

Standard SIMS Report:

Balance of Payments (BOP) and related results compilation



Single Integrated Metadata Structure (SIMS) Report

For

Balance of Payments (BOP) and related results compilation

This documentation applies to the reporting period: **2023**

Last edited:

December 2024



1. Table of Contents

1. Table of Contents	
2. Introduction	
3. Contact	
4. Metadata Update	
4.1. Metadata last certified	
4.2. Metadata last posted	5
4.3. Metadata last update	5
5. Statistical Presentation	6
5.1. Data Description	6
5.2. Classification System	6
5.3. Sector Coverage	
5.4. Statistical Concepts and definitions	7
5.5. Statistical Unit	12
5.6. Statistical Population	12
5.7. Reference Area	12
5.8. Time Coverage	12
5.9. Base period	13
6. Unit of Measure	13
7. Reference Period	13
8. Institutional Mandate	13
8.1. Legal Acts and other agreements	13
8.2. Data Sharing	13
9. Confidentiality	13
9.1. Confidentiality – policy	13
9.2. Confidentiality – data treatment	14
10. Release Policy	14
10.1. Release Calendar	14
10.2. Release calendar access	14
10.3. User access	14
11. Frequency of Dissemination	15
12. Accessibility and clarity	15
12.1. News release	15
12.2. Publications	15
12.3. On-line database	16
12.3.1. AC 1. Data tables - consultations	
12.4. Micro-data Access	16
12.5. Other	16
12.5.1. AC2. Metadata consultations	
12.6. Documentation on Methodology	16
12.6.1. AC3 – Metadata completeness – rate	
12.7. Quality Documentation	17
13. Quality Management	17
13.1. Quality Assurance	
13.2. Quality Assessment	17
14. Relevance	
14.1. User Needs	
14.1.1. Main National Users	
14.1.2. Principal External Users	
14.2. User Satisfaction	
14.3. Data Completeness	
14.3.1. Data Completeness rate	
15. Accuracy and reliability	18
15.1. Overall accuracy	
15.2. Sampling Error	
15.2.1. A1. Sampling error indicator	19



15.3. Non-sampling Error	19
15.3.1. Coverage error	19
15.3.2. Measurement error	19
15.3.3. Non-Response Error	19
15.3.4. Processing error	19
15.3.5. Model assumption error	19
16. Timeliness and punctuality	19
16.1. Timeliness	19
16.1.1. TP1. Time lag – First results	20
16.1.2. TP2. Time lag – Final results	20
16.2. Punctuality	
16.2.1. TP3. Punctuality - delivery and publication	
17. Comparability	20
17.1. Comparability – Geographical	20
17.1.1. Errors and Omissions	
17.1.2. CC1. Asymmetry for mirror flow statistics	
17.2. Comparability over time	
17.2.1. Length of Comparable Time series	23
17.3. Coherence – cross domain	24
17.4. Coherence – internal	
17.4.1. Coherence with National Accounts	
18. Cost and Burden	
19. Data Revision	
19.1. Data Revision Policy	25
19.2. Data Revision Practice	
19.2.1. Data Revision – Average size	
20. Statistical processing	
20.1. Source Data	
20.1.1. Population and sampling frame	
20.1.2. Sampling design	
20.1.3. Survey size	
20.1.4. Survey technique	
20.2. Frequency of data collection	
20.3. Data Collection	
20.3.1. Type of Survey/Process	
20.3.2. Questionnaire (including explanations)	
20.3.3. Survey Participation	
20.3.4. Data Capture	
20.4. Data Validation	
20.5. Data Compilation	
20.5.1. Imputation (for Non-Response or Incomplete Data Sets)	
20.5.2. Grossing and weighting	
20.6. Adjustment	
20.6.1. Seasonal Adjustment	
21 Comment	34



2. Introduction

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.

3. Contact

Contact Organisation: Central Statistics Office

Contact Organisation Unit: Balance of Payments and Financial Sector (BOP & FS)

Balance of Payments Analysis and Dissemination (BOP & AD)

Contact Name: Ms. Lucia Perez Alvaro/Ms. Clare Sullivan

Mr. Faris Bader

Contact person function: Statistician

Contact Mail address: Ardee Road, Rathmines, Dublin 6, D06 FX52

Contact email address: BOP@cso.ie

Contact Phone Number: Ms. Perez Alvaro +00 353 (0)1 498 4145

Ms. Sullivan +00353 (0)1 498 4143 Mr. Bader +00353 (0)1 498 4270 Mr. Sheridan +00353 (0)1 498 4258

Contact Fax Number:

4. Metadata Update

4.1. Metadata last certified

20/10/2025

4.2. Metadata last posted

20/10/2025

4.3. Metadata last update

20/10/2025



5. Statistical Presentation

5.1. Data Description

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
- BOP30 form is a survey on portfolio investment. It is intended to cover the activities of Irish Investment Managers.
- BOP40 form is a survey on manufacturing and non-financial services companies. It is intended to cover any services transaction between the Irish part of any group and all counterparts, both residents and non-residents.
- BOP42 form is a survey on non-Life Insurance and Reinsurance companies. It is intended to cover
 the activities of Irish companies, Irish captive companies and Irish branches of foreign
 companies which provide and/or procure non-life insurance/reinsurance services.
- BOP43 form is a survey on Life Assurance and Reinsurance It is intended to cover the activities of Irish companies, Irish captive companies and Irish branches of foreign companies which provide and/or procure assurance and reassurance services.
- BOP44 form is a survey on Stand-Alone Treasury companies at IFCS. It is intended to cover the
 activities of stand-alone Treasury companies which provide internationally traded financial
 services.
- BOP45 form is a survey on banks, asset finance companies, securities trading companies, agency
 and captive treasuries and related financial service companies. It is intended to cover the
 activities of banks, asset finance companies, securities trading companies, agency and captive
 treasury companies and similar financial services companies which provide internationally
 traded financial services, hereafter referred to as "the Company"

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.

5.2. Classification System

The statistics are compiled to meet to the greatest extend possible, the recognised statistical standards recommended in the IMF's Balance of Payment Manual (6eth edition)-BPM6. They are regarded as being methodologically sound and therefore comparable overtime and between those countries subscribing to the standards. (Please keep in mind that there will be a new version manual which will be named BPM7). 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.

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).

5.3. Sector Coverage

BOP30: Activities of Irish Investment Managers

BOP40: Manufacturing and non-financial enterprises

BOP42: Non-life insurance/reinsurance service providers

BOP43: Life insurance/reinsurance service providers

BOP44: Stand-Alone Treasury companies

BOP45: NACE Rev.2 divisions 64 and 66

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.

5.4. Statistical Concepts and definitions

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

Current account

• Merchandise exports and imports are valued f.o.b. (free on board) for BOP purposes. While imports are valued c.i.f. (cost, insurance and freight) in the official external trade statistics, adjustments are made to reflect an estimated f.o.b. valuation. These adjustments result from the application of different c.i.f./f.o.b. conversion ratios to the values of imports from within the European Union and from outside the European Union. In addition, and in line with EU and ECB requirements, merchandise imports from within European Union member states are compiled on the basis of country of consignment rather than country of ultimate origin (as was the case formerly). Some adjustments are also made to the official merchandise trade statistics to conform to the BOP change of ownership and market valuation principles. In addition, certain exports sales of software licences are included in BOP service exports and not in BOP merchandise exports. The



BOP merchandise figures also include the estimated values of (unrecorded) retail exports of fuel to Northern Ireland and of unrecorded imports of goods for personal consumption from Northern Ireland and elsewhere. Merchanting consists of the sales net of purchases by Irish merchants of foreign goods bought from and sold to non-residents without entering or leaving Ireland. It may also extend the sale/purchase of services associated with the installation, maintenance, repair, etc. of these goods. Such services are included in other services not elsewhere specified on a net basis.

- Services exports and imports are presented to show nine categories of service types: transport, tourism and travel, communications, insurance services, financial services, computer services, royalties and licences, business services and other services not elsewhere specified. Some specific points of note are:
 - i. Repairs and processing cover processing and repair work by residents on goods that are owned by non-residents (and vice versa). The value includes any parts or materials supplied by the repairer and included in the charge.
 - ii. Because of the presentation of merchandise imports on a f.o.b. (rather than c.i.f.) basis, the freight element of the c.i.f. to f.o.b. adjustment is included in transport.
 - iii. For tourism/travel the credit item represents the receipts of residents from non-resident visitors other than passenger fare receipts of Irish passenger carriers from non-residents; the latter are included under transport credits. The tourism/travel debit item represents foreign expenditure by Irish residents on foreign travel. Because of the difficulty of separately distinguishing passenger fares paid to non-resident carriers this element of expenditure is generally included in the tourism/travel debit item (rather than being more appropriately categorised as a debit item under transport. Payments made to Irish passenger carriers by Irish residents are excluded.
 - The value of insurance services provided to non-residents by resident insurers (credit) is iv. estimated as the value of direct and supplementary premiums earned less the value of claims payable less increases in the actuarial element of insurance technical reserves. Supplementary premiums consist of investment income earned on investing the insurance technical reserves. For BOP purposes, this income is attributed to the policy holders and is also treated as being paid back to the insurance company by them. To obtain the value of insurance services purchased from non-resident insurers (debit), the ratio of the estimated service charge to total premiums for insurance exports is applied to the total premiums payable to non-resident insurers. Reinsurance transactions (e.g. premiums and claims) are recorded on a gross basis and, hence, insurance service credits and debits are accordingly higher than they would have been if recorded on a net basis. This gross recording treatment of reinsurance transactions has no net impact on the insurance service balance as the reinsurance element on the credit and debit sides are offsetting. In relation to merchandise imports, the freight insurance element of the c.i.f. to f.o.b. adjustment referred to above under merchandise is recorded under insurance.
 - v. Financial services cover non-interest receivables and payables in respect of financial intermediary and auxiliary services (other than those of insurance enterprises and pension funds). Also included are margins between interest payable and the reference rate on loans and deposits (called financial intermediation services indirectly measured (FISIM).
 - vi. Royalties/Licences include franchises and similar rights as well as other royalties and licence fees. Franchises and similar rights comprise international payments and receipts of franchising fees and the royalties paid for the use of registered trademarks. Other royalties and licence fees include international payments and receipts for the authorised use of intangible, non-produced, non-financial assets and proprietary rights (such as patents, copyrights and industrial processes and designs) and with the use, through licensing agreements, of produced originals or prototypes (such as manuscripts, and cinematographic works and sound recordings). In line with the IMF's BPM6 recommendation, payments and receipts for the outright purchase or sale of these assets and rights are excluded from this service component. Instead, such transactions are recorded as capital account transactions in the Balance of Payments statement. As described above under item (vi) computer services and as a conscious CSO departure from the international recommendations, receipts and payments in respect of computer



- software licence fees are not included under royalties and licence fees but are instead included under computer services. A further deviation from the international standards is that royalty receivables and payables in connection with the entertainment industry (mainly concerning film distribution and musical recordings and performances) are currently excluded from royalties and licence fees and included under other services not elsewhere specified.
- vii. Communications covers postal and courier services and telecommunications services. Postal and courier services include the pick-up, transport and delivery of letters, postcards, printed matter, parcels and packages. Telecommunications services include the transmission of sound, images and other information by telephone, radio and television broadcasting, electronic mail, facsimile services and by satellite delivery. Also included are cellular telephone services and internet access services. Details of expenditures by resident enterprises on services purchased from non-residents are obtained from the BOP surveys of these enterprises. Information on receipts from non-residents in respect of their purchases of Irish-produced communications services are obtained from resident service providers.
- viii. Exports and imports of computer software which is embedded in hardware or carried on other physical media are not included in computer services but under merchandise.
 Sales and purchases of software transmitted electronically as well as exports of certain software licences are recorded under computer services.
- ix. Business services cover receivables and payables for (a) research and development, (b) operational leasing and (c) miscellaneous business services. Research and development services cover those services that are associated with basic research, applied research and experimental development of new products and processes. Activities in the physical sciences, social sciences and humanities are covered, including the development of operating systems that represent technological advances. Also included is commercial research related to electronics, pharmaceuticals and biotechnology. Outright sales and purchases of the results of research and development (such as patents, copyrights and industrial processes) are included. These transactions tend to occur infrequently, but the amounts involved can vary substantially. Amounts payable and receivable for use of such proprietary rights are included under royalties/licences (see above). Operational leasing covers rental receivables and payables in respect of leasing (other than financial leasing) and chartering, without operators, of aircraft, ships and other transport or other equipment and plant Miscellaneous business services covers legal, accounting, management consulting, public relations, advertising and marketing and other professional and technical services as well as agricultural services. It also covers interaffiliate management fees and other trade related services such as commissions earned by resident agents or paid to non-resident agents in connection with imports or exports.
- x. Other services not elsewhere specified covers construction services, personal and cultural services (e.g. fees and royalties for film, television and musical recordings and performances), educational services and government services. The last sub-category includes credit and debit entries for (a) the estimated expenditures of embassy and consular staff in the host countries, (b) non-labour expenditures by governments towards the provision of embassy and consular services in the host countries, and (c) receipts i.e. credits, in respect of collection of Ireland's budgetary contributions to the EU).
- Primary Income covers (a) compensation of employees, which relates to the earnings of persons
 working outside their country of residence for less than one year (i.e. students and other shortterm cross-border workers) and earnings of local staff working in embassies and consulates, and
 (b) investment income, which covers earnings arising from foreign investors' investments in
 Ireland and Irish investors' investment abroad. Investment income excludes realised and
 unrealised capital and exchange gains or losses. It is subdivided into three categories:
 - i. Direct investment income covers income accruing to an Irish or foreign direct investor from their ownership of (correspondingly) a direct investment enterprise located abroad or in Ireland (see definition of direct investment in the financial account section below). It is split into income on equity and income on debt. Direct investment income on equity may be called the 'entrepreneurial income' of the enterprise which, in principle, is its net



operating surplus plus investment income receivable less investment income payable. Apart from excluding capital and exchange gains and losses, it also excludes the value of unusual provisions and write-offs and is calculated net of corporation taxes. In company accounting terms, direct investment income on equity can be equated or approximated to an enterprise's consolidated profit (or loss) after interest, tax and minority interests and excluding capital and exchange gains (or losses) and other unusual provisions and writeoffs. This income item is further subdivided into dividends and distributed branch profits and reinvested earnings. Dividends are recorded at the time they become due for payment while distributed branch profits are recorded when receipt or payment occurs. Amounts recorded under reinvested earnings represent the difference between the enterprise's entrepreneurial income earned in the reference period and the distributions (dividends, etc.) made in the same period. As it is an income flow in the BOP current account but without a counterpart cash flow in the financial account, an offset (i.e. with the opposite sign) of equal magnitude is recorded under direct investment in the latter. Direct investment income on debt covers income (mainly interest) on non-equity interaffiliate assets and liabilities (mainly loans). This item also includes estimates of (a) the (net) income generated from investment by private individuals in residential and commercial property abroad, and (b) the profits attributable to the foreign owners of breeding bloodstock - see Direct Investment below.

- ii. Portfolio investment income covers income receivable and payable to non-direct investors on their holdings of equity and long and short-term debt securities (see definition of portfolio investment below). Income on equity consists of dividends actually received/paid. Income on debt securities refers to coupon or interest payments on bonds and notes and interest on money market instruments. In principle, the income should be recorded on an accruals basis using market valuations. In practice, some respondents may report on a cash basis. Discounts and premiums (i.e. differences between the nominal value and the issue value) are treated as income or negative income respectively and spread (accrued) over the life of the instrument.
- iii. Other investment income covers interest on loans, deposits and trade credits. The flows recorded under this item relate largely to interest flows of credit institutions but also cover the income generated from the holdings of the Central Bank of Ireland in external reserve assets and income arising from its non-reserve assets and liabilities.
- Secondary income covers unrequited receipts and payments. Important components are
 subsidies and other current transfers receivable from and taxes payable to the European Union,
 payments under Third World aid programmes operated by non-governmental organisations and
 transfers related to non-life insurance business. As regards the latter, for resident insurers the
 transfer credit is calculated as the gross insurance premiums earned (i.e. premiums earned plus
 supplementary premiums) less the insurance service charge; the debit is the amount of claims
 payable to non-resident policy holders adjusted by the change in the actuarial element of
 insurance technical reserves. For resident holders of policies issued by non-resident insurers,
 credits represent claims receivable and debits represent the insurance premiums less the
 estimated insurance service charge (see also the note above on 'insurance' item under 'services').
 This item also includes income taxes receivable or payable on the earnings of cross-border
 workers.
- The *current account balance* is the total of all current account credits less the total of all current account debits.

Capital account

The capital account largely covers capital transfers, in particular amounts receivable under the EU Regional Development Fund and the Cohesion Fund and all other transfers intended for capital purposes. Estimates of migrants' transfers (i.e. the transfer of the net worth of immigrants and emigrants) are included but they are not well based. In addition, acquisitions and disposals of non-produced, non-financial assets (excluding patents, copyrights, etc.) are also covered here. Because of certain data limitations only the net flows are shown.



Financial account

The financial account covers transactions in foreign financial assets (i.e. claims on non-residents) and foreign financial liabilities (i.e. obligations to non-residents). The four categories of functional investment which are distinguished (i.e. direct investment, portfolio investment, other investment and reserve assets) are based primarily on the relationship between the parties and secondly on the nature of the instrument involved.

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 investment 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).

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.

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.

International Investment Position and External Debt

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.

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.

5.5. Statistical Unit

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.).

5.6. Statistical Population

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

- the provision of goods, services or financial instruments to non-residents;
- receipt of goods, services or financial instruments from non-residents;
- acquisition or disposal of a financial claim on non-residents;
- incurrence or redemption of a financial liability to non- residents;
- payment of income to non-residents;
- receipt of income from non-residents

are relevant to the surveys.

5.7. Reference Area

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.

5.8. Time Coverage

1998 - 2023

The present quarterly BOP series was introduced for the reference year 1998.

The IMF's BOP Manual has recently 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.



5.9. Base period

Not applicable.

6. Unit of Measure

Millions of Euros

7. Reference Period

This documentation applies to the reporting period: 2023.

8. Institutional Mandate

8.1. Legal Acts and other agreements

In 2019, the Statistics (Balance of Payments Survey) Order 2016 made under the Statistics Act of 1993 was the primary legal basis for collecting the required data from providers, whereas the Statistics (Balance of Payment Survey) Order 2020 represents the current legal basis. These orders specify who may be surveyed, the frequency with which they may be surveyed and the nature of the data that may collected.

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.

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.

8.2. Data Sharing

Not applicable.

9. Confidentiality

9.1. Confidentiality - policy

All information supplied to the CSO is treated as strictly confidential. The Statistics Act, 1993 sets stringent confidentiality standards: Information collected may be used only for statistical purposes, and no details that might be related to an identifiable person or business undertaking may be divulged to any other government department or body.



These national statistical confidentiality provisions are reinforced by the following EU legislation: Council Regulation (EC) No 223/2009 on European statistics for data collected for EU statistical purposes.

Further details are outlined in the CSO's Code of Practice on Statistical Confidentiality.

For more information on the CSO confidentiality policy please visit: https://www.cso.ie/en/aboutus/lgdp/csodatapolicies/statisticalconfidentiality/

All existing CSO Data policies can be accessed from: https://www.cso.ie/en/aboutus/lqdp/csodatapolicies/

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).

9.2. Confidentiality – data treatment

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.

10. Release Policy

10.1. Release Calendar

The date of dissemination of all statistics released by CSO can be found in the Release Calendar published in CSO.ie. This calendar is regularly updated.

10.2. Release calendar access

The release calendar can be accessed via the CSO website, www.cso.ie, or directly from this link: https://www.cso.ie/en/csolatestnews/releasecalendar/

10.3. User access

In accordance with Principle 6 of the European Statistics Code of Practice all users of CSO statistics have equal access via the CSO website at the same time of 11 am. Any privileged pre-release access to any outside user is limited, controlled and publicised. In the event that leaks occur, pre-release arrangements are revised so as to ensure impartiality.

The CSO recognises that in very limited circumstances a business need for pre-release access may be substantiated. Any form of pre-release access is a privilege and a strict CSO pre-release access policy is



adhered to for these special requests. The full pre-release access policy can be accessed at https://www.cso.ie/en/aboutus/lgdp/csodatapolicies/csopolicyonpre-releaseaccess/

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 data dissemination database, 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.

11. Frequency of Dissemination

- BOP data: monthly and quarterly
- International Investment position & External data: quarterly and yearly
- Resident holdings of foreign portfolio securities: yearly
- Foreign Direct investment: quarterly and yearly
- International Trade in Services: yearly

12. Accessibility and clarity

12.1. News release

Not applicable.

12.2. Publications

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:

- Balance of International Payments (Quarterly)
- International Investment Position & External Debt (Quarterly)
- Resident Holdings of Foreign Portfolio Securities (Annual)
- Foreign Direct Investment (Annual)
- Service Exports and Imports (Annual)
- Statistical Yearbook of Ireland (Chapter 8 Economy)

The results are also available on CSO's website as follows:

 $https://www.cso.ie/en/statistics/international accounts/international accounts/ and on the CSO's new data dissemination database, PxStat. \\ \underline{https://data.cso.ie/}$

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.

12.3. On-line database

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/

12.3.1. AC 1. Data tables - consultations

Not calculated.

12.4. Micro-data Access

Not applicable.

12.5. Other

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

 $\label{lem:oecd.org/economy/outlook/economicoutlook.htm} \begin{tabular}{l} OECD: Economic Outlook: http://www.oecd.org/economy/outlook/economicoutlook.htm Main Economic Indicators: http://www.oecd.org/std/oecdmaineconomicindicatorsmei.htm http://www.oecdmaineconomicindicatorsmei.htm http://www.oe$

Databases:

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

12.5.1. AC2. Metadata consultations

Not calculated.

12.6. Documentation on Methodology

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



The IMF's Balance of Payments Manual (6^{th} Edition) – known generally as BPM6 – is used as the fundamental standard

Links to all methodological documentation can be found in the CSO's methods page or via this direct link: https://www.cso.ie/en/methods/internationalaccounts/methodologydocuments/

12.6.1. AC3 - Metadata completeness - rate

100%

12.7. Quality Documentation

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.

Links to all Quality documentation can be found in the CSO's methods page or via this direct link: https://www.cso.ie/en/methods/internationalaccounts/balanceofpaymentsquarterly/

13. Quality Management

13.1. Quality Assurance

Quality Management Framework

The CSO avails of an office wide Quality Management Framework (QMF). This framework allows all CSO processes and outputs to meet the required standard as set out in the European Statistics Code of Practice (ESCOP). The QMF foundations are based on establishing the UNECE's Generic Statistical Business Process Model (GSBPM) as the operating statistical production model to achieve a standardised approach to Quality Management. All and any changes implemented to CSO processes and outputs require adherence to the OMF.

13.2. Quality Assessment

Not assessed.

14. Relevance

14.1. User Needs

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.

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.

14.1.1. Main National Users

Internally within the CSO Dept of Finance Economic analysists Social Researchers

14.1.2. Principal External Users

ECB Eurostat IMF OECD

14.2. User Satisfaction

No user satisfaction exercises have been carried out.

14.3. Data Completeness

Not calculated.

14.3.1. Data Completeness rate

Not calculated.

15. Accuracy and reliability

15.1. Overall accuracy

Following a Eurostat initiative CSO introduced measures of accuracy and reliability for its BOP related statistics. The relevant assessments for years 2013-2023 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.

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.

15.2. Sampling Error

Not applicable.



15.2.1. A1. Sampling error indicator

Not applicable.

15.3. Non-sampling Error

The balance of payments is compiled according to the double-entry system. Every transaction involves both a credit entry and a debit entry. The employment of this principle implies that the balance of payments, i.e. all three main accounts taken together, will always balance, any differences between the totals being attributable to statistical discrepancies, the so-called "errors and omissions".

As data originates from other statistics the errors that may be attached to these statistics will be repeated in the balance of payments. In particular, there will be errors in the first compilations of a certain time period as some relevant information is not available by then.

For the statistics on "Danish manufacturing companies' international production" the data is restricted to sources where it is possible to define an activity. This is especially relevant for the statistics on international trade in services and international trade in goods, since only the enterprises that report directly to these surveys can attributed with an activity. However, the largest enterprises in the manufacturing industry are reporting directly to these statistics, so the expected under coverage is small.

15.3.1. Coverage error

Not applicable.

15.3.1.1. A2. Over coverage rate

0%

15.3.1.2. A3. Common units - proportion

Not applicable.

15.3.2. Measurement error

Not calculated.

15.3.3. Non-Response Error

Not applicable.

15.3.3.1. Unit non-response rate

Not applicable.

15.3.4. Processing error

Not applicable.

15.3.5. Model assumption error

Not applicable.

16. Timeliness and punctuality

16.1. Timeliness

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.

Under normal circumstances, the nationally published quarterly BOP, IIP and External Debt results and the related calendar year results are first revised mid-July 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.

16.1.1. TP1. Time lag - First results

Not applicable.

16.1.2. TP2. Time lag - Final results

Under normal circumstances, the nationally published quarterly BOP, IIP and External Debt results and the related calendar year results are first revised mid-July 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.

16.2. Punctuality

16.2.1. TP3. Punctuality - delivery and publication

The balance of payments statistics are normally published without delays as to the preannounced dates available in the release calendar, which are released at least three months ahead.

17. Comparability

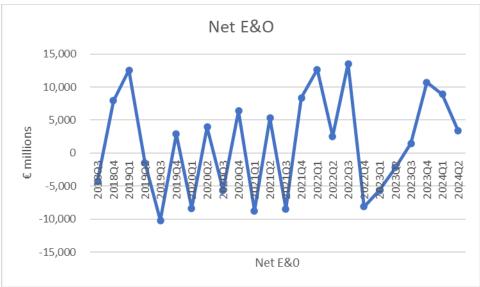
17.1. Comparability - Geographical

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.



17.1.1. 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 below from 2018Q3 to 2024Q2.



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

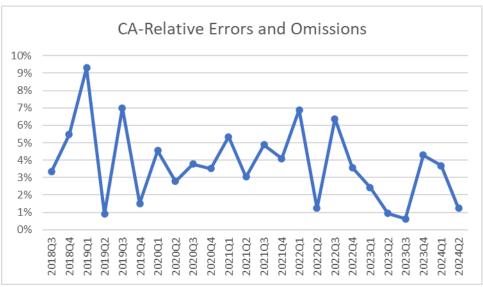
$$RE(EO) = \frac{EO_t}{(CA(c)_t + CA(d)_t)/2}$$

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



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



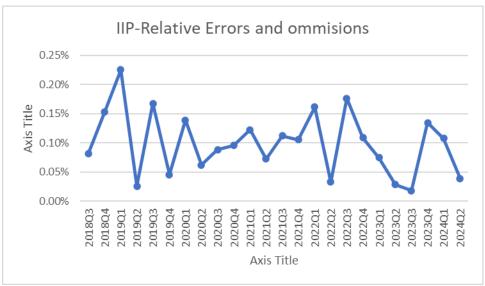
The relative error RE(EO) in relation to the IIP was proposed as follows

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

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



 $Source\ BOP/IIP/FDI: \underline{https://www.cso.ie/en/statistics/international accounts/international accounts/internatio$

Both the current account and IIP relative errors show an improving downward trend towards 0% in the period 2018Q3 to 2024Q2. 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 2020Q3 to 2023Q2 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

$$ARE(EO)=1/N \sum_{t=1}^{\infty} | EO _t/(((CA _c)t + CA _c$$

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

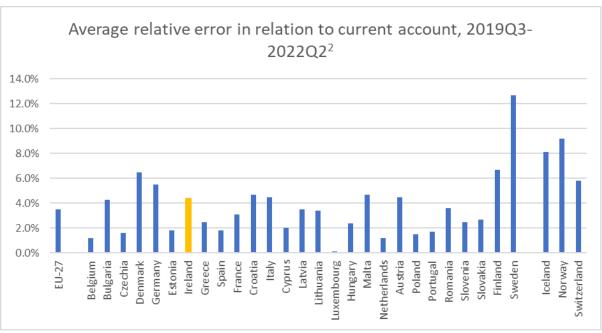
ARE(EO) CA% for Ireland (Based on data updated since July 2024)					
2018Q3-2021Q2 2019Q3-2022Q2 2020Q3-2023Q2					
4.21% 4.05% 3.84%					

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

The figure below shows the average relative error in relation to the current account in the 27 European member states from 2020Q3 to 2023Q2.

Please keep in mind that, the graph data is based on the 2022 BOP data transmitted in September 2023 to Eurostat and is not the most updated one. 2020, 2021, 2022 and 2023 data have been updated again since July 2024.





Source: Eurostat quality report on BOP, ITS and FDI (Edition 2023)

The ARE(EO) CA% for Ireland is above the EU-27 ARE(EO) CA% based on 2022 BOP data transmitted to Eurostat in September 2023. A process of continuous monitoring is in place to improve data quality and to minimise errors and omissions.

17.1.2. CC1. Asymmetry for mirror flow statistics

Not applicable.

17.2. Comparability over time

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.

17.2.1. Length of Comparable Time series

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 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.



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.

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.

17.3. Coherence – cross domain

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.

17.4. Coherence – internal

17.4.1. Coherence with National Accounts

The balance of 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 negligible.

accounts should be negligible.				
BOP/IIP		NA, S2		
Net goods and services (G+S)	167,777	Exports – Imports (P.6- P.7)	167,779	
Net income (IN.1+IN.2)	-126,514	Net Income (D.1-D.8)	-126,515	
Current Account (CA)	41,262	Current External Balance (B.12)	41,263	
Net Financial Account (FA)-Net errors and omissions	32,599	Net lending (+)/borrowing (-) (B.9)	32,599	

Source BOP/IIP/FDI: <a href="https://www.cso.ie/en/statistics/internationalaccounts/inte

In 2023, the overall results of this analysis indicate that there were no imbalances between BOP and National Accounts in the field of net exports and imports of goods and services, net income, current account and net financial account.

18. Cost and Burden

Estimates of Cost and Burden can be obtained from the Response Burden Barometer https://data.cso.ie/

https://data.cso.ie/table/RBA01



19. Data Revision

19.1. Data Revision Policy

Revisions refer to changes made to published statistical data when the information used in its production has been updated or corrected. This information includes all data used in compiling the statistic e.g. respondent data, administrative data, weights and factors, methodology, classifications, definitions, modifications to survey questionnaires, survey scope and data collection methods.

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 OFCD

19.2. Data Revision Practice

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.

The table below shows the number of quarters revised upward as compared to the number of quarters for which data has been revised.

Number of quarters revised upwards/revised						
BOP Items	2020	2021	2022	2023		
total current account credits	4/4	3/4	3/4	4/4		
total current account debits	4/4	3/4	3/4	4/4		
goods credits	4/4	0/4	2/4	0/4		
goods debits	2/4	2/4	0/4	3/4		
services credits	4/4	4/4	2/4	4/4		
services debits	4/4	2/4	1/4	4/4		
primary income credits	4/4	2/4	3/4	4/4		
primary income debits	4/4	3/4	3/4	4/4		
transport credits	3/4	2/4	2/4	4/4		
transport debits	4/4	1/4	2/4	3/4		
travel credits	3/4	4/4	1/4	3/4		
travel debits	2/4	2/4	1/4	4/4		
other services credits	4/4	3/4	2/4	4/4		
other services debits	4/4	2/4	1/4	4/4		
secondary income credits	4/4	1/4	2/4	4/4		
secondary income debits	4/4	2/4	2/4	4/4		



compensation of employees credits	4/4	4/4	3/4	4/4
compensation of employees debits	4/4	3/4	1/4	4/4
direct investment credits	3/4	2/4	3/4	2/4
direct investment debits	4/4	3/4	3/4	4/4
portfolio investment income credits	4/4	4/4	3/4	4/4
portfolio investment income debits	4/4	4/4	3/4	4/4
other investment credits	0/4	0/4	1/4	4/4
other investment debits	4/4	3/4	3/4	4/4
net outward FDI flows	3/4	2/4	2/4	3/4
net inward FDI flows	3/4	2/4	2/4	2/4
net PI assets flows	2/4	2/4	3/4	4/4
net PI liabilities flows	4/4	2/4	1/4	2/4
net other investment assets flows	1/4	3/4	2/4	0/4
net other investment liabilities flows	0/4	3/4	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 2020 to 2023 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.

19.2.1. Data Revision - Average size

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.

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

The MAPE is defined as follows:

It should be noted that when the value of t Xi 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 t Xi is not small a persistently high value of MAPE for an item should warrant further investigation.

The table below presents the results of the MAPE calculations for the major BOP items for 2023 (with comparisons from 2020 to 2023)

BOP ITEM	MAPE Ireland			
	2020 2021 2022 202			2023
Total current account credits	13%	8%	2%	15%
total current account debits	21%	10%	3%	17%



goods credits	2%	1%	1%	19%
goods debits	2%	2%	4%	9%
services credits	27%	16%	1%	18%
services debits	34%	8%	5%	17%
primary income credits	9%	37%	6%	72%
primary income debits	12%	41%	5%	31%
transport credits	5%	24%	2%	48%
transport debits	39%	3%	5%	11%
travel credits	41%	184%	27%	39%
travel debits	21%	104%	28%	81%
other services credits	27%	15%	0%	18%
other services debits	34%	8%	5%	17%
secondary primary credits	6%	3%	7%	27%
secondary primary debits	3%	3%	3%	16%
compensation of employees' credit	2%	0%	0%	28%
compensation of employees' debit	2%	4%	3%	71%
direct investment income credit	32%	16%	25%	92%
direct investment income debit	14%	18%	6%	12%
portfolio investment income credit	9%	17%	7%	46%
portfolio investment income debit	10%	11%	3%	47%
other investment income credit	91%	9%	9%	95%
other investment income debit	97%	88%	12%	94%

 $Source\ BOP/IIP/FDI: \underline{https://www.cso.ie/en/statistics/international accounts/international accounts/internatio$

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:

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

The following table presents the results of the calculations for the major BOP Financial Account items for the reference periods from 2020 to 2023. Figures are given for Foreign Direct Investment (FDI), Portfolio Investment (PI) and Other Investment (OI). Initial vs last estimate

Absolute Total Discrepancy (€ millions)	2020	2021	2022	2023
Net FDI flows abroad	56,546	37,102	10,613	19,378
Net FDI flows to Ireland	95,462	31,684	43,348	18,442



Net PI assets	30,348	37,980	13,919	60,943
Net PI liabilities	35,521	25,501	50,301	29,106
Net OI assets	33,873	20,250	39,802	17,955
Net OI liabilities	48,895	26,019	34,521	39,899

 $Source\ BOP/IIP/FDI:\ \underline{https://www.cso.ie/en/statistics/international accounts/international accounts/internati$

For the assessment of FDI positions neither the MAPE nor the ATD is used internationally. The table below presents the values for inward and outward FDI initial and final estimates in reference years from 2020 to 2023.

Foreign Direct Investment (€ million)	2020		2021		2021		2022		2023	
	outward	inward	outward	inward	outward	inward	outward	inward		
First estimate	-43,433	27,597	52,404	2,393	5,071	1,415	-6,099	-8,476		
Final/Latest estimate	-9,223	95,521	31,701	-9,806	-28,069	-53,034	10,441	-2,476		

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 (2020Q1-2023Q4). The size of revision is compiled for the most important BOP items for partner World.

For QBOP data deliveries, the size of revision r is defined as follows:

$$r = (Xtf - Xti)/Xti$$

where: Xti = initial estimate for BOP item X in reference quarter t Xtf = the last available estimate for the same BOP item in reference quarter t Dr

Indicator		Mean (%)	St Dev (%)	Max (%)	Min (%)
Goods	Cr	-1.4	5	2.7	-16.7
	Dr	-12.6	27.5	20.5	-60.3
Services	Cr	-13.7	10.7	33.7	-1.2
	Dr	-12.8	18.7	58.4	-15.2
Primary Income	Cr	-3.3	28.6	37.5	-62.2
	Dr	4.7	13.4	23.4	-37
Transport	Cr	10.9	26.2	73,1	-45.9
	Dr	13.6	17.4	46.4	-9.8
Travel	Cr	57.8	84.1	234.6	-21.2
	Dr	40.3	67.2	212.3	-22.9
Other services	Cr	13.7	11	34.3	-1



	Dr	12.6	19.3	59.2	-16.7
Secondary income	Cr	5.9	9.6	26.5	-20.1
	Dr	3.6	4.6	15.1	-5.8
Compensation of Employees	Cr	9.2	15.3	34.7	0
	Dr	15.6	31.6	115.6	-6.5
Direct Investment Income	Cr	10.7	30.2	85.2	-35.1
	Dr	10.3	9.6	26.2	-6.5
Portfolio Investment Income	Cr	12.2	7	28.8	4.1
	Dr	9.8	7	30	1.5
Other Investment	Cr	1,8	20.6	49.5	-24.7
	Dr	16.4	10.1	41.8	2
Direct Investment flows	Cr	-51.5	154.3	292.9	-445.6
	Dr	-7.3	765.6	1427.7	- 2303,1
Portfolio Investment flows	Cr	-79.5	277.6	18.2	- 1114.2
	Dr	-14.1	189.2	362.6	-603,3
Other Investment flows	Cr	22.1	208	764.3	-202.1
	Dr	-545.8	1831.2	534	- 7104.3

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.

Reliability of Trends

Users of BOP statistics expect the first estimate (Xi) 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.



BOP Item	Directional reliability					
	2020	2021	2022	2023		
total current account credits	75%	100%	75%	100%		
total current account debits	100%	100%	100%	100%		
goods credits	100%	100%	75%	75%		
goods debits	100%	100%	75%	100%		
services credits	100%	100%	75%	100%		
services debits	75%	100%	100%	75%		
primary income credits	50%	75%	50%	25%		
primary income debits	100%	100%	75%	75%		
transport credits	100%	100%	75%	100%		
transport debits	75%	100%	100%	75%		
travel credits	75%	75%	75%	75%		
travel debits	100%	100%	25%	75%		
other services credits	50%	100%	75%	100%		
other services debits	75%	100%	100%	100%		
secondary income credits	100%	100%	75%	75%		
secondary income debits	100%	100%	100%	75%		
compensation of employees' credit	25%	0%	75%	0%		
compensation of employees' debit	100%	100%	75%	50%		
direct investment income credit	50%	75%	75%	25%		
direct investment income debit	100%	100%	25%	100%		
portfolio investment income credit	75%	100%	75%	100%		
portfolio investment income debit	50%	100%	50%	100%		
other investment income credit	75%	50%	75%	75%		
other investment income debit	100%	100%	75%	75%		
net outward FDI flows	100%	75%	50%	100%		
net inward FDI flows	75%	100%	100%	100%		
net PI assets flows	100%	100%	50%	75%		
net PI liabilities flows	100%	100%	50%	75%		
net OI assets flows	75%	100%	50%	100%		
net OI liabilities flows	100%	100%	50%	100%		

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

Conclusion: The proportion of directional reliability of 100% decreases by 12.5% between 2020 and 2023. 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.

20. Statistical processing

20.1. Source Data

Quarterly Balance of Payments 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.

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.

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.

Arrangements have been put in place, in co-operation with the CBI, for the quarterly collection and compilation of 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 by the CBI under its legislation as well as European legislation. The data are supplied by the CBI to CSO for statistical compilation purposes. This arrangement started in 2008 and may be extended to other categories of financial corporation. It 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.

Administrative data from government departments (or their agencies) and from the CBI are also used.

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

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.

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.

Ireland's balance of payments (BOP) quarterly statistical compilation system was completely overhauled in the late 1990's to strengthen sectoral and enterprise coverage in basic data collection; adopt best international methodological standards; conform more closely with international presentation formats; and provide for geographical analysis of the results. The improvements facilitate the production of data required by the European Central Bank (ECB) and the EU Commission (Eurostat) to compile balance of payments statistics for the EMU and EU areas. The needs of other international organisations (such as IMF and OECD) as well as those of national users have also been catered for.

20.1.1. 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.



20.1.2. Sampling design

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 8,848 financial enterprises are covered over the course of a year. For non-financial enterprises, a selection of about 1727 enterprises is made from CSO's statistical register sources, 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.

20.1.3. Survey size

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.

20.1.4. Survey technique

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.

20.2. Frequency of data collection

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

20.3. Data Collection

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 IFCS (BOP44)
- Survey of Banks, Assets Finance Companies, Securities Trading Companies, Agency and Captive Treasuries and related Financial Services Companies (BOP45)

Information is obtained from the above surveys 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. 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. Balance sheet data are also collected for the same functional categories of investment listed for transactions.

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

20.3.1. 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/

20.3.2. 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).

20.3.3. Survey Participation

The surveys are carried out under the Statistics (Balance of Payments Survey) Order, 2020 (Statutory Instrument S.I. No 91 of 2020) made under the Statistics Act, 1993. Participation in the survey is mandatory.

20.3.4. 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.

20.4. Data Validation

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.

20.5. Data Compilation

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.

20.5.1. 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

20.5.1.1. A7. Imputation rate

Not calculated.

20.5.2. Grossing and weighting

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

20.6. Adjustment

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.

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.

20.6.1. Seasonal Adjustment

Not applicable.

21. Comment