and, if justified, S.14+S.15 (no direct source data). The instruments in which the most relatively significant balancing adjustments occur tend to be AF.512+AF.519 (Unquoted and Other Equity) and AF.89 (Other Accounts Receivable/Payable excluding Trade Credits and Advances).

The general approach to balancing the annual financial accounts is elaborated upon in the national publication, available at:

<http://www.cso.ie/en/releasesandpublications/ep/p-isaff/isaff2016/appx/>

B.2.5 Methods to Align Quarterly and Annual data

The institutional arrangements for the production of national financial accounts statistics in Ireland are as follows:

- a) Quarterly Financial Accounts – Compiled and disseminated by the Central Bank of Ireland.
- b) Annual Financial Accounts – Compiled and disseminated by the Central Statistics Office.

As a result of these institutional arrangements both processing systems and production processes have evolved separately over time and have led to alignment differences. A programme of work was undertaken to address and reconcile these differences. One of the products of this effort was the agreement to implement, where practicable and with deference to broader constraints, a set of rules for balancing the financial accounts matrix. This approach has led to significant improvements in the consistency of the annual and quarterly time-series. Work is ongoing, through a collaborative effort led by a working group composed of members from CSO and CBI, to address outstanding differences and alignment issues.

C. STATISTICAL OUTPUT

C.1. CoP11 Relevance / PC11 Relevance

At national level the annual financial accounts of the institutional sectors are published and disseminated in an integrated presentation together with the non-financial sector accounts. The direct presentation of financial accounts data is, in response to user demands and feedback, being augmented by supplementary analyses which aim to facilitate deeper engagement with the data.

At international level annual financial accounts data is required by Eurostat to produce three of the headline MIP Scoreboard indicators which help in identifying macroeconomic imbalances for a given economy. The data supports the assessment of vulnerabilities and interconnectedness for financial stability purposes by the European Systemic Risk Board (ESRB).

C.2. CoP12 Accuracy and reliability / PC12 Accuracy and reliability (including stability)

C.2.1 Accuracy and Reliability

Annual financial accounts are subject to a suite of edit-checks as part of the validation process undertaken by Eurostat in advance of publication. The financial accounts for Ireland have passed all validation checks currently in place (leaving aside the issue of outstanding requirements which are

offset by derogations). Details of issues in relation to Ireland's most recent transmission of annual financial accounts are contained in Eurostat's "[Annual Financial Accounts Progress Report - 2017](#)" published on 29th November 2017.

Revisions, apart from exceptional items, are implemented in accordance with the schedule as outlined in 1.3.2.

In quantitative terms, the annual financial accounts ensure that the net financial transactions (B.9F) and financial net worth (BF.90) for the Rest of the World (S.2) are consistent with the published BOP and net IIP. The scale of the vertical discrepancy, by sector, between the financial transactions account and the non-financial sector accounts is closely monitored for quality and systematic issues. This work is naturally influenced by the scale, in any given year, of the net errors and omissions. A summary of these discrepancies, by sector, is presented in 3.4.

C.2.2 Internal Consistency

In qualitative terms the accounts are closely scrutinised during the balancing stage of production to identify anomalous time-series issue and/or unusually large revaluations. These are investigated and explanations sought for their occurrence. Once the results are at a draft stage they are assessed in light of the scale of revision to the results in comparison to earlier vintage(s) and significant revisions are explored.

In general terms the compilation and production (including balancing) processes contain, along the way, various means by which quality and accuracy are monitored. However, apart from the analysis of the B.9/B.9F discrepancy in 3.4, there is currently no framework in place which would facilitate an easy cross-country comparison of reliability and accuracy.

C.3. CoP13 Timeliness and punctuality / PC13 Timeliness (including punctuality)

C.3.1 National Requirements

Publication of annual data usually occurs at T+10 months after the latest reference year.

C.3.2 International Requirements

In the EU, the ESA 2010 transmission programme requires reporting of annual data at T+9 months.

C.4. CoP14 Coherence and comparability / PC14 Consistency and comparability

In the annual financial accounts the net financial transactions (B.9F) for S.2 (Rest of the World) is consistent with the published BOP. The financial net worth (BF.90) of S.2 is consistent with the published net IIP from the Balance of Payments statistics.

Data for the General Government (S.13) sector is consistent with the most recent vintage of the QFAGG.

Consistency with the non-financial sector accounts is determined, from year to year, largely by the extent of the net errors and omissions. The vertical discrepancy (B.9 – B.9F) for each institutional sector is monitored for anomalous and systematic deviations. A summary of this discrepancy (expressed as a percentage of annual GDP) is shown in the table below for the most recent annual transmission to Eurostat.

Net lending and borrowing differences between non-financial and financial accounts:						
B.9 - B.9F	S.1	S.11	S.12	S.13	S.1415	S.2
2002	1.6	-1.0	2.3	0.3	-3.7	-1.6
2003	0.7	1.4	-2.6	0.2	-1.7	-0.7
2004	3.0	1.1	1.9	-0.4	-3.1	-3.0
2005	-2.7	-0.4	-3.1	-0.2	-1.2	2.7
2006	-0.3	-0.6	2.5	0.2	-3.1	0.3
2007	0.9	-3.0	4.2	0.2	-0.3	-0.9
2008	2.8	-1.2	3.0	0.5	-0.8	-2.8
2009	-2.6	-0.1	-4.9	0.1	-0.4	2.6
2010	5.7	-0.8	7.1	-0.1	-0.6	-5.7
2011	7.2	-0.8	8.8	0.0	-0.7	-7.2
2012	2.4	0.2	2.7	-0.1	0.2	-2.4
2013	-1.8	0.7	0.5	0.0	-0.4	1.8
2014	1.0	-0.2	3.8	0.2	-0.8	-1.0
2015	0.8	-0.5	1.7	0.0	-0.5	-0.8
Average	1.3	-0.4	2.0	0.1	-1.2	-1.3

C.4.1 Time and Back-Data Consistency

There are no significant breaks in the annual time-series. The series is ESA 2010 compliant and consistent across its timespan.

C.4.2 Consistency across Frequencies

As outlined earlier in this report, the quarterly and annual series are compiled in the CBI and the CSO respectively. Separate compilation and production systems inevitably produce series which are not fully consistent. However, a programme of collaborative work has been in place and is ongoing to reconcile the two sets of accounts. Significant differences and discrepancies in the two series have been resolved and both sets of accounts are largely consistent now. Remaining differences are relatively small in scale and are being addressed and resolved through the efforts of a joint working group composed of staff from both institutions.

C.5. CoP15 Accessibility and Clarity / PC15 Accessibility and Clarity

C.5.1 Data

National annual financial accounts are published annually and are available from the CSO website through the interactive database called Statbank.

<http://www.cso.ie/px/pxeirestat/statire/SelectTable/Omrade0.asp?Planguage=0>

The accounts are published in electronic format only and are presented in an integrated fashion with the annual non-financial sector accounts. The most recent edition is available by following the link below.

<http://www.cso.ie/en/releasesandpublications/ep/p-isanff/isanff2016/>

Links to international organisations' data repositories are listed below.

Eurostat : <http://ec.europa.eu/eurostat/data/database>

OECD : http://stats.oecd.org/Index.aspx?DataSetCode=FIN_IND_FBS#

C.5.2 Metadata

Metadata on the annual financial accounts is available as part of the annual electronic publication and is found by following the link below.

<http://www.cso.ie/en/releasesandpublications/ep/p-isanff/isanff2016/appx/>

C.5.3 Contact

Annual Financial Accounts contacts: Sarah O'Rourke, Christina Feeney and Christopher Sibley.

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