

Standard Report
on
Methods and Quality

For

Balance of Payments (BOP) and related results compilation



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This documentation applies to the reporting period:

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1 Overview

The Balance of Payments compilation system consists primarily of a quarterly survey operation which is supplemented by the use of internal CSO data on merchandise trade and tourism as well as administrative data from public bodies and miscellaneous data collected from a variety of sources along with some minor additional estimation.

The data collection, capture and processing arrangements are designed to meet not only a number of Balance of Payments related statistical requirements but also some significant national accounts and financial accounts demands.

Data collection is statutory and data providers are required to supply information under the Statistics (Balance of Payments Survey) Order 2020 (Statutory Instrument S.I. No. 91 of 2020) made under the Statistics Act of 1993. The collection system is a multi-survey operation. Financial services, manufacturing and non-financial service enterprises are required to supply transactions data during the reference period on services sold or purchased, income receipts and payments and transfer receipts and payments and also balance sheet data. In addition, transaction/position data vis-à-vis Irish residents are collected for national and financial accounts purposes. A geographical breakdown of the above information is also reported. In order to reduce the reporting burden, companies having lower levels of activity report annually.

Quarterly information on merchandise trade and travel statistics are obtained from the relevant compiling divisions within the CSO. Administrative data from the Central Bank of Ireland (CBI) and from government departments or their agencies such as the office of the Revenue Commissioners are also used.

Apart from the quarterly data obtained from direct collection, internal CSO or external administrative sources, ancillary information to assist with the compilation of results is also used. This largely consists of Irish Stock Exchange listings, currency exchange and interest rates, CBI statistics and any other relevant statistical information from industry association or other sources.

Arrangements have been put in place, in co-operation with the CBI, for the collection and compilation of statistics for banks, investment funds and financial vehicle corporations (e.g. FVCs). The system has been in operation since 2008 and has significantly reduced the burden on respondents as one return now meets a number of requirements for CSO and CBI. This development is in line with our commitment to minimise the burden on data providers. The collection system is also designed to meet the European Central Bank (ECB)'s requirement to collect Portfolio Investment statistics on a security by security basis. It is intended that arrangements for collection of Portfolio Investment data on this basis will be extended to other categories of financial enterprises in due course.

Qualitative information useful for statistical register purposes is obtained from the CSO Central Business Register (CBR) and from other sources. In addition, information from the Department of Finance, the CBI and the Companies Registration Office (CRO) is used in the maintenance of the financial services enterprises section of the register. Individual company data from the internal CSO merchandise trade statistics database, along with any useful information from newspapers, periodicals, etc., are used as inputs into the statistical register system.

The results, which are of a macro-economic nature, are published nationally by CSO in statistical release form on a quarterly and annual basis as follows:

- International Accounts
- Annual Resident Holdings of Foreign Portfolio Securities
- Annual Foreign Direct Investment
- Annual International Trade in Services

In addition, Balance of Payments data are transmitted to the ECB on a monthly basis. The results are also available on CSO's website as follows: https://www.cso.ie/en/statistics/internationalaccounts/ internationalaccounts/ and on the CSO's new dissemination database system, PxStat.



Various results tables are also supplied to the EU Commission (Eurostat) and to the European Central Bank (ECB) as statutorily required. In addition, a variety of tables are supplied to the International Monetary Fund (IMF) and to Organisation for Economic Co-operation and Development (OECD).

The results are used for a variety of purposes depending on particular user requirements. Nationally, the figures are used as an input into and in conjunction with the national accounts results to assess Ireland's economic performance. They are also used to assess investment trends in relation to the type and magnitude of foreign investment into Ireland as well as investment abroad by Irish residents. In addition, individual industry bodies and public and semi-state bodies assess foreign trade patterns and developments.

The international organisations use the figures for similar purposes; however, the ECB has a particular interest in them for assessing and developing monetary policy for the euro area. Eurostat and the ECB use national data to compile aggregate statistics for the EU and Euro Areas respectively.

2 General Information

2.1 Statistical Category

Primary statistical surveys combined with internal CSO data and data obtained from administrative records and from other miscellaneous sources in particular the Central Bank.

2.2 Area of Activity

Balance of Payments (BOP), external debt (ED), international investment position (IIP), foreign direct investment (FDI) and exports/imports of services.

2.3 Organisational Unit Responsible, Persons to Contact

BOP and related statistical compilation in the CSO are the joint responsibility of two divisions within the Macroeconomic Statistics Directorate. These are the Balance of Payments and Financial Sector (BOP&FS) Division and the Balance of Payments Analysis and Dissemination (BOPA&D) Division. The BOP&FS Division is responsible for data collection and processing. This involves the maintenance of the survey management system (SMS), the conduct of the surveys, data capture and processing. The BOPA&D Division is responsible for the analysis, publication and dissemination of the results internally in the CSO, nationally and internationally.

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2.4 Objectives and Purpose; History

Quarterly BOP data compilation in Ireland is based on statutory CSO statistical surveys, combined with administrative data, and is closely integrated in the CSO with the compilation of the national accounts. The statistics produced are used to monitor Ireland's economic performance and as an input into CSO's preparation of the national accounts aggregates GDP (Gross Domestic Product) and GNI (Gross National Income). They are also used by the ECB and Eurostat for the preparation of the necessary European statistical aggregates and for monitoring economic performance nationally and for the EU and Euro areas.

Following a complete overhaul of the collection and compilation system in the latter half of the 1990s the collection of data was greatly expanded, particularly for financial enterprises including those operating in the International Financial Services Centre (IFSC). The compilation methodology was altered where necessary to adhere as closely as possible to the international statistical recommendations concerning BOP related statistics, particularly to the IMF's BOP Manual 5th Edition, 1993 (known as BPM5). This resulted in the present quarterly BOP series being introduced for the reference year 1998. The IMF's BOP Manual has since been updated to the 6th Edition, 2009 (BPM6)¹. A large number of changes to the compilation system were required to ensure compliance with the new methodology and these were successfully implemented in 2014.

Within this overall compilation framework, annual IIP statistics were first published nationally by the CSO in 2002. In 2003, a new quarterly series on External Debt statistics (which are closely related to the IIP liability data) was published. In addition, annual national statistical releases were introduced giving further geographical detail on Foreign Direct Investment (flows and stocks) and on Irish Resident Holdings of Foreign Portfolio Securities. Greater geographical detail was introduced for both quarterly BOP and annual IIP data in 2004.

The results are also supplied to Eurostat, the ECB, IMF and OECD and presented according to each organisation's specific requirements in terms of frequency, content and analytical detail.

As economic and financial globalisation develops and as statistical requirements change, the compilation system is modified and developed as necessary and appropriate to reflect the resulting changes.

While the CSO is the official compiler of the statistics referred to, over the years there has been very close on-going liaison and co-operation between the CSO and the CBI concerning compilation of the quarterly and annual results, as well as monthly estimates for ECB purposes. This co-operation primarily centres on statistics relating to financial enterprises and continues to deepen with developments both nationally and at European level.

2.5 Periodicity

The basic survey process has a quarterly frequency but enterprises having lower levels of activity are surveyed annually to minimize response burden.

2.6 Client

The Balance of Payments and related statistics are compiled for use by both national users and by the international organisations (primarily Eurostat, ECB, IMF and OECD). Eurostat and the ECB have statutory bases for requiring the supply of the data.

2.7 Users

National users: The CSO, Department of Finance and other Government Departments such as the Department of Foreign Affairs and Trade, CBI, economic commentators, the media, third level educational institutions, the public at large.

International users: Eurostat, ECB, IMF, OECD, World Bank, United Nations (UN).

¹ https://www.cso.ie/en/media/csoie/methods/internationalaccounts/BPM6.pdf



2.8 Legal basis

The Statistics (Balance of Payments Survey) Order 2020 (Statutory Instrument S.I. No. 91 of 2020) made under the Statistics Act of 1993 is the primary legal basis for collecting the required data from providers. This order specifies who may be surveyed, the frequency with which they may be surveyed and the nature of the data that may collected.

In addition, the European Communities (Statistics) Regulations, 1999 were introduced in June 1999 to allow the CSO to meet obligations under Council Regulation (EC) No 2533/98 of 23 November 1998 (as amended by council regulations (EC) Nos. 951/2009 of 9 October 2009 and by council regulation (EU) 2015/373 of 5 March 2015) concerning the statistical requirements of the European Central Bank (ECB). The ECB has a statutory basis - ECB Guideline ECB/2004/15 of 16 July 2004, as amended by Guideline ECB2007/3 of 31 May 2007, recast in Guideline ECB/2011/23 of 9 December 2011, as amended by ECB Guideline ECB/2013/25 of 30 July 2013 and EU Guideline 2016/231 of 26 November 2015 - for the compilation and supply of the BOP and related data it requires. Related to this, its formal instrument - ECB Recommendation ECB/2004/16 of 22 July 2004, as amended by ECB Recommendation ECB/2007/4 of 31 May 2007— applies to the CSO. Also, Regulation (EC) No 184/2005 of the European Parliament and of the Council of 12 January 2005, as amended by Regulations 601 and 602/2006 of 18 April 2006, 1137/2008 of 22 October 2008, 707/2009 of 5 August 2009, 555/2012 of 22 June 2012 and 2016/1013 of 8 June 2016 specifies the EU Commission (Eurostat) requirements concerning Balance of Payments, international trade in services and foreign direct investment statistics.

3 Statistical Concepts, Methods

3.1 Subject of the Statistics

The statistics produced and published tend to be broadly described as Balance of Payments and related statistics. As such, they cover the following specific statistical outputs:

- Balance of Payments
- International Investment Position and External Debt
- Foreign Direct Investment
- Resident Holdings of Foreign Portfolio Securities
- International Trade in Services

Balance of Payments

The balance of payments (BOP) is a statistical statement that summarises, for a specific time period, the economic transactions of the residents of an economy with the rest of the world. It consists of the current account, the capital account and the financial account.

The *current account* consists of trade in merchandise and services, income inflows and outflows and current transfers. The *capital account* covers capital transfers and the acquisition and disposal of non-produced, non-financial assets. The *financial account* is concerned with transactions in foreign financial assets and liabilities, distinguishing the functional type of investment i.e. direct, portfolio and other investment and reserve assets. *Current and capital account* transactions are allocated to the country of residence of the counterpart. *Financial account* transactions are allocated on the basis of the debtor/creditor principle; assets are geographically assigned to the country of the debtor (i.e. the issuer) of the assets, while liabilities are assigned to the country of the creditor (i.e. the holder). In the case of direct investment, transactions are geographically attributed on the basis of country of location of immediate ownership of the direct investment enterprise rather than that of the ultimate beneficial owner.

The BOP presentation follows the standard double entry accounting treatment for a transaction i.e. in principle, every credit entry is matched by a corresponding debit entry elsewhere in the system. The conceptual and theoretical basis of the BOP is such that BOP statistics are compatible with national accounts requirements.



International Investment Position

Closely related to the flow-oriented BOP framework is the stock-oriented *international investment position* (IIP). Compiled at a specified date, the IIP is a statistical statement of (i) the value and composition of the stock of an economy's foreign financial assets, or the economy's claims on the rest of the world, and (ii) the value and composition of the stock of an economy's liabilities to the rest of the world. Also encompassed in principle are land, other real property and other immovable assets which are:

- physically located outside the economic territory of the compiling economy and owned by residents of that economy; or
- physically located inside the economic territory of the compiling economy and owned by residents of other economies.

In addition, monetary gold and special drawing rights (SDRs) owned by the monetary authority i.e. the Central Bank and Financial Services Authority of Ireland are included.

The difference between the two sides of the balance sheet (the net position) measures that portion of the economy's net worth attributable to, or derived from, its relationship with the rest of the world. A change in stocks during any defined period can be attributable to transactions (i.e. BOP flows), to revaluations reflecting changes in exchange rates, prices, etc. or to other adjustments (e.g. reclassifications, corrections, uncompensated seizures).

The IIP and the Financial Account of the BOP are closely related. The same data sources and methods of compilation are used in producing the resulting statistics.

External Debt

The External Debt (ED) statistics are obtained as a subset of the IIP data. External Debt refers to those financial liabilities of an economy which are accounted for by investments by non-residents in financial instruments other than equity or financial derivatives.

Foreign Direct Investment

Direct investment reflects the objective of a resident entity in one economy to obtain a lasting interest in an enterprise resident in another economy. In line with international standards (IMF/OECD), a "10% ownership criterion" is applied to holdings of equity in order to infer a direct investment relationship. Based on this criterion, a direct investment relationship can exist between related enterprises, regardless of whether the linkage involves a single chain or a number of chains. It can extend to a direct investment enterprise's subsidiaries, sub-subsidiaries and associates. Once the direct investment has been established, all subsequent financial flows between the related entities are recorded as direct investment transactions, regardless of the financial instrument used, except in the case of transactions between financial intermediaries e.g. between affiliated banks and similar monetary financial institutions (MFIs), where direct investment transactions are confined to those of a permanent capital nature.

Direct investment statistics (covering equity and other capital) are not presented on an assets/liabilities basis as for other types of investment but are presented instead on a 'directional basis' in order to indicate whether the source of investment influence is located abroad or in the compiling economy. If the direct investor is a resident of the compiling economy, then the investment is categorised as *direct investment abroad*; if a non-resident, then it is categorised as *direct investment in the compiling economy* (i.e. Ireland).

Portfolio Investment

Resident Holdings of Foreign Portfolio Securities refer to the balance sheet stock of foreign financial assets held by Irish residents at the end of an annual calendar reference period. They form another subset of the IIP data (in which they are broadly identified on the assets side of the IIP statement under the category portfolio investment). Portfolio investment is a type of investment involving the purchase or sale of (i) equity securities and (ii) debt securities (in the form of bonds and notes and



money market instruments), except for those securities falling into the category of either direct investment or reserve assets. *Bonds and notes* are securities issued with an initial maturity of more than one year while *money market instruments* are securities issued with an initial maturity of one year or less. Financial instruments classified to portfolio investment are usually traded in organised markets. The annual statistics produced on Irish resident holdings of portfolio assets show the country of issuer of the securities involved.

Other Investment

It covers assets and liabilities other than those classifiable to direct investment, portfolio investment or reserve assets. It comprises *loans*, *currency* and *deposits*, *short* and *long-term* trade credits, financial derivatives and other accounts receivable and payable. Derivatives cover over-the-counter (OTC) and exchange-traded contracts and include options, futures, swaps, forwards, etc. For BOP purposes, all receipts and payments connected to financial derivative contracts (other than the values of transactions in the underlying commodities or financial instruments) are recorded in the financial account i.e., there are no entries in the current account other than related fees and service charges (not always identifiable). In principle, other investment transactions are valued at market valuation inclusive of accrued income. For loans, book values are accepted as a proxy for market values.

International Trade in Services

The annual statistics published are derived from the BOP data collected and show the value of imports and exports of a variety of services categorized according to the country/region of residence of the counterpart.

General aspects

The outputs outlined above form part of the overall body of statistical information used to describe and monitor Ireland's economic and financial interactions with the rest of the world and its economic performance generally. In order to meet these and other requirements, the statistics are collected and compiled in line with the recognized international standards. In particular, the IMF's Balance of Payments Manual (6th Edition) – known generally as BPM6 – is used as the fundamental standard. For goods exported to or imported from non-residents the figures are compiled using the 'change of ownership' criterion and not that concerning their physical movement across national borders. In general, for all types of transaction, recording is in principle made on an accruals basis i.e. when the event giving rise to the transaction is booked in the accounting books of the parties involved. Valuation is required on a market price basis but for some transactions e.g. loans, book value may be used and for non-listed direct investment companies own funds at book value (OFBV) can be used to value foreign direct investment stocks. In general, the economic and financial transactions, as well as the financial stock positions, are recorded using the internationally recognized debtor/creditor principle. The debtor is the foreign counterpart customer or client for whom a financial obligation to an Irish resident is created when, for example, that resident invests abroad or exports goods or services. The *creditor* is the foreign counterpart customer or client to whom a financial obligation by an Irish resident is created when (for example) that resident imports goods or services or acquires investment financing from abroad. Finally, the CSO compiles also the data on an asset/liability approach for the ECB.

3.2 Units of Observation/Collection Units/Units of Presentation

The unit of observation is primarily the enterprise. The unit of collection is either the observation enterprise or an entity acting on behalf of the observation enterprise or a number of such enterprises. The results are macro-economic in nature and are published for the economy of Ireland as a whole with a variety of analytical breakdowns (by type of transaction, by type of investment, by type of financial instrument, by type of institutional sector involved, etc.).

3.3 Data Sources

Most of the data are collected directly via the Balance of Payments surveys. These are supplemented by quarterly information on merchandise trade and travel statistics obtained from the relevant



compiling divisions within the CSO. Data required from licensed banks (credit institutions); from investment funds (including money market funds); and from FVCs to meet BOP, IIP and external debt requirements are collected quarterly by the CBI under its legislation as well as European legislation. This arrangement started in 2008 and may be extended to other categories of financial corporation. The data are supplied by the CBI to CSO for statistical compilation purposes. Administrative data from government departments (or their agencies) and from the CBI are also used. Apart from the quarterly data obtained from direct collection, internal CSO or external CBI and administrative sources, ancillary support information to assist with the compilation of results is also used. This largely consists of Irish Stock Exchange listings; currency exchange and interest rates; CBI statistics; and industry association or any other relevant statistical information.

The statutory quarterly collection system requires transaction data on services, income and transfers. Transaction and position data (along with the reconciliation items) are required for assets and liabilities. Sectoral and geographical details are also provided. In order to reduce the reporting burden, companies having lower levels of activity report on the same basis annually.

Transaction/position data vis-à-vis Irish residents are also collected for national and financial accounts purposes.

3.4 Reporting Unit/Respondents

All resident companies, resident branches of foreign companies or individuals who are engaged in:

- (a) the provision of goods, services or financial instruments to non-residents;
- (b) receipt of goods, services or financial instruments from non-residents;
- (c) acquisition or disposal of a financial claim on non-residents;
- (d) incurrence or redemption of a financial liability to non-residents;
- (e) payment of income to non-residents;
- (f) receipt of income from non-residents

are relevant to the surveys.

3.5 Type of Survey/Process

The Balance of Payments surveys consist of several surveys which are as follows:

- -Survey of Portfolio Investment (BOP30)
- -Survey of Manufacturing and Non-Financial Services Companies (BOP40)
- -Survey of Non-Life Insurance and Reinsurance Companies (BOP42)
- -Survey of Life Assurance and Reinsurance Companies (BOP43)
- -Survey of Stand-Alone Treasury Companies at IFSC (BOP44)
- -Survey of Banks, Assets Finance Companies, Securities Trading Companies, Agency and Captive Treasuries and related Financial Services Companies (BOP45)

The survey results are supplemented with other internal CSO data (i.e. merchandise exports/imports and tourism statistics) as well as administrative data from public sources such (CBI, National Treasury Management Agency (NTMA), government departments) and other miscellaneous data. Financial data such as the ones required from credit unions, investment funds and FVCs are also collected by the CBI.

See https://www.cso.ie/en/methods/surveyforms/internationalaccounts/

3.6 Characteristics of the Sample/Process

3.6.1 Population and Sampling Frame

A register of relevant entities is maintained by Balance of Payments Division. Qualitative information useful for statistical register purposes is obtained from the CSO Central Business Register (CBR) and from other sources. In addition, information from the CBI and the Companies Registration Office (CRO) is used in the maintenance of the BOP financial services enterprises section of the register. Individual company data from the internal CSO merchandise trade statistics (exports/imports) database, along with any useful information from newspapers, periodicals, etc., are used as inputs into the BOP statistical register system.



3.6.2 Sampling Design

BOP data collection is statutory and surveys are conducted by the CSO and the CBI. Since 2008, the data required from licensed banks (credit institutions) and from investment funds (including money market funds) to meet BOP, IIP and external debt requirements (as well as other statistical demands on both organisations) have been collected quarterly by the CBI only. The main reasons are the rationalisation of statistical data collection and compilation for the financial sector and also the burden reduction on data providers. The CSO has therefore discontinued its surveys of credit institutions and investment funds but continues to collect the required data from other financial enterprises as well as non-financial enterprises using its ongoing quarterly statutory surveys. Irish companies or Irish branches of foreign companies which are involved in the provision or receipt of financial services to/from non-residents as well as those who are engaged in manufacturing or the supply of nonfinancial services and which have significant interaction with non-residents are covered by the surveys.

For financial enterprises, complete coverage of all enterprises having economic or financial transactions with non-residents is aimed at. In all, about 8,600 financial enterprises are covered over the course of a year. For non-financial enterprises, a coverage of about 2,900 enterprises is realised by the CSO, the focus being on the larger enterprises. The Large Cases Unit (LCU) was established to be the single point of contact for larger companies. This reduces the burden on these companies and allows the CSO to check the consistency across all of the returns for a particular company. In monetary terms, the results from this sample cover approximately 90% of the trading and investment activities of non-financial enterprises.

3.7 Survey Technique/Data Transfer

Soft (electronic) copies of the forms are issued each quarter to relevant entities. The forms are available on the CSO website and are returned electronically to CSO by most respondents. This data can then be loaded automatically to the BOP database. For the small number of respondents who return information in hard copy the data has to be keyed manually into the database.

3.8 Questionnaire (including explanations)

The statutory quarterly collection system for non-financial services enterprises requires transaction data on services, income and transfers. Transaction and position data (along with the reconciliation items such as valuation changes and exchange rate effects) are required for assets and liabilities. The transaction details (i.e. services and income items and instrument breakdowns) necessary to meet BPM6 requirements are distinguished. Sectoral and geographical details are also provided. The same information is required from financial enterprises, but the forms have been customized to reflect the differing types of financial activity (e.g. fund management, life/non-life insurance, treasury activity, banking and other financial services).

See http://www.cso.ie/en/surveysandmethodology/balanceofpayments

3.9 Participation in the Survey

Participation in the survey is mandatory. The surveys are carried out under the Statistics (Balance of Payments Survey) Order 2020 (S.I. No. 91 of 2020).

3.10 Characteristics of the Survey/Process and its Results

Information is obtained from survey and other sources on Ireland's economic and financial interactions with the rest of the world. The information is primarily collected quarterly for the preceding calendar quarter. The data obtained cover transactions in monetary terms concerning Ireland's:

- sales of goods and services, distinguishing export and import trade
- income generated, including flows of income (profits, dividends, interest) into Ireland from investment abroad, as well as similar flows of income abroad from Ireland
- current and capital transfers into Ireland and out of Ireland covering largely EU receipts and payments, charitable aid, non-life insurance cover and remittance flows



• investment into Ireland and from Ireland categorized by the functional categories into *direct* investment, portfolio investment, financial derivatives, other investment, and reserve assets.

This information is broken down by country of residence of the counterpart to the transaction.

Balance sheet data are also collected for the same functional categories of investment listed for transactions.

The results published and disseminated are essentially an aggregation of the raw data collected. Some minor estimation or derivation is also undertaken to avoid additional reporting burden. This mostly covers the geographical attribution of investment income as well as the calculation of insurance service exports and insurance transfers.

3.11 Classifications used

The statistics published and disseminated are broken down to show a range of analyses. In terms of geographical breakdown, the quarterly BOP figures show regional (e.g. EU/Non-EU; Euro-area/non-Euro-area) detail. In the annual releases this level of detail tends to be repeated but with additional individual country breakdowns as well as some larger geographical aggregation (e.g. continents). The definitive source of the geographical list used is the ISO3166 classification of countries.

The statistics on Foreign Direct Investment are also presented to show a broad economic activity breakdown which is based on the EU NACE Rev. 2 classification.

The IIP statistics are analysed to show a breakdown by institutional sector, the sectors distinguished being monetary authority (i.e. Central Bank of Ireland), general government; monetary financial institutions (mainly credit institutions and money market funds) and other sectors.

3.12 Regional Breakdown of Results

The statistics compiled and published refer to Ireland as a single regional unit. International statistical standards do not require a breakdown of the results for regions within Ireland.

4 Production of the Statistics, Data Processing, Quality Assurance

4.1 Data Capture

For BOP survey operations, the CSO operates an integrated computer processing system (BOP-facts) using Sybase relational database technology. A standard processing approach applies to all quarterly surveys and administrative data. The system was designed to streamline the entire statistical production operation. Where data are returned in electronic form, they are imported through a bulk loading process into the database. Any forms received in hard copy are keyed manually into the database.

4.2 Coding

Country and currency codes are assigned automatically in BOP-facts. Other codes (e.g. economic activity, institutional sector) are obtained automatically from the Balance of Payments register (SMS).

4.3 Data Editing

On receipt in the CSO, all quarterly (and annual) returns are manually checked for obvious reporting errors. If no errors are apparent, the data are loaded into the Sybase database (BOP-facts) and undergo various automated consistency and plausibility data checks. If the data fail the more important checks, the CSO contacts the company concerned to query the data and make any necessary corrections.

4.4 Imputation (for Non-Response or Incomplete Data Sets)

Estimates are made for partial or complete non-responses using either automated or manual imputation procedures. These estimates are based on previous returns made by the entity or on returns



made by similar entities. Data available from Revenue, CBI and CRO are also used in making these estimates. This facility is largely applied only to non-returning smaller companies surveyed, as the larger companies are pursued until the data are supplied.

4.5 Grossing and Weighting

Profits and trade in services of the relevant manufacturing and non-financial service companies not covered by the BOP surveys are estimated from Census of Industrial Production and Annual Services Inquiry returns. These are geographically allocated according to the overall country breakdown for the relevant BOP survey and are added to the results of the surveys.

4.6 Computation of Outputs and estimation Methods Used

All data are converted to single euro within BOP-facts. Apart from the analyses available within the processing system, further analyses are undertaken using SAS software. Once verified and further processed as necessary, the data from all surveys are summarised to produce the results. The outputs required by various users are generated from the database in the form of comma separated files (i.e. csv files). These are then used to prepare the tables for national publication and also to provide the data required by the ECB, Eurostat, IMF and OECD.

4.7 Other Quality Assurance Techniques Used

The Large Cases Unit (part of national accounts Division) of the CSO carries out data collection and checks the consistency of quarterly and annual data returned by large manufacturing and non-financial services companies for various divisions within the CSO, including the BOP Division. The Large Cases Unit liaises on an on-going basis with these divisions and with any company concerned to determine the reasons for any significant discrepancy or inconsistency. In an on-going effort to improve data quality the Large Cases Unit operates a programme of company visits and liaison so that the CSO becomes aware as early as possible of any material change in companies' operational, accounting or reporting practices affecting the data returned. BOP personnel often participate in these visits and also make visits independently as and when specific BOP problems need to be resolved.

Prior to publication, some further manual checking is also carried out on the consistency of the BOP/IIP results with information available elsewhere, e.g. financial trade data, production statistics and profits data. More in-depth data quality checks are conducted annually against data available to the national accounts Division.

Concerning financial enterprises, the quality analyses undertaken by the CSO involve comparison of its results with aggregate data available from other sources. These include representative associations for insurance companies, pension funds, collective investment institutions (CIIs e.g. mutual funds, Undertaking Collective Investment in Transferable Securities (UCITS)), government departments, etc. In addition, the CSO and the CBI undertake a detailed reconciliation of aggregate money and banking statistics and BOP/IIP statistics for Monetary Financial Institutions (i.e. credit institutions and money market funds) each quarter. Work is also on-going between the two organisations to reconcile differences between aggregate BOP/IIP data and regulatory data relating to CIIs and other financial intermediaries (OFIs).



5 Quality

5.1 Relevance

These statutory inquiries are conducted to meet the requirements of Regulation (EC) No 184/2005 of the European Parliament and of the Council of 12 January 2005 on community statistics concerning Balance of Payments, international trade in services and foreign direct investment (as amended by Regulation Nos. 601/2006, 602/2006, 1137/2008, 707/2009, 555/2012 and 2016/1013) and the ECB Guideline ECB/2004/15 (as amended by ECB Guideline ECB/2007/3 , recast in Guideline ECB/2011/23 as amended by ECB Guideline ECB/2013/25 of 30 July 2013 and EU Guideline 2016/231 of 26 November 2015) on the statistical reporting requirements of the European Central Bank in the field of Balance of Payments and international investment position statistics.

As a result of its role in monitoring Ireland's economic performance, the Department of Finance is interested in all aspects of the BOP. The main focus of the Department of Business, Enterprise and innovation is on industrial development in the manufacturing and services sectors. It is particularly interested in the direct investment aspects of the BOP, as well as in the data on merchandise and services. Data are also used by stockbrokers, analysts in the field of economic and social research as well as universities. The national accounts Division also uses BOP results internally within the CSO.

The CSO supplies data to international organisations such as the ECB, the European Commission (Eurostat), the IMF and the OECD.

5.2 Non-sampling effects

5.2 .1 Quality of data sources used

Most of the data are collected directly via the Balance of Payments surveys. These are supplemented by data from other divisions within CSO, administrative data from other government departments and from the CBI. These data sources are considered to be reliable.

5.2.2 Register coverage

Every effort is made to ensure the register coverage is complete. The CSO's Central Business Register (CBR) is the source for non-financial enterprises while information from CBI, Companies Registration Office and Revenue is used to ensure coverage of relevant financial enterprises.

5.2.3 Non-response

For financial enterprises the response rate for the quarterly Balance of Payments surveys is close to 88% while that for non-financial enterprises is over 93%. For the annual surveys the response rate is approximately 66% for financial enterprises at the time of first publication. This increases to over 80% at the time of first revision.

5.2.4 Measurement errors

The BOP survey forms were designed in consultation with industry representatives. Large multinational companies provide early estimates on a best effort basis. These are subject to revision and definitive data are provided when final audited accounts become available. The revisions can be substantial at times. Changes in company structure can also lead to revisions.

5.2.5 Accuracy and Reliability

Following a Eurostat initiative (see Section 6) CSO introduced measures of accuracy and reliability for its BOP related statistics. The relevant assessments for years 2018-2021 have been applied to the BOP, FDI, Portfolio Investment and Other Investment results. It is intended that these measures will also be applied in due course to other BOP related statistics.



The quantitative analysis of quality for Balance of Payments and Foreign Direct Investment Positions items focuses on the size of revisions, their direction and the reliability of trends.

5.2.5.1 Size of revisions

For the gross BOP items of the current account the Mean Absolute Percentage error (MAPE) is used as an indicator for the size of revisions.

The MAPE is defined as follows:

$$MAPE = \frac{1}{N} \sum_{t=1}^{N} \left| \frac{X_{f}^{t} - X_{i}^{t}}{X_{i}^{t}} \right|$$

Where.

 X_i^t = the initial estimate for BOP item X in reference quarter t

 X_f^t = the last available estimate for the same BOP item in reference quarter t

N = the number of quarters

It should be noted that when the value of X_i^t is close to zero the MAPE might potentially reach very high levels although the absolute size of revision might be relatively small. Where the value of X_i^t is not small a persistently high value of MAPE for an item should warrant further investigation.

Table 1 presents the results of the MAPE calculations for the major BOP items for 2021 (with comparisons from 2019 to 2022).



Table 1: Mean absolute percentage error, current account, 2019-2022 (%)

BOP Item	MAPE Ireland				
	2019	2020	2021	2022	
total current account credits	6%	7%	4%	2%	
total current account debits	11%	14%	4%	3%	
goods credits	1%	2%	1%	1%	
goods debits	5%	2%	2%	4%	
services credits	8%	11%	5%	1%	
services debits	14%	24%	2%	5%	
primary income credits	17%	9%	36%	5%	
primary income debits	10%	6%	31%	4%	
transport credits	2%	5%	24%	2%	
transport debits	34%	39%	3%	5%	
travel credits	13%	41%	184%	27%	
travel debits	3%	21%	104%	28%	
other services credits	8%	11%	4%	0%	
other services debits	14%	24%	2%	5%	
second primary credits	12%	6%	3%	6%	
second primary debits	8%	3%	2%	2%	
compensation of employees' credit	0%	2%	0%	0%	
compensation of employees' debit	6%	2%	2%	3%	
direct investment income credit	30%	32%	15%	16%	
direct investment income debit	4%	4%	4%	5%	
portfolio investment income credit	10%	9%	17%	7%	
portfolio investment income debit	15%	12%	13%	1%	
other investment income credit	33%	10%	9%	8%	
other investment income debit	20%	5%	6%	14%	

Source BOP/IIP/FDI: https://www.cso.ie/en/statistics/internationalaccounts/internationalaccounts/

The MAPE for travel credits and debits in 2021 is high. This could be explained by the travel data revision due to the Covid-19 pandemic. It is also widely acknowledged internationally that the BOP Financial Account flows tend to be very volatile. The MAPE is therefore not considered to be a suitable measure to assess revisions for Financial Account components. The Absolute Total Discrepancy (ATD) is used instead.

The ATD is defined as follows:

$$ATD = \sum_{t=1}^{N} \left| X_f^t - X_i^t \right|$$

Where,

 X_{i}^{t} = the initial estimate for BOP item X in reference quarter t

 X_f^t = the last available estimate for the same BOP item in reference quarter t

N = the number of quarters



Table 2 presents the results of the calculations for the major BOP Financial Account items for the reference periods from 2019 to 2022. Figures are given for Foreign Direct Investment (FDI), Portfolio Investment (PI) and Other Investment (OI).

Table 2: Absolute Total Discrepancy, FDI, 2019-2022 (€ million)

Absolute Total Discrepancy	Initial vs last estimate				
	2019	2020	2021	2022	
Net FDI flows abroad	16,774	55,654	35,574	11,091	
Net FDI flows to Ireland	81,494	95,311	17,111	46,919	
Net PI assets	48,342	30,477	292,674	14,524	
Net PI liabilities	44,348	27,841	351,446	15,960	
Net OI assets	31,922	36,528	35,602	36,770	
Net OI liabilities	65,891	45,508	10,546	30,521	

Source BOP/IIP/FDI: https://www.cso.ie/en/statistics/internationalaccounts/internationalaccounts/

For the assessment of FDI transactions neither the MAPE nor the ATD is used internationally. Table 3 presents the values for inward and outward FDI initial and final estimates in reference years from 2019 to 2022.

Table 3: FDI first and final estimates, 2018-2022 (€ million)

Foreign Direct	2019		2020		2021		2022	
Investment	outward	inward	outward	inward	outward	inward	outward	inward
First estimate	16,170	69,886	-43,433	27,797	52,404	2,393	5,071	1,415
Final/Latest estimate	28,659	133,485	-9,981	89,756	47,471	-3,325	8,922	-23,796

Source BOP/IIP/FDI: https://www.cso.ie/en/statistics/internationalaccounts/internationalaccounts/



Another quantitative analysis for quarterly BOP items focuses on some descriptive statistics (average, standard deviation, minimum and maximum value) of the size of revisions recorded in the last 16 quarters (2019Q1-2022Q4). The size of revision is compiled for the most important BOP items for partner World in Table 4. For QBOP data deliveries, the size of revision *r* is defined as follows:

$$r = \frac{(X^{t_f} - X^{t_i})}{X^{t_i}}$$

where: X_i^t initial estimate for BOP item X in reference quarter t

 X_f^t = the last available estimate for the same BOP item in reference quarter t

Table 4: Average, standard deviation, minimum and maximum, current account and FDI, 2019Q1-2022Q4 (%)

Indicator		Mean	St Dev	Max	Min
Goods	Cr	0.0%	3.1%	9.1%	-5.7%
	Dr	-12.2%	27.4%	18.3%	-60.3%
Services	Cr	4.9%	7.9%	23.2%	-16.3%
	Dr	14.5%	35.5%	123.7%	-25.6%
Primary income	Cr	-2.6%	28.0%	19.5%	-62.3%
	Dr	1.3%	15.2%	23.6%	-41.5%
Transport	Cr	32.1%	75.3%	268.9%	-62.8%
	Dr	20.1%	18.1%	51.1%	-0.5%
Travel	Cr	90.0%	145.4%	535.7%	-53.0%
	Dr	162.5%	528.8%	2127.3%	-80.8%
Other services	Cr	4.5%	7.8%	21.9%	-17.2%
	Dr	14.2%	35.4%	122.3%	-26.4%
Secondary income	Cr	6.0%	7.3%	18.2%	-12.5%
	Dr	3.3%	6.5%	13.3%	-11.6%
Compensation of Employees	Cr	17.1%	68.6%	274.3%	0.0%
	Dr	1.4%	17.1%	61.9%	-21.1%
Direct Investment Income	Cr	16.8%	31.2%	103.7%	-30.6%
	Dr	4.0%	12.4%	31.2%	-31.9%
Portfolio Investment Income	Cr	10.9%	4.8%	20.0%	1.8%
	Dr	10.2%	7.0%	19.5%	-0.6%
Other Investment	Cr	3.7%	19.4%	36.8%	-22.4%
	Dr	11.4%	9.6%	29.4%	-4.7%
Direct Investment flows	Cr	-49.4%	155.0%	94.6%	-597.3%
	Dr	215.0%	775.6%	2655.5%	-581.9%
Portfolio Investment flows	Cr	-15.1%	86.2%	195.5%	-204.0%
	Dr	-25.8%	109.2%	130.7%	-384.4%
Other Investment flows	Cr	-53.8%	134.4%	63.1%	-425.7%
	Dr	-33.0%	134.0%	225.5%	-387.6%

Source BOP/IIP/FDI: https://www.cso.ie/en/statistics/internationalaccounts/internationalaccounts/

Conclusion: Significant revisions can be observed in the above table particularly for travel, direct investment, portfolio investment and other investments flows. The same trend can be observed concerning the ATD of financial components.



5.2.5.2 Direction of revisions

Over time, it is expected that both positive and negative revisions will occur. If the revisions are systematically positive or negative, it is necessary to analyse the underlying reasons for this, e.g. a lack of coverage in early estimates, and there should be an attempt to correct any systematic bias. Table 5 shows the number of quarters revised upward as compared to the number of quarters for which data has been revised.

Table 5: Direction of revisions, current account and FDI, 2019-2022

BOP items	Number of quarters revised upwards/revised				
	2019	2020	2021	2022	
total current account credits	4/4	4/4	4/4	4/4	
total current account debits	4/4	4/4	4/4	3/4	
goods credits	2/4	4/4	1/4	3/4	
goods debits	3/4	2/4	4/4	0/4	
services credits	4/4	4/4	4/4	3/4	
services debits	4/4	4/4	4/4	1/4	
primary income credits	4/4	4/4	4/4	4/4	
primary income debits	4/4	4/4	4/4	4/4	
transport credits	4/4	3/4	4/4	4/4	
transport debits	4/4	4/4	3/4	3/4	
travel credits	4/4	3/4	4/4	2/4	
travel debits	4/4	2/4	4/4	2/4	
other services credits	4/4	4/4	4/4	4/4	
other services debits	4/4	4/4	4/4	2/4	
secondary income credits	3/4	4/4	4/4	4/4	
secondary income debits	3/4	4/4	4/4	4/4	
compensation of employees' credits	4/4	4/4	4/4	4/4	
compensation of employees' debits	1/4	4/4	3/4	0/4	
direct investment credits	4/4	3/4	2/4	3/4	
direct investment debits	4/4	2/4	4/4	4/4	
portfolio investment income credits	4/4	4/4	4/4	4/4	
portfolio investment income debits	4/4	4/4	4/4	2/4	
other investment credits	4/4	0/4	0/4	2/4	
other investment debits	4/4	3/4	4/4	4/4	
net outward FDI flows	2/4	3/4	2/4	2/4	
net inward FDI flows	2/4	3/4	2/4	2/4	
net PI assets flows	1/4	1/4	3/4	4/4	
net PI liabilities flows	2/4	4/4	3/4	3/4	
net other investment assets flows	2/4	4/4	3/4	3/4	
net other investment liabilities flows	2/4	1/4	3/4	3/4	

Source BOP/IIP/FDI: https://www.cso.ie/en/statistics/internationalaccounts/internationalaccounts/

Conclusion: The table above suggests that there is understatement of total current account credits and debits from 2019 to 2022 in the initial estimates. CSO will continue to monitor revisions over time and will take any corrective measures necessary to minimise the occurrence of possible bias.



5.2.5.3 Reliability of trends

Users of BOP statistics expect the first estimate (X_i) for a given period to be a correct indicator of the direction (upward or downward) of the time series. That is, if the first estimate indicates an upward trend, it is expected that the revised data will confirm this trend.

This is assessed by the *Directional Reliability* indicator which is calculated as follows:

$$Q = \frac{n_{11} + n_{22}}{N}$$

where,

- n_{11} equals the number of cases where the positive trend indicated by the initial estimate is confirmed by a positive trend indicated by the last available estimate;
- n_{22} equals the number of cases where the negative trend indicated by the initial estimate is confirmed by a negative trend indicated by the last available estimate.
- N is the number of quarters

Ideally, a 100% directional reliability is expected. The higher the Q-value, the higher the directional reliability (See Table 6).



Table 6: Directional reliability, current account and FDI, 2019-2022 (%)

BOP Item	Directional reliability				
	2019	2020	2021	2022	
total current account credits	75%	100%	100%	100%	
total current account debits	100%	100%	100%	75%	
goods credits	75%	100%	100%	100%	
goods debits	100%	100%	100%	75%	
services credits	100%	100%	100%	100%	
services debits	100%	75%	100%	75%	
primary income credits	75%	75%	75%	100%	
primary income debits	75%	100%	100%	75%	
transport credits	100%	100%	100%	100%	
transport debits	75%	75%	100%	100%	
travel credits	100%	75%	75%	100%	
travel debits	100%	100%	100%	50%	
other services credits	75%	100%	100%	100%	
other services debits	100%	75%	100%	75%	
secondary income credits	75%	100%	100%	100%	
secondary income debits	100%	100%	75%	100%	
compensation of employees' credit	0%	25%	0%	75%	
compensation of employees' debit	100%	100%	100%	100%	
direct investment income credit	100%	50%	75%	100%	
direct investment income debit	100%	100%	100%	25%	
portfolio investment income credit	100%	75%	100%	100%	
portfolio investment income debit	75%	50%	100%	75%	
other investment income credit	100%	75%	25%	100%	
other investment income debit	100%	100%	100%	75%	
net outward FDI flows	100%	100%	75%	100%	
net inward FDI flows	100%	75%	100%	100%	
net PI assets flows	75%	100%	100%	100%	
net PI liabilities flows	100%	100%	100%	100%	
net OI assets flows	75%	75%	100%	100%	
net OI liabilities flows	100%	100%	100%	100%	

Source BOP/IIP/FDI: https://www.cso.ie/en/statistics/internationalaccounts/internationalaccounts/

Conclusion: The directional reliability improved between 2019 and 2022: The proportion of directional reliability of 100% increases by 5.3% between 2019 and 2022. CSO will continue to monitor revisions over time and will take any corrective measures necessary to increase the proportion of directional reliability of 100% over time.

5.3 Timeliness and Punctuality

5.3.1 Provisional Results

The quarterly BOP, IIP and External Debt results are first published within three months after the end of the previous reference quarter. The detailed annual Resident Holdings of Foreign Portfolio Securities, FDI and International Trade in Services results are first published between September and December of the year following the reference calendar year. They are consistent with the calendar year BOP data published at end-June, merely adding a greater level of detail to the results.

Quarterly, biannual and annual results sent to Eurostat, ECB, IMF and OECD follow broadly the same dissemination frequency.



5.3.2 Final Results

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.

The same revision and results finalisation policy applies to the data sent to Eurostat, ECB, IMF and OECD.

Figures, particularly those of a quarterly frequency, may be occasionally revised more often than described if a very significant revision is required or following introduction of significant methodological changes.

5.4 Coherence

The BOP Current Account and BOP Financial Account are compiled by the CSO to integrate and be compatible with the national accounts and the Annual Financial Accounts also compiled by the CSO. The consistency of the various types of data from large multi-national enterprises available to the CSO (e.g. production, turnover, exports/imports, profits) is checked and balanced by the Large Cases Unit in order to ensure that the accuracy and reliability of this information is as well based as possible. This information as well as balance sheet transactions and stocks are also checked against the companies' audited accounts when they become available later.

5.4.1 Errors and Omissions

Errors and Omissions (E&O) is the residual BOP item, which in principle should be equal to 0. E&O is expected to be relatively small and not persistently positive or negative in the long run. The sign of the E&O is showed in Figure 1 from 2017Q3 to 2023Q2.

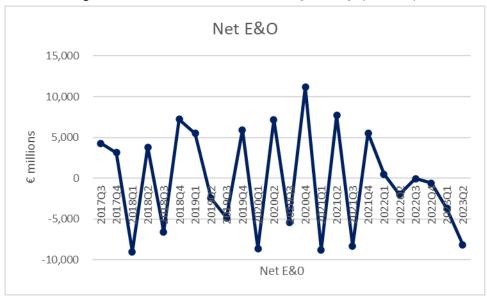


Figure 1: Net errors and Omissions, 2017Q3-2023Q2 (€ million)

Source BOP/IIP/FDI: https://www.cso.ie/en/statistics/internationalaccounts/internationalaccounts/

The following additional indicators on errors and omissions in relation to both IIP and current accounts were added to provide a better understanding of the impact of errors and omissions size.

The relative error RE(EO) in relation to the current account was proposed as follows (See Figure 2):



$$RE(EO) = \frac{EO_t}{(CA(c)_t + CA(d)_t)/2}$$

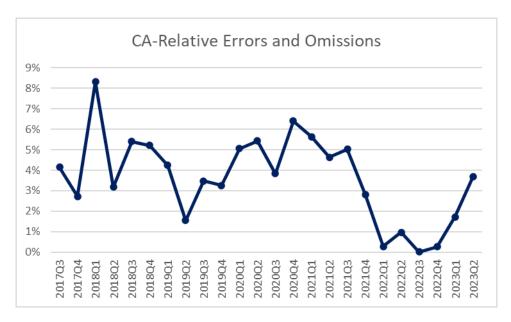
Where,

 EO_t = Errors and omissions in reference quarter t

 $CA(c)_t$ = current account credit in reference quarter t

 $CA(d)_t$ = current account debit in reference quarter t

Figure 2: Relative error RE(EO) in relation to the current account, 2017Q3-2023Q2 (%)



Source BOP/IIP/FDI: https://www.cso.ie/en/statistics/internationalaccounts/internationalaccounts/

The relative error RE(EO) in relation to the IIP was proposed as follows (See Figure 3):

$$RE(EO)_{mp} = \frac{EO_t}{(FA_LE(a)_t + FA_LE(l)_t)/2}$$

Where,

 EO_t = errors and omissions in reference quarter t

 $FA_LE(a)_t$ = total international investment position, assets at the end of the reference quarter t

 $FA_LE(l)_t$ = total international investment position, liabilities at the end of the reference quarter t



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Figure 3: Relative error RE(EO) in relation to the IIP, 2017Q3-2023Q2 (%)

Source BOP/IIP/FDI: https://www.cso.ie/en/statistics/internationalaccounts/internationalaccounts/

Both the current account and IIP relative errors show an improving downward trend towards 0% in the period 2017Q3 to 2023Q2. A process of continuous monitoring has been put in place to improve data quality and to minimise errors and omissions.

In order to compare the size of E&O of Ireland from 2019Q3 to 2022Q2 with the other 27 european member states, the Average Relative Error (e.g. ARE(EO)) in relation to the current account was proposed as follows (See Table 7):

$$ARE(EO) = \frac{1}{N} \sum_{t=1}^{N} \left| \frac{EO_t}{\left(CA_{(c)t} + CA_{(d)t}\right)/2} \right|$$

Where,

 EO_t = Errors and omissions in reference quarter t

N = time frame (e.g. 12 quarterly observations for 3 years)

 $CA(c)_t$ = current account credit in reference quarter t

 $CA(d)_t$ = current account debit in reference quarter t

Table 7: Average relative error (ARE(EO)) in relation to the current account, 2017Q3-2020Q2, 2018Q3-2021Q2, 2019Q3-2022Q2

ARE(EO) CA% for Ireland ¹				
2017Q3-2020Q2 2018Q3-2021Q2 2019Q3-2022Q2				
4.92% 4.51% 3.90%				

Source BOP/IIP/FDI: https://www.cso.ie/en/statistics/internationalaccounts/internationalaccounts/

¹ Based on data updated since July 2022.



Figure 4 shows the average relative error in relation to the current account in the 28 European member states from 2018Q3 to 2021Q2.

Please keep in mind that, the graph data is based on the 2021 BOP data transmitted in September 2022 to Eurostat and is not the most updated one. 2020, 2021 and 2022 data have been updated again since July 2023.

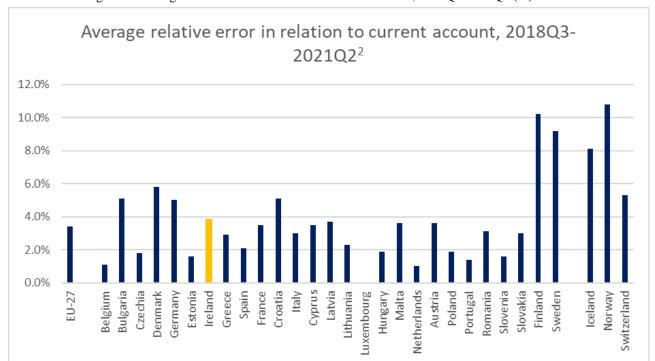


Figure 4: Average relative error in relation to current account, 2018Q3-2021Q2 (%)

The ARE(EO) CA% for Ireland is above the EU-27 ARE(EO) CA% based on 2021 BOP data transmitted to Eurostat in September 2022. A process of continuous monitoring is in place to improve data quality and to minimise errors and omissions.

5.4.2 Consistency analysis between BOP and National Accounts (NA)

The balance or Payments and the national accounts rest of the world account are in theory completely coherent. A comparative analysis is used to monitor actual consistency where differences between the accounts should be negligable (See Table 8).

BOP/IIP NA, S.2 Exports of goods and services (G+S) 694,051 Exports (P.6) 694,052 Imports (P.7) 492,003 Imports of goods and services (G+S) 492,003 Net income (IN.1+ IN.2) -147,459 Net Income (D.1 - D.8) -147,460 Current account (CA) 54,589 Current External Balance (B.12) 54,588 Net lending (+) / borrowing (-) (B.9) Net financial account (FA)-Net errors 53,421 53,419 and omissions

Table 8: Consistency analysis comparison between BOP and NA, 2022, (€ million)

Source BOP/IIP/FDI: https://www.cso.ie/en/statistics/internationalaccounts/internationalaccounts/
Source NA: https://www.cso.ie/en/statistics/nationalaccounts/institutionalsectoraccountsnon-financial-quarterly/

In 2022, the overall results of this analysis indicate that there were no imbalances between BOP and National Accounts in the field of exports and imports of goods and services, net income, current account and net financial account.

² Source: Eurostat quality report on BOP, ITS and FDI (Edition 2022)



5.5 Comparability

The statistics are compiled to meet, to the greatest extent possible, the recognized statistical standards recommended in the IMF's Balance of Payments Manual (6th Edition) – BPM6. They are regarded as being methodologically sound and therefore comparable over time and between those countries subscribing to the standards. However, the BOP Current Account components can be affected by quarterly seasonal factors. To date the results have not been seasonally adjusted as the international standards do not require such treatment. The BOP Financial Account and the IIP transactions and stocks statistics – as well as the FDI and portfolio security statistics - tend to be quite volatile in both magnitude and direction. Sudden changes in trends and patterns can therefore occur depending on actual or anticipated events occurring in local and global financial markets. This can make statistical comparability over time and across countries quite difficult.

5.6 Accessibility and Clarity

5.6.1 Assistance to Users, Special Analyses

The various results are published nationally in statistical release format as well as on the CSO website (www.cso.ie). Selected extracts from the results are posted on the CSO's new dissemination database system, PxStat.

Each statistical release presents the relevant statistical tables along with an opening commentary on the main results. In addition, the *background notes* provided at the end of the release give the reader detailed information on the methodological basis underpinning the results and any connections with other related statistics. The quarterly BOP results and the quarterly national accounts (National Income and Expenditure) results are generally published simultaneously. A media briefing is held to assist media interests as well as economic commentators, research institutions, government departments and other users of the statistics. In addition, the CSO assists users generally by way of written, telephone, or e-mail contact as well as through arranged appointments to meet personal callers.

The published BOP and IIP results provide data back to 1998, the year of introduction of the current series. In the case of related statistical series retrospection is generally provided back to 2001 but the series of annual geographical results for imports and exports of services was introduced for 2003.

5.6.2 Revisions

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. A very similar revision and results finalization policy applies to the data sent to Eurostat, ECB, IMF and OECD.

Figures, particularly of a quarterly frequency, may be occasionally revised more frequently than described if a very significant revision is required or following introduction of significant methodological changes.

5.6.3 Publications

5.6.3.1 Releases, Regular Publications

National Statistical Releases:

All available at: https://www.cso.ie/en/statistics/internationalaccounts/internationalaccounts/

International Accounts (Quarterly)

Resident Holdings of Foreign Portfolio Securities (Annual)

Foreign Direct Investment (Annual)

Service Exports and Imports (Annual)

Statistical Yearbook of Ireland (Chapter 8 – Economy)



Eurostat:

Eurostat no longer publishes much data in hard copy. Data is available on the statistical database:

http://ec.europa.eu/eurostat/web/balance-of-payments/statistics-illustrated

ECB:

Only Euro area aggregate statistics are published

IMF:

BOP Statistical Yearbook

OECD:

Economic Outlook: http://www.oecd.org/economy/outlook/economicoutlook.htm
Main Economic Indicators: http://www.oecd.org/std/oecdmaineconomicindicatorsmei.htm
Databases:

<u>http://www.oecd.org/std/its/</u> - International Trade and Balance of Payments Statistics
<u>http://www.oecd.org/daf/inv/investment-policy/statistics.htm</u> - Foreign Direct Investment Statistics

5.6.3.2 Statistical Reports

None

5.6.3.3 Internet

https://www.cso.ie/en/statistics/internationalaccounts/internationalaccounts/

CSO PxStat link (Select Economy, International Accounts and then BOP - Annual Series or BOP - Quarterly Series from the menu on the left): https://data.cso.ie/

5.6.4 Confidentiality

The confidentiality of individual data collected for compilation of BOP and other related statistics is protected under the provisions of the Statistics Act, 1993 and, where relevant, under European legislation i.e. Council Regulation (EC) No. 322/97 of 17 February 1997 repealed by regulation (EC) No. 223/2009 of 11 March 2009 (as amended by regulation (EU) 2015/759 of 29 April 2015) on Community Statistics and Council Regulation (EC) No. 2533/98 of 23 November 1998 (as amended by council regulations (EC) Nos. 951/2009 of 9 October 2009 and by council regulation (EU) 2015/373 of 5 March 2015) concerning the collection of statistical information by the European Central Bank (ECB).

Aggregated statistical results which are published nationally may include analytical statistical elements which are statistically confidential and which therefore have to be suppressed. Such confidential data can arise where there are small number of contributors (enterprises) to a particular piece of information or in other cases where one or two contributors are very dominant. The information is suppressed in a way that renders it undisclosed either directly or indirectly by derivation.

In supplying aggregated statistical information to Eurostat and the ECB certain elements of the information may be confidential. The European legislation referred to above obliges EU member countries to provide this information so that the two organisations can compile EU and Euro-area aggregate BOP and IIP statistics. Both organisations are obliged to protect the confidentiality of data under the above legislation.

6 Additional documentation and publications

6.1 Eurostat quality reports for BOP related statistics



In line with Regulation (EC) No 184/2005 (as amended by Regulations 601 and 602/2006 of 18 April 2006, 1137/2008 of 22 October 2008, 707/2009 of 5 August 2009, 555/2012 of 22 June 2012 and 2016/1013 of 8 June 2016) referred to earlier, EU Member States are obliged to provide the EU Commission (Eurostat) with reports concerning the quality of the results compiled. These reports were introduced for the 2006 data and are an annual requirement. As for other Member States, the CSO provides the necessary information to produce the reports required.

6.2 European Central Bank (ECB) - Description of BOP statistical compilation

The European Central Bank (ECB) publication *European Union Balance of Payments / International Investment Position Statistical Methods* (also known as "the BOP Book") published on the ECB's website in May 2007 provides information on the concepts underpinning the compilation of the statistics covered and also provides information supplied by each Member State on its national compilation system. Ireland's system is described in Chapter 4 Section 7.

Please see http://www.ecb.int/pub/pdf/other/BOP_052007en.pdf to access this information. In addition, the ECB publishes a Euro Area Balance of Payments and International Investment Position Statistics Quality Report each year. The 2015 report is available here: http://www.ecb.europa.eu/pub/pdf/other/euroareabalanceofpaymentsiipstatistics201604en.pdf