

Austria's balance of payments and international investment position based on BPM6

Manual on sources and methods

This manual refers to time series from
1995 for the current account and 1999 for the financial account

Version dated May 2019

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Executive summary	7
I. Introduction	9
1. For whom has this manual been developed?	9
2. Definitions and use	9
2.1. Definitions and key indicators	9
2.2. Data users and intended use	10
II. Framework conditions	12
1. Legal basis	12
1.1. Data collection powers	12
1.2. Reporting requirements	12
1.3. Cooperation with Statistics Austria	13
2. Conceptual framework	15
2.1. Accounts system and links with ESA	15
2.2. Accounting principles and methods	17
2.3. Classification of units and territories	17
2.4. Classification of assets and liabilities	17
2.5. Functional categories	17
2.6. Backcast time series and self-assessment	18
III. Production	19
1. Data production	19
1.1. Production processes and systems	19
1.2. Current account	21
1.2.1. Goods	21
1.2.1.1. International trade statistics	21
1.2.1.2. Adjusting international trade statistics for BoP purposes	22
1.2.2. Services (excluding travel)	25
1.2.2.1. Special surveys and estimations	26
1.2.3. Travel	29
1.2.3.1. Travel receipts (exports)	29
1.2.3.2. Travel expenses (imports)	29
1.2.4. Income (other than investment income)	30
1.2.4.1. Primary income (other than investment income)	30
1.2.4.2. Secondary income	30
1.3. Capital transfers	31
1.4. Financial account (including investment income)	32
1.4.1. Direct investment	32
1.4.1.1. Subsystem overview	33
1.4.1.2. Data sources	33
1.4.1.2.a. Annual surveys	33
1.4.1.2.b. Annual financial statements	35
1.4.1.2.c. Monthly report of transactions	36
1.4.1.2.d. Monthly report of stocks	36
1.4.1.2.e. MFI intragroup lending	37
1.4.1.2.f. Report of interest income	37
1.4.1.2.g. Intragroup corporate bonds	38
1.4.1.2.h. Administrative data sources	38
1.4.1.3. Estimates	38
1.4.1.3.a. Overview	38
1.4.1.3.b. Estimating interim stocks	39

1.4.1.3.c.	Estimated return on equity	40
1.4.1.3.d.	Direct investments below the reporting threshold	41
1.4.1.4.	Compilation	41
1.4.1.4.a.	Basic methodology	41
1.4.1.4.b.	Equity capital	43
1.4.1.4.c.	Intragroup lending	43
1.4.1.4.d.	Investment income from equity	44
1.4.1.4.e.	Investment income from loans	44
1.4.1.4.f.	Reinvested earnings	44
1.4.1.4.g.	Exchange rate effects (X values)	44
1.4.1.4.h.	Asset price changes (P values)	45
1.4.1.4.i.	Reclassifications in other changes in volume (O values)	45
1.4.1.4.j.	Residuals (R values)	46
1.4.1.4.k.	Main aggregates	47
1.4.1.5.	Special issues	48
1.4.1.5.a.	Delineation of other investment	48
1.4.1.5.b.	Differences between direct investment and portfolio investment	50
1.4.1.5.c.	Inherited UBO ownership	50
1.4.1.5.d.	Joint ventures	51
1.4.1.5.e.	Round-tripping	52
1.4.1.5.f.	Special purpose entities	52
1.4.1.5.g.	Super dividends	53
1.4.1.5.h.	Debt cancellation (debt forgiveness)	53
1.4.1.5.i.	Type of transaction (M&A, greenfield)	54
1.4.1.5.j.	Investment funds	54
1.4.1.5.k.	Branches	54
1.4.2.	Portfolio investment	54
1.4.2.1.	Subsystem overview	56
1.4.2.2.	Data sources	56
1.4.2.2.a.	Scope of security-by-security reporting	57
1.4.2.2.b.	Entities required to report security-by-security information	58
1.4.2.2.c.	Survey of domestic custodians' own holdings of securities	58
1.4.2.2.d.	Survey of assets held in custody by resident custodians	59
1.4.2.2.e.	Survey of custody account holdings of securities abroad and of own holdings of foreign securities	61
1.4.2.2.f.	Survey of securities holdings of domestic investment funds	61
1.4.2.2.g.	Master data	62
1.4.2.3.	Estimates	63
1.4.2.4.	Compilation	64
1.4.2.4.a.	Aggregates for individual reporting agents	64
1.4.2.4.b.	Aggregates for individual securities	65
1.4.2.4.c.	Production database / BoP data warehouse	69
1.4.2.4.d.	Main aggregates	70
1.4.2.5.	Special issues	71
1.4.2.5.a.	Pool factor bonds	71
1.4.2.5.b.	Securities repurchase and lending transactions	71
1.4.2.5.c.	Securities held in trust	72
1.4.2.5.d.	Other special cases	72
1.4.2.6.	Delineation of portfolio investment	73
1.4.2.6.a.	Differences between portfolio investment and direct investment	73
1.4.2.6.b.	Differences between portfolio investment and other investment	73
1.4.2.6.c.	Differences between portfolio investment and financial derivatives	73
1.4.2.6.d.	Differences between portfolio investment and reserve assets	73
1.4.3.	Financial derivatives	73

1.4.3.1.	Subsystem overview	74
1.4.3.2.	Data sources	74
1.4.3.2.a.	Reports on financial derivatives	74
1.4.3.2.b.	Security-by-security reporting	76
1.4.3.2.c.	Financial derivatives transactions made by the OeNB	76
1.4.3.3.	Estimates	76
1.4.3.4.	Compilation	76
1.4.3.4.a.	Aggregation of data on individual reporting agents/individual securities	76
1.4.3.4.b.	Production database / BoP data warehouse	76
1.4.3.4.c.	Main aggregates	77
1.4.3.5.	Delineation of financial derivatives	78
1.4.3.5.a.	Differences between portfolio investment and financial derivatives	78
1.4.4.	Other investment	78
1.4.4.1.	Subsystem overview	78
1.4.4.2.	Data sources	79
1.4.4.2.a.	Internal data sources	80
1.4.4.2.b.	External data sources	81
1.4.4.3.	Estimates	82
1.4.4.3.a.	FISIM – Monthly production	82
1.4.4.3.b.	Deposits/loans of Austrian businesses/households to nonresident banks	82
1.4.4.3.c.	Currency	83
1.4.4.4.	Compilation	83
1.4.4.4.a.	Automated system integration	84
1.4.4.4.b.	Manual system integration (balance sheet items statistics)	85
1.4.4.4.c.	System uploads	87
1.4.4.4.d.	Other investment aggregates	90
1.4.4.5.	Special issues	91
1.4.4.5.a.	Ad hoc uploads	91
1.4.5.	Delineation of other investment	91
1.4.5.1.a.	Differences between other investment and direct investment	91
1.4.5.1.b.	Differences between other investment and portfolio investment	91
1.4.6.	Reserve assets	92
1.4.6.1.	Subsystem overview	92
1.4.6.2.	Data sources	93
1.4.6.3.	Estimates	93
1.4.6.4.	Compilation	93
1.4.6.5.	Special issues	94
1.5.	Errors and omissions	96
1.6.	Special FDI statistics	96
1.7.	International trade in services	98
2.	Dissemination	98
2.1.	Release calendar	98
2.2.	Data revision policy	98
2.3.	Confidentiality	100
2.3.1.	Definition	100
2.3.2.	Special cases and exceptions	100
2.4.	Historical data	101
2.5.	Products	101
2.5.1.	Data dissemination	101
2.5.1.1.	Data provided at oenb.at/Statistics	101
2.5.1.1.a.	Standardized tables	101
2.5.1.1.b.	User-defined queries	102
2.5.1.2.	Statistics app	102
2.5.1.3.	Data transmission to national and international organizations	102

2.5.1.4.	Statistics Hotline	103
2.5.1.5.	Scientific cooperation	103
2.5.2.	Publications	103
2.5.2.1.	Information published by the OeNB's External Statistics, Financial Accounts and Financial Statistics Division	103
2.5.2.2.	Other publications with contributions from the OeNB's External Statistics, Financial Accounts and Financial Statistics Division	104
2.5.2.3.	Press releases	104
2.5.3.	Press conferences	104
IV.	Quality	105
1.	Quality dimensions	105
1.1.	Relevance	105
1.2.	Accuracy	106
1.2.1.	Plausibility	106
1.2.2.	Completeness	106
1.3.	Currency versus timeliness	107
1.4.	Comparability	108
1.5.	Coherence	109
1.5.1.	Balance sheet items statistics	109
1.5.2.	International trade statistics	109
1.5.3.	SNA rest-of-the-world accounts	109
1.5.4.	Further statistical comparisons	110
2.	Quality assurance instances	111
2.1.	Data sources	111
2.1.1.	External data sources	111
2.1.2.	OeNB surveys	111
2.2.	Compilation	111
2.3.	International organizations	112
V.	Annex	113
1.	Abbreviations	113
2.	Methodological glossary	113
3.	Methodical basis	122
4.	Overview of reporting templates	123

List of tables

Table 1: Division of tasks between OeNB and Statistics Austria	13
Table 2: Link between financial assets classification and functional categories.	16
Table 3: Adjustment of international trade data for BoP purposes	23
Table 4: Reconciliation.....	39
Table 5: Main FDI aggregates.....	47
Table 6: Differences between direct investment and other investment (reported stocks)	48
Table 7: Differences between direct investment and other investment (reported interest income)	49
Table 8: domestic custody client groups	59
Table 9: Key data fields for aggregates for individual reporting agents.....	64
Table 10: Calculation of R values.....	65
Table 11: Key data fields for aggregates for individual securities and investment funds	65
Table 12: Calculation of nonresident stocks (aggregates for individual securities).....	66
Table 13: Calculation of transactions abroad (aggregates for individual securities).....	66
Table 14: Key data fields for production database aggregates	69
Table 15: Aggregation codes for the main portfolio investment aggregates (XINTIP).....	70
Table 16: List of main aggregates.....	70
Table 17: Aggregation codes for main financial derivatives aggregates.....	77
Table 18: S reporting templates as internal OeNB data sources for other investment	80
Table 19: Calculation of exchange rate effects and transactions	84
Table 20: Aggregates for other investment	90
Table 21: Financing instruments and their categorizations.....	115

List of Figures

Figure 1: Austria's current account balance over time	10
Figure 2: The OeNB's BoP system: overview of production processes.....	20
Figure 3: CIF vs. FIB.....	22
Figure 4: FISIM framework.....	28
Figure 5: Overview of the FDI subsystem.....	33
Figure 6: Integration of annual financial statement data into the balance of payments.....	36
Figure 7: Direct investment estimates in closed and open periods.....	39
Figure 8: Direct Influence/Indirect Control Method (DIIC) – Figure A.4.8 (source: BMD4).....	42
Figure 9: Example of inherited UBO ownership (Austria and Germany).....	51
Figure 10: Subsystem overview for portfolio investment.....	56
Figure 11: Bond yields calculated on an accrual basis.....	67
Figure 12: Subsystem overview for financial derivatives.....	74
Figure 13: Subsystem overview for other investment	79
Figure 14: Sources of other investment data	80
Figure 15: Compilation process for other investment.....	83
Figure 16: Manual system integration during the compilation of other investment data	86
Figure 17: Mapping the reporting framework for balance sheet items statistics to the reporting format for external statistics.....	87
Figure 18: OeNB and Statistics Austria cooperation to calculate FISIM data.....	88
Figure 19: Estimates of deposits and loans defined as other investment.....	90
Figure 20: Subsystem overview for reserve assets.....	92
Figure 21: Populating the BoP data warehouse with reserve asset positions.....	94
Figure 22: Link between presentation principles and entities covered	97
Figure 23: Revision plan for all macroeconomic statistics.....	99
Figure 24: Data transmission matrix displaying the OeNB's reporting obligations	103

Executive summary

Austria's balance of payments is part of a consistent conceptual framework for external economic statistics, which also covers the international investment position, external debt statistics, statistics on international trade in services, direct investment statistics and other statistics. The external statistics are interlinked with other statistical frameworks, such as the flow-of-funds accounts (i.e. the financial accounts of the system of national accounts – SNA) or MFI balance sheet items statistics. Using a common set of underlying data, for instance where there are overlaps with the SNA rest-of-the-world accounts, ensures a high degree of consistency across all statistical products. The cycles at which the individual statistics are produced depend on international reporting requirements (as defined by the European Central Bank (ECB) or the European Commission) and the needs of national data users.

Systematic coverage of economic and financial flows to and from the rest of the world, such as goods exports and imports or financial transactions, allows the data collected to be aggregated at different levels and to different extents for different purposes, and also at different intervals. The resulting statistical products range from timely monthly data with a low level of granularity to annual data with a high level of granularity. In terms of data input, the statistics are based on a broad range of reporting frameworks, existing data as well as estimates made to close data gaps.

Austria's balance of payments and international investment position data at a glance

Coverage	The balance of payments (BoP) provides a flow-of-funds perspective on the cross-border activity of the domestic sectors of an economy. The international investment position (IIP) reflects the resulting stocks. The BoP's financial account and the IIP are based on a functional classification. The data are compiled in line with the sixth edition of the IMF's Balance of Payments Manual (BPM6) as well as the European System of Accounts 2010 (ESA 2010) because the BoP and the IIP constitute the SNA rest-of-the-world accounts.
Statistical population	The statistical population consists of all institutional units (households, financial and nonfinancial corporations, government entities and nonprofit institutions serving households) resident in Austria.
Type of statistics	System of accounts
Data sources/compilation types	Primary statistics (above all MFI balance sheet items statistics, securities issues statistics), direct reporting (subject to relevant reporting thresholds) and estimates for missing or nonrepresentative data
Reporting period/ reference date; periodicity	Annual data, from 1995 Quarterly data, from Q1 1999
Main legal basis	Regulation (EC) No. 184/2005 and ECB guideline 2011/23
Level of regional granularity	Austria (breakdowns by provinces cannot be provided at present)
Timeliness	Quarterly data: $t + 82$ days Revised annual data: $t + 9$ months (final after 45 months)

I. Introduction

1. For whom has this manual been developed?

Austria's balance of payments (BoP), its international investment position (IIP), external debt statistics, statistics on international trade in services and foreign direct investment (FDI) statistics are the statistical reflection of Austria's trade flows with the rest of the world and the resulting stocks, thus providing important information for monetary and economic policymakers. The challenge for data compilers is to apply the concepts and methods of the relevant international manuals – above all the BPM6,¹ which is compatible with the international System of National Accounts (SNA 2008) and the European System of Accounts (ESA 2010)² – and to align a variety of sources, based on different conceptual frameworks and standards. What we attempt to do here is describe this process step by step: define the underlying statistical concepts, identify relevant business cases and describe the resulting data products. Moreover, we will address the quality and publication standards which we apply.

In other words, this document is mainly intended to serve as a methodological reference for readers needing to know how Austria's financial and nonfinancial flows to and from the rest of the world and the resulting stocks are measured and compiled. In addition, we also explain how the balance of payments relates to the bigger ESA picture, and how it is interlinked with related statistics, such as FDI statistics.

2. Definitions and use

2.1. Definitions and key indicators

The BoP covers all economic transactions made by Austrian residents with nonresidents. These transactions include both nonfinancial transactions (trade in goods and services, compensation of labor, investment income, transfer payments) and financial transactions (international capital transactions supporting trade investments, securities investments, deposits and loans, and reserve assets).

Nonfinancial transactions are captured by the current account including capital transfers. Financial transactions are captured by the financial account and are also an integral part of the IIP and FDI statistics, as adjusted for value changes.

The term “balance” in balance of payments would imply that the BoP framework is comparable with corporate balance sheets. Indeed, like corporate balance sheets, the BoP framework is based on the concept of double-entry bookkeeping. Yet unlike corporate balance sheets, the BoP does not list positions for a given reporting date (the IIP does) but the amount of transactions made during the reference period. Furthermore, unlike in corporate balance sheets, there will always be some amount of residual cross-border activity that cannot be captured, leaving a residual that cannot be allocated to specific positions.

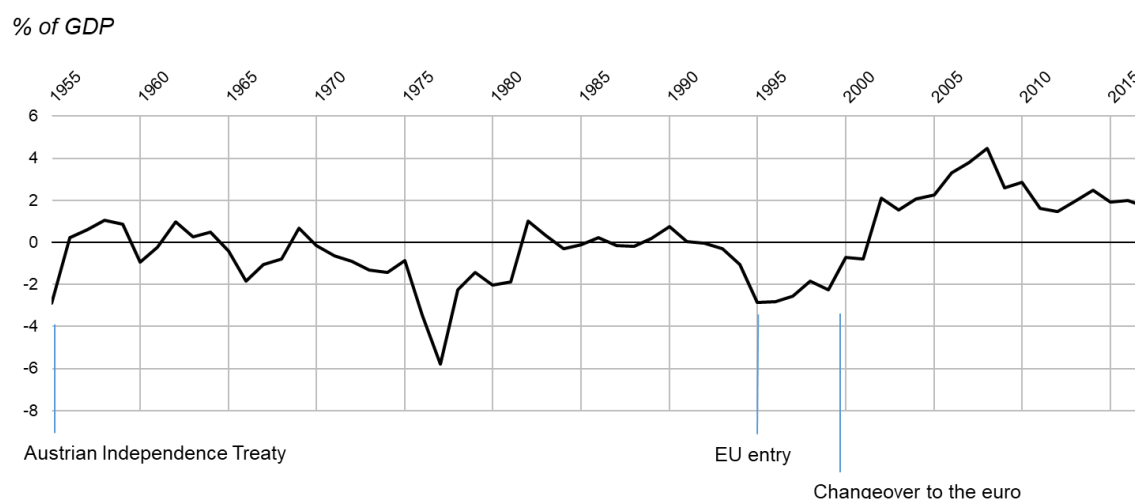
The balance of payments as such indicates whether an economy tends to be a net lender or a net borrower. This makes the BoP an important benchmark for a country's economic and financial stability. The key BoP indicator, i.e. the main BoP result, is the current account balance, which is the net result of an economy's nonfinancial transactions with the rest of the world. Measured as a share of GDP, the current account balance typically serves as an indicator for a country's net borrowing requirement by international institutions such as Eurostat, the ECB, the OECD and the IMF. Austria's current account has been in surplus

¹ IMF Balance of Payments Manual, 6th edition.

² European System of Accounts 2010, regulation (EU) 549/2013.

for several years by now, enabling Austria to make progress in paying down legacy debt. In sync with the BoP, an economy's net IIP measures the country's net amount of assets invested abroad or liabilities owed to nonresidents. The changes in the net IIP are correlated with the changes in the current account balance as a rule, but also subject to valuation effects.

Figure 1: Austria's current account balance over time



Source: WIFO, Statistics Austria, OeNB.

2.2. Data users and intended use

BoP data provide key decision-making input for economic and monetary policymakers. They enable policymakers to see how the economy has been doing in terms of its external activity, and to spot emerging vulnerabilities. Specifically, the current account balance is an indicator of economic and financial stability. If the current account is in surplus, as has been the case for Austria for several years, this means that cross-border nonfinancial transactions have earned a country more than it has spent abroad. In such case, the external sector helps drive the economy and helps make sure that the economy can gainfully invest surplus capital abroad rather than depending on international capital for financing.

The BoP is also a key source of information for Austrian stakeholders and businesses on how competitive the economy is in general, and on how competitive individual industries and export markets are in particular. Such details also inform trade negotiations, such as the WTO's negotiations on the General Agreement on Trade in Services (GATS). Last but not least, the BoP feeds into other statistics, above all the national accounts, and thus ultimately into GDP measures. By and large, the SNA rest-of-the-world accounts corresponds to the current account including capital transfers.

Other user groups:

- National users
 - Ministries
 - Financial Market Authority
 - Statistics Austria
 - Research institutions
 - The Economic Chamber
 - Media
 - Students
- International users
 - Economic Chamber offices abroad
 - Database providers
 - ECB (European Central Bank)
 - Eurostat
 - BIS (Bank for International Settlements)
 - OECD (Organisation for Economic Co-operation and Development)
 - World Bank
 - IMF (International Monetary Fund)
 - UN (United Nations)
 - Other central banks and statistical offices

II. Framework conditions

1. Legal basis

1.1. Data collection powers

Within the EU, **regulation (EC) 184/2005**³ (as amended) provides the framework for a harmonized compilation of national data on the balance of payments, international trade in services and foreign direct investment. A corresponding **ECB guideline (ECB/2011/23)**⁴ (as amended) regulates the format and timing of data transmission to the ECB, as well as quality assurance and confidentiality, in addition to the definitions of the data themselves. The harmonization of the conceptual frameworks used by the ECB and the European Commission (Eurostat) for the balance of payments and related statistics allows for consistent data production and publication.

The key national provisions relate to the **Foreign Exchange Act 2004**, which requires the OeNB to prepare Austria's balance of payments and related statistics, at the same time conferring the powers to do so. Specifically, the OeNB has been empowered to obtain information, including background information, from natural and legal persons, and to inspect accounts on site. Yet, the data may be used only for statistical purposes and for the purpose of fulfilling ESCB-related tasks.⁵ Publication of the data in form of the above-mentioned statistics presupposes that the data reported have been anonymized.

1.2. Reporting requirements

The OeNB is required to transmit data to the ECB and Eurostat in line with the statistical work programs of the two institutions. We **compile** and aggregate data reported to us in line with the methodological requirements laid down in the relevant **international manuals**, above all ESA 2010,⁶ BPM6,⁷ BMD4⁸ and MSITS.⁹ In greater detail, the methodologies to be used for the respective delivery requirements have been laid down in separate documents. These documents provide definitions for specific data flows, country groups or codes and include the ECB's "Booklet"¹⁰ or Eurostat's "Vademecum."¹¹

The **specific reporting requirements** for natural and legal persons resident in Austria have been laid down in **national reporting regulations** issued by the OeNB (ZABIL 1/2012¹² and ZABIL 1/2013¹³). These two regulations define the requirements for international trade in services and specific cross-border transfers (ZABIL 1/2012) and for covering capital financial flows to and from abroad (ZABIL 1/2013 – amended in 2016). This includes above all direct data reports (on FDI, other investment, investment in real estate) and security-by-security reporting, which is largely done by account managers. For details on the reporting framework (infographics, notes, technical data transfer) see the relevant **explanatory notes or reporting**

³ Regulation (EC) No. 184/2005 of the European Parliament and of the Council of 12 January 2005.

⁴ Guideline of the European Central Bank ECB/2011/23 of 9 December 2011.

⁵ *Federal Exchange Act 2004 article 7* in connection with the *Nationalbank Act article 44*.

⁶ ESA 2010 is the EU's version of SNA 2008.

⁷ See the BPM6 Compilation Guide provided by the IMF.

⁸ OECD Benchmark Definition of Foreign Direct Investment, 4th Edition 2008.

⁹ Manual on Statistics on International Trade in Services.

¹⁰ Booklet on The exchange of balance of payments, international investment position statistics.

¹¹ BALANCE OF PAYMENTS VADEMECUM.

¹² OeNB reporting regulation on cross-border trade in services (ZABIL 1/2012).

¹³ OeNB reporting regulation on cross-border financial flows (ZABIL 1/2013).

guidelines.¹⁴ As a rule, reporting is not enforced by either the OeNB or Statistics Austria. Potential reporting agents are responsible for submitting data as required (in most instances, relevant reporting thresholds apply.) In addition, reporting agents must provide data **when asked to do so**. This is the case with the OeNB's annual FDI survey.

The OeNB, in turn, above all reports data to the ECB and Eurostat. In addition, we are **required to transmit data to other institutional institutions** such as the OECD, the IMF, the BIS and the World Bank. These reporting requirements have not been laid down in separate provisions but arise from membership as a rule.

1.3. Cooperation with Statistics Austria

Since 2002, a service-level agreement has been in place between the OeNB and **Statistics Austria**. This agreement foresees that we share the burden of compiling the required data by focusing on our respective core business areas with a view to maximizing synergies. By working together, we also seek to reduce the burden of reporting agents as much as possible by using existing administrative and register data and avoiding reporting duplication (in line with article 6(3) Federal statistical act 2000). In practice this means that we compile the financial data (financial account, IIP, investment income) while Statistics Austria compiles the nonfinancial data. Compiling the data on capital transfers is a joint effort. Last but not least, we share with Statistics Austria data on financial sector services and secondary income, while Statistics Austria provides us with the financial data on the general government sector that feed into the financial account.

Table 1: Division of tasks between OeNB and Statistics Austria

	OeNB	Statistics Austria			
	Nonfinancial corporations	Financial corporations	General government	Households	Nonprofit organizations
CURRENT ACCOUNT					
Goods					
Services					
Primary income					
Compensation of employees					
Investment income					
Other primary income					
Secondary income					
CAPITAL TRANSFERS					
FINANCIAL ACCOUNT					
Direct investment					
Portfolio investment					
Financial derivatives					
Other investment					
Reserve assets					
ERRORS AND OMISSIONS					

Beyond the service-level agreement, the division of tasks has also been specified in a number of separate agreements. Specifically, we compile the foreign affiliates statistics and the quarterly flow-of-funds accounts whereas Statistics Austria compiles the statistics on cross-border services of nonfinancial corporations.

¹⁴ <https://www.oenb.at/meldewesen/meldebestimmungen/aussenwirtschaftsstatistik/meldeinhalte.html>

The service-level agreement defines the BoP and related statistics as areas of intensive cooperation with a view to generating a specific statistical product. The details of cooperation are governed by separate agreements (e.g., regarding data on foreign affiliates or the general government sector (annex)).

Beyond the day-to-day cooperation, we have also put in place a steering committee, which convenes at quarterly intervals. The steering committee is tasked with monitoring and enhancing output. Other responsibilities include reviews of the service level agreement and its extension.

2. Conceptual framework

2.1. Accounts system and links with ESA

One of the key integrating elements are the net lending/net borrowing positions and the net assets positions of the individual sectors of the economy. See below for an overview of the links between the BoP and the IIP with the system of national accounts.

The current account (including net capital transfers) represents the net lending/net borrowing position of an economy and can be described as follows:

$$\sum (S + CT - I - N)_{\text{of sectors } NFC, FC, GG, HH, NPISH} = L/B_{\text{domestic}} = CA + CT (= SNA \text{ rest of the world account})$$

- S** Saving (derived from income)
- CT** Capital transfers
- I** Gross investment
- N** Acquisitions less disposals of nonproduced assets
- L/B** Net lending/borrowing
- CA** Current account in the balance of payments (with the net value of goods and services exports and imports representing the contribution of net exports to GDP¹⁵)

The economic sectors are NFC = nonfinancial corporations, FC = financial corporations, GG = general government, HH = households and NPISH = nonprofit institutions serving households. Together, these sectors constitute the economy as a whole.

The financial account of the balance of payments indicates how these transactions are financed. The net financial account is interpreted as net lending to the rest of the world when positive, and net borrowing from the rest of the world when negative.

$$\sum (I - F)_{\text{of sectors } NFC, FC, GG, HH, NPISH} = L/B_{\text{domestic}} = FA (= SNA \text{ rest of the world account})$$

- I** Financial investment
- F** Financing (from external sources, not savings-based)
- FA** Financial account in the balance of payments

Financial transactions are also used to explain changes in positions, using the following equation:

$$\sum (A - L)_{\text{of sectors } NFC, FC, GG, HH, NPISH} = NP_{\text{domestic}} = IIP$$

- A** Financial assets
- L** Liabilities
- NP** Net position
- IIP** International investment position (IIP)

¹⁵ Defined on the basis of the demand components of GDP: Consumption expenditure + gross investment + net exports (of goods and services) + errors and omissions (in the output method of calculating GDP, using the concept of value added).

The identity of the first two equations results from the equality relations within each sector:

$$(S + CT - I - N) = (I - F)$$

and from the equality relations within the balance of payments:

$$CA + CT = FA$$

Despite this conceptual consistency, the different approaches underlying the nonfinancial accounts (including current account and capital transfers within the balance of payments) and the financial accounts of the national accounts framework (including the financial account in the balance of payments) results in a balancing item (BI). In sum, these residuals for all sectors of the economy are reflected in the errors and omissions of the balance of payments.

$$FA - (CA + CT) = BI$$

Conceptually, the financial account of the **balance of payments** is a functional presentation of the SNA rest-of-the-world accounts. In Austria, the two systems are fully comparable because ESA 2010 and the BPM6 have been implemented in full.

Table 2: Link between financial assets classification and functional categories.

Functional categories of the financial account ¹⁶						
		Direct investment	Portfolio investment	Financial derivatives	Other investment	Reserve assets
Financial instruments according to ESA 2010	Monetary gold, SDR (F.1)				X ¹⁷	X
	Currency and deposits (F.2)				X	X ¹⁸
	Debt securities (F.3)	X	X			X
	Loans (F.4)	X			X	X
	Shares (F.511/F.512)	X	X			X
	Other equity (F.519)	X			X	
	Investment fund shares (F.52)		X			X
	Nonlife insurance including reinsurance (F.61)				X	
	Net equity in life insurance reserves (F.62)				X	
	Pension entitlements and entitlements to nonpension benefits (F.63-F.65)				X	
	Financial derivatives (F.7)			X		X
	Trade credits (F.81)	X			X	
	Other accounts receivable/payable (F.89)				X	

¹⁶ See also: BPM6, chapter 6, table 6.1 Link between Financial Assets Classification and Functional Categories

¹⁷ Following the implementation of SNA 2008 and ESA 2010, SDRs are now classified under "other investment" under F.12 (financial instruments, liability side).

¹⁸ In theory, collective custody accounts for gold holdings would have to be identified as reserve assets also on the liability side. However, since the liability side of the reporting framework does not include the respective functional category, reporting banks most probably report such holdings as deposits under "other investment."

Some sectors had to be reclassified following the latest ESA revision. For a detailed table on changes due to ESA 2010, see the OeNB's financial accounts manual (page 70).¹⁹ For further details, also see the documentation on nonfinancial sector accounts.²⁰

2.2. Accounting principles and methods

Our accounting principles are based on the applicable BPM6 rules. That is to say, we use the accrual method of accounting (we record cash flows at the point in time when a given activity or transaction takes place; see section 1.4.2.4.b) and we use nominal values. For the time being, we cannot provide inflation-adjusted or seasonally adjusted data.

2.3. Classification of units and territories

We use the residence principle, i.e. our data refer to the institutional units that are mainly resident in Austria and for whom Austria is the center of predominant interest. We define units in line with the principles on institutional units specified in BMP6 and SNA 2008. A special form of institutional units are vehicles controlled by nonresidents, which we consider to be separate units in each economic territory in line with the principle of residence. This is relevant above all for holding companies and special purpose entities. We reroute assets and liabilities of vehicles resident abroad but controlled by the general government with a view to showing them as general government assets and liabilities resulting from resident-to-resident transactions. We use the same sectoral classification for both the balance of payments and the national accounts. For details see the OeNB's financial accounts manual.²¹

2.4. Classification of assets and liabilities

Classification depends on whether a position is an asset or a liability. This is particularly relevant for accounts which may relate to either assets or liabilities (for instance, clearing accounts; overdrafts; margin accounts for financial derivatives; financial derivatives that are independent from underlying transactions, such as currency swaps made to swap the proceeds of bond issues into another currency). Special provisions apply for the presentation of FDI data according to the directional principle (for more details, see the section on direct investment). We record FDI data according to the direct investment relationship, i.e. we distinguish between outward and inward FDI. Austria's share in currency in circulation in the euro area is shown as a liability for Austria in line with the Eurosystem's capital share mechanism.

2.5. Functional categories

While linked to the classification of financial assets and liabilities, the functional categories have been designed to facilitate analysis by highlighting above all the existence of strategic or nonstrategic direct investment relationships or singling out assets held as reserve assets by the OeNB. Other functional categories reflect additional dimensions such as portfolio investment (in a broad range of securities) and other investment (including deposits and loans including trade credits as well as other forms of financing).

¹⁹ OeNB, Financial Accounts for Austria. Manual on Sources and Methods: [https://www.oenb.at/dam/jcr:78a7c810-a5a3-4558-b4e9-8fa1fa4d517f/Financial%20Accounts%20in%20Austria%20-%20Manual%20on%20Sources%20and%20Methods%20\(2014-12\).pdf](https://www.oenb.at/dam/jcr:78a7c810-a5a3-4558-b4e9-8fa1fa4d517f/Financial%20Accounts%20in%20Austria%20-%20Manual%20on%20Sources%20and%20Methods%20(2014-12).pdf)

²⁰ Statistics Austria's documentation on nonfinancial sector accounts: http://www.statistik.at/wcm/idc/idcplg?IdcService=GET_PDF_FILE&RevisionSelectionMethod=LatestReleased&dDocName=020006

²¹ See <https://www.oenb.at/en/Statistics/Standardized-Tables/financial-accounts.html> in the download section.

Yet another category are financial derivatives (other than financial derivatives classified as reserves or in some other functional category).

2.6. Backcast time series and self-assessment

In Austria, we follow the definitions used in the BPM6. We produce (level 3) self-assessment reports to provide an indication of the quality of the MIP indicators based on BoP/IIP data. The time series that we provide data in line with BPM6 rules start with the reporting year 1995.

III. Production

1. Data production

This section describes the data production process and the individual data categories used in the balance of payments and the international investment position. Each section starts with the main components that drive BoP and IIP compilation. In a number of instances, the data are also used for other purposes, which may require alternative or additional data transformation processes. The remainder of the section describes these processes as well as methodological exceptions and alternative concepts.

1.1. Production processes and systems

The methodology we use to produce international trade measures is fairly consistent. Depending on the purpose for which data are used, different levels of aggregation and granularity may be useful. With this in mind, the compilation system has been designed to be very flexible.

We have defined a set of basic aggregates (internally referred to as “Basis-ZPos”) as the lowest level of aggregation for individual balance of payments positions. The basic aggregates are calculated from the microdata reported (to a large extent directly) to the OeNB. These initial aggregates are then used to produce further aggregates, across three levels of hierarchy and for five matrix dimensions (global, regional, etc.). Each aggregation run turns the pool of microdata into a consistent set of main aggregates (internally referred to as “XINTIP” positions = eXtended INTernational Investment Positions, or extended IIP positions). These main aggregates constitute a toolbox for generating a broad set of statistical products. The main aggregates are finalized for release or transmission through a process of data clustering,²² data enrichment using master data²³ and final transformation steps.²⁴ Moreover, we use versioning to manage underlying aggregates and the corresponding microdata. This allows us to drill down our aggregate data to individual inputs and trace information back to its original source.

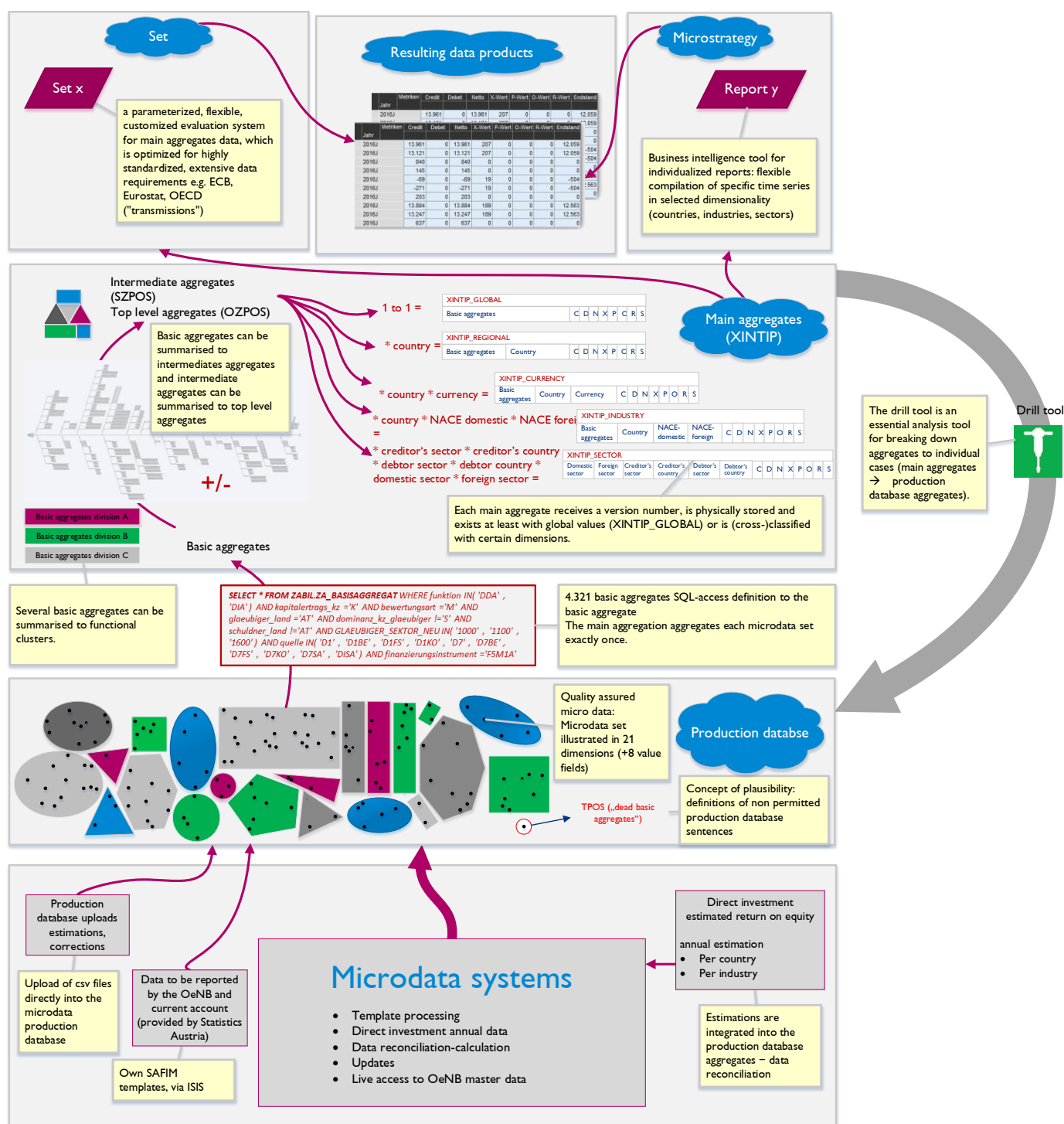
See the following Figure for an overview of the data production process. Definitions are provided in a [methodological glossary](#).

²² For instance for regional breakdowns.

²³ For instance to produce correct output code designations.

²⁴ Such as selecting specific data fields or specific units.

Figure 2: The OeNB's BoP system: overview of production processes



1.2. Current account

The current account statistics are compiled in line with the BoP manual and in cooperation with Statistics Austria. We compile quarterly current account data directly from the individual financial service providers and insurance companies, which report their transactions broken down by financing instruments and counterparty country of residence. The data we receive from Statistics Austria are also broken down by financing instruments and counterparty country of residence. To enable plausibility checks, Statistics Austria also shares its annual microdata time series – especially on trade in services – on a counterparty basis with the OeNB. We map these data with our financial account data, above all with our data on direct investment.

We check our granular current account data for quality and aggregate the required release and reporting positions in line with BPM6 provisions for the quarterly balance of payments. Moreover, we perform estimates and corrections when compiling the quarterly statistics. Specifically, we calculate service charges for insurance plans, add market maker fees to financial services fees and make offsetting entries for FISIM flows in interest income.

To be able to provide the required inputs for the monthly BoP data for the euro area, we need to produce estimates for some sections of the current account because most respondents are not in a position to provide monthly data. For this purpose, we have developed an estimation model, which we use to generate global and regional²⁵ monthly results for the following indicators:

- Exports and imports of goods
- Services (broken down by travel and tourism, transport, and other services)
- Compensation of employees
- Other primary and secondary income (other than investment income)

The model is based on quarterly time series (seasonally adjusted) for:

- Truck mileage data, based on the OeNB's export indicator for goods exports and transportation
- Number of overnight stays by nonresidents visiting Austria, based on information provided by Statistics Austria, to estimate tourism receipts
- Monthly data on cross-border trade, based on data compiled by Statistics Austria, to estimate trade in goods and transport services

1.2.1. Goods

The current account shows cross-border flows of moveable goods that involve a transfer of economic ownership between residents and nonresidents. Transactions are marked to market. The starting point for the goods and services account is the **international trade statistics** compiled by Statistics Austria, which we adjust in line with international BoP conventions.

1.2.1.1. International trade statistics

The international trade statistics compiled by Statistics Austria are based on two EU systems for collecting and producing statistics: Intrastat for intra-EU trade statistics and Extrastat for extra-EU trade statistics.²⁶

²⁵ EU, Extra-EU, euro area, “pre-ins” (EU countries remaining outside the euro area)

²⁶ For a detailed description of Intrastat and Extrastat, see Statistics Austria's methods manual: http://www.statistik.gv.at/web_de/dokumentationen/Wirtschaft/aussenhandel/index.html.

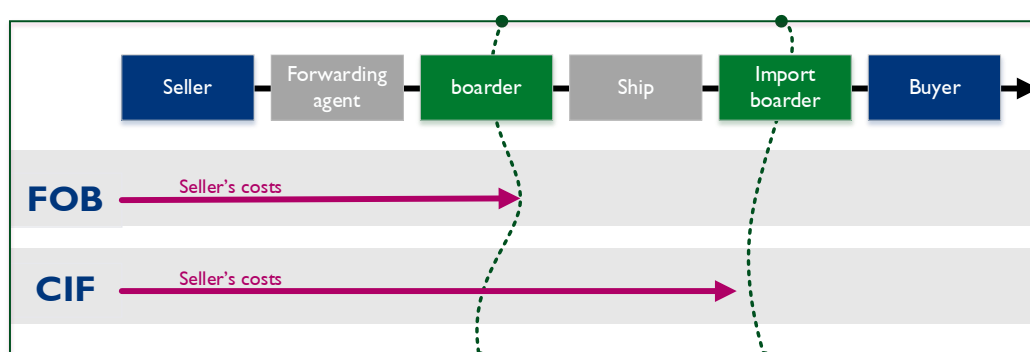
Intrastat is a census survey subject to reporting thresholds based on the annual value of intra-EU trade. The required monthly data are to be reported to Statistics Austria, which obtains aggregates from the primary data. Extrastat data are secondary data; most data on cross-border trade in goods between EU countries and non-EU countries are compiled by the customs authorities.

With a view to identifying reporting agents, Statistics Austria has developed a dedicated register – the international trade register – which is reconciled at regular intervals with the company register. If the Intrastat or Extrastat surveys reveal a new unit reporting imports or exports which is not yet reflected in the company register, this unit is included in the company register.

The international trade statistics cover exports from the reporting economy to the rest of the world and imports by the reporting economy from the rest of the world. The key criterion for recording data in the international trade statistics is physical border-crossing. Exceptions apply for specific movements of goods (such as coverage of ship trade).

For BoP purposes, both goods exports and imports are, as a rule, recorded at export-border-crossing prices (using “FOB measures”²⁷). In contrast, the international trade statistics measure only exports on an FOB basis, while including imports at import-border-crossing prices (using “CIF measures”). In other words, the CIF-based prices of goods imported to Austria include freight and other costs between the country of origin and Austria, and the FOB-based prices of exports from Austria include transport and insurance costs. This is why data derived from the international trade statistics must be adjusted for BoP purposes (goods and services account) in a number of ways, as outlined in section 1.2.1.2 below.

Figure 3: CIF vs. FOB



Mirroring the conceptual framework of the international trade statistics, the BoP statistics distinguish between a national concept and an EU concept. From our (Austrian) perspective, we publish the data using the country-of-origin principle. The EU uses the country-of-consignment perspective to record imports. In other words, if a good originating in non-EU country A is shipped to EU country C, the EU statistics will show EU country B rather than the originating non-EU country A as the country from which the good was imported.

1.2.1.2. Adjusting international trade statistics for BoP purposes

While goods imports and exports as recorded in international trade statistics reflect the physical flow of goods across borders, goods imports and exports on a BoP basis reflect the economic transfer of ownership. Therefore, the original international trade data need to be adjusted for BoP purposes.

²⁷ FOB = free on board, and CIF = cost, insurance, freight.

Table 3: Adjustment of international trade data for BoP purposes

Adjustment of international trade data for BoP purposes	
	Exports and imports of goods as reported in international trade statistics
–	Inward processing
–	Outward processing
–	Port services
–	Trade in nonmonetary gold
=	Goods exports and imports of goods as adjusted²⁸
–	Adjustments for CIF/FOB (imports only)
–	Adjustments for EU customs fees ("Rotterdam effect;" imports only)
+	Adjustments for foreign entities without a physical presence
+	Input/output corrections
+	Goods not crossing borders
+	Illegal trade
+	Relief and aid supplies
+	Expensive purchases while traveling
+	Port services
=	General merchandise (goods for which changes of ownership occur between Austrian residents and the rest of the world)
+	Transit trade
+	Trade in nonmonetary gold
=	Exports and imports of goods adjusted for BoP purposes

Inward processing/outward processing:

Processing refers to goods that are exported for refinement and subsequently reimported. For balance of payments purposes, (inward or outward) processing of goods needs to be subtracted, as the import and export transactions do not involve a change of ownership. The activities involved qualify as services and are therefore recorded as such in the balance of payments.

Adjustments for CIF/FOB:

As imports of goods are valued at CIF in the international trade statistics, transportation and insurance costs need to be deducted from the international trade data. The adjustments to be made for CIF/FOB are made with the volume freight rate method, based on trade volumes, distance from exporting countries type of transport, and the applicable freight and transport insurance tariffs.

Rotterdam effect:

As the internal European market constitutes a customs union, customs fees on imports from non-EU countries may be charged by the first EU country across which a good is transported or by the EU country of destination. Hence it is necessary to estimate the share of customs fees levied at the non-Austrian external border of the EU which is carried by Austrian importers, and to deduct this share from the imports

²⁸ For more details on mapping goods exports and imports as adjusted for processing, port services and nonmonetary gold to goods exports and imports as defined in the balance of payments, see the following current account table (including capital transfers):

<https://www.oenb.at/isaweb/report.do?sessionid=F23EACED09941B3DE67F390B94A1000?report=9.1.07>

recorded in the international trade statistics, and to record this amount under secondary income as amounts to be paid to the EU.

Adjustments for foreign entities without a physical presence:

If an institutional unit's physical presence in Austria (in terms of employees and turnover) is very small, or if it does not have a physical presence in Austria, this unit is not treated as a resident unit for BoP and national accounts purposes. As a result, there will be no change of economic ownership between a resident and a nonresident unit (i.e., ownership will pass from one nonresident unit to another). For this reason, international trade data referring to foreign institutional units are not recorded in the BoP and national accounts statistics. Instead, we use the relevant data from VAT statistics for domestic turnover or domestic income of the relevant institutional unit.

Input/output corrections:

For every reporting year, we undertake an input-output analysis for all institutional units to systematically match and reconcile the international trade data reported with data from available secondary sources, such as VAT statistics, short-term statistics on industrial production, structural business statistics, data on manufacturing inputs or annual report data. In case of major mismatches or plausibility issues, we reconcile the international trade data with the data on goods exports and imports derived from secondary sources.

Trade in goods not crossing borders:

For the purpose of international trade statistics, import and export flows are defined as physical cross-border flows. For the purpose of BoP statistics, import and export flows are recorded when economic ownership passes from a resident to a nonresident entity or vice versa. These two definitions may give rise to recording discrepancies above all in the context of globalized manufacturing processes. Cases in point include goods processed abroad that are not returned to the owner of the goods under processing but sold to residents of the same economy as the processor, or if the processing inputs were acquired directly abroad. Thus, we need to adjust the international trade statistics for BoP and national accounts purposes for the corresponding export flows to adequately reflect goods processed and sold directly abroad, and for the corresponding import flows to adequately reflect inputs acquired abroad. For the purpose of this reconciliation exercise, we produce input-output tables based on VAT statistics, short-term statistics on industrial production, structural business statistics, cross-border services statistics and manufacturing input statistics. In these tables, we adjust export flows for all goods sold directly abroad and import flows for all processing inputs bought directly abroad.²⁹

Gap estimates of illegal trade; estimates of relief and aid supplies:

Imports of illegal goods (such as drugs or smuggled goods, specially cigarettes) and relief and aid supplies to crisis regions are not recorded in international trade statistics and therefore added to the balance of payments based on national accounts estimates.

Expensive purchases while traveling:

Expensive purchases of goods while traveling are recorded as services in the national accounts but qualify as goods exports or imports in the balance of payments.

²⁹ For details (in German) on the current methodology of the national accounts, see: http://www.statistik.gv.at/web_de/dokumentationen/Wirtschaft/VolkswirtschaftlicheGesamtrechnungen/index.html.

Transit trade revenues:

Transit trade is defined as the purchase of goods by a company resident in Austria from a nonresident combined with the subsequent resale of the same goods to another nonresident. In other words, the corresponding change of ownership occurs without those goods ever having been present in Austria. Therefore, these goods are not recorded in international trade statistics for conceptual reasons and need to be added as exports or imports to the balance of payments.

Nonmonetary gold and port services:

As is evident from the table above, **nonmonetary gold** and **port services** are deducted initially to arrive at a narrower trade measure. Adequate representation of such goods and services in the balance of payments requires that they are newly added at a later stage.

1.2.2. Services (excluding travel)

The OeNB itself does not compile data on the cross-border services provided or used by nonfinancial corporations (essentially service providers, manufacturers and retailers and wholesalers (excluding agricultural businesses and public administration))³⁰ plus a range of financial corporations.³¹ This task has been outsourced to **Statistics Austria**. Statistics Austria uses a sampling method subject to statutory sampling thresholds. Moreover, Statistics Austria uses an estimation model to calculate the patterns of services imports and exports made by businesses which are not covered by the sampling method. At the time of writing, the sampling thresholds were EUR 500,000 for annual income from or costs of cross-border services. This means that the reporting population consists of some 5,000 entities.

The compilation framework requires regular quarterly surveys on cross-border services as outlined in Eurostat's corresponding VADEMECUM: Services exports and imports as defined in the Extended Balance of Payments Services Classification 2010; trading partners based on ISO standards as amended. Statistics Austria provides respondents with an electronic reporting platform ("eQuest-Web"), which also includes a data import interface. As many as 99% of all reporting entities have already switched to web-based reporting, with some 20% of all reporting entities also using the data import interface. Upon request, the data can also be filed using paper-based questionnaires.

Data missings are estimated separately for each reporting unit by imputing the extrapolated data for the corresponding quarter of the previous year based on historical company-specific export and import patterns (i.e. service code patterns and country patterns). The resulting estimates are subsequently assessed by experts to avoid outlier bias resulting from the underlying data. In the absence of previous year quarterly data for an entity, the gap is filled with data from the summary reports of the EU-wide VIES system (Value Added Information Exchange System). Measured as a share of reporting agents, data missings total some 6% on average. Taking into account data submitted after the reporting deadline and added during data revisions, the unit nonresponse rate drops to about 3% per quarter.

For companies below the reporting threshold, the VIES system provides data on services exports only for some 7,000 companies; data on services imports only for some 5,000 companies; and data on services exports as well as imports for some 27,000 companies. These data are broken down by trading countries. The structural business survey conducted in 2015 contained ad hoc questions for cross-checking the trade volumes of companies below the reporting threshold with non-EU trading partners. Moreover, the

³⁰ ÖNACE sections B to J, L to N, P to S (based on ÖNACE 2008).

³¹ ÖNACE group 64.2 and ÖNACE division 66 in section K (based on ÖNACE 2008).

structural business survey captures additional data on the volume of trade in services with non-EU countries, which are integrated into the estimation model as indicated by analysis.

While Statistics Austria compiles data on the cross-border services exported or imported by nonfinancial corporations, the **OeNB** compiles corresponding data for banks and insurance companies.³² Up to 300 banks and about 30 insurance companies report their services imports and exports to the OeNB at quarterly intervals (or, on a voluntary basis, at monthly intervals). Here, the focus is on financial services (financial services proper, fees and commissions for securities and gold lending, gross volume of securities transactions with nonresident counterparties as the basis for margin calculations). The reporting threshold for fees and commissions paid or received per calendar year for cross-border services is EUR 10 million for banks (in line with the regulation on asset, income and risk statements) and EUR 20 million for insurance companies.

The OeNB also receives data on the amount of cross-border insurance services provided for own account. Duplicate reporting is not required for insurance companies which report these data to the FMA using the central reporting platform of the insurance industry. The reporting structure is based on Eurostat's reporting requirements for the services of insurance companies (see Commission Regulation (EC) No. 1225/1999 of 27 May 1999 concerning the definitions of characteristics for insurance services statistics). We receive quarterly data on premiums and claims with detailed breakdowns for individual insurance segments. Breakdowns include actual and accrued premiums and claims as well as free establishment and free provision of services. We use these data to report the major categories of insurance services in line with the BPM6 (service charge concept). At annual intervals, we also receive information on the annual results of insurance companies, including insurance technical reserves. This allows us to revise the quarterly data in line with cancellations and repayments, project the volume of insurance technical reserves and estimate income from the export of life insurance products. To be able to estimate the services component and the amount of insurance technical reserves related to the import of life insurance products, we receive mirror data from the other national supervisory bodies within the European Economic Area (EEA). By analogy to the national accounts, we use the data on gross flows to estimate the services component of insurance as a percentage that reflects the relationship between premiums and claims over time for the domestic insurance industry.

1.2.2.1. Special surveys and estimations

To generate data on financial and nonfinancial corporations not covered by the basic surveys, the OeNB and Statistics Austria conduct or use a number of special surveys and estimations:

- 1) Data on the **cross-border services of agricultural and forestry enterprises: Survey** among Austrian forestry companies conducted by the agriculture and forestry ministry; survey among Austrian woodcutting companies conducted by a research and training agency (Bundesforschungs- und Ausbildungszentrum für Wald, Naturgefahren und Landschaft); data reported by Austria's forestry management agency (Österreichische Bundesforste AG) to Statistics Austria.
- 2) Data on **nonprofit organizations**: Survey among about 120 organizations on the cross-border supply of relief and aid supplies and financial support. Exports of nonprofit R&D services are determined based on data from the Austrian Report on Research and Technology.
- 3) Data on **public services** provided by embassies, consular offices and cultural institutes are mainly derived from the final budget accounts.

³² Divisions 64 and 65 in section K of ÖNACE 2008 (excluding group 64.2).

4) Data on **illegal services**: Data on illegal cross-border services are generated using national accounts estimation models. The biggest items are imported long-term care services and monies paid to foreign prostitutes.

5) **Financial intermediation services indirectly measured (FISIM)**: FISIM refers to services banks do not charge explicitly via commissions and fees but implicitly via the margin between interest received on loans and interest payable on deposits. To be able to measure such charges, we need detailed information on the associated cross-border interest flows. As a reference rate we use the interbank interest rate, which is a function of the transactions between domestic and foreign banks. This reference rate is free of service charges and risk premia and is therefore identical for depositors and borrowers. This interest rate, multiplied by deposit holdings and loan portfolios, provides the theoretical interest flows (= interest payable if the reference rate were used) adjusted for FISIM. We arrive at the service fees by subtracting these theoretical interest flows from the actual amounts of interest receivable and payable. Thus, FISIM consists of two components: FISIM on loans granted (monies paid by borrowers to banks) and FISIM on deposits taken in (monies paid by banks to depositors). These two components add to total cross-border FISIM flows. FISIM has a portfolio shift effect between financial services and primary incomes (without any impact on the bottom line).

Directions: Depending on the business case, we measure FISIM in one of the following ways:

Interest (income) is payable from residents to nonresidents = debit

- Exports (deposits) – “Deposit-taking services are exported”: Foreign nonbanks receive interest in turn for money deposited with domestic banks
- Imports (loans) – “Money lending services are imported”: Foreign banks receive interest in turn for loans taken out by domestic nonbanks

Interest (income) is payable from nonresidents to residents = credit

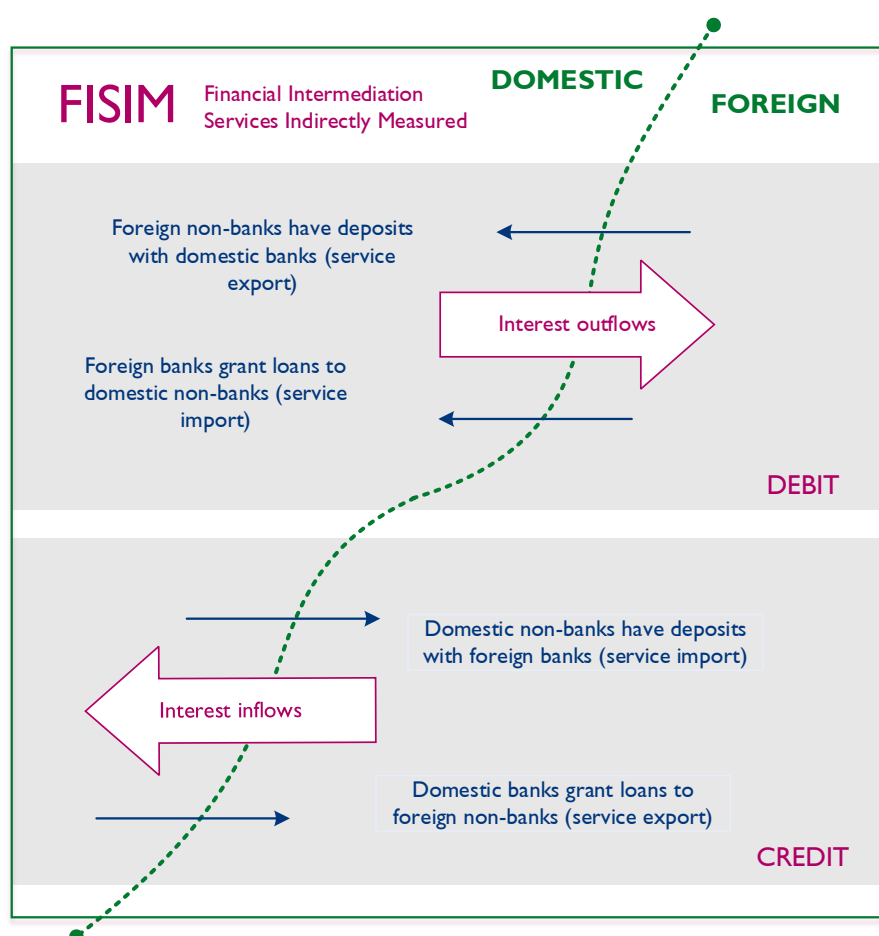
- Exports (loans) – “Money lending services are exported”: Domestic banks receive interest in turn for loans taken out by foreign nonbanks
- Imports (deposits) – “Deposit-taking services are imported”: Domestic nonbanks receive interest in turn for money deposited with foreign banks

For BoP purposes, this conceptual framework needs to be simplified, because financial flows can be recorded only as outward flows (debit) or inward flows (credit).

Credit = imported deposits – exported loans

Debit = exported deposits – imported loans

Figure 4: FISIM framework

Debit example:

When foreign nonbanks receive interest from domestic banks in turn for money deposited, they will receive a lower rate of interest than is implied by the reference rate (interbank rate) because the banks will retain FISIM as a service charge (deposit-related FISIM exports). In order to arrive at the corresponding interest position in line with ESA, we therefore need to top up interest flows from domestic banks to foreign nonbanks with the item deposit-related FISIM exports.

When foreign banks receive interest from domestic nonbanks in turn for loans granted, they will receive a higher rate of interest than is implied by the reference rate because the banks will add a FISIM surcharge for their services (loan-related FISIM imports). In order to arrive at the corresponding interest position in line with ESA, we therefore need to deduct the item loan-related FISIM imports from interest flows from domestic nonbanks to foreign nonbanks.

The net (debit) position resulting from these two business cases reflects the net flow of interest.

6) **Fees charged by traders and market makers (margins):** Traders and market makers charge implicit fees ("margins") for transactions with bonds, listed shares, investment fund shares and financial derivatives. Securities and investment fund shares not listed at a stock exchange are traded over the counter and are hence not part of an official secondary market, for which traders/market makers charge a given spread. Foreign currencies are not taken into account because the concept of margins was developed before exchange-traded funds were developed. This could change depending on how markets continue to

develop in the medium term. Moreover, margins are not part of the account of fees and commissions that serves as the basis for estimations.

In the current account, margins are added to services imports/exports; in the financial account, margins are deducted, in turn, from portfolio investment and financial derivatives transactions.

On the import side, margins are calculated for purchases and sales of foreign securities held by domestic creditors (causing portfolio investment assets to go up or down). On the export side, margins are calculated for purchases and sales of domestic securities held by foreign creditors (causing portfolio investment liabilities to go up or down):

$$\text{Margins} = \text{gross transactions} * \frac{1}{2} \text{ spread}$$

The spread is the difference between the bid-ask rate and multiplied by $\frac{1}{2}$ in order to avoid double counting (securities are bought at a bid price and sold at an ask price).

1.2.3. Travel

We use a hybrid compilation system to draw up the travel balance, namely a mix of primary and secondary data sources.

1.2.3.1. Travel receipts (exports)

To calculate the required data characteristics, we can use data that describe the entire statistical population (number of arrivals and overnight stays) and data that describe spending patterns (average amounts spent). As a rule, we calculate all characteristics by linking the data on spending patterns with the data on the statistical population.

Our key data source on the statistical population are the statistics on overnight tourist stays (produced in line with the Austrian tourism statistics regulation adopted in 2002, as amended). We use these data directly (to produce quantitative data) and indirectly (to produce structural data). In addition, we use the so-called T-MONA surveys conducted by the national tourist office (Österreich Werbung) among overnight tourists to measure the economic value of tourism (average amounts spent per day). By combining this information with the quantitative data from the overnight stay statistics, we arrive at the aggregate travel receipts from overnight tourists. As the T-MONA data become available only every other year or only every third year and with a view to avoiding conceptual distortions or a sampling bias, we also use short-term statistics for services (ÖNACE 55, ÖNACE 49.39-1), CPI data and the growth rate of overnight stays by hotel categories to support the original spending data.

A range of other data source serve to cover, for instance, spending habits of business travelers; daily travel expenditure; fuel and shopping tourism; spending habits of seasonal workers, border workers and students. These data sources include: Eurostat microdata on EU member country surveys among business travelers and vacationers; mirror statistics, income tax statistics, scientific studies (published by Deutsches Wirtschaftswissenschaftliches Institut für Fremdenverkehr), Erasmus mobility statistics/ university statistics, credit and debit card data.

1.2.3.2. Travel expenses (imports)

The main source of data on travel imports (expenditure by residents traveling abroad) are quarterly surveys among residents traveling for business or pleasure (CATI; n=3,500). Such surveys are made in line with the regulation on tourism demand statistics adopted in 2003, as amended. The surveys are based on stratified proportional sampling and Austria's centralized residence registry. The regional breakdown of

travel expenses is adjusted for package holidays operated by tour operations from non-EU countries. On account of the limited sample size, the primary statistics cannot provide reliable data for all countries. Therefore, we rely on credit and debit card data to arrive at a detailed geographical breakdown.

Other data sources used include mirror statistics, Erasmus mobility statistics, income tax statistics, consumer surveys, social insurance data (as published by the Association of Austrian Social Security Institutions) and current ABTA studies on business travel (if available).

1.2.4. Income (other than investment income³³)

Income is an integral part of the current account. The current account distinguishes between primary income (compensation of employees, investment income and other primary income) and secondary income (public and private current transfers).

1.2.4.1. Primary income (other than investment income)

The current account captures any labor income earned in Austria by individuals whose primary residence is in another country or who do not live in Austria for more than a year. Vice versa, the current account also includes any labor income earned by people who have their primary residence in Austria but work abroad.

The data on the gross earnings of Austrians working abroad are derived above all from mirror statistics compiled by Austria's neighboring countries. For this purpose, bilateral data exchanges are made at annual intervals. The data on labor income payable to nonresidents are based on payslip statistics and broken down by nationality.

Primary income also includes taxes on products, including taxes on products n.e.c., public rental income, product subsidies and other subsidies. The single biggest item are EU subsidies under the EAGGF³⁴ program. The data are based on Austria's final budget accounts. At regular intervals, we reconcile the respective appropriations with actual data from the agricultural accounts.

1.2.4.2. Secondary income

Secondary income includes EU withholding tax (finance ministry), income tax and social security contributions paid by seasonal and cross-border workers (income and payslip statistics, tax office), pension payments (Association of Austrian Social Security Institutions), EU payments (Ministry of Finance), relief supplies (surveys among nonprofit organizations, development aid programs of individual ministries), member fees for international organizations (final budget accounts).

Estimation of workers' remittances to Austria (credit): The starting point for this exercise is the number of Austrians working abroad, as recorded by the ministry of foreign affairs. We use average net income levels in Austria as adjusted for the price levels of the respective countries. The annual amount of workers' remittances to Austria is the product of the number of individuals making remittances multiplied with price-adjusted net incomes and the ratio of remittances to GDP (based on international studies).

Estimation of workers' remittances from Austria (debit): The key data source for this exercise are payslip statistics, which provide information on nationality, the duration of (resident/nonresident) labor and gross annual incomes. By analogy with the credit side, the annual amount of workers' remittances from Austria

³³ The compilation of data on investment income is described in the section on the financial account using a functional breakdown.

³⁴ European Agricultural Guidance and Guarantee Fund.

is the product of the number of individuals making remittances multiplied with their net incomes and a country-specific ratio of remittances to GDP (based on international studies).

1.3. Capital transfers

Capital transfers refer to cross-border transactions which are not made in turn for services provided but one-off transactions that are financed from existing capital stocks. Therefore, capital transfers do not qualify as current income. Examples include the acquisition or disposal of nonproduced, nonfinancial assets (such as the purchase of patents or the sale of customer bases and transfer fees for professional athletes), debt relief transactions as well as reimbursements from the EU budget for infrastructure projects. The data are broken down by public capital transfers (i.e., capital transfers made or received by the government sector, such as EU payments) and private capital transfers (i.e., payments made by the other sectors of the economy, such as transfer fees for professional athletes or corporate debt cancellations).

We make every effort to keep the reporting burden for respondents as low as possible. Subject to availability, we therefore use administrative data sources and existing surveys. Specifically, we use above all the final budget accounts to gain data on transactions related to the EU budget and services surveys to gain data on businesses and households, such as data on athlete transfer fees, debt cancellation transactions, disproportionately high insurance payments and the purchase or sale of natural resources and CO₂ emission certificates. For data plausibility checks on the latter transactions, we also reconcile our data with the database of Environment Agency Austria.

Capital transfers may also take the form of debt cancellation or forgiveness if creditors agree to the settlement of a debt for less than the amount owed (write-offs or write-downs). The essential characteristic of debt forgiveness or cancellation is that it constitutes an irreversible transfer from creditors to debtors. Such incidents are also covered by the OeNB's relevant reporting regulation for BoP statistics (ZABIL 1/2013).

1.4. Financial account (including investment income)

We compile two types of statistics on the assets and liabilities that arise from financial transactions between residents and nonresidents: flow-of-funds statistics that summarize transactions during a specific time period (the balance of payments) and statistics that show the value of the resulting stocks at a specific point in time (the international investment position). In both instances, we use the following breakdown of functional categories:

- Direct investment
- Portfolio investment
- Other investment
- Financial derivatives
- Reserve assets

This manual addresses each of these functional categories below. The outlined compilation steps also refer to the production of statistical information on the investment income associated with each of these categories.

1.4.1. Direct investment

Direct investment (FDI) refers to cross-border financial flows from an entity resident in a given economy (direct investor) to a company resident in another economy (direct investment enterprise) with a view to establishing a lasting relationship. A lasting relationship implies that direct investors seek to establish a long-term business interest that gives them a substantial say in the management of the enterprise in question. Direct investment includes both the initial transaction between the two parties that established the direct investment relationship as well as any subsequent transactions between the direct investor and the direct investment enterprise and between affiliated companies with or without a separate legal personality.

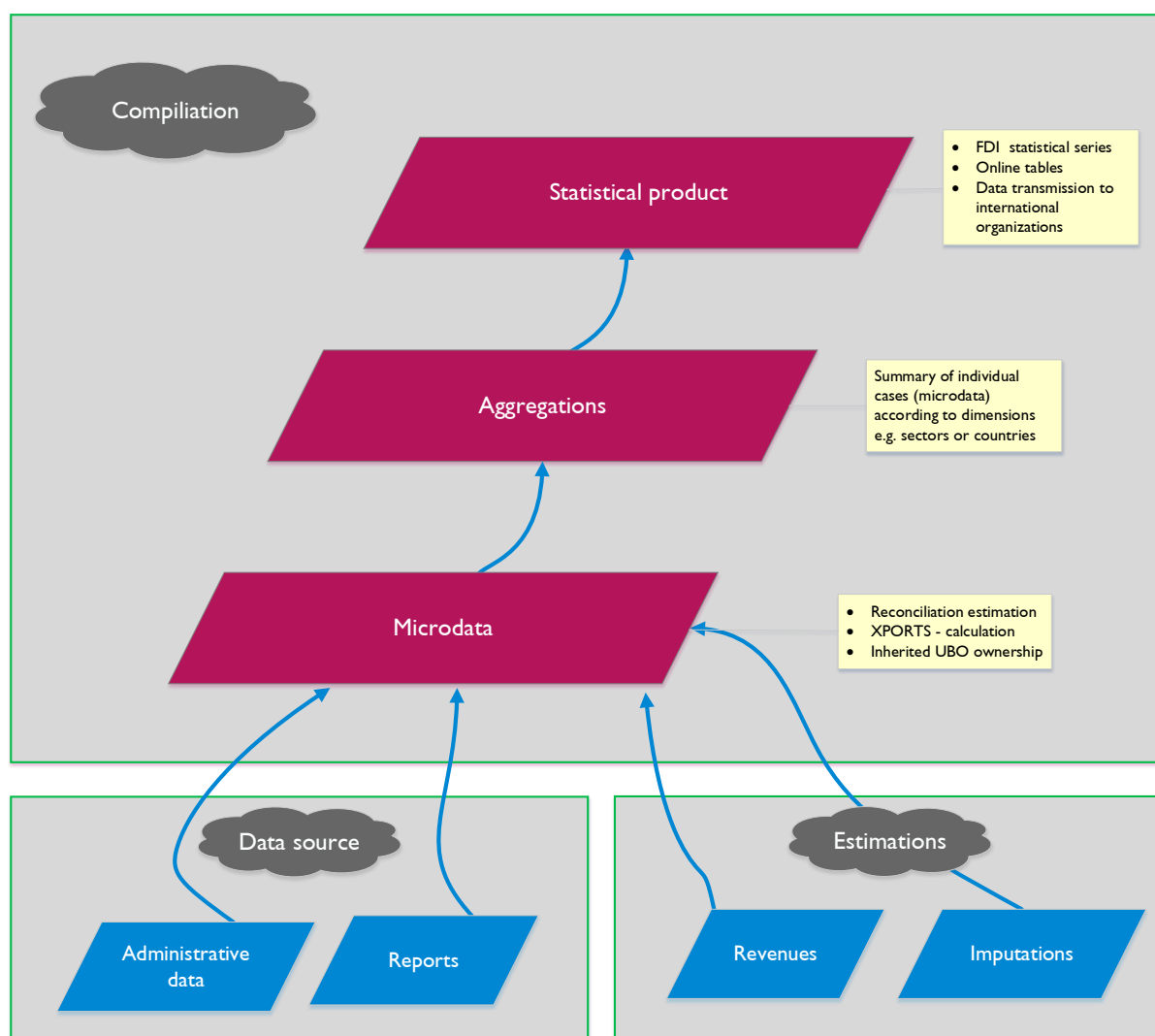
Traditionally, these transactions are broken down into outward and inward flows. Outward FDI refers to a domestic investor's activities abroad. Inward FDI refers to activities of foreign investors in domestic enterprises. Usually, financial assets flow from direct investors to direct investment enterprises in the form of equity subsidies or intra-company loans. Therefore, outward FDI refers primarily to claims held by resident investors on their enterprises abroad, while inward FDI mainly translates into liabilities of resident corporations vis-à-vis their foreign investors.

However, there are cases when funds are channeled in the opposite direction: instances where group loans are extended by the subsidiary to the investor or parent company. Such reverse investment reduces the overall amount of outward or inward FDI. Direct investment is therefore expressed as a net figure: In the case of outward FDI, the net figure represents claims minus liabilities, while inward FDI is calculated by subtracting claims from liabilities.

FDI is presented somewhat differently in related statistics such as the balance of payments, international investment position or the flow-of-funds accounts. There, FDI is shown in line with the asset/liability principle. This means that FDI is broken down into the main categories "claims" and "liabilities" regardless of its direction (outward or inward). Furthermore, real estate and special purpose entities (SPEs) are included in direct investment as well.

1.4.1.1. Subsystem overview

Figure 5: Overview of the FDI subsystem



1.4.1.2. Data sources

1.4.1.2.a. Annual surveys

Annual business surveys are the most important data source for FDI data for the balance of payments, separate FDI statistics and foreign affiliates statistics.³⁵ When asked to do so, reporting agents must provide data on inward FDI and affiliated joint-stock-companies in Austria (reporting template D6) and data on outward FDI and affiliated companies abroad (reporting template D7). The following information is required: master data, classification items (e.g. economic activity according to NACE), stock and flow data for the reporting entity/stakeholder and direct investment enterprises as well as to a lesser extent data on indirectly controlled companies.

Reporting entities are selected as follows:

³⁵ In some cases, reporting entities also include natural persons and private foundations.

The group of respondents for surveys on **inward FDI and nonresidents' affiliated companies in Austria** is revised before each survey round based on the previous survey round. Reporting agents who filed a nil report in the previous survey are removed from the list. Moreover, the reporting population changes in line with the following:

→ *Reported transactions*

In addition to the annual FDI surveys, there are also (ad hoc) monthly reports for interim FDI transactions. This includes the purchase or sale of domestic business units as well as capital increases and capital decreases (when business units are dissolved) and profit distributions.

The acquisition of new business interests and capital increases for existing business interests will lead to the preselection of reporting units for the annual surveys. The treatment of sales and capital decreases depends on whether we are dealing with a complete disinvestment or whether the direct investment relationship continues to exist. If the direct investment relationship is dissolved, the domestic reporting unit will be removed from the group of respondents for the annual surveys.

→ *Use of registry data*

To identify previously unknown but relevant direct investment relationships, we use information from the Austrian company register. We preselect for reporting any entities in which nonresident stakeholders have a business interest of 10% or more.

→ *Use of annual financial statement data to enrich data on preselected entities*

We use our internal database of corporate financial statement data and the structural business statistics provided by Statistics Austria to enhance our data on preselected entities with the following variables:

- Number of employees
- Turnover
- Nominal capital
- Equity capital
- Total assets

Based on this information, we sort the list of entities in descending order of relevance for each variable (ignoring items with data missings).

Based on these rankings, we identify the actual list of respondents for the survey year.

→ *Manual selection*

In addition to the two methods described above, we also select individual entities manually on a case-by-case basis. Cases in point are stock corporations which we may select following media reports.

In the case of **outward FDI or affiliated companies abroad**, we proceed as in the case of inward investment, but we use additional criteria for “manual selection”:

→ *Reported transactions*

The acquisition of new business interests and capital increases for existing business interests beyond the benchmarks will lead to the preselection of reporting units for the next annual survey. The treatment of sales and capital decreases depends on whether we are dealing with a complete disinvestment or whether the direct investment relationship continues to exist. If the direct investment relationship is dissolved, the domestic reporting unit will be removed from the group of respondents for the annual surveys.

→ *Use of registry data*

The scope for using registry data is highly limited for direct investment undertakings or foreign affiliates.

→ *Manual selection*

To achieve adequate coverage, we make use of

- media reviews
- APA full text search
- securities information (based on portfolio investment data reported by banks)

to identify transactions that may need to be reported, i.e. to identify potential new reporting agents.

1.4.1.2.b. *Annual financial statements*

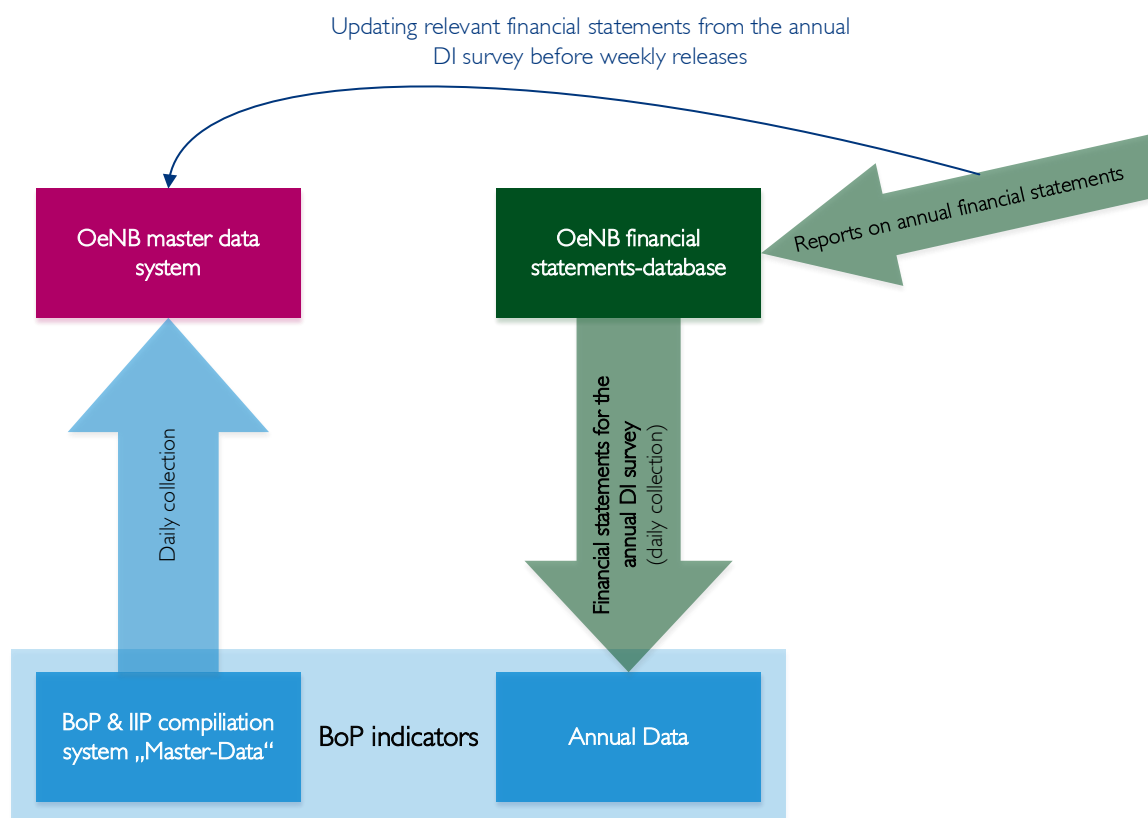
While we use a dedicated reporting template (template D7) to compile foreign financial statement data, existing data serve to meet most of our requirements for domestic financial statement data. We require companies to report only financial statement data that have not been reported previously or that have not been reported in full.³⁶

We use an FDI occurrence code in the master data system to flag relevant financial statements for inclusion in our annual FDI statistics. The BoP compilation system has been programmed to send this code information on a daily basis to the master data system. The dataset transferred contains the relevant corporate identifiers ("ident numbers") and the balance sheet date for which the financial statement information is required.

The balance sheet date is stored in the information field of the occurrence code and subject to regular updates. This date triggers the retrieval of balance sheet data from the financial statements database.

This means that the variables required for calculating the balance sheet dates need to be adjusted selectively for all idents. To give an example: Once financial statement information has been retrieved for a given ident for a given balance sheet date [parameter 299], we set this information to [Parameter 299] + 1. Example: As the variable was set to data retrieval after September 2011, the balance sheet data for 2011 were retrieved in October. On the following day, the balance sheet date contained in the FDI occurrence code was moved forward one year (to December 31, 2012).

³⁶ In many instances, we have only balance sheet data but no profit or loss data.

Figure 6: Integration of annual financial statement data into the balance of payments

1.4.1.2.c. Monthly report of transactions

The annual reports described above serve to populate our database with data on FDI stocks. However, to be able to produce timely flow-of-fund statistics we also require monthly data. For this purpose, we have created template D1 for direct investment transaction reports. The data to be reported include equity capital transactions such as the acquisition or disposal of equity, capital increases and disinvestment transactions as well as profit distributions received and paid. As these business cases tend to an irregular phenomenon, reporting is only required on an ad hoc basis. We know from past experience that such reports often tend to be overlooked. Therefore, we make sure to monitor and nudge reporting by

- Screening the media for large transactions (APA, other media)
- Cross-checking stocks with flows (to identify missing data on transactions based on the stocks evident from annual financial statements)
- Regularly issuing reminders to companies which have not submitted reports

1.4.1.2.d. Monthly report of stocks

The monthly stock reports serve to document cross-border intragroup lending which is to be classified as direct investment – with the exception of settlement accounts (which are part of “other investment” in the functional classification system).

Intragroup lending includes:

- Loans
- Deposits
- Trade credit
- Settlement accounts, clearing accounts, cash pooling accounts (classified as “other investment”)
- Past due receivables and payables
- Repos
- Financial leasing
- Other receivables and payables

The reporting pattern is as follows:

- Reporting entity x counterparty x currency (templates S1, S2, SA, SB)
- Reporting entity x country x currency (templates S3, S4, SC, SD)

See also section 1.4.4.2 Data sources for other investment.

Reporting agents are required to report end-of-month euro equivalents. At our end, we calculate transactions and non-flow changes in stocks in the compilation process (see also section on 1.4.1.4 Compiling direct investment data).

1.4.1.2.e. MFI intragroup lending

Since banks have many different reporting requirements, we have created a single “smart cube” reporting interface. In other words, we receive multidimensional data that allow us to retrieve the required information on intragroup lending to nonfinancial corporations.

Loans will be classified as direct investment loans

1. if the reporting entity is classified in ESA sector 122
 2. if the foreign counterparty is not classified in ESA sector 122
 3. if the foreign counterparty is included in the reporting entity's scope of consolidation (as defined in the Capital Adequacy Regulation – CRR)³⁷
- OR
- if the reporting entity and the counterparty are affiliated in some other way.

If these conditions are fulfilled, the loans in question will not be classified under *other investment* but under direct investment.

1.4.1.2.f. Report of interest income

Residents are required to report interest receivable (template S5) and interest payable (S6) at monthly intervals (no reporting thresholds apply).

The reporting pattern is as follows: Reporting entity x currency x country.

³⁷ Regulation (EU) No. 575/2013.

1.4.1.2.g. *Intragroup corporate bonds*

Some multinational groups use securities as an instrument for intragroup financing. No specific reporting requirements apply; securities issued are to be reported like any other securities to be reported under portfolio investment in the survey on securities held by domestic custodians (see section 1.4.2.2.d). Manual editing allows us to identify and flag instances of intragroup financing (master data field: intragroup financing code). If this field has been activated, the securities at hand will be treated as direct investment in the procedures that follow.

1.4.1.2.h. *Administrative data sources*

Under the Foreign Exchange Act, the OeNB is required to use existing data sources wherever possible. Therefore, we update our databases at regular intervals with information on resident reporting entities. We retrieve master data from the company register on a daily basis and classification data from Statistics Austria on a monthly basis. Furthermore, we take over turnover and employment data (as well as some data fields from the structural business statistics) from Statistics Austria. These data serve as input for the production of special FDI statistics.

1.4.1.3. *Estimates*

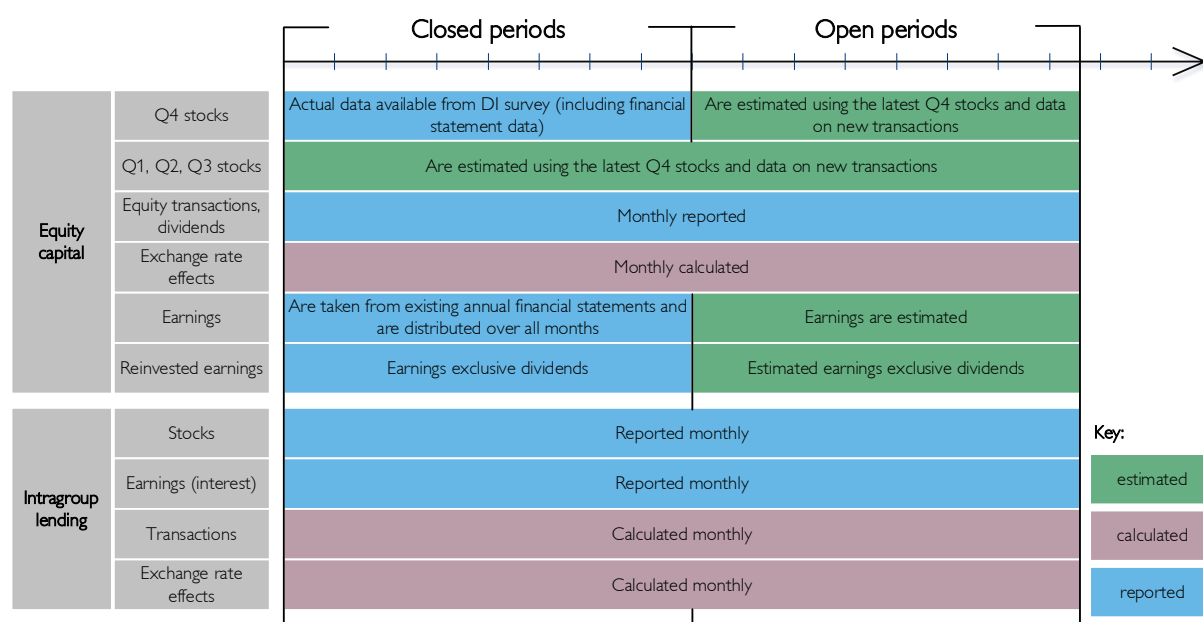
1.4.1.3.a. *Overview*

In many instances, actual outcomes will be reported with significant time lags. As a case in point, many year-end stocks become available only about one-and-a-half years after the reporting date. This is why we need to estimate various components in **open accounting periods**.³⁸ The overview below explains where the data on direct investment come from in open and closed periods. In **closed accounting periods**,³⁹ the data are as reported or calculated; in open periods, the data are estimates:

³⁸ Periods for which the final outcomes are yet to be established; i.e. periods for which the data are going to be revised at least once.

³⁹ Periods for which no further data revisions are forthcoming. Usually, periods are closed once the financial statements data obtained during the direct investment survey have been aggregated.

Figure 7: Direct investment estimates in closed and open periods



1.4.1.3.b. Estimating interim stocks

Reported equity data become available only once a year, following the processing of firms' annual financial statements. When we receive new financial statements data, we log the weighted pro rata share of equity capital as direct investment. As we need to disclose IIP data at quarterly intervals, we copy the latest year-end stocks to all following periods and use other incoming information to adjust these stocks accordingly.

Specifically, we map every incident with an impact on stocks to the components used in the functional breakdown of the financial account ("reconciliation").

Table 4: Reconciliation

	IS (initial stocks)
+/-	(+ C - D = N) (transactions)
+/-	P (asset price changes)
+/-	X (exchange rate movements)
+/-	O (reclassifications)
+/-	R (residual)
=	RS (resulting stocks)

Definitions:

IS	Initial stocks (= balances carried over from the previous period) of financial assets and liabilities
C	Credit – current account credit (= income gained through exports) or financial account credit (= assets or liabilities accumulated through exports)
D	Debit – current account debit (= capital spent on imports) or financial account debit (= reduction of assets/liabilities)

N	Net – net result of credit minus debit (e.g. capital increases, equity sales, dividend payments or estimated reinvested earnings)
P	Asset price changes – other changes in assets (e.g. changes that result from fluctuations in securities prices)
X	Exchange rate movements – other changes in assets resulting from currency fluctuations (e.g. Swiss franc appreciates)
O	Reclassifications (other changes) – other changes in assets that result from moving items to a different statistical category (e.g. by changing the functional classification, raising direct investment to a share of more than 10% of the voting capital, thus turning other investment/portfolio investment into direct investment).
R	Residual – balancing item, e.g. resulting from the recognition of previously unknown statistical units
RS	Resulting stocks. See initial stocks.

Examples of changes in stocks:

- Capital increases (C,D,N)
- Equity sales (C,D,N)
- CHF appreciates (X)
- Dividend payments (C,D,N)
- Estimated reinvested earnings (C,D,N)
- Stock price setbacks (P)
- Capital increases drive up the share of the voting capital beyond 10% (other or portfolio investment turns into direct investment) (O)

1.4.1.3.c. *Estimated return on equity*

As annual financial statements data come with a time lag of 1.5 years, we need to include estimates of the return on equity (RoE) until the relevant data become available. These estimates affect the following direct investment components:

- Investment income (current account; flows)
- Reinvested earnings (financial account; flows and stocks)

RoE estimates are made separately for each host country (outward FDI) or for each industry (inward FDI).

Example of RoE estimate for direct investments made by an Austrian company in Germany:

According to our microdata database, a given Austrian investor has invested EUR 100 million of equity in a German limited liability company. The latest reporting date was December 31, 2014. We estimate direct investment undertakings in Germany to return 6% on equity. Based on these figures, we arrive at an estimated RoE of EUR 6 million for 2015. Divided by 12 months, we get an estimated RoE of EUR 0.5 million for January 2015 ($\text{EUR } 100 \text{ million} * 0.06 / 12 = \text{EUR } 0.5 \text{ million}$).

Country-by-country estimates are not meaningful for inward FDI, as two Austrian companies working in the same industry are unlikely to have the different prospects of return only because one is owned by

Polish shareholders and the other one by French shareholders. Therefore, we use an industry breakdown for inward FDI data (on the aggregation level of NACE divisions).⁴⁰

1.4.1.3.d. *Direct investments below the reporting threshold*

We use the cutting-off-the-tail principle for compiling data on direct investment, i.e., the OeNB's annual FDI surveys cover only selected cross-border direct investment undertakings. We use the following reporting thresholds:

- D6 – inward FDI
 - No reporting threshold apart from a 10% share of nominal capital. Our selection is ranking-based (see also the section on Annual surveys).
- D7 – outward FDI (individual reporting thresholds mailed to reporting agents)
 - In line with international guidelines (OECD benchmark definition 4), investments qualify as direct investments when the resulting share in a foreign company's nominal capital is at least 10%. Moreover, data need to be reported only if
 - the Austrian company has invested at least EUR 100,000 in the nominal capital of the respective foreign company, or if
 - the foreign company at hand has total assets of at least EUR 10 million.

As a rule, we aim to create a closed system stock and flow reports. In practical terms, this means that reporting entities are required to use template D1 for transactions and templates D6/D7 for stocks.

The application of the cutting-off-the-tail system implies that some 10% of the total direct investment capital goes unreported.

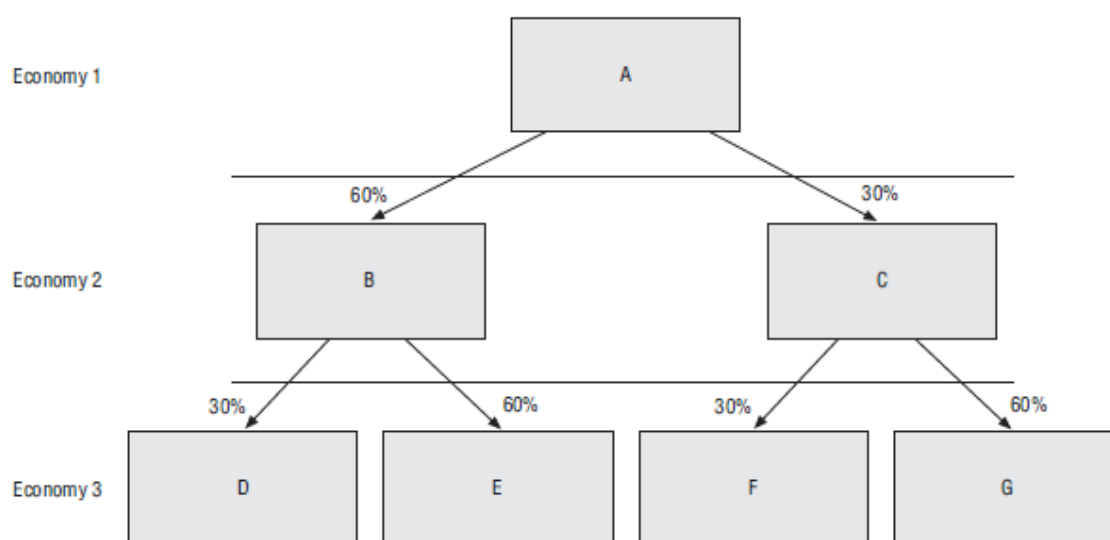
1.4.1.4. *Compilation*

1.4.1.4.a. *Basic methodology*

The OECD *Benchmark Definition of Foreign Direct Investment* (BMD4) proposes a variety of classification systems to identify direct investment units.⁴¹ The OeNB opted for the **direct influence/indirect control (DIIC) method** when implementing BMD4. This means that we consider direct investment relationships to arise not only when investors own equity that entitle them to 10% or more of the voting power, but also through indirect ownership through a chain of direct investment relationships, in cases where direct investment enterprises themselves control other businesses, i.e. own 50% or more of the voting power in those businesses. To illustrate this method, Figure A.4.8. (Figure 5) of BMD4 (BMD4, p. 169) contains three units (D, F and G) that do *not* qualify as direct investment relationships under the DIIC method.

⁴⁰http://www.statistik.at/web_de/klassifikationen/oenace_2008/oenace_2008_implementierung/index.html

⁴¹ BMD4 p. 164 (ANNEX 4, Framework for Direct Investment Relationships)

Figure 8: Direct Influence/Indirect Control Method (DIIC) – Figure A.4.8 (source: BMD4)

Given efforts to harmonize BMD4 and BPM6 provisions, we use both the traditional **directional principle** and the **assets/liability principle** to record FDI data.⁴² At the first level of aggregation, we therefore compile direct investment data in a way that allows us to analyze the data using **both principles**:

Example:

- Direct investment claims on fellow enterprises, outward FDI
- Direct investment claims on fellow enterprises, inward FDI
- Direct investment liabilities to fellow enterprises, outward FDI
- Direct investment liabilities to fellow enterprises, inward FDI

Using these four positions, we can calculate either measures in line with the directional principle:

- Outward FDI = a minus c
- Inward FDI = d minus b

or measures in line with the asset/liability principle:

- Claims = a plus b
- Liabilities = c plus d

Regarding valuation, we apply the principle of **market valuation** as a rule. That is to say, we use current prices for the stocks and transactions of listed companies, or we use transaction prices to arrive at market values for nonlisted companies. This is why reporting agents are required to list the amounts actually paid or received when purchasing or selling direct investment shares in the direct investment transaction reports. Alternatively, we use the **own-funds-at-book-value method** to arrive at stock measures. For this purpose, we use the equity shares disclosed in the affiliated companies' balance sheets to establish the value of direct investment holdings.

⁴² BMD4 p. 56 (3.4.5. The asset/liability principle and the directional principle)

1.4.1.4.b. Equity capital

Being one of the key financial instruments in the field of direct investment, equity capital holdings play a key role in compiling FDI data. Since most direct investment enterprises are unlisted, i.e. since market values are not readily available, we use the equity figures published in annual financial statements as a basis for valuation.

Reverse investment of equity capital (<10%) and **stakes in fellow enterprises** (<10%) are not classified as direct investment but as other investment.⁴³

Support provided for second-tier subsidiaries⁴⁴ is accounted for step by step in line with the level of hierarchy. The reporting system does not allow reporting agents to skip the corresponding data.

Data on **negative equity capital** typically need to be checked for plausibility before the data are transmitted to international organizations, and often give rise to discussions in working groups. As a rule, assets, including equity investments, ought to be positive. However, negative equity capital does occur in corporate balance sheets (e.g. in the case of highly leveraged companies who are expected to stay in business). In such instances, we use negative direct investment aggregates on a pro rata basis.

We have implemented routines for conducting plausibility checks on a case-by-case basis. Such checks have enabled us in the past to identify and correct reporting errors.

Branches will typically not publish full-fledged annual financial statements. Therefore, we use working capital figures or settlement accounts, depending on availability, to establish the amount of equity capital. See also section 1.4.1.5.k.

Banks report **subordinated capital and liability capital** as direct investment capital in their financial statements without any prejudice for their share of voting capital. In such instances, cross-checks of stocks against flows serve as important plausibility checks that may help identify errors. The differences resulting from such capital measures are included as residuals in the reconciliation line (internally referred to as "XPORTS calculation") and commented accordingly.

1.4.1.4.c. Intragroup lending

Intra-group lending may relate to project financing, cash pooling or to ordinary trading transactions (credit purchase/credit sale). Should the transaction value exceed the given benchmarks, reporting agents are required to report end-of-month stocks per counterparty. All other fields of the reconciliation line are computed or updated manually on an ad hoc basis.

There is an exception for bonds subscribed only by other group entities. Those measures are to be reported via the securities reporting system (template P1) and are classified ex post on an ad hoc basis as direct investment (flagged as intragroup financing).

⁴³ As these measures are very small in sum but would make the direct investment compilation system overly complex, we opted not to make any differentiation between direct investment and other investment when implementing the BPM6 rules.

⁴⁴ Capital increases made by a given company to indirect investment affiliates, e.g. from "grandparent" companies to "grandchild" companies).

1.4.1.4.d. *Investment income from equity*

Investment income from equity is calculated on the basis of annual financial statements, if available, for each direct investment enterprise:

$$(\text{Result before taxes} - \text{extraordinary results} - \text{taxes}) * \text{share of direct investment enterprise}$$

For reporting periods for which no financial statements have become available, we use estimates. In the case of outward FDI, we estimate the return on equity per country, in the case of inward FDI, we estimate the return on equity per domestic industry (NACE 2-digits).

1.4.1.4.e. *Investment income from loans*

Investment income from loans is derived only from reports on investment income (section 1.4.1.2.f). Since the survey does not expressly distinguish between direct investment income and other investment income, we use an algorithm to establish the relationship. For details see section 1.4.1.5.a on the definition of other investment.

The respective figures are to be reported, and are aggregated, at monthly intervals. No reporting thresholds apply. For direct investment purposes, many of the data characteristics to be reported are irrelevant (such as information on whether a loan is an investment loan or a trade credit) because the OeNB is required to transmit, or has opted to release, only aggregate information for “other direct investment capital” (and the resulting income).

In the case of investment income from loans we do not produce any estimates. Relevant incoming information may give rise to data revisions.

1.4.1.4.f. *Reinvested earnings*

There is no reporting regime for reinvested earnings; we calculate the respective figures.

Example for year X:

+	Pro rata profit for the year derived from a direct investment enterprise in year X
–	Profit actually distributed in year X (even if earned in balance sheet year X–1)
=	Earnings reinvested in year X

If annual financial statements data are not yet available, we will use estimates (see section 1.4.1.3.c on estimated income).

Reinvested earnings as calculated may also be negative if the profit distributions made exceed the profit for a given year, or if there is an annual loss.

1.4.1.4.g. *Exchange rate effects (X values)*

Assets denominated in foreign currencies are invariably subject to exchange rate effects. In the direct investment context, exchange rate effects relate above all to equity invested in foreign companies and to intragroup loans denominated in foreign currencies. In the case of equity investments, we use the main national currencies as the calculation basis.

Stocks are valued currency by currency on the basis of **end-of-period stocks**. If the euro equivalents have increased compared with the stocks calculated for the previous period, the resulting X value calculated by the system is positive. Vice versa, declining exchange rates will produce negative X values.

For **transactions**, we use the **monthly mean exchange rates** for valuation.

In the case of **SPEs**, we enter the exchange rate effects that occurred on the assets side (mostly CHF) manually on the liabilities side at quarterly intervals. While Austrian stakes are denominated in euro, we expect direct investment capital invested through Austria to increase hidden reserves. Moreover, we have opted to use the same values for both inward and outward FDI. See also section 1.4.1.5.f on special purpose entities.

1.4.1.4.h. Asset price changes (P values)

We use P values to manually adjust price changes observed for **listed direct investment enterprises** at quarterly intervals (see also information on exports reconciliation in the [Methodological glossary](#)).

In the case of unlisted direct investment enterprises, which are much more common, we use the equity figures published in the annual financial statements as direct investment stocks. Should investment structures have changed, the equity transactions reported may contain market price information that deviates substantially from the available book values. The following cases are particularly common and therefore outlined in greater detail.

Complete disinvestment:

A reporting agent reports to have sold an outward FDI stake accounted for with a book value of 100 in the period of sale. The sales price was 150. Thus, we enter a P value of 50 for the same period, to adequately reflect the revaluation. At the end of the period, the FDI stake has a value of 0 (because 150 have been disinvested).

Share increases:

A foreign investor increases his or her stake in an Austrian direct investment enterprise from 50% to 100%. 50% of the company used to be domestically owned. Before the share increase, the FDI stake was valued at a rate of 1,000. The purchase price for the other 50% is 2,000. Hence, the carrying value of the FDI stake is 3,000. The annual financial statements drawn up at some point after the transaction shows only an equity capital of 2,000, because the book value was below the sales price. To align these two sums, we need to enter a P value of –1,000 at year-end.

1.4.1.4.i. Reclassifications in other changes in volume (O values)

Typical reclassification cases include:

- The share of investors has risen above or fallen below the 10% threshold for FDI.
- The direction of a direct investment relationship changes because of a change of the controlling entity (in case of intragroup lending to fellow enterprises, the direction of the direct investment relationship depends on whether the group is domestically controlled or not).
- The legal form of a company has changed (e.g. from a limited liability company to a stock corporation).
- The main economic activity has changed (NACE code)

In all these cases, we need to enter positive and negative other changes in volume (O values) of equal size for the period in question. Negative O values reflect the decline in the “old” category, positive O values reflect additions to the “new” category.

A special case are super dividends, as described in section 0 1.4.1.5.g. Super dividends may give rise to unilateral O values.

1.4.1.4.j. *Residuals (R values)*

Residual items reflect mistakes or systematic deficiencies of the external statistics framework.

Typical reasons for R values include:

- Direct investment relationships (stocks) were reported for the first time.
- Transaction balances are below the reporting threshold and therefore lead to wrong carryovers.
- Transaction balances have not been reported and therefore lead to wrong carryovers.
- Atypical hybrid capital financing, such as supplementary capital.

1.4.1.4.k Main aggregates

Table 5: Main FDI aggregates

available
not possible

Groups	Subgroups	Income claims	Income liabilities	Income balance	Capital claims	Capital liabilities	Capital balance
FDI-Total	Total						
Component	Equity						
	Equity without reinvested earnings						
	Reinvested earnings						
	Dividends						
	Other capital						
Inward/Outward	Outward FDI						
	Inward FDI						
Type	Companies						
	SPE						
	Real estate investment						
Financial instruments	Quoted shares						
	Unquoted shares						
	Other equity						
	Other capital						
Direction	Normal						
	Reverse						
Component x Type	Fellow enterprise						
	Equity companies						
	Equity SPE						
	Equity without reinvested earnings companies						
	Equity without reinvested earnings SPE						
	Reinvested earnings companies						
	Reinvested earnings SPE						
	Dividends companies						
	Dividends SPE						
	Other capital companies						
Component x Type x Inward/Outward	Other capital SPE						
	Equity - Companies - Outward FDI						
	Equity - SPEs - Outward FDI						
	Equity - Companies - Inward FDI						
	Equity - SPE - Inward FDI						
	Equity without reinvested earnings - Companies - Inward FDI						
	Equity without reinvested earnings - SPE - Inward FDI						
	Equity without reinvested earnings - Companies - Outward FDI						
	Equity without reinvested earnings - SPE - Outward FDI						
	Reinvested earnings - Companies - Inward FDI						
	Reinvested earnings - SPE - Inward FDI						
	Reinvested earnings - Companies - Inward FDI						
	Reinvested earnings - SPE - Inward FDI						
	Dividends - Companies - Outward FDI						
	Dividends - SPE - Outward FDI						
	Dividends - Companies - Inward FDI						
	Dividends - SPE - Inward FDI						
	Other capital - Companies - Outward FDI						
	Other capital - SPE - Outward FDI						
	Other capital - Companies - Inward FDI						
	Other capital - SPE - Inward FDI						
Component x Inward/Outward	Equity - Outward FDI						
	Equity - Inward FDI						
	Equity without reinvested earnings - Outward FDI						
	Equity without reinvested earnings - Inward FDI						
	Reinvested earnings - Outward FDI						
	Reinvested earnings - Inward FDI						
	Dividends - Outward FDI						
	Dividends - Inward FDI						
	Other capital - Outward FDI						
	Other capital - Inward FDI						
Type x Inward/Outward	Companies - Outward FDI						
	SPE - Inward FDI						
	Companies - Inward FDI						
	SPE - Outward FDI						

The overview above indicates which main aggregates are available for analysis.

Definitions/key:

Components	Equity, reinvested earnings, other capital
Inward/outward	Inward FDI, outward FDI
Type	Company, SPE, real estate investment
Direction	Normal, reverse, fellow enterprise

1.4.1.5. Special issues

1.4.1.5.a. Delineation of other investment

Cross-border claims and liabilities with a debt character (deposits and loans) are reported by the respective companies directly as part of their monthly stock reports Monthly report of stocks(see section 1.4.1.2.d). These claims and liabilities may qualify as either direct investment or other investment, depending on the following criteria:

1. Financing instrument = settlement account → other investment
2. Reporting entity AND counterparty = sector 122 OR 1235 OR 124 → other investment
3. The ultimate classification is worked out with relationship data as shown in the decision table below:

Table 6: Differences between direct investment and other investment (reported stocks)

Reporting agent											Resulting functional algorithm	
"valid" type of relationship, based on OBServ interface										Dominance code for reporting agent "3" or "5"		
with counterparty					with other (foreign) units							
direct/outward: digesellbez (reported by creditor)	indirect/outward: inddigesez (reported by creditor)	direct/inward: digesellbez (reported by borrower)	indirect/inward: inddigesez (reported by borrower)	fellow company	direct/outward: digesellbez (reported by creditor)	indirect/outward: inddigesez (reported by creditor)	direct/inward: digesellbez (reported by borrower)	indirect/inward: inddigesez (reported by borrower)	fellow company		function (claims; reported by creditor)	function (liabilities; reported by borrower)
1	0	0	0	0	–	–	–	–	–	–	DDA	DDA
0	0	1	0	0	–	–	–	–	–	–	DDP	DDP
0	1	0	0	0	–	–	–	–	–	–	DIA	DIA
0	0	0	1	0	–	–	–	–	–	–	DIP	DIP
1	0	1	0	0	–	–	–	–	–	–	DDA	DDP
0	1	0	1	0	–	–	–	–	–	–	DIA	DIP
1	0	0	1	0	–	–	–	–	–	–	DDA	DIP
0	1	1	0	0	–	–	–	–	–	–	DIA	DDP
0	0	0	0	1	1n	1n	1n	1n	–	1	DXP	DXP
0	0	0	0	1	1n	1n	1n	1n	–	0	DXA	DXA
0	0	0	0	1	0	0	0	0	–	1	DSP	DSP
0	0	0	0	1	0	0	0	0	–	0	DSA	DSA
1n	1n	1n	1n	1n	–	–	–	–	–	–	Dirty flag "3"	
–	–	–	–	–	–	–	–	–	–	–	Dirty flag "4"	

DDA (borrower) or DDP (creditor)
= reverse investment

Due consideration to foreign control (fellow enterprise) may lead to shifts among inward and outward FDI

Actual change was for ExDP; used to be other investment

Result is ambiguous

Relationship is not valid

–	irrelevant
1	single occurrence
0	not applicable
1n	multiple occurrence

DDA, DIA, DSA, DXA → Outward FDI
 DDP, DIP, DSP, DXP → Inward FDI
 SI → Other investment

We also use an algorithm to allocate the reported interest income to the functional categories “direct investment” and “other investment” (see below):

1. Check reporting agent's ESA sector = 122* = fixed other investment value
2. Check reporting item code = 7961 (reporting template item, check whether interest income or expense vis-à-vis foreign bank) = fixed other investment value
3. Check reporting agent's ESA sector = 122* = accuracy table

Table 7: Differences between direct investment and other investment (reported interest income)

Reporting agent (<> 122*)							Resulting interest algorithm
FDI relationship with other (foreign) units					Reporting UBO		
direct/outward: digesellbez (reported by creditor)	indirect/outward: inddigesez (reported by creditor)	direct/inward: digesellbez (reported by borrower)	indirect/inward: inddigesez (reported by borrower)	fellow company	UBO = AT	UBO <> AT	
0	0	0	0	0	-	-	SI
1n	-	0	0	-	-	-	DDA
0	1n	0	0	-	-	-	DIA
0	0	1n	-	-	-	-	DDP
0	0	0	1n	-	-	-	DIP
1n	-	1n	-	-	x	0	DDA
-	1n	-	1n	-	x	0	DDA
1n	-	-	1n	-	x	0	DDA
-	1n	1n	-	-	x	0	DDA
0	0	0	0	1n	x	0	DSA
1n	-	1n	-	-	0	x	DDP
-	1n	-	1n	-	0	x	DDP
1n	-	-	1n	-	0	x	DDP
-	1n	1n	-	-	0	x	DDP
0	0	0	0	1n	0	x	DSP
-	-	-	-	-			Dirty flag "3"

–	irrelevant
1	single occurrence
0	not applicable
1n	multiple occurrence

Key:

UBO	Country of residence of the ultimate beneficial owner
1n	Applicable at least once
0	Inapplicable
x	Applicable
SI	Interest algorithm yields allocation to “other investment”
DIA and DDA	Interest algorithm yields allocation to “outward FDI”
DIP and DDP	Interest algorithm yields allocation to “inward FDI”

Moreover, we classify intragroup **equity investments of less than 10% of the voting capital** (as indicated in the monthly stock reports) within one and the same group as direct investment.

1.4.1.5.b. *Differences between direct investment and portfolio investment*

Our data on domestic (ISIN-identified) securities held by nonresident investors below the 10% threshold for FDI are derived from two sources: first, from the OeNB's direct investment surveys (template D6 for stocks, D1 for transactions) and second, from the securities reports of resident custodians, i.e. from portfolio investment by nonresidents derived on this basis (residual approach). In order to avoid double counting, we use incoming information from our FDI surveys to adjust the data on foreign portfolio investment.

Likewise, we use incoming information from our FDI surveys to also adjust the data on portfolio investment made by residents abroad.

1.4.1.5.c. *Inherited UBO ownership*

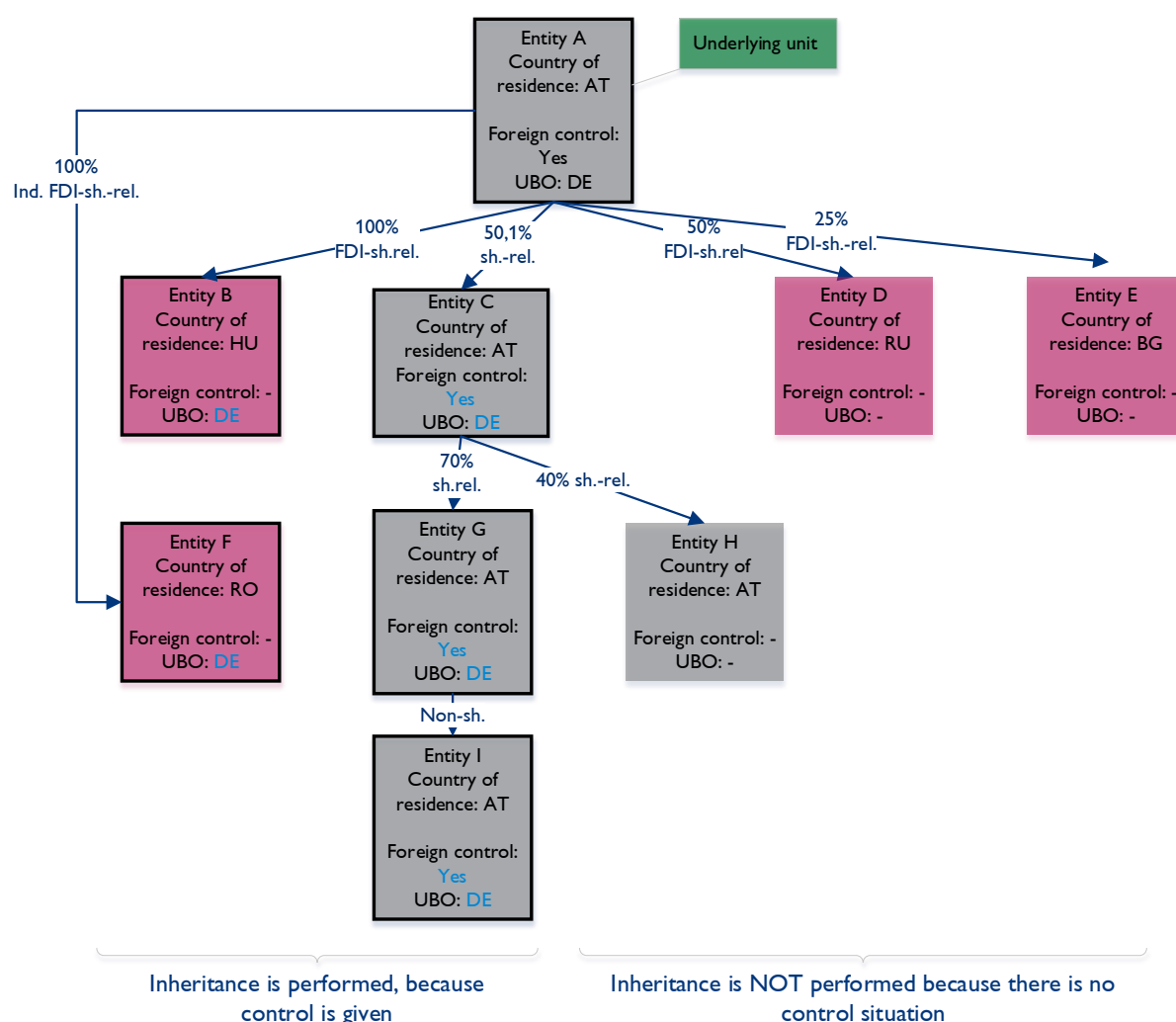
The OeNB's annual FDI survey serves to generate data on the extent of foreign control of Austrian companies and on the country of the ultimate owner. Austrian subsidiaries and second-tier subsidiaries of Austrian companies that are controlled by foreign owners must also be flagged as foreign-controlled. Based on the annual FDI survey, all domestic entities owned by a given group thus "inherit" the two data fields "controlling country" and "dominance code" (foreign-controlled, domestically controlled, SPE) during the annual data cycle.

We use the concept of **ultimate beneficial ownership** (UBO) (i.e. we classify inward direct investment enterprises not under the country of the immediate owner but under the country in which a given group is headquartered) to arrive at the inward FDI data that the OeNB publishes. In addition, we also use the concept of ultimate beneficial ownership as the basis of the OeNB's statistics on foreign affiliates.

In this respect, the following types of relationship are taken into account:

- Stakeholder relationships in the context of limited liability companies: shares > 50%
- Stakeholder relationships in the context of stock corporations: sole shareholder
- Liability relationships in the context of limited partnerships and general partnerships: stakeholders have unlimited liability
- Direct investment relationships: shares > 50%
- Indirect direct investment relationships (controlling interests): No thresholds
- Group affiliation as reported
- Multiple minority ownership cases (several minority interests sum to more than 50%)

Figure 9: Example of inherited UBO ownership (Austria and Germany)



Key:

Gray	Austrian entity (country of residence = AT)
Pink	Foreign entity (country of residence <> AT)
Underlying unit	Entity whose UBO is established in the survey
UBO	Country of residence of the ultimate beneficial owner
DI-Ges.-Bez	Direct investment relationship
Ind. DI-Ges.-Bez	Indirect direct investment relationship (controlling interests)
Ges.-Bez.	Stakeholder relationship

1.4.1.5.d. Joint ventures

In the case of joint ventures with equal direct investment shares held by each investor, the following hierarchy for identifying the country of the controlling investor applies:

1. Several investors are nationals of a given country, creating a “national” majority for this country → controlling investor country = country of the majority investors
2. One investor is an Austrian citizen → controlling investor country = AT

3. One investor committed himself/herself for a longer period than all other investors → controlling investor country = country of the investor with the longest commitment
4. None of the above applies → random decision (to be retained)

1.4.1.5.e. Round-tripping

Round tripping involves funds from an entity in one economy being invested in an entity resident in a second economy, that are then invested in another entity in the first economy. A case in point would be an Austrian investor who holds 100% of an Austrian manufacturing company through his or her Swiss holding company.

In other words, round tripping results in Austria being also the ultimate host economy in the geographical breakdown of inward FDI as adjusted for parent company location.

1.4.1.5.f. Special purpose entities

The BMD4 lists a number of criteria for identifying special purpose entities (SPEs) which leave some room for interpretation.⁴⁵ SPEs need to be identified as such also in the flow-of-funds accounts, to facilitate calculation of the assets of holding companies.⁴⁶

Criteria guiding decision-making:

The following criteria are relevant for the OeNB:

1. Does the company do business in Austria?
2. Is the company under foreign control?
3. How large is the company?
4. Does the company channel funds through Austria?

Ad 1: We use the combined turnover and employment figures of all Austrian units affiliated with multinational corporations as a criterion for establishing whether a given group is doing business in Austria. Specifically, we use the following rule of thumb: If a company does not have any, or only some, employees based in Austria, the company must be flagged as an SPE.

Ad 2: A company must be under foreign control to qualify as an SPE. So far, all companies flagged as SPEs have been fully owned by their foreign investors. Whether an SPE with domestic minority stakes will qualify as an SPE for our purposes is established on an ad hoc basis.

Ad 3: Given the complexity of the compilation process, we will identify SPEs as such only once they have reached a particular size, namely EUR 500 million or more. SPEs will continue to be identified as such even they temporarily drop below this threshold.

Ad 4: Companies must have claims on and liabilities to foreign entities to qualify as SPEs. Domestic SPEs will typically process profit distributions, capital transactions of intragroup lending or financing based on intragroup bond issues. Tapping the Austrian capital and credit market is no knock-out criterion for identification as an SPE.

⁴⁵ BMD4, p. 102.

⁴⁶ See also the OeNB's financial accounts manual, infographic 2: "Decision tree for calculating holding company assets"

[https://www.oenb.at/dam/jcr:509e5d0d-fbd3-4419-9aea-faca7d90e375/GFR%20-%20Handbuch%20zu%20Definitionen,%20Quellen%20und%20Berechnungsmethoden%20\(2014-12\).pdf](https://www.oenb.at/dam/jcr:509e5d0d-fbd3-4419-9aea-faca7d90e375/GFR%20-%20Handbuch%20zu%20Definitionen,%20Quellen%20und%20Berechnungsmethoden%20(2014-12).pdf)

SPE identification practice:

The identification of SPEs may be reviewed on an ad hoc basis, but all SPE measures will be reviewed once a year, typically during the annual FDI data production cycle. In case we decide to identify a company as an SPE, we will flag all Austrian entities that are part of the group⁴⁷ as SPEs.

In practice, SPEs will be flagged as such in our database of identifiers ("OBServ") by setting the dominance code to "S, foreign-controlled, SPE." SPEs are to be classified under ESA sector 1270A.

Publication strategy:

The main rationale for identifying SPEs as such is to remove outliers (major investment without any business activity in Austria) from the direct investment statistics. Accordingly, the information we provide on direct investment on our website⁴⁸ as well as in our annual FDI series (special issue of the "STATISTIKEN" quarterly)⁴⁹ is adjusted for data on SPEs.

FDI information is a separate statistical product but at the same time a functional category of the balance of payments and the international investment position. In line with the BPM6, claims and liabilities of SPEs will typically qualify as direct investment. The FDI statistics differ from direct investment as an integral part of the balance of payments/international investment position as a result of different presentation methods. We use the directional principle for compiling FDI data but the asset/liability principle for compiling the balance of payments/international investment position.

When reporting data to the IMF in the Coordinated Direct Investment Survey, we include the SPE data in the "regional unallocated" category.

Templates to be used for reporting to the OECD and Eurostat already contain (optional) positions for SPEs, which we use.

1.4.1.5.g. Super dividends

Super dividends are dividend payments that are *not* made out of the current income from operations, or *not* out of the previous year's earnings. Whenever dividends are exceptionally high compared with equity or compared with previous years' dividends, we check the figures manually to establish whether dividends are to be treated as super dividends. Any super dividends that we identify on a case-by-case basis will be treated as a withdrawal of equity rather than a dividend payment.

1.4.1.5.h. Debt cancellation (debt forgiveness)

The outstanding amount of intragroup lending may decrease not only as a result of transactions or exchange rate effects but also through the cancellation of debt, which is a separate reporting item. From a methodological point of view, debt may be cancelled by mutual agreement between debtors and creditors, or without their mutual agreement. For reporting purposes, we do not make such a distinction.

We assume debt to be cancelled (i.e. written off) as default assumption, large cases are evaluated manually if a mutual agreement exists. If the amount of debt cancelled exceeds EUR 10 million or more, we will check with the creditor on a case-by-case basis whether this was a voluntary cancellation. In such cases,

⁴⁷ Following the logic of UBO "inheritance."

⁴⁸ <https://www.oenb.at/en/Statistics/Standardized-Tables/external-sector/foreign-direct-investment.html>

⁴⁹ <https://www.oenb.at/en/Publications/Statistics/Special-Issues.html>

we will treat the debt forgiveness as a capital transfer transaction (debt forgiveness, see BPM6, section 13.22). The offsetting transaction will be treated as capital transfers.

Example:

Company X agrees to cancel some EUR 600 million of debt owed by an AU-based group

The debt forgiveness deal is based on MUTUAL AGREEMENT

Debit entry (FDI claims): EUR 600 million (reduction)

Debit entry (capital transfers): EUR 600 million

1.4.1.5.i. *Type of transaction (M&A, greenfield)*

Users have repeatedly requested a feature that provides for the reporting of different types of transactions. In the case of equity capital transactions, our surveys already distinguish between new and existing equity. However, this distinction does not suffice to neatly distinguish between M&A transactions and greenfield transactions (which often reflect intragroup restructuring activities).

At the time of writing (February 2018), the “type of transaction” breakdown was being discussed in international working groups (TF-FDI, WGIIIS). We expect common standards to be defined for the future.

1.4.1.5.j. *Investment funds*

Investment funds may also act as direct investors. Their investments are recorded like those of any other entities provided they have been allocated a separate ID number in our database of identifiers.

Investment funds do not serve as direct investment targets (direct investment enterprises) (→ portfolio investment).

1.4.1.5.k. *Branches*

Branches include branches established by foreign entities in Austria and branches established by Austrian entities abroad. Branches do not have a legal personality in their own right, but they are treated as separate statistical entities in the BPM6.

Branches do typically not produce separate financial statements, which are the key source for compiling direct investment data. Alternatively, we need to use other intragroup accounts for the assessment of FDI transactions and stocks. Ideally, there will be separate **working capital** accounts for each branch, or separate **settlement accounts**.

1.4.2. *Portfolio investment*

Portfolio investment is defined as cross-border transactions and positions involving securities (other than those defined as direct investment, subject to a 10% threshold, or central bank reserve assets). Portfolio investors above all invest for profit (yield), whereas direct investors above all invest with a view to obtaining equity interests. We compile the corresponding stock and flow data, capturing cross-border purchases and sales of securities (including interest accrued) in the balance of payments and the resulting stocks of foreign securities held by residents and the resulting stocks of domestic securities held by nonresidents in the international investment position.

We distinguish between portfolio investment claims and liabilities in both the BoP and IIP statistics:

- Portfolio investment claims: claims arising from foreign securities bought by domestic investors (outward portfolio investment)
- Portfolio investment liabilities: liabilities arising from domestic securities bought by foreign investors (inward portfolio investment)

Domestic securities are securities (denominated in euro or other currencies) whose issuer is domiciled in Austria. Foreign securities are securities (denominated in euro or other currencies) whose issuer is domiciled abroad. The place of issuance is not relevant for this attribution.

We distinguish between the following types of securities (financing instruments):

- equity securities, broken down by listed/nonlisted stocks and investment fund shares
- debt securities, broken down by their original maturity in short-term debt securities (with a maturity of up to one year) and long-term debt securities (with a maturity of more than one year).

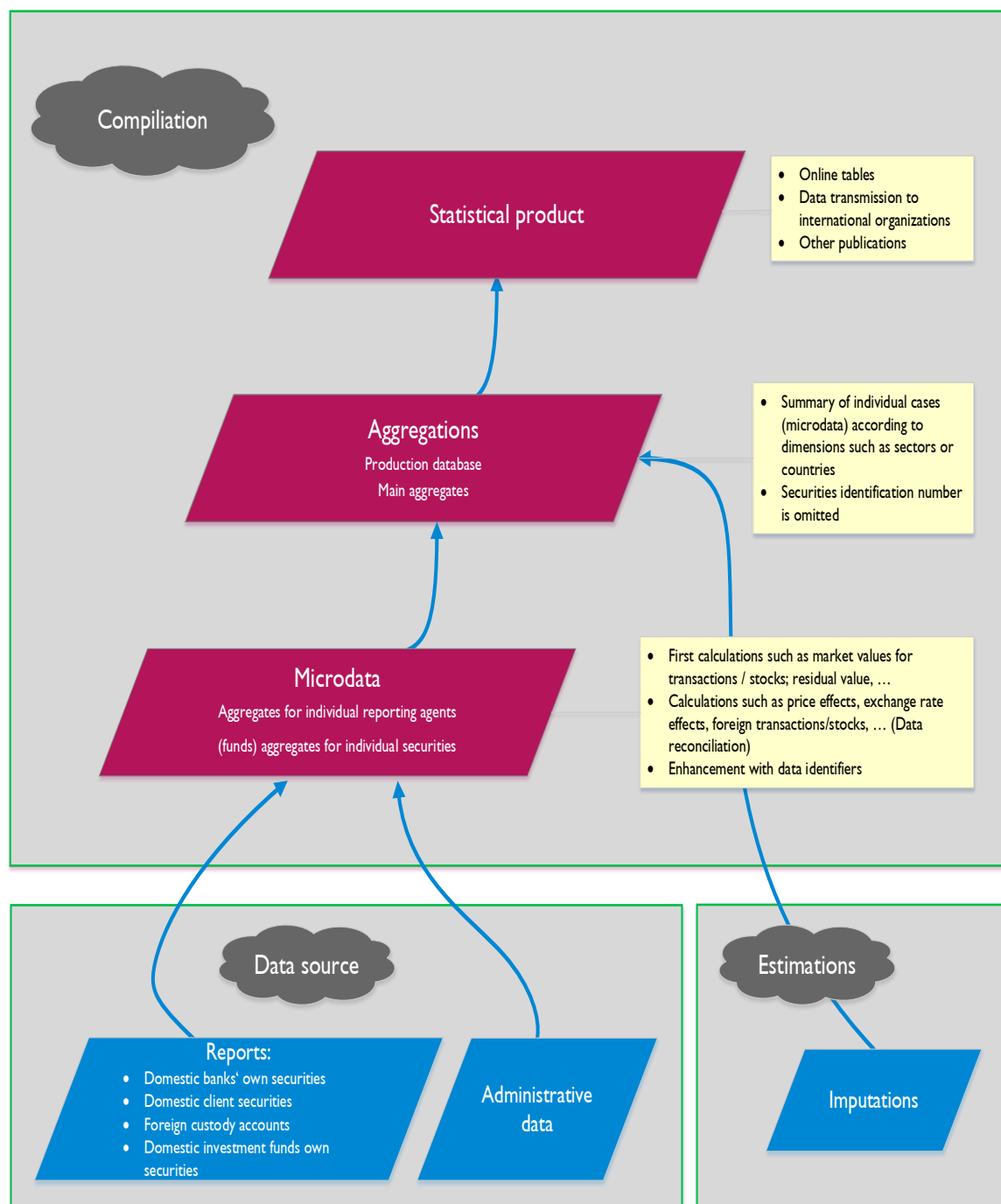
Cross-border income on securities is shown with the same breakdown as the breakdown for stocks. The corresponding category in the current account balance is the financial account.

We break down the data on portfolio investment by individual countries and regions as well as by economic sectors in line with ESA 2010, in order to be able to answer the following questions:

- In which countries have Austrian investors invested in securities? (outward portfolio investment)?
- Which domestic entities belonging to which economic sectors have invested in foreign units (outward portfolio investment), and which domestic units have raised capital abroad (inward portfolio investment)?

1.4.2.1. Subsystem overview

Figure 10: Subsystem overview for portfolio investment



1.4.2.2. Data sources

We have been compiling data for securities statistics **on a security-by-security basis** since 1991, and since 2006 we have been processing the data as outlined in this manual. The security-by-security database enables us to show all domestic and foreign securities held in Austria or by Austrians using the **creditor breakdown in line with ESA 2010 sectors**. For domestic securities, we also calculate the share of outstanding amounts abroad. The data are required for multiple use: the balance of payments and the international investment position, the flow-of-funds accounts, investment funds statistics, securities holdings

statistics (by sector and by reporting banking group) and MFI balance sheet items statistics. We compile only information that is not available from other sources and use **master data** to add attribute information on individual securities and issues (securities category, designation, maturity, issuing sector, issuing country, ...). Thus, all securities will be documented with the same master data for all reporting agents/creditors, and all calculations (on yields and dividends) will be made on the same basis.

1.4.2.2.a. *Scope of security-by-security reporting*

We require information on a security-by-security basis on the following types of **securities**:

- equity securities, such as
 - common and preferred stock
 - rights issues
 - dividend-right certificates and profit-participation certificates
 - investment fund shares and real estate investment fund shares
- debt securities, such as
 - straight bonds
 - zero coupon bonds
 - pool factor bonds
 - floating rate notes
 - perpetual bonds
 - federal treasury bills and notes
 - commercial papers
 - medium-term bonds
 - registered bonds
 - mortgage bonds, covered bank bonds, asset-backed securities
 - negotiable certificates such as certificates of deposit, guarantee certificates, index certificates and turbo certificates
 - securities with embedded financial derivatives (such as reverse convertible bonds, index bonds, convertible bonds or exchangeable bonds, credit-linked notes)

Security-by-security reports do **not include**:

- nonsecuritized derivatives such as options, futures, swaps and similar products even if ISIN-identified⁵⁰
- bonded loans
- checks and bills
- securities-related charges and custodian fees⁵¹
- coupon and dividend payments⁵²

For securities without official ISIN codes, we use internal securities identification numbers. For this purpose, we require reporting entities to report master data on an ad hoc basis. This allows us to make sure that our internal master data database contains the relevant identifiers for every single security.

⁵⁰ These financial instruments are included in the report on financial derivatives.

⁵¹ Estimated securities-related charges and custodian fees are included under “financial services” in the current account.

⁵² We calculate coupon and dividend payments ourselves with the help of securities master data by way of approximation.

1.4.2.2.b. *Entities required to report security-by-security information*

Security-by-security information **must be reported by:**

- (1) resident custodians, for
 - a. own holdings of securities
 - b. securities held on behalf of customers
- (2) domestic nonbanks with securities custody accounts abroad or own holdings of securities
- (3) domestic investment funds, for their own securities holdings

1.4.2.2.c. *Survey of domestic custodians' own holdings of securities*

Since September 2016, domestic custodians have used the OeNB's "smart cube" data model.⁵³ The OeNB started to report its own holdings of securities with the "basic cube" data model in January 2018. We use the securities data cubes not only for BoP purposes but also for the flow-of-funds accounts, for securities holdings statistics (by sector and by reporting banking group) and for balance sheet items statistics → a single data source for all statistics ensures data consistency.

"Own holdings" refers to all securities recorded on the asset side of bank balance sheet and short positions recorded on the liabilities side.

Own holdings of securities are to be reported for:

- the domestic head office
- domestic branch offices
- branch offices in former customs enclaves
- irrespective of where the securities are held
- at monthly intervals

Security-by-security reporting does **not** include:

- securities taken in for safe custody or administration for customers (see 1.4.2.2.d Survey of domestic custodians' holdings for customers)
- securities held in safe custody or administered for other custodians
- investment portfolios of money market funds which are MFIs
- Own holdings of securities of foreign branches (irrespective of whether these securities are held in safe custody at the head office or not)⁵⁴
- Own holdings of foreign subsidiaries

Security-by-security reporting is not meant to include any **direct offerings** launched for subscription (e.g. in book-entry form) which have not (yet) been sold on the reporting date. The only exceptions are a reporting entity's **own ordinary shares**, which are to be reported as own holdings at any rate.

Repurchases of direct offerings do not have an impact on outstanding issues; the respective amounts are to be reported as part of the own holdings portfolio. In contrast, redemptions of direct offerings (which reduce outstanding volumes) are not to be reported as own holdings.

⁵³ See: <https://www.oenb.at/meldewesen/gemeinsames-meldewesen-datenmodell.html> (German only)

⁵⁴ For the purpose of reporting on a security-by-security basis, own holdings of securities of foreign branches are not added to the domestic head office's own securities holdings. There is no consolidation of branch data. Consolidated securities holdings, which include a banking group's entire securities portfolio (including own securities holdings of foreign subsidiaries and branches) are to be reported for the ECB's securities holdings statistics by reporting banking groups.

Data on **equity investments** are entered manually, based on the FDI survey (see 1.4.1.5.b Differences between portfolio investment and direct investment). That is to say, the respective measures are deducted from portfolio investment and added to direct investment.

Reporting agents are required to report the following information per month and per security (there are no reporting thresholds):

- reporting agent (OeNB ID)
- reporting period
- securities identification number (ISIN code or internal securities ID)
- securities classification code
- debtor (OeNB ID)
- original maturity
- nominal value or no. of securities and market value
- balance sheet item

Market values are to be reported without interest accrued (i.e., excluding interest to be capitalized), i.e. as “clean price” figures.

Transactions had to be reported until August 2016, since September 2016 we have been **calculating** the respective amounts:

Transactions (nom/no) = period- end stocks (nom/no_t) – period- end stocks (nom/no_{t-1})

*Transactions (market prices_t) = transactions (nom/no_t) * mean rate_t*

$$\text{Mean rate}_t = \frac{\frac{\text{period- end stocks (market prices}_t) + \text{period- end stocks (market prices}_{t-1})}{2}}{\frac{\text{period- end stocks (nom/no}_{t-1}) + \text{period- end stocks (nom/no}_t)}{2}}$$

t... current reporting period; t-1... previous period

nom/no ... nominal value or number of securities

1.4.2.2.d. Survey of assets held in custody by resident custodians

Customer stocks held by resident custodians are to be reported indirectly, i.e. by the respective custodian banks, on a security-by-security basis at monthly intervals. There are no reporting thresholds. This guarantees that we can cover 100% of the securities held on behalf of customers in domestic custody. Custodians report stocks/transactions per group of custody creditors, not for every single customer.

At present, there are 16 **domestic custody client groups** reflecting one or more ESA 2010 sectors:

Table 8: domestic custody client groups

Custody client group ⁵⁵	Designation of custody client group	ESA 2010 sector
1230A	Money market funds that are MFIs	1230A
1240Z	Asset management funds (excl. money market funds that are MFIs): investment funds, real estate funds and licensed alternative investment funds	1240B-G
1250B	Severance funds	1250B

⁵⁵ The combined stocks of each custody client group are mapped to the respective ESA 2010 sectors – a more detailed breakdown (i.e. per ESA 2010 sectors) is not envisaged for the time being.

1250A	Other financial institutions such as financial leasing companies, private equity and venture capital funds, financial vehicle corporations (FVC), clearinghouses	1250A; 1250C-E; 1250Z
1260A	Financial auxiliaries such as insurance brokers, asset management firms	1260A-B; 1270A; 1270C
1270B	Private foundations	1270B
1280	Insurance companies	1280A-Z
1290	Pension funds	1290
1311	Central government	1311
1312	Regional governments	1312
1313	Local governments	1313
1314	Social security funds	1314
1100	Nonfinancial corporations	1100
1400A	Self-employed workers and freelancers	1400A
1400B	Other households	1400B
1500	Nonprofit institutions serving households	1500

For the time being, we also compile data on four **foreign custody client groups**:

- institutional investors excl. central banks (such as banks, investment funds, insurance companies, ...)
- households (self-employed workers and freelancers) as well as other private households
- nonfinancial depositors excluding households and government sector units (nonfinancial corporations and nonprofit institutions serving households)
- government sector units (federal, regional and local governments) and foreign central banks including sovereign wealth funds

The data on foreign custody client groups serve as control measures for the size of nonresident stocks and enter the securities holdings statistics sector data as third-party holdings. We do not process these data any further for BoP or IIP purposes or the for the flow-of-funds statistics.

On a monthly basis, we require the following data per security and custody account group (no reporting threshold applies):

- reporting agent (OeNB ID)
- reporting period
- custody category
- custodian country of incorporation
- securities identification number (ISIN code or internal securities ID)
- nominal value or no. of securities (code)
- nominal currency
- transfers for value (purchase/sale)
 - nominal value or no. of securities in nominal currency
 - euro value
 - accrued interest
- not-for-value transfers (e.g. custody transfers, splits)
 - nominal value or no. of securities in nominal currency
- transfers without changes in volume (pool factor, partly paid instruments)
 - euro value
- holdings per custody group

- nominal value or no. of securities in nominal currency
- market value in euro (must be reported only for unlisted stocks as well as securities with internal IDs, may also be reported for other items)

Market values are to be reported without interest accrued (i.e., excluding interest to be capitalized), i.e. as “clean price” figures.

1.4.2.2.e. *Survey of custody account holdings of securities abroad and of own holdings of foreign securities*

Residents who do not serve as custodians, who have authorized foreign custodians to hold their securities in safe custody, or who hold foreign securities on their own, are required to report their stocks and transactions

Reporting thresholds: securities (stocks) not held by domestic custodians at the end of the calendar year

- that exceed EUR 30 million or its euro equivalent (quarterly reporting)
- or
- that exceed EUR 5 million or its euro equivalent (annual reporting).

On a **quarterly/annual basis** we compile the following data on a security-by-security basis:

- reporting agent (OeNB ID)
- reporting period
- nominal currency
- transfers for value (purchase/sale)
 - nominal value or no. of securities in nominal currency
 - euro value
- not-for-value transfers (e.g. custody transfers, splits)
 - nominal value or no. of securities in nominal currency
- custody account balance
 - nominal value of no. of securities in nominal currency
 - market value in euro

Custody account balances may also be reported as negative balances, e.g. short positions or negative balances arising from securities lending transactions.

1.4.2.2.f. *Survey of securities holdings of domestic investment funds*

Domestic investment funds are required to report their holdings of investment fund shares on a security-by-security basis. These reporting requirements have been defined for both traditional and “alternative” investment funds.

On a monthly basis, we require the following data per security (no reporting threshold applies):

- reporting agent (OeNB ID)
- reporting period
- securities identification number (ISIN code or internal securities ID)
- share/bond code
- transfers for value (purchase/sale)
 - nominal value or no. of securities in nominal currency

- euro value
- accrued interest
- not-for-value transfers (e.g. custody transfers, splits)
 - nominal value or no. of securities in nominal currency
- flows: interest accrued/coupon
 - euro value
- flows: interest accrued/redemption price
 - euro value
- dividends paid/profits distributed
 - euro value
- holdings per custody group
 - nominal value or no. of securities in nominal currency
 - market value in euro
 - interest accrued: coupon discount
 - interest accrued: issuance and redemption price

Market values are to be reported with interest accrued (i.e., including interest to be capitalized), i.e. as “dirty price” figures. Interest amount reported as “of which” positions enable us to calculate the corresponding clean prices for further processing.

1.4.2.2.g. Master data

In addition to the reported stock and flow amounts, we also require master data for further processing steps (see 1.4.2.4 compilation). Master data are stored in a dedicated database (**OBServ**⁵⁶). Our system of master data is sourced from a range of subsystems and allows us to prioritize potential sources for each attribute. If the priority 1 source for a given attribute does not provide any information, the priority 2 source will be used instead, etc. This staggered system ensures that the best possible source will be used for data enrichment.

All securities are, as a rule, processed with the same master data, irrespective of the reporting agents. This is a precondition for the comparability of data and decreases the reporting burden, as the master data need not be reported again and again for every reporting period and every security.

For the purpose of data enrichment, we use the following **data sources/data providers**:

- The ECB's centralized securities database (CSDB)⁵⁷
- Oesterreichische Kontrollbank (OeKB)
In Austria, ISIN codes are issued by OeKB
- WM Datenservice (WM)
In Germany, ISIN codes are issued by WM Datenservice (Herausgebergemeinschaft Wertpapier-Mitteilungen Kepler, Lehman GmbH & Co. KG)
- Wiener Börse
- securities issues statistics (compiled on the basis of the “smart cube” data model)
- securities identifiers reported for securities without ISIN codes

⁵⁶ The OeNB's database of identifiers (“OBServ”) contains not only securities identification data but also company identification numbers and bank identification numbers, etc.

⁵⁷ The CSDB is the database of securities identifiers maintained by the ECB/ESCB. The identifying data are reported by the ESCB members and commercial data providers; some attributes are calculated by the ECB.

Among other things, we store the following **attributes** in OBServ:

- ISIN or internal securities identification number – primary key
- designation/short form
- information on issuers
 - internal OeNB ID number
 - name
 - national ISO code
 - ESA 2010 sector
- maturity from/to (original maturity and residual maturity)
- nominal currency
- nominal value or no. of securities (code)
- classification category for financial instruments
- outstanding amounts (with complete information on past redemptions and increases)
- issuance and redemption price
- yield information (interest or dividends)

Securities prices and exchange rates are stored in a dedicated BoP database of identifiers. The securities prices are sourced from data providers (such as the ECB's centralized securities database or Börse Wien) or from calculations (e.g. based on reported data),⁵⁸ in line with a prioritization system. Our sources for exchange rates include the ECB's euro foreign exchange reference rates and the Bundesbank's exchange rate statistics. Precious metal prices are added manually at monthly intervals.

1.4.2.3. Estimates

Foreign custody accounts of domestic households:

Reporting thresholds apply for custody accounts held by domestic households abroad. Therefore, coverage is less than complete (see 1.4.2.2.e Survey of securities holdings in foreign custody accounts and of own securities holdings). For enhanced coverage, we produce gap estimates based on mirror data for securities holdings statistics sector data and data made available based on Austria's tax agreement with Switzerland.

Historical balances for unlisted shares:

As of January 1, 2014, unlisted stock corporations no longer have the option of choosing between bearer and registered shares. The underlying rationale was to increase transparency. This is why some companies returned their ISINs as of December 2013 or later. In order to close the resulting data gap for portfolio investment, we have used historical balances for unlisted shares since January 2014. In addition, we use balance sheet information as contained in balance sheet items statistics to adjust the data for changing creditor structures and market values.

Income from domestic investment funds with reinvested dividends:

Income from domestic investment funds with a dividend reinvestment plan is subject to 27.5% investment income tax. We multiply the reported investment income tax by 3.6364 and include it as income in the month of distribution.

Income from foreign investment funds with reinvested dividends:

With a view to calculating the income of domestic investors from foreign investment funds with a dividend reinvestment plan, we define the average annual income for each category of funds (equity funds, fixed-

⁵⁸ Reported stocks valued at market prices/nominal value or no. of securities = nominal price per share.

income funds, ...). We then use this percentage to calculate the respective income per investment fund, creditor group and month.

1.4.2.4. Compilation

Each month, we process the reported portfolio investment data at three levels of aggregation: first we calculate aggregates for individual reporting agents; then we calculate aggregates for individual securities, and then we feed the latter into the production database.

1.4.2.4.a. Aggregates for individual reporting agents

Aggregates for individual reporting agents are the first level of aggregation. These aggregates serve to generate information on individual custodian banks (and their own holdings and client holdings). As this information is needed only for special exercises, it is not retained for client holdings at the next level of aggregation.

Technical procedure: We use the OeNB's "smart cube" data model to compile data on banks' own holdings and client stocks and then import the data into the BoP (securities reporting) system. In a next step, we produce aggregates for banks' own holdings and client holdings, and aggregates for own investment funds stocks (see 1.4.2.4.b).

Table 9: Key data fields for aggregates for individual reporting agents

Designation	Source
Reporting period	Reported
Reporting agent ID	Reported
ISIN/internal securities ID	Reported
Nominal value or no. of securities (code)	Master data; enriched using ISIN/internal securities ID
Creditor's ID	Report category recoded into creditor's ID
Transfers for value: nominal value or no. of securities	Banks' own holdings: – Client holdings: reported
Transfers for value: EUR value	Banks' own holdings: – Client holdings: reported
Transfers (for value or not for value): nominal value or no. of securities	Banks' own holdings of securities: calculated Client holdings: reported
Not-for-value transfers: EUR value	Banks' own holdings: calculated (at monthly mean prices) Client holdings: calculated (at monthly mean prices)
Resulting stocks: nominal value or no. of securities	Reported
Resulting stocks: EUR (market) value	Banks' own holdings: reported Client holdings: calculated (at end-of-month prices) / reported
Residual: nominal value or no. of securities	Calculated (see below)
Residual (market value)	Calculated (see below)

R values essentially are the result of faulty reports and will be adjusted up to the agreed benchmark (see chapter IV Quality). We need to calculate R values to ensure a consistent reconciliation of exports (see below).

Table 10: Calculation of R values

Calculation of R values	
Initial stock (nominal value or no. of securities) = amount carried forward (nominal value or no. of securities)	1,000,000
Reported transaction (nominal value or no. of securities)	+ 30,000
Reported closing stock (nominal value or no. of securities)	1,035,000
= R value (nominal value or no. of securities) = (1,000,000 + 30,000,000 – 1,035,000) * –1	5,000
R value (market value) = R value * end-of-month prices	5,000 * 1.05 = 5,250

1.4.2.4.b. *Aggregates for individual securities*

At the second level of aggregation, the data are translated into **aggregates for individual securities**⁵⁹ or **aggregates for individual investment funds**.⁵⁹ The aggregates for individual securities are the major level of aggregation for securities data and the basis for most calculations and quality checks. We use the master data described above to make calculations and enrich our data.

Table 11: Key data fields for aggregates for individual securities and investment funds

Designation	Source
Reporting period	Securities aggregates: aggregates for individual reporting agents Investment funds aggregates: reported
Reporting agent ID	Securities aggregates: Bank's own holdings: aggregates for individual reporting agents Client holdings: dummy ID Investment funds aggregates: reported
ISIN/internal securities ID	Securities aggregates: aggregates for individual reporting agents Investment funds aggregates: reported
Financing instrument	Master data; enriched using ISIN/internal securities ID
Original maturity	Master data; enriched using ISIN/internal securities ID
Residual maturity	Calculated (time until maturity – current date)
Debtor's ID	Master data; enriched with ISIN/internal securities ID
Debtor's sector (ESA 2010)	Master data; enriched using issuer's ID
Debtor country	Master data; enriched using issuer's ID
Creditor's ID	Securities aggregates: aggregates for individual reporting agents Investment funds aggregates = reporting agent's ID
Creditor's sector (ESA 2010)	Master data; enriched using creditor's ID
Creditor's country	Master data; enriched using creditor's ID
Credit/debit (nominal value or no. of securities)	Securities aggregates/investment funds aggregates: Total transfers (for value or not for value) (nominal value or no. of securities)
Credit/debit (market value)	Securities aggregates/investment funds aggregates: Total transfers (for value or not for value) (marked to market)
Net nominal (transaction) value or no. securities	Securities aggregates/investment funds aggregates: nominal value or no. of securities – credit minus debit
Net (transaction) (market value)	Securities aggregates/investment funds aggregates: market value – credit minus debit
End-of-period nominal value or no. of securities	Securities aggregates: aggregates for individual reporting agents Investment funds aggregates: reported

⁵⁹ To arrive at banks' holdings of own securities and client securities (allowing us to process client custody groups of money market funds and investment funds in parallel with own holdings of securities directly and with a view to conducting quality checks).

Resulting stocks: EUR (market value)	Securities aggregates: aggregates for individual reporting agents Investment funds aggregates: reported
Residual: nominal value or no. of securities	Securities aggregates: aggregates for individual reporting agents Investment funds aggregates: calculated (like securities aggregates)
Residual (market value)	Securities aggregates: aggregates for individual reporting agents Investment funds aggregates: calculated (like securities aggregates)
Price effects (P values)	Calculated (see below)
Exchange rate effects (X values)	Calculated (see below)
Reclassifications (O values)	Calculated (see below)

Client stocks are no longer mapped based on the reporting agent's ID but based on the reporting agent's ID. For instance, security instruments owned by domestic households as reported by three different custodian banks are added up to a single dataset.

We use the residual approach to calculate **nonresidents' holdings** of domestic securities:

+	Outstanding amounts reported (based on securities issues statistics)
–	Domestic stocks reported (on a security-by-security basis)
=	Nonresidents' holdings

We calculate not only nonresidents' holdings but also transactions (purchases and sales) made by foreign creditors. Once a year, we estimate a regional breakdown, using mirror data from CPIS and SHSS.

Table 12: Calculation of nonresident stocks (aggregates for individual securities)

Calculation of nonresident stocks (nominal value or no. of securities)			
	2017Q1	2017Q2	2017Q3
Outstanding amounts reported	1,000,000	1,200,000	1,200,000
Domestic stocks reported	750,000	800,000	700,000
Calculated nonresident stocks	1,000,000 – 750,000 = 250,000	1,200,000 – 800,000 = 400,000	1,200,000 – 700,000 = 500,000
Resident and nonresident stocks, total	750,000 + 250,000 = 1,000,000	800,000 + 400,000 = 1,200,000	700,000 + 500,000 = 1,200,000

Table 13: Calculation of transactions abroad (aggregates for individual securities)

Calculation of transactions abroad (nominal value or no. of securities)			
	2017Q1	2017Q2	2017Q3
Increases/redemptions	0	+ 200,000	0
Reported domestic transactions	+ 300,000	+ 50,000	– 100,000
Calculated foreign transactions	0 – 300,000 = – 300,000	+ 200,000 – 50,000 = + 150,000	0 – (– 100,000) = + 100,000
Resident and nonresident transactions, total	+ 300,000 – 300,000 = 0	+ 50,000 + 150,000 = + 200,000	– 100,000 + 100,000 = 0

In other words, if no increases or redemptions are made during a reporting period, resident and nonresident transactions sum up to zero.

We use end-of-month prices to value **nonresident stocks** (nominal value or no. of securities). We use average monthly mean prices to value **transactions**. This is why increases in particular (the most prominent example being domestic sovereign bonds) may lead to a bias in the presentation of transaction prices.

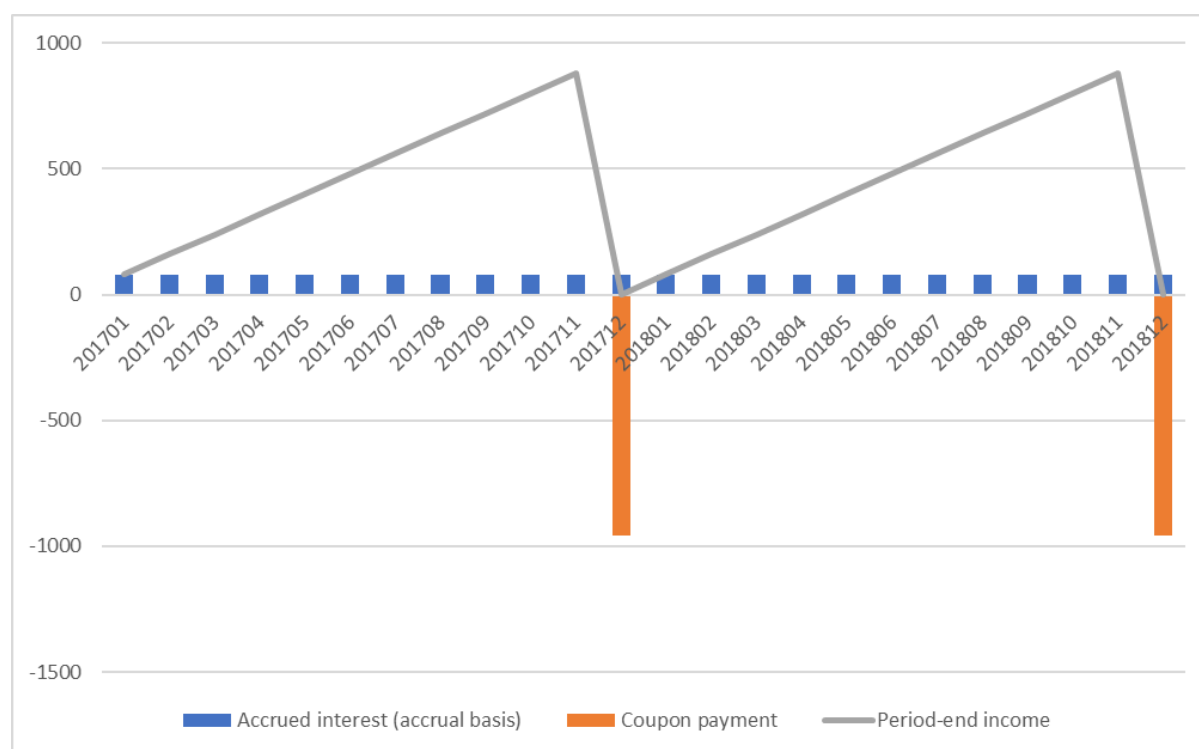
We use end-of-month securities prices and exchange rates to calculate **price and exchange rate effects** of stocks.

We calculate **reclassifications** for instance when stocks are delisted, when issuers were transferred to a different ESA 2010 sector or moved from country A to country B, ...

Calculation of the income component of securities:

For BoP purposes, we calculate the stream of income from debt securities and investment fund shares on an accrual basis, using the “debtor” approach. This means that the future flow of interest is determined at the point of issue/that the accrual of interest is recorded from the perspective of the issuer until maturity.⁶⁰ Dividend and coupon payments are calculated for the respective maturity dates.

Figure 11: Bond yields calculated on an accrual basis



In the process of calculating securities aggregates, the system has been automated to calculate the individual yield components per security/creditor category/reporting period, and to store the resulting datasets alongside the reported capital component. The separate datasets for the yield component allow us to adequately map these datasets in the further process of compiling the financial account, the current account and investment income.

In the balance of payments, the international investment position and the flow-of-funds accounts, we value closing balances at market prices. Market prices are reported without interest accrued (i.e., excluding interest to be capitalized), i.e. as “clean price” figures (with the exception of investment funds, for which separate interest information reported allows us to calculate clean prices, however). We then add the income components to the clean prices, which means that the final balances shown in the IIP are equivalent to dirty prices.

⁶⁰ Under the “creditor approach,” the accruing interest flows are recalculated by applying the prevailing market rate until the security matures.

Income from short-term and long-term debt securities:

In the OeNB's database of identifiers, we record coupon size and periodicity for all securities. Using the difference between the issuance and redemption price,⁶¹ we thus calculate any explicit and implicit interest accrued per security per month:

Calculation of implicit interest

$$\text{interest accrued1} = \frac{\text{redemption price} - \text{issuance price}}{\text{days}(\text{maturity end} - \text{maturity start}) * 100}$$

Calculation of explicit interest accrued

$$\text{interest accrued2} = \frac{\text{interest rate}}{360 * 100}$$

Interest accrued per unit per day = interest accrued 1 + interest accrued 2

Interest accrued per month and creditor category⁶² =

Interest accrued per unit per day * average balances per creditor category for the respective reporting period (nominal value or no. of securities) * 30⁶³ * monthly mean rate of exchange

The information on implicit interest may be distorted by capital increases.

In the financial account, interest accrued is shown as a flow position increasing stocks; in the current account, interest accrued is shown as investment income, i.e. as an income stream from abroad (from foreign securities) or as an income stream toward other countries (from domestic securities). Interest payments (coupons) are recognized upon maturity (as a flow position reducing portfolio investment stocks in the financial account – the offsetting entry in the form of other investment is shown as an increase in deposits).

Dividend payments from stocks:

Based on the information stored in the OeNB's ID register, dividends paid or received are used to calculate dividends paid per share/per creditor category per month (dividend per unit * average number of shares). In the current account, dividend payments are shown under investment income as dividends paid or received.

Income from foreign investment fund shares:

We use the accrual basis method to calculate income from foreign investment fund shares held by domestic creditors for funds that distribute and also for funds that reinvest their earnings. In the absence of adequate earnings information, we define average earnings per year and per type of fund (equity funds, fixed-income funds, ...) ex post. We then use this percentage to calculate the respective income per security, creditor group and month. Dividend distributions are calculated in the same vein. See 1.4.2.3 Estimates.

Income from domestic investment fund shares:

We do not use the accrual method to calculate income from domestic investment fund shares held by nonresident creditors. We use the withholding tax information reported to calculate reinvested earnings per security, creditor group and month. Dividend distributions are calculated in the same vein. See 1.4.2.3 Estimates.

⁶¹ In particular, this allows us to adequately reflect zero coupon bonds and bonds issue above or below par.

⁶² In the case of pool factor bonds, we also take the corresponding pool factor into account.

⁶³ In the issuance and redemption month, we multiply interest accrued with 30 instead of 15.

Following the data enrichment and calculation exercises, we can turn to analyzing the **reconciliation line**⁶⁴ as described in section **Fehler! Verweisquelle konnte nicht gefunden werden.** for each security and creditor group. Reconciliation is relevant only for the financial account/IIP but NOT for the current account = income, because the current account is based on (credit, debit, net) transactions alone.

1.4.2.4.c. Production database / BoP data warehouse

For the purpose of data aggregation, we populate a microdata production database with all datasets used for the balance of payments, the international investment position and the flow-of-funds accounts. In the case of portfolio investment, this means that we first create aggregates for individual securities and then feed them into the production database. In this process, ISIN code information is lost as we produce issuer-by-issuer aggregates (e.g. by aggregating Austrian sovereign bonds issues for the respective period on the basis of original and residual maturity, type of security, nominal currency, etc.)

We also adjust the production database measures for **gap estimates** and **data corrections**, which we were unable to integrate on a security-by-security basis.

Ultimately, we migrate the production database into the BoP data warehouse. At this level of aggregation, information on reporting agents' ID, creditors' IDs and debtors' IDs drops out. At this level of aggregation, it is only possible to extract information on creditors and debtors for individual ESA 2010 sectors.

Table 14: Key data fields for production database aggregates

Designation	Source
Reporting period	Securities aggregates
Reporting agent ID	Securities aggregates
Financing instrument	Securities aggregates
Original maturity	Securities aggregates
Residual maturity	Securities aggregates
Issuer's ID	Securities aggregates
Issuing unit's sector (ESA 2010)	Securities aggregates
nationality of issuer	Securities aggregates
Creditor's ID	Securities aggregates
Creditor's sector (ESA 2010)	Securities aggregates
Creditor's country	Securities aggregates
Credit/debit (nominal value or no. of securities)	Calculated (monthly mean rate of exchange)
Credit (market value)	Securities aggregates
Debit (nominal value or no. of securities)	Calculated (monthly mean rate of exchange)
Debit (market value)	Securities aggregates
Net nominal (transaction) value or no. of securities	Calculated (monthly mean rate of exchange)
Net (transaction) (market value)	Securities aggregates
Resulting nominal unit value	Calculated (monthly mean rate of exchange)
Resulting stocks: EUR (market) value	Securities aggregates
Residual: nominal value or no. of securities	Securities aggregates/ calculated (monthly mean rate of exchange)
Residual (market value)	Securities aggregates
Price effects (P values)	Securities aggregates
Exchange rate effects (X values)	Securities aggregates
Reclassifications (O values)	Securities aggregates/ calculated (monthly mean rate of exchange)

⁶⁴ For a detailed definition of reconciliation, see the [methodological glossary](#).

Nominal prices Until the production of securities aggregates, nominal prices are shown in their original currencies. When feeding the data into the production database, we convert them into euro at the monthly mean or end-of-month rates of exchange.

1.4.2.4.d. Main aggregates

The aggregation of the data on portfolio investment into main aggregates ("XINTIP positions;" see the section on production processes and systems) is reflected in the following aggregation codes:

Table 15: Aggregation codes for the main portfolio investment aggregates (XINTIP)

Position number	Example	General definition	Specific definition (portfolio investment)
Digit 1	A	Domestic/foreign/special area	Rest of the world
Digit 2	6	Functional category	Portfolio investment
Digits 3 –5	511	Financing instrument	Quoted shares
Digits 3–5	33<	Financing instrument + original maturity (for fixed-rate securities)	Original maturity short-term or long-term
Digit 6	K	Capital gains code	Capital
Digit 7	F	Claim/liability	Claim
Digits 8–10	140	Creditor sector	Households
Digits 11–13	130	Debtor sector	General government sector
Digit 14	>; R; D	Depends on the financing instrument	See below

The 14th digit of the aggregation code may reflect different types of information, depending on the underlying financing instrument:

- Long-term debt securities: residual maturity (short-term or long-term)
- Investment fund shares: reinvested earnings/dividends

Apart from the general limitation to foreign transactions and portfolio investment, these are the main aggregates:

Table 16: List of main aggregates

Attribute	Corresponding main aggregates
Financing instrument	Listed/unlisted shares; investment fund shares; short-term and long-term debt securities:
Original maturity	For debt securities: short-term or long-term
Residual maturity	For long-term debt securities: short or long
Capital gains code	Capital or income component
Claims/liabilities	Claims = resident creditor; liabilities = nonresident debtor
Creditor sector	Aggregates based on current ECB reporting requirements (see below).
Debtor sector	Aggregates based on current ECB reporting requirements (see below).

Creditor and debtor categories:

- The central bank (S.121)
- Credit institutions (S.122)
- Money market funds (S.123)
- General government sector (S.13)
- Other financial institutions (S.124–S.129)
- Nonfinancial corporations and household sector (S.11, S. 14, S.15)

The following definitions are invalid:

- The OeNB does not issue securities.
- Investment fund shares may be issued only by money market funds (S.123) or investment funds (S.124).
- Domestic money market funds and investment funds may issue only investment fund shares/units.

1.4.2.5. Special issues

1.4.2.5.a. Pool factor bonds

Partial redemptions of pool factor bonds (causing the pool factor to change) are not shown like “normal” redemptions. Holdings of pool factor bonds are to be reported with the original nominal value (i.e. not multiplied with the pool factor). Hence, partial redemptions by the issuer before maturity, which do not affect the original nominal value, are to be reported as payments received without any changes in volume. Payments received without any changes in volume are treated as payments made in the course of aggregation. Related cross-border transactions are treated like “normal” transactions in line with the residual approach, which is why large positions need to be adjusted manually.

Whenever pool factor bonds are redeemed, or upon “normal” partial redemptions (leaving the pool factor unchanged), the resulting outflows are reported as transfers for value.

1.4.2.5.b. Securities repurchase and lending transactions

(Securities) statistics remain unaffected by **securities repurchase** (repos or reverse repos) and **lending transactions**, because the securities remain in the books of the party supplying the securities. Hence, repos and securities lending are not reported by domestic custodian banks and domestic investment funds. For repos and securities lending transactions made by domestic custodian banks on behalf of their clients, reporting agents have the option of not including these transactions in their reports, or of reporting not-for-value transfers.

Example:

- A client has instructed a domestic bank to hold a given security in custody. The custodian bank reports the security as part of the applicable custody client group. The client further takes out a loan from the bank at hand, using said security as collateral. This transaction is not to be included in the bank’s report on securities or securities held on behalf of clients.
- A bank’s client takes out a loan from domestic bank A, using a loan secured with this security as collateral. For this purpose, the client removes the security to be used as collateral from his or her custody account with bank B and transfers it to a custody account provided by bank A. Bank B

reports outflows from the client's custody account (not-for-value transfers), whereas bank A reports corresponding inflows (not-for-value transfers).

Securities not held in custody by resident custodians are subject to the following reporting requirements: Repos and securities lending transactions are reported like "normal" securities transactions if a foreign counterparty is involved. Hence, corresponding (changes in) securities holdings and corresponding inflows and outflows are to be reported. In addition, domestic noncustodians have to report their repos and securities lending transactions with nonresident counterparties in a separate repo/securities lending report on the basis of securities IDs.

Securities sale/purchase or lending transactions with right of repurchase are reflected in the books of the party receiving the securities and are to be reported like securities purchases and sales:

- Inflows/outflows in the context of securities sale/purchase transactions with right of repurchase → transfers for value
- Inflows/outflows in the context of securities lending transactions with right of repurchase have an impact on the balance sheet – securities-related claims rise, and there is an offsetting obligation from an asset loan → not-for-value transfers

1.4.2.5.c. *Securities held in trust*

If a domestic custodian bank holds securities in trust for a client, these securities are to be reported as own holdings, and they are to be identified accordingly as either (a) trustee assets without rights to separate satisfaction, or as (b) trustee assets with a right to separate satisfaction.⁶⁵ For the purpose of BoP or IIP statistics and the flow-of-funds accounts, we do assign own holdings of securities identified as trustee assets to own holdings. Instead, we treat the respective amounts as having been reported by the trustee custodian bank for the given custody account group, i.e. for the securities portfolio of the respective nonbank sector.

1.4.2.5.d. *Other special cases*

For the purpose of income calculation, index-based bonds are treated like all other debt securities, because it is not possible to distinguish whether inflation developments have been priced in or not.

Increases of sovereign bonds: In the OeNB's ID register, we store the original issuance prices for all bonds. This approach is not straightforward for increases of sovereign bonds. Therefore, we use a capital-weighted average issuance prices for all increases of bonds listed in the ID register. Some bias is inevitable, though, in the presentation of below/above par increases, not least because of holdings abroad, which corresponds to the resulting residual: We use monthly mean rates of exchange to calculate the transactions of nonresident creditors, and original issuance prices to calculate implicit interests. With a view to correcting remaining distortions, we align the transactions and the investment income from sovereign bonds with the fiscal agent's own data as provided by Statistics Austria.

⁶⁵ See Banking Act § 48. (1) Trust assets held by the credit institution in its own name on behalf of others must be reported on the balance sheet by the trustee. The total amounts of such receivables and liabilities must be indicated separately or in the notes to the financial statements and subdivided according the various asset and liability items. Trustee assets may be disclosed off the balance sheet provided there are special rules whereby such funds can be excluded from the assets available for distribution in the event of the winding-up of a credit institution (or similar proceedings).

(2) Assets acquired in the name of and on behalf of others must not be accounted for on the balance sheet.

Interest rate calculation is the same for nominal value and face value bonds. However, face value bonds need to be valued as the basis for calculating interest accrued (i.e. interest accrued will appear too low).

1.4.2.6. Delineation of portfolio investment

1.4.2.6.a. Differences between portfolio investment and direct investment

Unless they are to be classified as financial derivatives (see 1.4.3.5.a Differences between portfolio investment and financial derivatives), securities reported on a security-by-security basis are classified in the functional category of portfolio investment – unless they qualify as direct investment. Any portfolio investment constituting a participating interest of 10% or more will qualify as a direct investment. For details see section 1.4.1.5.b on the definition of other investment.

Equity interests in banks in the form of securities are to be included in the “smart cube” reports, under one of two possible balance sheet items: either as “equity interests” or as “shares in affiliated undertakings.” This allows us to exclude equity interests abroad in the case of portfolio investment, and to include such interests in the case of FDI.

1.4.2.6.b. Differences between portfolio investment and other investment

Bonded loans tend not to be securitized, which means that they do not come with an ISIN code. They are no securities to be reported on a security-by-security basis but are to be reported under “other investment” (long-term loans).

1.4.2.6.c. Differences between portfolio investment and financial derivatives

Reports on a security-by-security basis also include the following instruments:

- Warrants
- Securitized leveraged products

These instruments are classified under the functional category “financial derivatives” (see 1.4.3 Financial derivatives) and must not be included in the report on financial derivatives (see 1.4.3.2.a).

1.4.2.6.d. Differences between portfolio investment and reserve assets

The OeNB's reserve assets include all securities issued by non-euro area residents that are not denominated in euro.

1.4.3. Financial derivatives

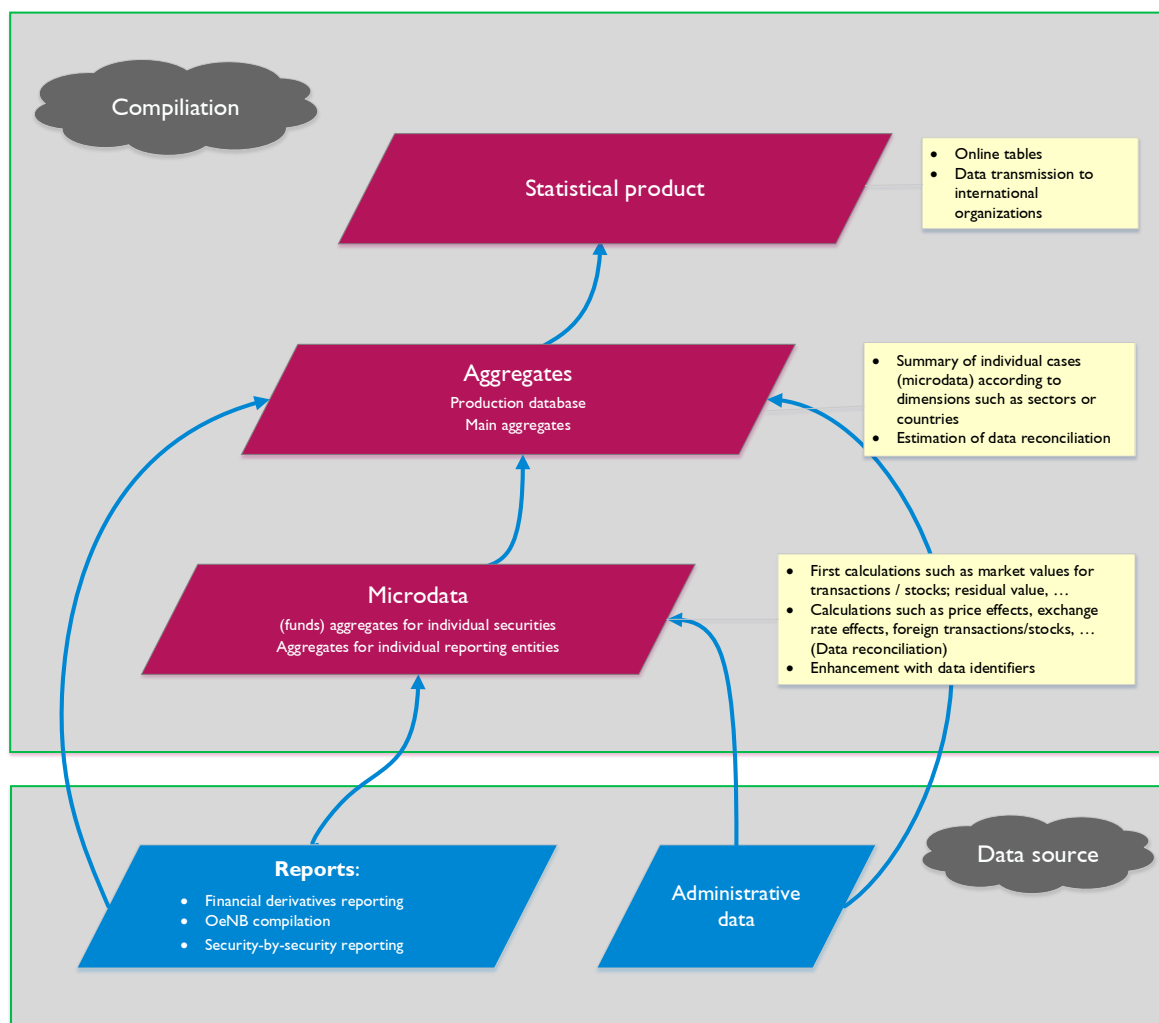
Financial derivatives include options, futures contracts, swaps or any other derivative financial instruments. Derivatives can be based on capital products (e.g. foreign exchange assets, securities) or on interest rate instruments. In the BoP and IIP, financial derivatives are valued at market prices.

There are three data sources:

- Reports on financial derivatives
- Reports on a security-by-security basis for securitized financial derivatives
- Reports made by the OeNB

1.4.3.1. Subsystem overview

Figure 12: Subsystem overview for financial derivatives



1.4.3.2. Data sources

1.4.3.2.a. Reports on financial derivatives

The reports on financial derivatives are meant to provide information on payments made and received on cross-border transactions with financial derivatives and revaluations of existing assets and liabilities.

The **reporting requirement** extends to all residents who have entered into financial derivatives transactions with nonresidents. The reporting threshold is:

- EUR 1 million for monthly payments received and made
- EUR 5 billion for quarterly stocks for IAS-/IFRS-accounting reporting agents⁶⁶

⁶⁶ IAS = International Accounting Standards, IFRS = International Financial Reporting Standards.

Resident custodians are required to report only their own holdings of financial derivatives. There are no reporting requirements for customer business (with the exception of financial derivatives which are to be reported on a security-by-security basis).

The following **financial derivatives** are to be reported, irrespective if they come with an ISIN code or not:

- Options bought (listed options and OTC options)
 - Credit spread options bought
 - Interest options bought
 - Currency options bought
 - Equity options and other security index options bought
 - Precious metal options bought
 - Commodity options bought and other conditional forward transactions bought
- Options written
 - Credit spread options written
 - Interest options written
 - Currency options written
 - Equity options and other security index options written
 - Commodity options and other conditional forward transactions written
- Futures
 - Interest rate futures and interest-based index contracts
 - Currency futures and currency-based index contracts
 - Equity futures and other securities-price-related index futures
 - Equity index contracts and other securities-based index futures
 - Precious metal futures
 - Commodity futures and other contracts of a similar nature
- Other financial derivatives
 - Interest rate swaps
 - Floating interest rate swaps
 - Forward rate agreements including purchases and sales of fixed-term deposits and forward transactions in securities (OTC trade)
 - Cross-currency interest rate swaps, capital market swaps
 - Money market swaps (foreign exchange swaps)
 - Foreign exchange forwards (OTC trade)
 - Forward precious metal transactions (OTC trade)
 - Forward commodity transactions (OTC trade) and other contracts of a similar nature
- Credit derivatives
 - Single name credit default swaps
 - Portfolio credit default swaps
 - Total return swaps
 - Credit spread options
 - Credit spread forwards

If securitized financial derivatives are reported in the report on holdings of securities, then they must not be reported in the reports on financial derivatives.

Scope

- Reporting agent – OeNB ID number
- Reporting period

- Counterparty information: Country – ISO code (for assets: debtor's country; for liabilities: creditor's country)
- Stocks and receipts or payments regarding claims and liabilities, broken down by
 - Options bought
 - Options written
 - Futures (payment flows only)
 - Other financial derivatives including credit derivatives

The reporting obligation does not extend to any underlying values (such as underlying stock purchases), and it does not relate to options bought which are to be reported with their ISIN code on a security-by-security basis.

1.4.3.2.b. Security-by-security reporting

With regard to securities holdings, we collect data on the following financing instruments and process these data like all other data on portfolio investment:

- Warrants
- Leveraged securities (derivate securities or securitized financial derivatives)

The portfolio investment report does not extend to non-securitized financial derivatives such as options, futures, swaps and similar products, even if they have an ISIN number (see 1.4.2.2.a Scope of security-by-security reporting).

The security-by-security reporting format allows us to identify both resident creditor sectors and nonresident debtor sectors. This is not the case with the data reported on financial derivatives and with the data reported by the OeNB itself.

1.4.3.2.c. Financial derivatives transactions made by the OeNB

The data on the OeNB's own financial derivatives transactions are compiled and processed in line with the data on reserve assets (see 1.4.6 Reserve assets).

1.4.3.3. Estimates

We do not produce any estimates on financial derivatives.

1.4.3.4. Compilation

1.4.3.4.a. Aggregation of data on individual reporting agents/individual securities

Any data on financial derivatives compiled through security-by-security reporting are processed like any other portfolio investment data (see 1.4.2.4 Compilation).

1.4.3.4.b. Production database / BoP data warehouse

For the purpose of data aggregation, we populate a microdata production database from all data sources used for the balance of payments, the international investment position and the flow-of-funds accounts. Data on financial derivatives reported on a security-by-security basis are migrated into the production database in line with the procedure used for portfolio investment data. That is to say, the datasets are

summarized into aggregates for individual issuers, which means that the information on ISIN codes (or any internal securities IDs) is lost in this process.

Any data on financial derivatives included in the report on financial derivatives are added directly to the production database and enriched with master data (e.g. information on the creditor or debtor sector, as evidenced by the OeNB ID number for reporting agents). In this process, we also calculate price effects and reclassifications (e.g. to other sectors).

In the same way, we feed the data reported by the OeNB on its financial derivatives holdings into the production database.

In this functional category, we upload **corrections** into the production database, but no estimates. Ultimately, we migrate the production database into the BoP data warehouse. In this aggregation step, information on reporting agents' ID, creditors' IDs and debtors' IDs drops out. At the resulting level of aggregation, it is only possible to extract information on creditors and debtors for individual ESA 2010 sectors.

1.4.3.4.c. Main aggregates

Financial derivatives are aggregated into main aggregates ("XINTIP positions;" see 1.1 Production processes and systems) based on the following aggregation codes:

Table 17: Aggregation codes for main financial derivatives aggregates

Position number	Example	General definition	Specific definition (financial derivatives)
Digit 1	A	Domestic/foreign/special area	Rest of the world
Digit 2	6	Functional category	Financial derivatives
Digits 3–5	710	Financing instrument	Financial derivatives
Digit 6	K	Capital gains code	Capital
Digit 7	F	Claim/liability	Claim
Digits 8–10	122	Creditor sector	Credit institutions
Digits 11–13	110	Debtor sector	Nonfinancial corporations
Digit 14	I, O, F, S	Type of financial derivatives	See below

The 14th digit of the aggregation code describes the type of financial derivatives:

- I = ISIN, i.e. securitized financial derivatives (debtor and creditor sector)
- O = Options (for claims: creditor sector; for liabilities: debtor sector)
- F = Futures (like options)
- S = Other financial derivatives (such as options)

Creditor and debtor categories:

- The central bank (S.121)
- Credit institutions (S.122)
- Money market funds (S.123)
- General government sector (S.13)
- Other financial institutions (S.124–S.129)
- Nonfinancial corporations and household sector (S.11, S.14, S.15)

The following definitions are invalid:

- Securitized financial derivatives issued by (1) monetary authorities or (2) money market funds.

1.4.3.5. Delineation of financial derivatives

1.4.3.5.a. Differences between portfolio investment and financial derivatives

Portfolio investment reports on a security-by-security basis also include the following instruments:

- Warrants
- Securities with embedded financial derivatives (such as reverse convertible bonds, index bonds, convertible bonds or exchangeable bonds, credit-linked notes)
- Leveraged securities (frequently referred to as derivative securities or securitized financial derivatives)

These instruments are classified under the functional category “financial derivatives” and must not be included in the report on financial derivatives.

1.4.4. Other investment

In the balance of payments, other investment is a residual category that includes positions and transactions other than those included in direct investment, portfolio investment, reserve assets and financial derivatives.

Other investment includes the following financing instruments:

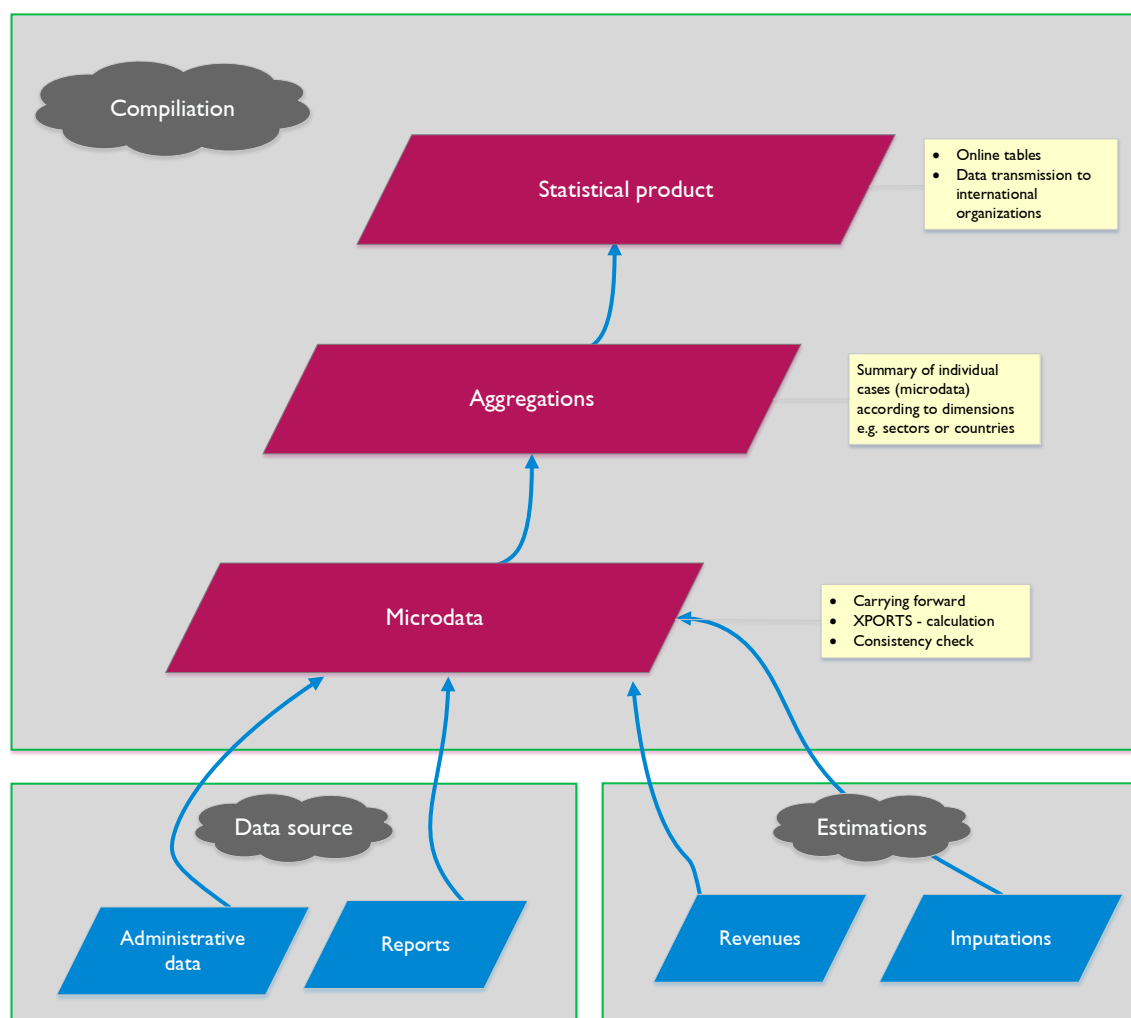
- SDR allocations (AF.12)
- Currency (AF.21)
- Deposits (AF.2)
- Loans (AF.4) – including settlement accounts, clearing accounts and cash pooling
- Other equity (AF.519)
- Insurance, pension and standardized guarantee schemes (AF.6)
- Trade credits (AF.81)
- Other accounts receivable/payable (AF.89)

1.4.4.1. Subsystem overview

The subsystem for other investment is broken down (1a) data sources, (1b) estimates and (2) the compilation process.

While data sources and estimates are subject to fundamental functional differences, the process of compilation is identical for all functions.

Figure 13: Subsystem overview for other investment



1.4.4.2. Data sources

With regard to other investment, we basically distinguish between internally and externally sourced data and gap estimates. Below, we cover internal and external data sources.

Figure 14: Sources of other investment data

Sources of other investment					
Internal data sources		External data sources		Estimations	
S-templates	OeNB survey	FISIM (quarterly data)	Wind-down entities	Estimated deposits of domestic households/enterprises abroad	
Balance sheet item statistics		General government sector data		Estimated loans of domestic households/enterprises from abroad	
Current account data (Reports on insurance services)				Currency	FISIM (monthly data)
ECB investment fund statistics					

1.4.4.2.a. Internal data sources

Data derived from internal sources are either data reported directly to the OeNB's external statistics function or to other OeNB business areas.

S templates: These reporting templates are submitted at monthly intervals by a group of resident reporting agents. These templates covers all capital transactions that are not included in other functional categories of the BoP statistics. Key items are cross-border intragroup financing transactions, loans and bank deposits (demand deposits, fixed-term deposits and saving deposits). In this respect, due consideration must be given to transactions that qualify as direct investment or portfolio investment (see 1.4.4.5 Special issues).

Table 18: S reporting templates as internal OeNB data sources for other investment

Reporting template	Title	Financing instruments
S1/S2	Report on other investment claims and/or liabilities	Loans to/deposits with/equity interests in other businesses below 10%/other claims
S3/S4	Report on other investment claims on and/or liabilities to nonresident affiliated enterprises	Loans to/deposits with/equity interests in other businesses below 10%/other claims
SA/SB	Report on other investment claims and/or liabilities under trade credits	Trade credit
SC/SD	Report on other investment claims and/or liabilities under trade credits to/from nonresident affiliated enterprises	Trade credit
S5/S6	Report on interest receivable and/or payable under other investment	Income (interest)

Reporting threshold: If total stocks of liabilities under cross-border other investment equal or exceed a value of EUR 10,000,000 or the euro equivalent, the stocks of both outstanding claims and outstanding liabilities from other investment (or trade credits) must be reported.

Scope: Data are to be reported on a monthly basis and in euro equivalents (plus the amounts in the original currency). The data to be reported include end-of-month stocks, debt forgiven and irrecoverable claims (see 1.3 Capital transfers).

Data to be reported by the OeNB: The reporting obligation also extends to the Austrian central bank. With regard to other investment, the OeNB reports data on SDR allocations (F.12) and loans (AF.4)/deposits (AF.2). See section 1.4.6 Reserve assets for further details.

Balance sheet items statistics (BSI): The monetary statistics to be reported by the OeNB to the ECB are also a key source of data on loans and deposits that qualify as other investment. The OeNB compiles this information from Austrian monetary financial institutions (MFIs) on behalf of the ECB. The data are collected monthly.

Reporting population: MFIs resident in Austria.

Scope of data (relevant for other investment): The relevant information on the loans provided (AF.4) and deposits taken in (AF.2) by domestic banks to or from the rest of the world is taken in its entirety from the balance sheet items statistics.

Coverage: Following the launch of a new reporting framework, including a new data processing framework, the data reported cover the entire MFI population in Austria.

Reports on insurance services: This report is an integral part of the quarterly report on the provision of cross-border services. For the purpose of obtaining data on other investment, we use the quarterly report on cross-border insurance and reinsurance services (L7).⁶⁷ Specifically, we use this internal source to obtain data on the financing instrument for insurance technical reserves and to obtain data on the lending and deposit-taking activities of domestic investment funds. At the same time, this report also provides data on loans provided to or deposits taken in from foreign banks by domestic investment funds.

Reporting population: Austrian asset management companies.

Coverage: Quarterly census.

1.4.4.2.b. External data sources

External data sources refer to data that are not reported directly to the OeNB but forwarded to the OeNB from the receiving institutions based on underlying regulations.

Financial services indirectly measured (FISIM): FISIM refers to banking services for which banks do not charge explicitly via commissions and fees but implicitly via the margin between interest received on loans and interest payable on deposits. For more details, see 1.2.2.1 Special reports and estimates.

Wind-down entities: Wind-down entities have been a relatively new phenomenon in Austria. In line with supranational decisions,⁶⁸ wind-down entities are to be classified in the general government sector rather than the banking sector. As a result of this reclassification, wind-down vehicles do not have any reporting obligations for the balance sheet items statistics. To be able to reflect the data accordingly in the external statistics, we therefore rely on external data sources. Being part of the general government sector, wind-down vehicles are required to send their balance sheet data to Statistics Austria on a quarterly basis.

⁶⁷ Source: <https://www.oenb.at/meldewesen/meldebestimmungen/aussenwirtschaftsstatistik/meldeinhalte.html>

⁶⁸ Manual on Government Deficit and Debt, Part IV.5, Financial defeasance.

Statistics Austria then sends these data to the OeNB (to the External Statistics and Financial Accounts Unit).

European Financial Stability Facility (EFSF): The EFSF was established in 2010 as a temporary crisis resolution measure. We use the data on EFSF assistance provided by Eurostat on a monthly basis.

European Stability Mechanism (ESM): The ESM was created in 2012 as a permanent crisis mechanism, with a view to supporting insolvent euro area countries with emergency liquidity assistance and guarantees. We use the data on ESM assistance provided by Eurostat on a quarterly basis. Resulting balances are carried forward as adjusted for monthly transactions.

Export promotion loans: In line with Austria's export promotion legislation, the Austrian government supports domestic companies with government guarantees for export deliverables. We use the respective annual data uploads (made during the annual debt and deficit notification to Eurostat, e.g. in March 2017 for January to December 2016), with a view aligning the data with Statistics Austria's fiscal balance data sheet. We then allocate these figures to the 10 most important countries.

Payments to international financial organizations: The finance ministry reports quarterly on payment flows to international organizations. In line with a Eurostat decision, Statistics Austria classifies these payment flows as either nonfinancial (D.99) or financial (F.51) transactions. Statistics Austria transmits its breakdown with the quarterly accounts.⁶⁹

1.4.4.3. Estimates

To close data gaps in external statistics in general and with regard to data on other investment in particular, we also use estimates. The estimates are produced and fed into the system manually.

1.4.4.3.a. FISIM – Monthly production

We receive FISIM data on a quarterly basis from Statistics Austria. To adequately reflect the monthly production of FISIM in investment income, we need to produce estimates. To this effect, we assume that interest rates (and hence the resulting FISIM rates) move in line with a seasonal pattern. We use the figures from the corresponding quarter of the previous year and allocate this amount in equal amounts to the months of the current quarter.

Sources: The monthly FISIM data are the FISIM measures calculated by Statistics Austria based on the corresponding quarter of the previous year.

1.4.4.3.b. Deposits/loans of Austrian businesses/households to nonresident banks

Given that we have set a reporting threshold of EUR 10 million for cross-border loans and deposits of Austrian households and businesses, we need to generate estimates to account for undercoverage. Specifically, we use the mirror data of nonresident MFIs derived from their balance sheet items statistics and the BIS to cross-check marginal totals for deposits and loans. Thus, we estimate the amount of deposits made by Austrian households and business with foreign banks as well as loans granted to Austrian households and businesses from foreign banks. We calculate gap estimates at quarterly intervals.

⁶⁹ The codes for international organizations are available from the OeNB's website: <http://www.oenb.at/isocodes/isocodes?mode=intorgs>

Apart from estimating changes in stocks, we also produce gap estimates for income received from cross-border deposits and loans. Our main data source are the interest rates documented in the balance sheet items statistics (interest rate statistics), as enriched by other interest rates outside the euro area.

Sources: Mirror data from the balance sheet items statistics reported to the ECB by other EU countries, data from the BIS and interest rate statistics.

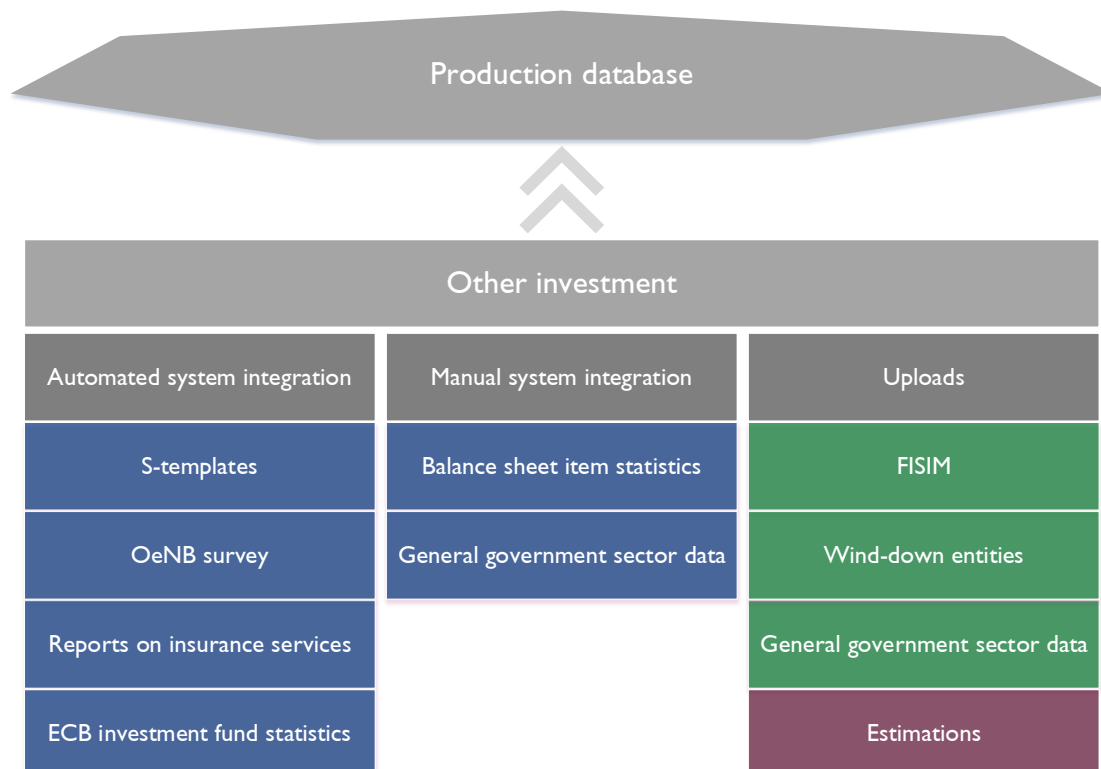
1.4.4.3.c. Currency

We produce cash estimates on a quarterly basis. Our starting point is the amount of cash held by the domestic sector, as evident from various sources and calculations. We then cross-check the resulting amount with the OeNB's obligations from the calculation of euro area banknotes and coins (based on the capital share mechanism). If the domestic claims exceed the OeNB's liabilities, we assume corresponding claims to exist vis-à-vis nonresidents. If domestic obligations exceed the OeNB's claims, we assume corresponding liabilities to exist vis-à-vis nonresidents. Ultimately, we use the quarterly estimates to adjust monthly data accordingly.

1.4.4.4. Compilation

With regard to the compilation of other investment for external statistics, we basically distinguish between integrating the data into the production database and then aggregating the data into individual BoP positions.

Figure 15: Compilation process for other investment



1.4.4.4.a. Automated system integration

The individual templates are sent electronically to the OeNB and collected for successive reporting periods.

S templates: The S templates support multidimensional reporting (country/currency/nonresidents) in line with the reporting requirements for external statistics. Reporting agents report monthly balances to the OeNB.

Before the monthly production of the balance of payments, we check the data received for completeness and quality and query points that need to be clarified. In this respect, it matters whether we receive a nil report or no report at all.

- *Difference between nil reports and nonresponse:* The S templates only serve to report stocks. However, we need to differentiate between changes in volume that are related to transactions and other changes in volume. The consistency of the data series that span two successive reporting periods is called reconciliation consistency. Based on the net change, we use exchange rate effects and reported reclassifications to arrive at the underlying transaction amounts.

Table 19: Calculation of exchange rate effects and transactions

	Resulting stocks, 12/2016	Transac- tions	Exchange rate effects	Price effects	Reclassific- ation	Residual	Resulting stocks, 01/2017
Reconciliation line	IS	±T	±X	±P	±O	±R	= RS
EUR amount	100				0		90
Amount in original currency	100*1.20 =120	94.5–120- 0=-25.5			=0*1.09= 0		90*1.05= 94.5
Final EUR amount	100	- 25.5/1.09 =-23.39	90–100– (-23.39)– 0=13.39		0		90
Result	100	-23.39	13.39	0	0	0	90

End-December exchange rate:	1.20
End-January exchange rate:	1.05
January average:	1.09

If a reporting agent reported a balance of “0” the system will automatically arrive at a transaction balance and an exchange rate effect of “0.” If a reporting agent did not submit any report to the OeNB, we will carry forward the balances on record. Carrying forward existing balances is subject to fewer revisions than setting all balances to “0.”

- *Data integration:* We transfer new data from the various reporting templates first to mirror files and then use the mirror files to populate our production database. Reconciling the data is an integral part of the database population process. The data update and reconciliation processes have been largely automated and will be repeated only in exceptional circumstances.

Data to be provided by the OeNB: See 1.4.6 Reserve assets.

Investment fund statistics: To compile data on other investment, we extract information on the cross-border lending and deposit-taking of investment funds from the available investment fund statistics. There are two different types of investment fund statistics: aggregated investment funds statistics as reported to the ECB (which we use to compile data on other investment) and security-by-security reporting (which is of particular relevance for portfolio investment).

The aggregates reported by investment funds (institutional units) include some balance sheet data (asset and liability flows and stocks, including other changes in assets) broken down primarily by individual types of instruments, individual currencies and individual countries and by (ESA) counterpart sectors.⁷⁰

Production database population is a process that basically includes the following steps:

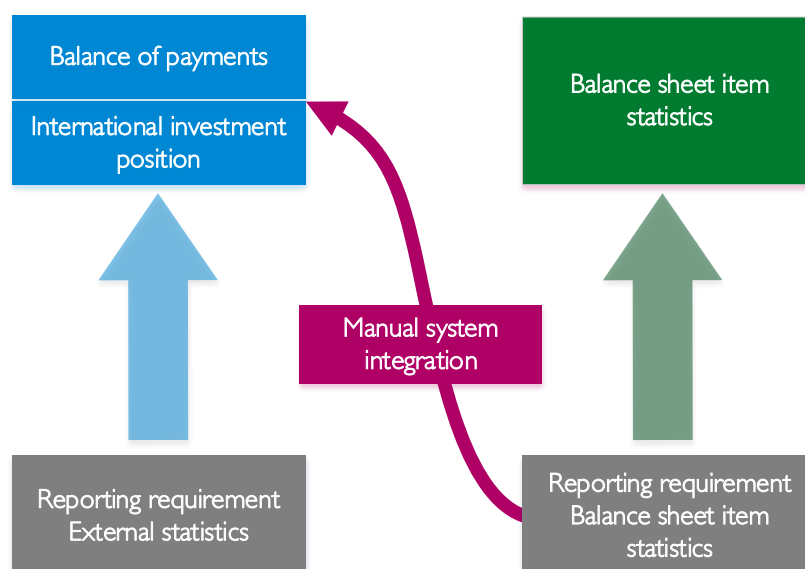
- *Data retrieval:* Once data have arrived at the OeNB, they are fed automatically into the data processing system developed for this purpose.
- *Consistency checks:* Consistency checks are made to verify the consistency of aggregates with each other and also within the exports reconciliation line. Moreover, we check exchange rate effects for validity (they must always be zero for euro-denominated amounts), and we check currency and country information. During the currency and country checks, we use master data to check whether currencies and countries indeed exist as reported or whether reporting errors may have occurred.
- *Data processing:* During this stage, we calculate and check individual parts of the exports reconciliation line, in order to spot and remedy reporting errors or substance.
- *Population of the production database*

1.4.4.4.b. *Manual system integration (balance sheet items statistics)*

The MFI balance sheet items statistics need to be updated manually for every reporting period. For BoP purposes, the balance sheet items statistics are secondary data, which means that the data were reported for a purpose other than the balance of payments in the first place.

⁷⁰ Diagram: <https://www.oenb.at/meldewesen/meldebestimmungen/monetaerstatistik/meldebestimmungen-investmentfondsstatistik.html>

Figure 16: Manual system integration during the compilation of other investment data



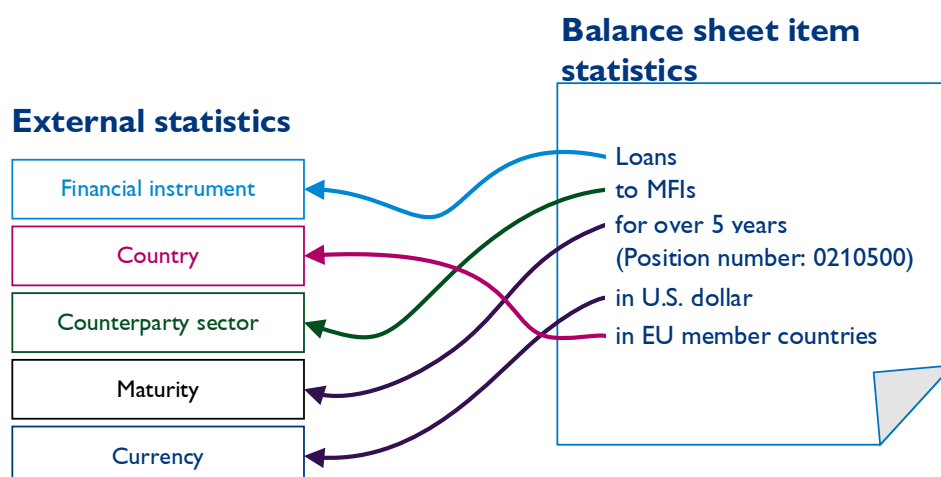
Manual integration of balance sheet items statistics into external statistics is a two-step process:

→ **Populating the mirror file:** Balance sheet items statistics are released on a monthly basis. Following each data release, our BoP system populates a mirror file with the data from the respective reporting period. Various calculation rules are applied to adjust the reporting format for balance sheet items statistics⁷¹ in a way that is meaningful for generating external statistics, essentially by reallocating the major data attributes used for balance sheet items statistics:

- Country
- Currency
- Maturity
- Sector
- Reporting agent
- Resulting stocks

⁷¹ For instance, the balance sheet items statistics require a different maturity breakdown than external statistics.

Figure 17: Mapping the reporting framework for balance sheet items statistics to the reporting format for external statistics



Once the mirror file has been fully populated, all data reported by individual reporting agents for individual instruments are integrated into the external statistics production database.

- **System updates:** Stage 2 of importing balance sheet items statistics into the external statistics system is defined by so-called transformation rules. This stage serves to enrich the imported data with the help of reporting agents' master data.⁷² In a next step we use successive end-of-period stocks to calculate the transactions made between the two reporting dates.

The data reported for balance sheet items statistics include only resulting stocks and reclassifications. To ensure consistency in the reconciliation of exports for BoP purposes, we need to calculate the flows of funds and exchange rate effects using the difference between two successive resulting stocks (as adjusted for reclassifications).⁷³ Since the technical approach to reconciling balance sheet items statistics is identical with the approach used for the S templates, the transformation process is also identical.

Plausibility check: The final step in the process of data integration is cross-checking the data with the original balance sheet items statistics both for individual banks and based on marginal totals. This enables us to identify and remedy technical and methodological errors in a timely manner.

1.4.4.4.c. System uploads

Data that do not lend themselves for direct integration into the external statistics system because of their complexity or changing data structures need to be added through uploads. Such uploads must be closely aligned with the system structure.

Specifically, manual system uploads must comply with the following rules and requirements:

- The upload file must be an Excel csv. file to facilitate error-free data integration.

⁷² Typical master data are: sector, ÖNACE codes, dominance codes, etc.

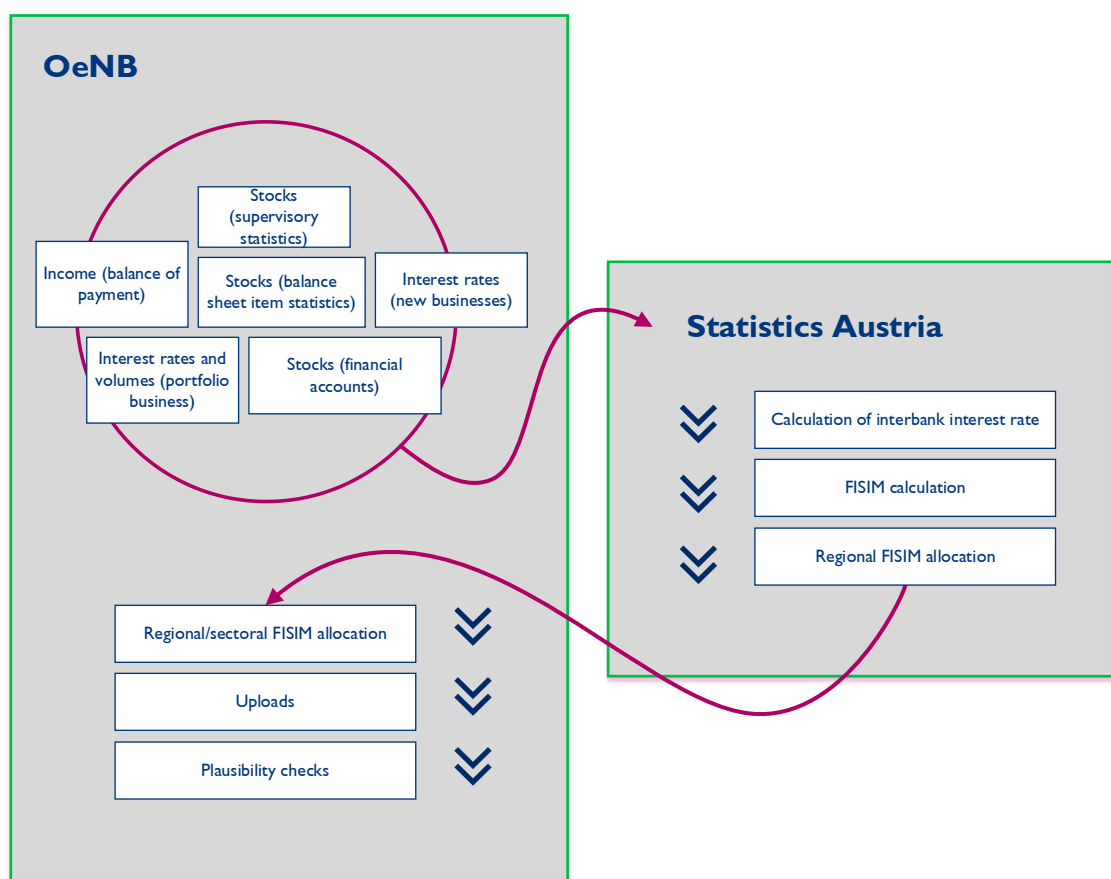
⁷³ We start from the assumption that deposits and loans are not subject to any price effects.

- The upload file consists of 36 fields (mirroring the structure of the production database) which need to be filled. Out of these 36 fields, 8 fields are pure data fields. The data fields must not contain any formatting.
- To make uploaded data distinguishable from the data added during the (automatic/manual) database population process, the data field containing the source code for the underlying templates (S1, O2, SD, ...) must always end with "KO."

FISIM (quarterly data): Calculating FISIM is a multi-stage procedure.

As shown in Figure 18, the OeNB shares the task of calculating the quarterly FISIM data with Statistics Austria: The OeNB provides Statistics Austria with quarterly data. Statistics Austria then applies a special calculation algorithm to produce a regional and sectoral breakdown, which it returns to the OeNB. To be able to feed the incoming quarterly data into our BoP statistics, we must first remove the monthly gap estimates added earlier from the system.

Figure 18: OeNB and Statistics Austria cooperation to calculate FISIM data



FISIM (monthly data): Since the FISIM calculations made by Statistics Austria are based on quarterly data cycles, we need to approximate the monthly data with estimations.

To adequately reflect seasonal patterns, we proceed as follows. For instance, to obtain data for December 2016, we split the data for the corresponding quarter of the previous year (Q4/2015) into three equal parts for October, November and December 2016, which we feed into the system accordingly.

As with the production of the quarterly data, the concluding step is a plausibility check.

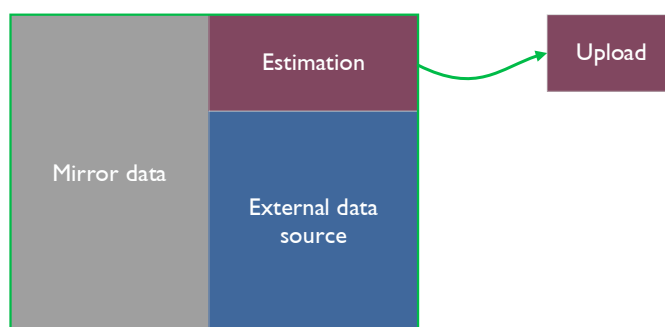
Wind-down entities: With regard to wind-down entities, we receive monthly data from the reporting agents themselves, and quarterly data from Statistics Austria.

- *Monthly data production:* The reporting requirements for external statistics kick in once domestic entities' transactions exceed the defined reporting thresholds. Data retrieval from the reporting templates received and integration into the statistics system has been automated.
- *Quarterly data production:* Because Statistics Austria is responsible for compiling data on the general government sector, we receive quarterly data from Statistics Austria, which are then fed into our system. These data also include the data provided by individual wind-down entities that have been established in Austria. Because these data take priority over the monthly data we receive, we need to replace the monthly data with the quarterly data. From a technical point of view, this means that we need to feed the data manually into system upload (Excel/csv.) files. These csv. files are then added to the production database in a separate step. In this process, the following points are important:
 - *Reporting scope:* The data submitted by Statistics Austria must contain the key attributes that we need to be able to generate a system upload. This includes the data fields as well as information on counterparty sectors, counterparty countries and currencies.
 - *Processing date:* The removal of the monthly data (also via system uploads) and the addition of the quarterly data must be timed adequately. The production of the quarterly data roughly coincides with the first production of monthly data for the next quarter (e.g.: Q4/2016 and 01/2017). To maintain reconciliation within the system, we first need to complete the monthly data production (to ensure that 12/2016 is consistent with 01/2017) before we can use the quarterly data release to replace the monthly data on wind-down entities (to ensure that Q3/2016 will be consistent with Q4/2016).
 - *Plausibility checks:* The manual production of system uploads must be checked for potential errors. To ensure that the production database will not be deficient, we conduct plausibility checks at every stage of the process. We check the data for completeness, and we also check the reconciliation of exports for consistency.

General government data: As mentioned above in the description of data sources, the data on the government sector are derived from numerous sources. For the system upload to work, we must restructure the data we receive to ensure compatibility with our data structures. Over time, more consistent templates have been agreed, thus simplifying the preparatory work for the data uploads.

Estimates: For the purpose of compilation, we need to produce estimates for foreign banks' deposit-taking from and lending to domestic households and nonfinancial corporations, and estimates of the currency-related liabilities of the central bank sector.

- *Loans/deposits:* Because gap estimation is a complex process, we make this exercise only once a year. Because gap estimation is a complex process, we make this exercise only once a year.

Figure 19: Estimates of deposits and loans defined as other investment

The gap estimates are made on a regional basis. Basically, we cross-check the balance sheet items statistics of all EU countries (mirror data) against each other, in order to be able to close data gaps in the data reported for external statistics.

We generate transaction data by dividing the net changes in stocks in equal parts and adjust the time series to be revised accordingly. Stocks are carried forward pending the availability of new data.

- *Currency:* We estimate the OeNB's liabilities to the rest of the world using a residuals method. Based on the OeNB's total liabilities arising from currency, we start by calculating the share of the domestic sectors, to be able to then calculate the share of the rest of the world.

OeNB liabilities arising from currency – claims of the domestic sector = claims of the nonresident sector.

We then use a regional key to divide up the sum total of nonresidents' claims on the OeNB (S.121).

Finally, we use this breakdown for system uploads to adjust the production database accordingly.

Accrued interest payable: Using the structure of the counterparty sectors for deposits and loans based on global data derived from the balance sheet items statistics, we break down accrued interest payable on a pro rata basis and allocate these amounts accordingly, also to nonresidents.

1.4.4.4.d. Other investment aggregates

To compress the microdata contained in the production database, we produce corresponding aggregates (called "sheets").

The aggregates define a given item with several characteristics. For instance, we use a special numbering system, which is the same for all functions of the financial account.

Example: A740< KF14012X.

Table 20: Aggregates for other investment

Position number	Example	General definition	Definition in this context
Digit 1	A	Use	Rest of the world
Digit 2	7	Functional category	Other investment
Digits 3–5	22T	Financing instrument	Overnight deposits

Digit 6	K	Capital gains code	Capital
Digit 7	F	Claim/liability	Claim
Digits 8–10	140	Creditor sector	Households
Digits 11–13	12X	Debtor sector	Banks incl. the central bank

We use these positions to aggregate microdata for subsequent analyses and data transmissions. For maximum flexibility in data processing and for fast responses to individual queries, we use a three-tier system of aggregation, or three types of “sheets”:

- *Basic aggregates*: This is the lowest level of aggregation for individual balance of payments positions. To ensure accurate aggregation, duplication must be avoided.
- *Intermediate aggregates*: Basic aggregates may be combined into main aggregates. Different financing instruments or different sectors are typically aggregated further (for example: short-term loans + long-term loans → loans).
- *Top-level aggregates*: This highest level of aggregation must be derived only from intermediate aggregates. It is mostly used to combine already highly aggregated BoP positions (for example: other investment – total claims).

1.4.4.5. Special issues

In the process of producing other investment data, the following issues may arise beyond the normal scope of compilation:

1.4.4.5.a. Ad hoc uploads

Following political or economic developments with major implications, we may make ad hoc uploads to adjust the production database accordingly.

Example: tax treaty between Austria and Switzerland: The tax treaty with Switzerland published in 2014. Here, the resulting flows of funds were recorded as published in the corresponding press release; they were added to the production database with a system upload.

1.4.5. Delineation of other investment

1.4.5.1.a. Differences between other investment and direct investment

For data classification decisions to be made, we rely on master data information. When the equity owned by a foreign entity totals more than 10% of the voting power, then all business transactions between the two units will be classified as direct investment. When the equity owned by foreign entity is less than 10% of the voting power, then all business transactions between the two units will be classified as other investment (provided the financial instruments involved are relevant for other investment).

1.4.5.1.b. Differences between other investment and portfolio investment

In general, portfolio investment has little in common with other investment because the underlying financial instruments differ fundamentally. However, when it comes to bonded loans, this is not the case.

Bonded loans tend not to be securitized, which means that they do not come with an ISIN code. They are no securities to be reported on a security-by-security basis; they are to be included in “other investment” (long-term loans).

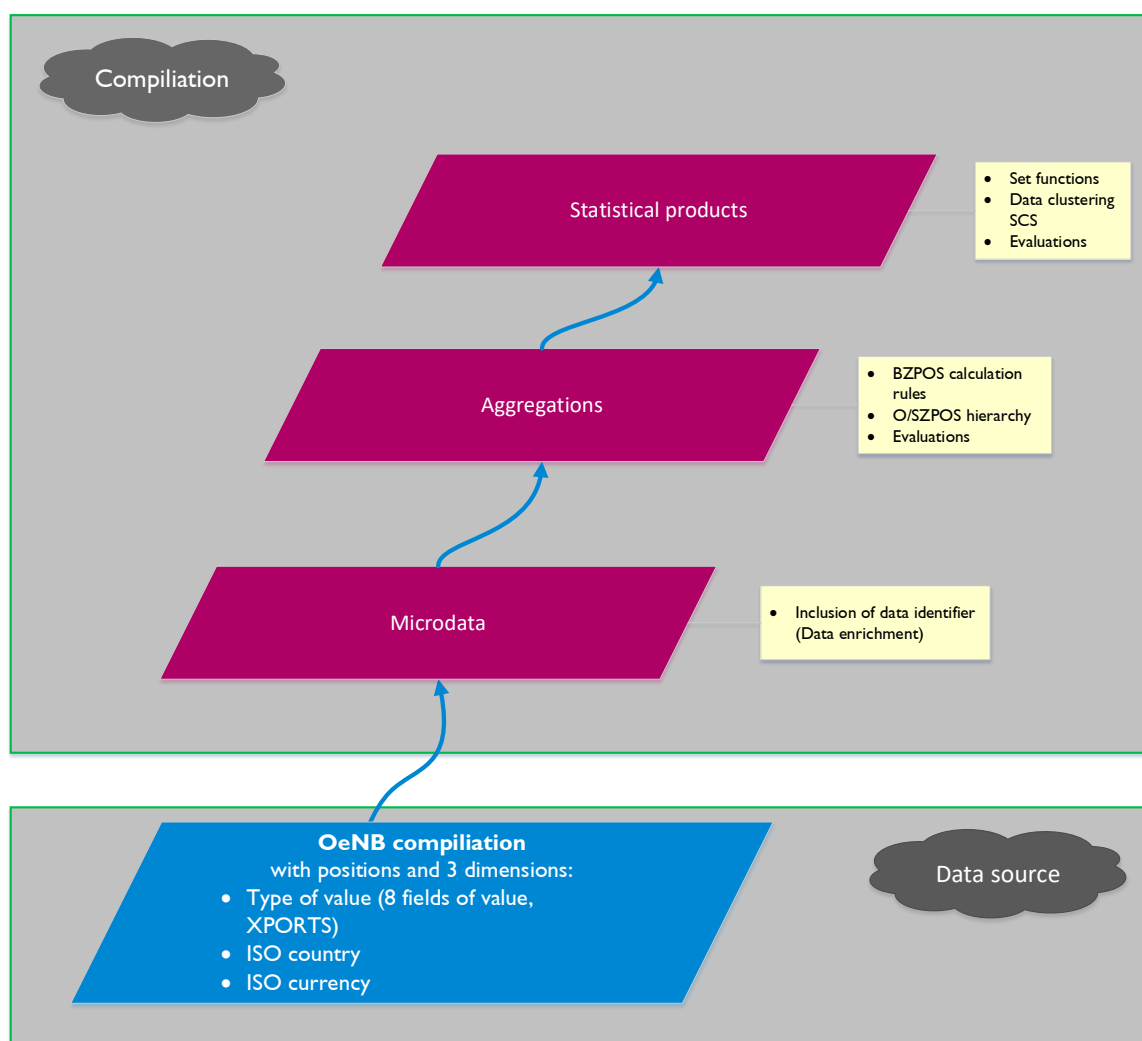
1.4.6. Reserve assets

Reserve assets constitute claims with the following characteristics: they are subject to control by the monetary authority, highly liquid, marketable and accepted as an international currency. In particular, these claims are denominated in currencies other than euro and they are claims against debtors headquartered outside the euro area. Cases in point are gold holdings, SDR holdings and the participation in the IMF. Reserve assets are claims by definition, which is why the amount of claims equals net reserves.

The reserve assets held by the ECB and administered by the national central banks in the euro area are an integral part of the Eurosystem's reserve assets as a whole.

1.4.6.1. Subsystem overview

Figure 20: Subsystem overview for reserve assets



1.4.6.2. Data sources

In Austria, reserve assets are reported only by the central bank.

Data are to be reported on a monthly basis and in euro equivalents as a rule. The reports cover stock positions, financial flows and non-flow changes (given exchange rate movements, security price movements or other effects).

The reports also contain the **initial stocks** (IS) and **resulting stocks** (RS) for each reporting period. Stocks are to be shown at market value and include any interest receivable or payable as accrued until the end of the previous period. Taken together, financial flows and non-flow changes (e.g. security price movements and changes resulting from reclassification or exchange rate movements) must explain any differences between initial and resulting stocks. In other words, due attention must again be paid to the reconciliation of exports (see Methodological glossary).

Reclassification examples:

- Reclassification resulting from portfolio shifts (from reserve assets to nonreserve assets, following the accession of new member states to the euro area; or from reserve assets to the own-funds portfolio).
- Reclassification following SDR allocations and cancellations
- Reclassification of monetary gold (reserve assets) to nonmonetary gold (goods and services account): Underlying reasons may be the purchase or sale of gold from/to counterparties other than other monetary authorities.

The relevant positions are reported per **ISO country** and per **ISO currency**. The ISO country code refers to the country of residence of the debtor, or of the international organization acting as the debtor in the context of the respective financing instruments. The ISO currency code refers to the nominal or original currency of the respective financing instruments. The code to be used for gold holdings or receivables is XAU (= gold; unit = ounce). The code for claims on the IMF arising from SDRs and the reserve position in the IMF is XDR (= special drawing rights of the IMF).

1.4.6.3. Estimates

We do not provide any estimates for reserve assets.

1.4.6.4. Compilation

We use a number of transformation rules and master data to transform the positions as reported per country and currency, which consist of 8 digits, from the data collection environment into the production database. Example:

Figure 21: Populating the BoP data warehouse with reserve asset positions

Report		BoP data warehouse	
Reporting period	2016 January	2016 01	Period
Position	Long-term debt securities (reserve assets)	Bonds	Financial instrument
Country	AU	Reserve assets	Function
Currency	USD	AT	Creditor country
Initial stocks	100	Central bank	Creditor sector
Incoming transaction (deposit)	40	AU	Debtor country
Outgoing transaction (withdrawal)	20	Banking	Debtor sector
Asset price changes	50	USD	Currency
Exchange rate movements	70	OeNB	Source
Reclassification	0	over 1 year	Maturity
Resulting stocks	240	100	Initial stock
Income	26	40	Incoming transaction (deposit)
Reporting agent	OeNB	20	Outgoing transaction (withdrawal)
		20	Balance of transactions (calculated)
		50	Asset price changes
		70	Exchange rate movements
		0	Reclassification
		240	Resulting stocks
		26	Income

Subsequent aggregation steps serve to generate the required main aggregates on reserve assets:

- Gold
 - thereof gold bullion
 - thereof unallocated gold accounts
- SDRs
- Reserve position in the IMF
- Currency and deposits
- Securities
 - thereof equity securities and investment fund shares
 - thereof debt securities
- Financial derivatives
- Other claims

1.4.6.5. Special issues

Claims in foreign currency:

Claims that the OeNB has against international organizations – including all European institutions (e.g. European Commission, European Investment Bank) but excluding the ECB – are classified as non-euro area residents, irrespective of where they are domiciled; hence the related claims are classified as reserve assets.

Gold

Unlike monetary gold, which is classified as a reserve asset, nonmonetary gold (such as industrial gold or gold for collector coins) is included in the goods and services account.

Gold bullion bars held by central banks as reserve assets must meet the good delivery rules of the London Bullion Market Association relating, for instance, to dimensions, weight and fineness. Good delivery gold bars have a serial number and the assay stamp of the certified refiner.

The breakdown of the gold position into gold bullion and unallocated gold accounts is available only from reports as of January 2013. Neither position can be allocated to particular regions. In regional statistics, they are therefore included in the XX section (= unallocated).

Gold bullion is defined as gold in physical form (coins, ingots or bars) with a minimum fineness of 995. This includes gold bullion coins in allocated gold accounts.

Unallocated gold accounts give title to claim the delivery of (monetary, physical) gold (= gold bars); they represent a claim against the account operator to deliver gold. For these accounts, the account provider holds title to a reserve base of physical (allocated) gold and issues claims to account holders denominated in gold.

Transactions are recorded for gold sales or purchases in which the other party is also a monetary authority (which includes transactions with the BIS and the IMF).

Liquidity-absorbing gold transactions (gold swaps, repos, loans and deposits) are not recorded on the balance sheet, leaving monetary gold stocks unchanged.

Special drawing rights

Special drawing rights (SDRs) constitute a virtual currency created by the IMF that is fully convertible and is regarded as part of official reserve assets. This position does not reflect SDR allocations and cancellations; transactions between the IMF and IMF member countries are recorded only when SDRs are bought or sold. Transactions in this category comprise loans granted to other member states via the IMF.

Liabilities arising from SDRs are not included under reserve assets but under other investment.

Reserve position in the IMF

The reserve position in the IMF shows claims against the IMF arising from the paid-up share in the capital subscription to the IMF as well as loans granted to the IMF (under the General Arrangements to Borrow and the New Arrangements to Borrow). These arrangements to borrow mirror loans granted by the IMF to its member states.

Reserve assets invested in securities

Reserve assets include securities issued by non-euro area residents that are not euro-denominated. While data on portfolio investment are available on a security-by-security basis, the data on reserve assets invested in securities are available only as issuer country aggregates per nominal currency. The reporting template includes the following categories of securities:

- Short-term debt securities (original maturity of up to 1 year)
- Long-term debt securities (original maturity of more than 1 year)
- Quoted shares
- Unquoted shares
- Investment fund shares

1.5. Errors and omissions

Net errors and omissions is the amount of net lending/borrowing that remains when the balance of the current account and capital transfers is deducted from the financial account balance. In theory, this amount should be zero, but in practice this never happens. Key reasons include the different reporting periods defined for current account transactions and the corresponding financial account transactions, the different reporting periods for financial account transactions that apply for different categories (particularly for FDI), and undercoverage resulting from the use of reporting thresholds. In Austria, we do not automatically adjust the balances of the current account, capital transfers and the financial account to arrive at zero errors and omissions, because this would imply that we would have to adjust aggregates either in the current account or in the financial account, including regional breakdowns, without knowing the underlying economic reasons. At the same time, we seek to keep net errors and omissions as small as possible. In particular, we follow up delays in the delivery of corporate data from Statistics Austria for the current account and from other OeNB functions for the financial account. Moreover, we follow up on data that appear to be implausible.

1.6. Special FDI statistics

In terms of end products, there are two types of FDI statistics: FDI as a functional category of the BoP and the IIP, and special FDI statistics in their own right.

Depending on the different use cases, the conceptual frameworks and the structural breakdowns also differ in a number of things:

Different use cases for FDI statistics		
	FDI as a functional BoP/IIP category	Separate FDI statistics
Entities covered	All entities	All entities but SPEs No real estate investments
Presentation principle	Assets/liabilities	Extended directional principle
Regional breakdown	Direct investor	Outward FDI: direct investor Inward FDI: group headquarters
Additional breakdown	None	Industries, provinces Duration of investment

Detailed overview:

Entities covered:

What matters for users of separate FDI statistics is above all that the data provide meaningful economic information for doing business. This is why the focus is on enterprises. When it comes to FDI as a BoP/IIP category, such a selective approach would not work, because the data would not provide a complete picture of the assets and liabilities of the Austrian economy. As a BoP/IIP category, FDI therefore also covers real estate investments (classified as in the functional category of direct investment in the BPM6) as well as [special purpose entities](#) (whose relevance for the real economy is limited).

Presentation principle:

As a functional BoP/IIP category, FDI must be recorded in line with the asset/liability principle,⁷⁴ as required by the conceptual framework for producing comprehensive aggregates. Special FDI statistics, in contrast, have always been compiled in line with the directional principle.⁷⁵ This distinction makes a difference when it comes to the classification of intragroup loans. When we use the asset/liability principle, we include loan receivables in claims and loan liabilities in liabilities. When we use the directional principle, the direction of the equity flows is the guiding principle: we need to include equity claims in outward FDI and equity liabilities in inward FDI. In line with the directional principle, it does not matter whether intragroup loans are credit claims or credit liabilities. If the credit flows move in the same direction as the equity flows, FDI stocks increase. Thus, credit claims will increase outward FDI stocks. If credit flows and equity flows move in opposite directions, FDI stocks will decrease. Hence, credit liabilities will decrease FDI stocks. This is what is called reverse investment.

Figure 22: Link between presentation principles and entities covered

		claims	liabilities	net figure
		2016		
		in Mio EUR		
A/L Principle	direct investment (strict term)	282.319	235.132	x
	SPE	54.151	55.874	x
	real estate investment	5.247	5.738	x
	direct investment (broad term)	222.921	173.530	x
<i>thereof</i>				
dir. Principle	inward FDI claims	197.153	x	x
	inward FDI liabilities	x	7.117	x
	inward FDI	x	x	190.036
	outward FDI claims	x	166.402	x
	outward FDI liabilities	25.768	x	x
	outward FDI	x	x	140.634

Regional breakdown:

Linking flows and positions with immediate counterparty countries is at the forefront of the production of BoP/IIP statistics, and hence also of the functional FDI category.

When we analyze direct investment relationships in greater detail, we often find highly complex group structures. These days, it is very rare for an investor based in country A to have a direct investment enterprise in country B, with no other hierarchies in between or no fellow companies involved. Knowing where money invested in Austria originally came from is meaningful economic information. This is why Austria's FDI statistics have been designed to identify the group headquarters' country of incorporation for all direct owners of Austrian businesses. Building on this information, the OeNB provides data on inward FDI (stocks, flows, income and employment) broken down by the countries in which the group headquarters are domiciled:

See:

<https://www.oenb.at/isaweb/report.do?report=9.3.31> (stocks)

<https://www.oenb.at/isaweb/report.do?report=9.3.32> (flows)

⁷⁴ Assets and liabilities are recorded separately.

⁷⁵ The BPM6 introduced the extended directional principle.

<https://www.oenb.at/isaweb/report.do?report=9.3.33> (income)

<https://www.oenb.at/isaweb/report.do?report=9.3.34> (connection between stocks and flows)

<https://www.oenb.at/isaweb/report.do?report=9.3.35> (employment)

Additional breakdown:

Apart from providing regional breakdowns, for which demand is high, we also offer special FDI statistics based on other breakdowns:

- Economic activity of direct investors and direct investment enterprises as classified in ÖNACE 2008
- Geographical distribution across Austria's provinces
- Duration of investment
- Investment at establishment
- Economic sector according to ESA 2010

Most of the data are held and analyzed in a separate data warehouse for direct investment with a more limited functionality (which does not support the analysis of BoP/MSTR datasets or the generation of SDMX files). This data warehouse is sourced from the annual FDI surveys and numerous other micro data sources:

- Other OeNB surveys (above all reports on transactions and group lending)
- Company register data (name, legal form, industry and other master data)
- Structural business statistics compiled by Statistics Austria (turnover, number of employees)
- Corporate financial statements (corporate register court; own surveys)

1.7. International trade in services

Data on international trade in services are an annual add-on to the balance of payments statistics that we transmit to Eurostat and the OECD. The services classification mirrors the BoP classification but is more detailed. The methodology for classification is the Extended Balance of Payments Services Classification (EBOPS 2010), which is in line with the BPM6. For additional information, readers are referred to the Manual on Statistics on International Trade in Services (MSITS 2010).

The OeNB offers data on international trade in services in the statistics section of its website:

<https://www.oenb.at/en/Statistics/Standardized-Tables/external-sector/services.html>

2. Dissemination

2.1. Release calendar

For the time being, we use monthly data to produce the quarterly statistics, and quarterly data to produce the annual statistics. In addition, we use the annual data from the OeNB's FDI surveys to update the stock positions in the December reporting rounds, and we spread reinvested earnings across the twelve months.

2.2. Data revision policy

The data revision cycle for the balance of payments (including the IIP) has been broadly synchronized with the production of the national accounts – the annual SNA data (including input/output tables), the

nonfinancial accounts, the financial accounts for the general government (provided by Statistics Austria) – and with the production of the flow-of-funds accounts. Our goal is to maintain consistency across the annual data for the three preceding reporting periods or more when producing the data for the second quarter of the current year.

In a first step, we revise the preliminary quarterly results (end-of-quarter positions for the fourth quarter or the cumulative four-quarter flows) using separate annual data for the government sector (EDP notification), data from the FDI survey, corporate balance sheet data and balance sheet data for other financial institutions that are not subject to reporting obligations (from the company register).

Major revisions involving changes of the entire time series are carried out at larger intervals; they are undertaken mainly to implement new methods and concepts or to access new data sources. Major past revisions that improved the availability of data included the complete roll-out of direct reporting by domestic reporting agents (also for securities reporting) for reports as of Q1 2006; the roll-out of changes to balance sheet items statistics for reports as of Q4 2016; and the implementation of Solvency II provisions in Q1 2017 for insurance statistics. The latest methodical revision took place in September 2014 on account of the transition to BPM6 and ESA 2010.

The timeline for producing and revising BoP (and IIP) data is closely aligned with the OeNB's own deadlines for transmitting data to the ECB, Eurostat, the OECD and the IMF (also in line with the data dissemination deadlines for SDDS Plus). Under the ECB's current transmission program, monthly and quarterly data are to be submitted within $t + 82$.

As the individual subsystems necessarily come with different and, in some instances, staggered compilation and revision cycles, data vintages (reflecting different calculation and revision phases) for individual subsystems cannot be avoided despite the integration of data and uniform concepts.

Figure 23: Revision plan for all macroeconomic statistics

Planned implementation of Amended HERP																	
Actual Practice followed, depth of revision in quarters, excluding the first reported quarter			Timeliness	Q1				Q2			Q3				Q4		
				Jan	Feb	Mar	Apr (EDP)	Apr	May	Jun	Jul	Aug	Sep	Oct (EDP GNI)	Oct	Nov	Dec
Quarterly	Main Aggregates (QNA release)		Q+2M	0	3	0	0	0	4	0	0	17	0	0	0	2	0
	Sector Accounts, non-financial (Combined QNA and QSA release)		Q+3M	0	0	3	0	0	0	4	0	0	17	0	0	0	2
	Sector Accounts, financial		Q+3M	0	0	15	0	0	0	1	0	0	17	0	0	0	2
	Government Finance Statistics		Q+3M	0	0	11	11	0	0	0	0	0	5	5	0	0	0
	Balance of Payments		Q+3M	0	0	3	0	0	0	0	0	0	13	0	0	0	2
	International Investment Position		Q+3M	0	0	4	0	0	0	1	0	0	13	0	0	0	2
Actual Practice followed, depth of revision in years, excluding the first reported year Core Tables			Timeliness	Q1				Q2			Q3				Q4		
				Jan	Feb	Mar	Apr (EDP)	Apr	May	Jun	Jul	Aug	Sep	Oct (EDP GNI)	Oct	Nov	Dec
Annual Tables *)	Main Aggregates, detailed tables		Y+9M	0	0	0	0	0	0	0	0	0	3	0	0	0	0
	Sector Accounts, non-financial, non-financial assets etc.		Y+9M	0	0	0	0	0	0	0	0	0	3	0	0	0	0
	Sector Accounts, financial		Y+9M	0	0	0	0	0	0	0	0	0	3	0	0	0	0
	Government Finance Statistics		Y+9M	0	0	2	2	0	0	0	0	0	1	1	0	0	0
FDI	FDI Statistics		Y+9M,21M	0	0	0		0	0	0	0	0	2		0	0	0

Latest version: Sept. 2017.

*) Without tables 26,29 of the ESA transmission programme

2.3. Confidentiality

Confidential data that the OeNB shares must be identified as such, or they must not be disseminated at all.

Both the ECB and Eurostat offer guidance on what kind of information should be considered to be confidential. At any rate, users of statistics must not be in a position to identify a previously unknown business case on the basis of published statistical information.

2.3.1. Definition

At the very latest, the systematic documentation of confidentiality must start when information on the originators of transactions ("idents") gets lost in the data aggregation and transformation process.

Basically, there are two criteria for determining whether a data position (transaction) is to be treated as confidential:

1. The number of idents is less than 3.
2. One ident is dominant (accounts for more than 85%).

If one of the above criteria is met, then the position is to be identified as confidential.

Idents with "0" positions (calculated or reported) are not taken into account in this regard.

When data positions are created from the production database, the system adds the list of underlying idents and the corresponding values for each data field. If a given ident occurs more than once in a position, it is counted only once, and the values are added up. As only domestic idents matter for identifying the adequate confidentiality treatment, we look at the creditor idents for outward FDI and at the debtor idents for inward FDI. If the type of position is not known, we identify the domestic ID based on the creditor or debtor country.

The dominance of a position per data field (d) is calculated as follows:

$$D(P) = \max_i \left\{ \frac{|d_i|}{\sum_i |d_i|}, i \in I \right\}$$

with $D(P)$ being the dominance of the position P , d_i the value of the i -th ident in the position P and I the ident index number for the position P .

2.3.2. Special cases and exceptions

Values of zero (e.g. in the current account balance with DE) do not provide any insights into transactions that would need to be treated as confidential. Therefore, values of zero are generally flagged as "free." This may happen with transactions that cancel each other out, or that all have a value of zero. The smallest publication unit is one million. To prevent a value of EUR 350,000 to be flagged as confidential, the amount will be converted to million in the confidentiality calculation. In the process of aggregation, we start by adding up the one-digit figures and converting them into million. Thus, values of zero will enter the confidentiality assessment in the form of EUR 0 million and will be assessed as "free." The threshold for zero values ranges from –EUR 499 million to EUR 499 million.

Dummy idents are identified with a corresponding code in the OeNB's identifier database. If a data position consists only of dummy idents, it will be flagged as "free." If a dummy ident occurring in combination with

a non-dummy ident should be dominant, the position will also be flagged as “free.” The “number of idents” field is not used for dummy idents.

Ultimately, flagging a data position as “free” or “confidential” is also a case of expert judgment, based on technical information that can be derived from the data, such as estimates. Such assessments may be made on an ad hoc basis or on a generic basis.

2.4. Historical data

Ahead of the OeNB’s bicentennial in 2016, substantial efforts were made to compile a wide range of macroeconomic time series, including BoP and IIP data. For Austria’s current account, we now have historical data series compiled by WIFO for the period from 1924 to 1953 (excluding the period from 1938 to 1946) plus OeNB time series compiled in line with the IMF’s BPM5 from 1954 onward, and in line with the BPM6 from 1995 onward. For Austria’s financial account, we now have (limited) data for the period from 1954 to 1976. With the reporting year 1977, the OeNB started to compile time series for the financial account and the IIP in line with the IMF’s BPM5. Here too we switched to the BPM6 with the reporting year 1995. Furthermore, we have data on travel services (including international passenger transport), starting with the reporting year 1954, and data on FDI stocks and flows (excluding real estate investment and SPEs), starting with the reporting year 1954.

2.5. Products

2.5.1. Data dissemination

2.5.1.1. Data provided at [oenb.at/Statistics](https://www.oenb.at/Statistics)

2.5.1.1.a. *Standardized tables*

The key product that we offer in the OeNB’s data download area are predefined tables for which data users may select the time range and the periodicity of the data. Every table may also be visualized as a Figure, but the number of indicators available is limited.

Standardized datasets are available for the following areas:

Balance of payments and international investment position

<https://www.oenb.at/en/Statistics/Standardized-Tables/external-sector/balance-of-payments-and-international-investment-position.html>

Services

<https://www.oenb.at/en/Statistics/Standardized-Tables/external-sector/services.html>

Direct investment

<https://www.oenb.at/en/Statistics/Standardized-Tables/external-sector/foreign-direct-investment.html>

Portfolio investment

<https://www.oenb.at/en/Statistics/Standardized-Tables/external-sector/portfolio-investment.html>

Other investment

<https://www.oenb.at/en/Statistics/Standardized-Tables/external-sector/other-investment.html>

Tourism

<https://www.oenb.at/en/Statistics/Standardized-Tables/external-sector/Tourism.html> – International tourism: receipts and expenditures

Financial accounts

<https://www.oenb.at/en/Statistics/Standardized-Tables/financial-accounts.html>

SDDS Plus – National summary data page (NSDP)

<https://www.oenb.at/Statistik/sdds-plus/national-summary-data-page.html> (Compiled by the External Statistics, Financial Accounts and Monetary and Financial Statistics Division and other OeNB business areas)

2.5.1.1.b. User-defined queries

In addition, we also provide a statistics dashboard enabling users to make **user-defined queries** that cover a range of additional indicators and breakdowns:

<https://www.oenb.at/isaweb/dyna1.do?lang=DE&go=initHierarchie>

2.5.1.2. Statistics app

We have also developed an app that allows data users to access data from our website (2.5.1.1 Data provided at [oenb.at/Statistics](https://www.oenb.at/Statistics)) on their mobile devices.

2.5.1.3. Data transmission to national and international organizations

As outlined in 1 Legal basis, we need to comply with standards for data transmission when meeting our national and international reporting obligations. Above all, we provide data to:

- ECB
- Eurostat
- IMF
- BIS
- OECD
- Statistics Austria
- The Chamber of Labor
- WIFO
- Ministry for Digital and Economic Affairs

Detailed overview of the datasets to be provided

Figure 24: Data transmission matrix displaying the OeNB's reporting obligations

Transmission matrix - who gets what?											Latest update: 16.01.2018		
										Ministry of Education, Science and Research			Austrian Investment Fund Management Companies (VöIG)
Set number	Name	OSIRIS export	ECB	Eurostat	IMF	BIS	OECD	ST-AT	WKÖ		World Bank	OeBFA	
Monthly													
manually	Treasury notes transmission	BNT-DSD - SDMX_BNT_EZB	x										
manually	IMF reserve template	-			x								
2101	MBOP	BOP-DSD - SDMX_MBOP_EZB bzw. _EUROSTAT	x	x									
2102	MBOP change	BOP-DSD - SDMX_MBOPC_EZB	x										
Quarterly													
2203	QBOP	BOP-DSD - SDMX_QBOP_EZB bzw. _EUROSTAT	x	x									
2204	QBOP change	BOP-DSD - SDMX_QBOPC_EZB bzw. _EUROSTAT	x	x									
2205	QIIP	BOP-DSD - SDMX_QIIP_EZB bzw. _EUROSTAT	x	x									
2206	QBOP IWF	BOP-DSD - SDMX_QBOP_IWF			x								
2207	QIIP IWF	BOP-DSD - SDMX_QIIP_IWF			x								
2510	FDI - Assets/Liabilities Transactions (quarterly)	FDI-DSD - SDMX_AL_FL_Q_OECD					x						
2512	FDI - Assets/Liabilities Transactions (Annual)	FDI-DSD - SDMX_AL_FL_J_OECD					x						
2511	FDI - Assets/Liabilities Stocks (quarterly)	FDI-DSD - SDMX_AL_ST_Q_OECD					x						
2513	FDI - Assets/Liabilities Stocks (Annual)	FDI-DSD - SDMX_AL_ST_J_OECD					x						
9251/manually	External Debt	-			x						x		
4001	ST-AT FISIM (ZABIL)	-						x					
4002	ST-AT DL-Vertrag	-						x					
4003/9101/9103	WKÖ (ZABIL)	-							x				
manually	ST-AT FISIM Annex Neu (GFR)	-						x					
manually	VöIG - transmission - investment fund	-											x
manually	GFR early estimates	NA_SEC-DSD - SDMX_EA_EZB	x										
manually	GFR national	NA_SEC-DSD - SDMX_NA_EZB	x										
manually	GFR institutional investors	-					x						
manually	GFR households	-					x						
manually	GFR BIZ	-				x							
manually	GFR - GFS - Staat-Annex	NA_SEC-DSD - SDMX_GFS_EZB						x					
manually	GFR - GFS - investment fund	-										x	
Semi-annual													
2305	CPIS	BOP-DSD - SDMX_CPIS_IWF			x								
2301	SEFER	BOP-DSD - SDMX_SEFER_EZB	x										
4004	BMWWF	-								x			
Annual													
2501	International Trade S. (ITS)	BOP-DSD - SDMX_ITS_ESTAT		x									
2502	FDI_Jahresfragebögen	FDI-DSD - SDMX_FDI_EUROSTAT		x									
2514/2515/2516	FDI - Directional Principle	FDI-DSD - SDMX_DP_I_J_OECD (DP_FL, DP_ST)					x				x		
manually	GFR (via ST-AT an Eurostat)	-						x					
2306/manually	CDIS	-			x								
manually	FATS	-						x					

2.5.1.4. Statistics Hotline

Specific data needs which cannot be met with predefined or user-defined queries (2.5.1.1) will be dealt with by the OeNB's Statistics Hotline, which can be contacted online (web query), via email or by phone (+43 1 40420 5555).

Beyond the provision of data, the Statistics Hotline also stands ready to provide guidance with regard to data selection and to answer questions about methodology (with the help of experts).

2.5.1.5. Scientific cooperation

Since 2017, the OeNB has been providing academic researchers access to microdata on the external sector, along with indicator descriptions, metadata and a dummy database. On this basis, our research partners create R-scripts, which are executed in a local OeNB environment. Ultimately, we share only data that have been aggregated and anonymized.

2.5.2. Publications

2.5.2.1. Information published by the OeNB's External Statistics, Financial Accounts and Financial Statistics Division

Our flagship publication **STATSTIKEN – Daten und Analysen** (available in German with English executive summaries) includes a regular series of reports and papers on trends in the balance of payments, the international investment position, direct investment, services, portfolio investment and other areas that are related to external statistics.

In addition, we provide in-depth analyses with corresponding datasets on direct investment and trade in services in **special STATISTIKEN issues**, which are made available in English as well.

Moreover, we provide short **explainers** (mostly in German) for different areas of external statistics.⁷⁶

2.5.2.2. Other publications with contributions from the OeNB's External Statistics, Financial Accounts and Financial Statistics Division

In cooperation with the OeNB, the Federal Economic Chamber publishes an annual book series entitled **Schwerpunkt Außenwirtschaft**. We contribute information on direct investment and services based on the OeNB's BoP compilation system.

- Facts on Austria and its banks
- Household income, consumption and wealth in Austria
- WIFO's monthly reviews
- OeNB/IHS/WIFO economic outlooks
- Alert mechanism reports under the macroeconomic imbalance procedure

We also contribute data from the OeNB's securities reporting system for one of the sections of the **Public Finance Report** published every year by the Fiscal Advisory Council. Specifically, we provide information on the general government's creditor structure.

2.5.2.3. Press releases

Press releases based on incoming information from the OeNB's external statistics are made on an ad hoc basis, often as new data have become available for a given period.

2.5.3. Press conferences

Once a year, typically upon the first release of data for the previous calendar year, we hold a press conference at the OeNB on the balance of payments and related areas.

⁷⁶ See: <https://www.oenb.at/Publikationen/Statistik/Finanzstatistik.html>

IV. Quality

1. Quality dimensions

In terms of data quality, we above all strive for **relevance, accuracy, currency/timeliness, comparability and coherence**, very much in line with the methodology used in the quality reports of international organizations such as the ECB and Eurostat. More details are provided in the sections below, which start with definitions of these five concepts.

1.1. Relevance

Relevance relates to the question in how far the statistical data and measures meet user requirements.

The BoP and the IIP (in particular data on cross-border ties and ramifications) serve numerous economic and political purposes. The main applications include (1) monitoring economic developments, (2) serving macroeconomic analysis (modeling), (3) providing input for policymaking and (4) enabling international comparisons.

Because Statistics Austria and the OeNB have harmonized their data revision policies, the BoP data that we release each September for the previous three reporting years are consistent with the information provided by the SNA rest-of-the-world accounts. The current account including capital transfers reflects the economic transactions that drive the changes in net lending/net borrowing. The quarterly financial account of the balance of payments corresponds to the SNA rest-of-the-world (financial) accounts.

BoP and IIP data are key inputs for the so-called macroeconomic imbalance procedure⁷⁷ introduced by the EU after the financial crisis. They serve to generate the following indicators for the assessment of external imbalances.

- The current account balance, defined as a three-year backward-moving average of the current account balance in percent of GDP, with thresholds of +6% and –4% of GDP growth.
- The net international investment position, defined as a percentage of GDP, with a threshold of –35% of GDP growth.

The other indicators are:

- The 5-year percentage change of export market shares measured in values, with a threshold of –6%.
- The 3-year percentage change of the real effective exchange rates based on HICP/CPI deflators, relative to 41 other industrial countries, with thresholds of –/+5% for euro area countries.

Conceptually, the FDI statistics may be thought of corporate statistics with globalization as the meta theme. In terms of substance, the biggest similarities are with the foreign affiliates statistics (FATS), which cover the nonfinancial aspects of foreign affiliates (such as number of entities and indicators like turnover and number of employees). A key merit of FDI statistics is that they cover the financing aspect of multinational groups. Such information provides relevant guidance for policymakers as the data imply how investors' readiness to commit funds for the long term is influenced by locational factors.

We do not compile any statistics on liabilities arising from portfolio investment. We rely on mirror data from the IMF's coordinated portfolio survey and the ECB's securities holdings statistics by sector to be able

⁷⁷ For details see: <https://ec.europa.eu/info/node/4320/>

to address the issue of the creditor structure of domestic securities for special analyses or press conferences.

1.2. Accuracy

The quality dimension of accuracy addresses the discrepancy between the methodology that defines data coverage and the data that ultimately become available. This includes major subcategories like completeness, plausibility and revision likelihood (which ultimately depends on the first two criteria).

1.2.1. Plausibility

Checking microdata and aggregates for plausibility accounts is a substantial part of the data work. Basically, we make three kinds of checks.

- 1) First, the data are checked for **integrity**. These checks are highly automated and standardized.

Examples:

- Credit – debit = balance
- Reconciliation line items must not be reconciled beyond the defined reporting periods.
- Use of adequate codes for countries/sectors/positions
- No negative stocks/no negative income for some positions
- The marginal total of data imported from other primary statistics has remained unchanged
- The totals of individual countries/sectors/industry are equal to the global values

- 2) Second, the **actual plausibility checks** serve to identify errors in the data, which generally requires more resources than the initial data integrity checks:

Examples:

- Outlier tests
- Manual check of high x, o, p and r values
- Version comparisons
- Mirror data comparisons (e.g. CDIS)
- Drilling of large transactions

- 3) Third, we **analyze individual business cases**, which is the most time-consuming part. In this process, we typically put a number of microdata sets in a larger perspective.

Examples:

- Cross-checks of data reported by different companies of the same group (“group aggregates”)
- SPE analyses (Do assets and liabilities match in terms of investments and earnings?)
- Identification of the story and motivation behind particularly large business cases
- Documentation of major events

1.2.2. Completeness

Completeness refers to the completeness of production in line with legal requirements and international standards (SDDS Plus) and compliance with those requirements and standards (“conceptual accuracy”),

as evidenced by quality reports and delivery feedback. In some areas, exceptions apply. With a view to establishing direct investment income, we do not apply the full current operating performance concept (COPC) but an all-inclusive method, taking into account exceptional earnings as defined in BMD4. Moreover, we do not calculate any interest accrued for investment funds.

Gap estimates (completeness of the data):

Estimates relating to real estate investments are subject to a high degree of uncertainty. We do not have access to stock positions; the published data are cumulative transaction values from the settlement system. Any income estimated on this basis must therefore be subject to a high degree of uncertainty. We are currently working on improving the model (by using new data sources, such as HFCS data and land register data).

Likewise, when it comes to estimating the wealth of households abroad, data availability is not satisfactory, and the data quality could be better.

Nonresponse issues (evergreening)

Response rates are highly dependent on the individual reporting templates and reporting deadlines. For instance, our annual direct investment surveys have a response rate of almost 100%. Yet in the case of ad hoc reports of FDI transactions, only roughly half of all reports are submitted within the reporting deadline of 1.5 months.⁷⁸

Likelihood of revisions:

Preliminary data may be subject to a high degree of uncertainty, thus giving rise to major revisions, due to problems that are inherent in the system. Cases in point are:

- Monthly current account estimates
- FISIM
- Direct investment income (annual financial statements providing actual data do not become available until 1.5 years later)
- FDI transaction reports (ad hoc reports)

1.3. Currency versus timeliness

Timeliness refers to the time expectation for the accessibility of data. Timeliness can be measured as the time between when data are expected and when they are readily available for use. Currency refers to the degree to which data are current with the world that they model. How fast results become available for a given period requires a trade-off between estimation quality and release dates.

We ensure compliance with the deadlines for data transmission with a production and release calendar that has been reconciled with all business areas within the OeNB. The currency of the data is broadly ensured by the production cycle of international organizations.

As we do not have access to monthly data on goods, services, employee compensation, other primary income and secondary income, some BoP positions are estimated for the monthly production of the balance of payments. The OeNB's export indicator, which provides important input, typically becomes

⁷⁸ In this case, the reporting population is unknown, which is why the response rate cannot be quantified more accurately.

available during the month in which the data will be delivered. Data on overnight stays become available around the 25th of the next month, i.e. in time to be able to comply. Here too we are currently working on improving the estimation model. In 2019, we have also been revising the monthly balance sheet data. See also [current account](#).

1.4. Comparability

Comparability refers to the stability of the conceptual framework over longer periods of time. The key question is basically: how often, and for what reasons, are there breaks in the time series? In a Eurostat report, comparability has been defined as follows: "Comparability refers to the measurement of the impact of differences in applied statistical concepts, measurement tools and procedures applied, when statistics are compared between geographical areas, sectoral domains or over time."

The BoP and the IIP are compiled in line with the common concepts and definitions of BPM6. Hence, the data for the individual reporting years will be comparable with each other in principle. The goal of data compilation and plausibility checks is to generate meaningful time series without breaks in the first place. Nonetheless, conceptual adjustments⁷⁹ do lead to breaks in the time series, which we have offset as much as possible, i.e. up to the reporting year 1995.

Implementation of direct reporting in 2006:

2006 was a milestone year for the production of external statistics. In January 2006, we changed the reporting system from banks' settlement system to direct reporting. At the same time, we started to cooperate with Statistics Austria on the compilation of the current account. And for the FDI surveys, we redefined the questionnaires for documenting stock positions.

Time-series break in the current account in 2014 - reinsurance business

Until the end of 2014, we compiled reinsurance data on the basis of reinsurance balances. Since the meaningfulness of these balances is limited, reinsurance companies have been required to report reinsurance premiums and services starting with their reports for Q1 2015. This led to higher gross flows in the first quarter of 2015, but there was no break in the net time series.

Migration to BPM6 in 2014:

Starting with the Q2 2014 reporting year, we migrated to the current version of the IMF's balance of payments manual.

We have backcast all time series in line with BPM6 provisions until 2006 (until 1999 for selected time series).

Multidimensional Reporting System for Banks in 2016

Breaks in time series do not result from conceptual changes alone. The OeNB, for instance, relaunched its reporting system for balance sheet items statistics in 2016 after a complete overhaul. We switched to a multidimensional system of census reporting. A sample of Austrian banks migrated to the new system in the final quarter of 2016. This led to breaks in the time series for individual financing instruments (loans, deposits).

⁷⁹ Most recently, we switched to BPM6 methodology in September 2015.

1.5. Coherence

Coherence reflects the degree to which the concepts and the results of a particular statistic are comparable with other statistical products. Depending on the degree of coherence, cross-checks one set of data with other data will be more or less meaningful.

1.5.1. Balance sheet items statistics

Basically, we use the following data from balance sheet items statistics for BoP purposes: (a) loans, (b) deposits and (c) currency. While the balance sheet items statistics are highly relevant for the balance of payments, there are instances in which the comparability of the two statistics is limited:

- a) *Loans/deposits*: Using the structure of the counterparty sectors for deposits and loans, we break down accrued interest payable and receivable on a pro rata basis. However, as these data are not contained in the balance sheet items statistics, 1:1 comparisons between the two statistics are not possible.
- b) *Currency*: The amounts of cross-border currency evidenced by MFI balance sheet items statistics deviate from the corresponding BoP/IIP statistics. This deviation is due to a residuals calculation for the rest of the world, based on data on banknotes in circulation and coins issued. Here, we deduct claims of resident creditors on the OeNB from the sum total and allocate the residual regionally to the rest of the world by regions.

1.5.2. International trade statistics

Trade in goods as shown in the balance of payments differs from trade in goods as shown in conventional international trade statistics. What matters for BoP purposes is the change of ownership rather than the physical crossing of borders. Imports and exports are included in the balance of payments only when these transactions involve a change in ownership, resulting in corresponding income (exports) or costs (imports). Imports and exports for further processing abroad (not involving a change of ownership) are no longer recorded as trade. Such flows qualify as cross-border services. Globalization has given rise to goods bought abroad (imports), processed further abroad and sold from abroad (exports) without crossing Austrian borders. Such transactions are recorded under services.

Example: An Austrian ceramics manufacturing company has outsourced processing steps to Romania (services imports). Along the value chain, it buys commodities in Hungary (goods imports) for shipment to Romania. Once the goods have been processed further, they are shipped to the U.K., where the Austrian company operates a branch. In the U.K., the product is labeled with the respective corporate logo and sold at a multiple of the original value (goods exports). Inward and outward processing is not reflected in the balance of payments.

For further conceptual adjustments, see 1.2.1.2 Adjusting international trade statistics for BoP purposes.

1.5.3. SNA rest-of-the-world accounts

The rest-of-the-world accounts of the system of national accounts correspond to the current account balance within the balance of payments. However, there are a number of conceptual differences:

- In the balance of payments, expensive purchases while traveling are included in goods exports and imports; in the SNA rest of the world accounts, they are classified as services.

- Reinsurance services are compiled and calculated in different ways by the OeNB (responsible for the balance of payments) and Statistics Austria (responsible for the system of national accounts). Work on harmonizing compilation and calculation is ongoing.
- Refunds of EU contributions are shown gross in the balance of payments and net in the system of national accounts.

Furthermore, vintage effects may arise as a result of different revision cycles. Statistics Austria and the OeNB have, however, harmonized their revision cycles in September 2017.

1.5.4. Further statistical comparisons

ECB and Eurostat quality reports have compared our balance of payments data with other ECB statistics, such as money market fund statistics, investment fund statistics, the SNA rest-of-the-world (financial) accounts, and securities holdings statistics by sector. Apart from small conceptual differences and vintage effects arising from different revision dates, these reports have not identified differences between the BoP data and the other statistics, as those statistics are all based on the same underlying data.

The OeNB's direct investment statistics and Statistics Austria's corporate statistics – above all the foreign affiliates statistics (FATS) – differ in one key point. Statistics Austria does not include any entities that are economically inactive in Austria (pure holding companies) because they are virtually irrelevant for nonfinancial indicators. At the same time, they may be highly relevant from a financial perspective, which is why they are included in statistics compiled by the OeNB, or else flagged as having been expressly excluded.

2. Quality assurance instances

The following sections refer to the various stages in the life cycle of external statistics at which typical quality assurance measures are particularly relevant.

2.1. Data sources

2.1.1. External data sources

To be able to compile the balance of payments and other external statistics, the OeNB regularly receives data from a broad range of administrative and commercial sources.

We process these data further on the (broad) assumption that they comply with the relevant quality standards. This notwithstanding, we (re)run simple, standardized checks in some instances, for example, when importing data from annual financial statements or CSBD data. The key quality dimensions for external data are **currency and timeliness**.

2.1.2. OeNB surveys

If existing data gaps cannot be closed with available datasets, we conduct surveys ourselves. Of course, compiling primary statistics is a major challenge for any institution, as this involves dealing with a variety of interfaces with different agents. Here, the **relevance** criterion is important, as real-world business cases need to be translated into data fields and questionnaires that must be as specific as possible. At the same time, subsequent rounds of data transformation must ensure that the final statistical products reflecting individual business cases adequately reflect the real world.

Another important quality criterion for OeNB surveys is **accuracy**. With regard to accuracy, the response rate is an issue. Reporting requirements that emerge on an ad hoc basis and require reporting agents to take initiative themselves tend to have particularly low response rates. In such cases, the OeNB needs to undertake a number of proactive quality assurance measures to make reporting agents aware of their action points. A number of consistency checks may already be made at source. Finally, accuracy also covers estimates that need to be made if this is the only option to close data gaps.

The same more or less applies for the criteria of **currency and timeliness**. For the OeNB's own surveys, an effective reminder system is an integral part of effective quality assurance.

2.2. Compilation

To be able to produce statistical products from the data we receive from external sources and from the data we collect ourselves, we need to run a number of transformation, aggregation and data enrichment exercises. The data are run through a variety of technical systems, and they are processed by different business areas, which ought to interpret the data consistently.

Hence the key quality assurance dimensions at this stage will be data **accuracy**, above all data plausibility, and data **coherence**, with a view to ensuring that the resulting statistical products will be comparable with other products (mirror data, multi-use of data).

2.3. International organizations

The quality assurance measures that accompany data transmissions to international organizations (**reminders**, Eurostat's **Edit FDI Checker**) and ex post quality assurance measures (**acknowledgment message**, **delivery feedback**, **major events**, **FDI network**) are highly automated and standardized. Here, the focus is clearly on accuracy, as well as on currency and timeliness.

In-depth feedback on compliance with all five quality dimensions across all EU countries is provided in comprehensive **quality reports** as produced at larger intervals by the ECB and Eurostat.

*"In the area of balance of payments (b.o.p.) and international investment position (i.i.p.) statistics, the ECB and EU Commission (Eurostat) produce quality assessment reports following the respective legal provisions, namely Guideline ECB/2011/23 (as amended) and Regulation (EC) 184/2005 (as amended). For Eurostat, Commission Regulation (EU) No 1227/2010 defines the quality criteria, as well as the content and periodicity of the quality reports."*⁸⁰

⁸⁰ CMFB 2017-01 Final Report.

V. Annex

1. Abbreviations

2. Methodological glossary

Aggregates for individual reporting entities

The first level of aggregation, focusing on reporting entities.

Aggregates for individual securities or mutual fund shares

The second level of aggregation, on a security-by-security basis, serves to implement the bulk of data calculations and quality checks for data on individual securities.

Balance of payments

The balance of payments systematically covers Austrian cross-border transactions. It consists of the current account (covering the real economy) and the financial account and follows the principle of double-entry bookkeeping. Methodically, it builds upon the international conventions introduced by the IMF's Balance of Payments Manual and the System of National Accounts.

Basic aggregates

We have defined a set of basic aggregates as the lowest level of aggregation for individual balance of payments positions. The basic aggregates are calculated from the microdata reported (to a large extent directly) to the OeNB. The basic aggregates, which serve to produce further aggregates across three levels of hierarchy, are generated in five different matrix dimensions (global, regional, etc. > main aggregates). Each aggregation run turns the pool of microdata into a consistent set of positions for a given point in time.

In the process of calculating the main aggregates, we use versions to manage underlying aggregates and the corresponding microdata. This allows us to drill down our aggregate data to individual inputs and trace information back to its original source.

Census survey

Census surveys are surveys conducted on the full set of observation objects belonging to a given population or universe. Census surveys do not involve sampling. The Intrastat survey, for instance, is a census survey subject to (low) reporting thresholds.

Credit institutions

Article 1 of the Austrian Banking Act defines credit institutions as institutions with a deposit-taking and/or lending license. EU law defines credit institutions as undertakings whose business is receiving deposits or other repayable funds and to grant credits for their own account.

Above all, credit institutions serve as financial intermediaries. As such, they take in deposits and/or close substitutes for deposits from other institutional units, including **monetary financial institutions**, and they grant loans and/or make investments in securities for their own account.

Credit institution is a wider concept than "bank."

Current account

The current account is the nonfinancial component of the balance of payments. Essentially, it covers cross-border transactions in relation to goods, services, primary income and secondary income (i.e. current transfers). Transactions are marked to market. Credit values refer to Austria's exports of goods, services and transfer payments to other countries, while debit values refer to Austria's imports of goods, services and transfer payments from abroad. When the balance on the current account is positive, the current

account is in surplus – export receipts exceed import payments. When the balance on the current account is negative, the current account is in deficit – export receipts fall short of import payments.

Data warehouse

Data warehouse for balance of payments data; basis for all further aggregations. See also “production database.”

Direct investment

Direct investment, i.e. foreign direct investment (FDI), refers to cross-border financial flows from an entity resident in a given economy (direct investor) to an enterprise resident in another economy (direct investment enterprise) with a view to establishing a lasting relationship. A lasting relationship implies that direct investors seek to establish a long-term business interest that gives them a substantial say in the management of the enterprise in question. Direct investment includes both the initial transaction between the two parties that established the direct investment relationship as well as any subsequent transactions between the direct investor and the direct investment enterprise and between affiliated companies with or without a separate legal personality.

Direct investor

An entity which owns at least 10% of the voting capital of a nonresident entity.

Direct investment enterprise

An entity in which a foreign direct investor holds at least 10% of the voting capital.

Equity

Equity comprises equity in branches, all shares (whether voting or nonvoting) in subsidiaries and affiliates (except nonparticipating, preferred shares, which are treated as debt securities and included under other direct investment assets) and other capital contributions. Equity also covers shares acquired by direct investment enterprises in their parent company.

Errors and omissions

The balance of payments is a double-entry accounting system: it is based on corresponding debits and credits for all cross-border economic transactions. In theory, all debits and credits cancel each other out, leaving a net balance of zero. In practice, imbalances do occur because of accounting difficulties, leaving a residual that is referred to as errors and omissions. The underlying reasons include time lags that occur between two corresponding entries.

Extra-EU trade statistics (or Extrastat)

External trade statistics covering trade in goods with non-EU countries. Extrastat and Intrastat data are two of the sources of Austria's international trade statistics.

FDI

Foreign direct investment; see “direct investment.”

Financial account

The financial account is the financial counterpart to the capital account in the balance of payments. It shows how the net cross-border lending or borrowing was financed, using one of the following financing instruments: FDI, portfolio investment, other investment, financial derivatives and reserve assets. For each underlying instrument, we distinguish between assets (Austrian investment abroad) and liabilities (foreign investment in Austria). Transactions are recorded at market value. A positive balance indicates an outflow of capital, a negative balance indicates an inflow of capital.

Financial derivatives

Financial derivatives include options, futures contracts, swaps and other financial instruments based on underlying financial assets. Derivatives may also be based on capital products (e.g. foreign exchange assets, securities) or interest rate products. The data are broken down by foreign financial derivatives owned by resident investors as well as domestic financial derivatives owned by nonresident investors.

Financing instruments

Table 21: Financing instruments and their categorizations

	Financing instruments	Breakdown
F.1	Monetary gold and SDRs ⁸¹	F.11 Monetary gold F.12 Special drawing rights
F.2	Currency and deposits	F.21 Currency F.22 Transferable deposits F.29 Other deposits
F.3	Debt Securities	F.31 Short-term debt securities F.32 Long-term debt securities
F.4	Loans	F.41 Short-term loans F.42 Long-term loans
F.5	Shares and other equity	F.511 Shares and other equity, excluding mutual fund shares F.511 Listed shares F.512 Unlisted shares F.519 Other equity F.52 Mutual fund shares F.521 Money market fund (MMF) shares or units F.522 Non-MMF investment fund shares or units
F.6	Insurance, pension and standardized guarantee scheme	F.61 Nonlife insurance technical reserves and reinsurance, including F.66 Provisions for calls under standardized guarantees F.62 Life insurance and annuity entitlements F.63 Pension entitlements, including F.64 Claims of pension funds on pension managers, including F.65 Entitlements to nonpension benefits
F.7	Financial derivatives and employee stock options ⁸²	
F.8	Other receivables and payables	F.81 Trade credits F.89 Other accounts receivable/payable

- **Consumer loans to households** (S.14) are bank loans to finance individual consumption of goods and services. This includes checking account overdrafts made for the consumption of goods and services by self-employed workers as well as any kind of overdraft or installment loan used by consumer households.
- **Currency** (F.21, *ESA 2010 paragraph 5.76*) consists of banknotes, base metal coins, bimetallic coins, silver and gold coins (if readily convertible into cash). Domestic currency includes:
 - Euro-denominated banknotes (from 2002 onward) based on the Austrian share in the overall circulation of banknotes in the euro area in line with the Eurosystem's capital share mechanism⁸³ and euro-denominated coins as put into circulation. Schilling-denominated banknotes and coins that can still be exchanged and have been classified under "other accounts receivable" (F.89) since the reporting year 2002.
 - Schilling-denominated banknotes and coins (pre-2002 reporting periods).
- **Entitlements to nonpension benefits** (F.65 *ESA 2010 paragraph 5.187*) include households' entitlements under severance fund schemes.

⁸¹ Monetary gold (gold bullions) are only recorded on the asset side of the central bank.

⁸² In Austria, there is no differentiation between financial derivatives (F.71) and employee stock options (F.72).

⁸³ For details, see the OeNB's annual reports (liabilities – banknotes in circulation).

- **Financial derivatives** (F.7, *ESA 2010 paragraph 5.199*) are assets based on either interest rate contracts or capital contracts. This includes tradable options and over-the-counter contracts⁸⁴ as well as stock exchange-traded futures contracts and employee stock options. Margin accounts are not recorded as financial derivatives but as deposits or loans.
- **Housing loans to households** (S.14) are loans to build, buy or improve residential housing (i.e. other than housing for use by self-employed workers and single proprietorships). This also includes home loans sold by government entities to third parties (at the nominal value).
- **Monetary gold** (F.11, *ESA 2010 paragraph 5.57*) and **special drawing rights** (F.12, *ESA 2010 paragraph 5.69*): Gold (gold bullions, unallocated gold accounts) held as part of reserve assets as well as special drawing rights created by the IMF and their allocation. Monetary gold is only recorded in the OeNB's balance sheet (on the asset side), but in line with ESA 2010 there are no corresponding liabilities-side entries in the books of the respective nonresident counterparties.
- **Mutual fund shares** (F.52, *ESA 2010 paragraph 5.160*) are shares in financial corporations which may be traded on a stock exchange (closed-end funds) or which may be issued and redeemed at the discretion of the respective corporation (open-ended funds). This category covers both shares in money market funds (issued by other monetary financial institutions, counted as deposits and hence as monetary aggregates) as well as other mutual fund shares. Mutual fund shares are recorded at market value.
- **Net equity of households in life insurance reserves** (F.62, *ESA 2010 paragraph 5.174*) consists of technical provisions set aside to satisfy the claims that are estimated to be made on a gross basis (e.g. not adjusted for shares sold to reinsurers but offset against the indirect business acting as reinsurers) against domestic and foreign insurance companies. The sum is adjusted for the benefits of nonresident households accrued with domestic insurance companies, based on balance of payments data; the residual value is added to the assets of domestic households. The equity of domestic households is divided into unit-linked claims and non-unit-linked claims, which are valued differently.
- **Nonlife insurance technical reserves**⁸⁵ (F.61, *ESA 2010 paragraph 5.169*) consists of technical provisions set aside to satisfy the claims that are estimated to be made on a gross basis (e.g. not adjusted for shares sold to reinsurers but offset against the indirect business acting as reinsurer) against domestic insurance companies with regard to nonlife and health care insurance plans. This position also includes reinsurance positions (both reinsurance services received and delivered).
- **Listed shares** (F.511, *ESA 2010 paragraph 5.146*) are corporate shares or certificates of participation of corporations listed on a stock exchange or traded otherwise on a market. In the case of FDI, the value of the shares also contains the corresponding reinvested earnings (as estimated or reported). Listed shares are recorded at market value.
- **Long-term debt securities** (F.32, *ESA 2010 paragraph 5.92b*) are bonds, zero coupon bonds, bonds with integrated financial derivatives (e.g. convertible bonds) and other securities under which the issuer owes the holders a debt that will be repaid at approximately at its nominal value and for which a maturity period of more than a year has been agreed. For technical reasons, increases to existing issues are classified as having the same maturity period as the original tranche in the flow-of-funds statistics.⁸⁶ The securities are recorded at market value (including accrued interest in accordance with ESA 2010 rules).
- **Long-term loans** (F.42, *ESA 2010 paragraph 5.115b*) are loans with an original maturity of more than one year. Maturity is calculated from the start of loan utilization rather than the point when the (revolving) credit line is fixed. Loans between domestic corporations as evidenced by balance sheets are classified by default as long-term loans in the financial accounts because of the lack of

⁸⁴ Some OTC contracts are defined as off-balance sheet items by the reporting banks and hence not reported under the position of "financial derivatives."

⁸⁵ This position includes provisions for calls under standardized guarantees as defined in ESA 2010 paragraph 5.197.

⁸⁶ The Austrian Federal Financing Agency classifies increases to existing issues in accordance with the respective tranche's maturity period.

maturity breakdown of balance sheet data. Financial leasing transactions are also recorded as long-term loans by default. Long-term loans to monetary financial institutions are shown as either transferable or other deposits, depending on the agreed maturity period. The loans are recorded at nominal value or book value excluding any adjustments.

- **Other accounts receivable/payable** (F.89, *ESA 2010 paragraph 5.230*) contains all financial instruments not included in any of the other categories. This includes above all interest accruing on deposits and loans, items in course of settlement at banks, cross-border transactions reported as residual items under “other investment,” holdings of schilling banknotes and coins (from the reporting year 2002 onward) which are convertible into euro, transactions arising from the timing difference between accrued transactions and payments made in respect of taxes, tax repayments and EU transfers.
- **Other equity** (F.519, *ESA 2010 paragraph 5.153*) refers to equity held in companies that have not been set up as a stock corporation. In the case of Austria this would above all be equity held in limited liability companies. Other equity also refers to investments made by the central government in international organizations, to the extent that such investments are indeed equity investments (including corresponding revenue) rather than transfers, as the capital is not expected to be repaid. In the case of FDI, the value also includes pro rata reinvested earnings (as estimated or reported). By ESA convention, other capital also refers to capital invested abroad in real estate, qualifying as capital invested in a quasi-corporation. Equity held in private foundations is imputed from the latter's net financial assets (gross financial assets minus loans) plus their real property. These assets are, as a rule, valued at book value.
- **Other deposits** (F.29, *ESA 2010 paragraph 5.85*) have been defined to include deposits that are subject to a fixed term/period of notice before withdrawal and repo transactions as defined in the MFI balance sheet reporting guidelines. Nontransferable loans to other monetary financial institutions (including nonresident MFIs) are classified as deposits in the flow-of-funds statistics. Other deposits also include the “net position arising from the allocation of euro banknotes within the Eurosystem” as agreed among the euro area countries. The deposits are recorded at nominal value. Circulating euro coins are classified as liabilities of the central government to the OeNB.
- **Other loans to households** (S.14) are loans other than housing and consumer loans. This includes above all loans to self-employed workers and sole proprietorships for investment purposes, debt consolidation loans, education loans and pension plans. Other loans also include loans (advances) by insurance companies, salary advances and loans among households.
- **Pension entitlements**⁸⁷ (F.63, *ESA 2010 paragraph 5.180*) refer to assets held to finance future pension claims, namely assets held in single- or multi-employer plans (including occupational group insurance) or provisions made for internally funded pensions by nonfinancial corporations, banks, insurance companies and the OeNB. These assets cover both benefits accrued under defined-benefit plans and defined contribution plans.
- **Short-term debt securities** (F.31, *ESA 2010 paragraph 5.92a*) are defined as securities with an originally agreed-upon maturity period of up to one year. This includes short-term marketable certificates of deposit and commercial paper as well as treasury bills with an original maturity of up to one year that are sold over the Internet. The securities are recorded at market value (including accrued interest in accordance with ESA 2010 rules).
- **Short-term loans** (F.41, *ESA 2010 paragraph 5.115a*) are defined as loans with an original period of up to one year. Maturity is calculated from the start of loan utilization rather than the point when the (revolving) credit line is fixed. Loan overdrafts or loans that are overdue have also been defined as short-term loans, as have working balance accounts serving as netting accounts of (typically) affiliated firms. This item also includes reinsurance depots, as agreed within the Eurosystem. Short-term loans to monetary financial institutions are shown as either transferable

⁸⁷ This includes the requirement for supplementary contributions to be made to pension funds by employers, i.e. claims of pension funds on pension managers (F.64 *ESA 2010 paragraph 5.185*).

or other deposits, depending on the agreed maturity period. The loans are recorded at nominal value or book value excluding any adjustments.

- **Transferable deposits** (F.22, *ESA 2010 paragraph 5.80*) are deposits that are not subject to a maturity period as defined in the MFI balance sheet reporting guidelines. In banks' reports to the OeNB, transferable deposits may be netted with loans without an agreed maturity of the same (customer or bank) counterparty. Loan assets without an agreed maturity to other monetary financial institutions (including nonresident institutions) are recorded as deposits in the flow-of-funds accounts, as the corresponding counterpart (liability-side) entry is also deposits. This position also includes short-term deposits as reported by nonbanks. The deposits are recorded at nominal value.
- **Trade credits and advances** (F.81, *ESA 2010 paragraph 5.124*) includes terms of payment⁸⁸ but does not include trade credits sales (i.e. factoring).
- **Unlisted shares** (F.512, *ESA 2010 paragraph 5.147*) are corporate shares or certificates of participation of corporations that are not listed on a stock exchange or traded otherwise on a market. In the case of FDI, the value of the shares also contains the corresponding reinvested earnings (as estimated or reported). The shares are valued at market prices or book value.

Functional category

The financial account is the financial counterpart to the capital account in the balance of payments. Broken down by functional categories, the financial account may consist of either FDI (cross-border equity investment of over 10%), or portfolio investment, other investment (mainly loans and deposits), financial derivatives (trading in the futures market) and foreign reserves.

General government

The general government sector consists of two types of institutional units: nonmarket producers whose output is intended for individual and collective consumption and financed by compulsory payments made by units belonging to other sectors; and institutional units principally engaged in the redistribution of national income and wealth. The government sector comprises the central government, regional and local governments and social security funds.

International investment position

The international investment position includes financial wealth abroad owned by Austrians and financial wealth in Austria owned by nonresidents. In terms of structure and content, the IIP complies with the IMF's regulations as published in the Balance of Payments Manual. Changes in volume as evidenced by the IIP reflect flows, valuation effects (price and exchange rate effects) and reclassification effects. The IIP covers the following financing instruments: FDI, portfolio investment, other investment, financial derivatives and reserve assets.

Intra-EU-trade statistics (or Intrastat)

EU trade statistics measuring the value and quantity of goods traded among EU Member States. Austria's international trade statistics are, among other things, sourced from Intrastat and Extrastat data.

Investment income

Investment income is defined as earnings (e.g. dividends, returns, profit distribution) which arise from cross-border investment or capital financing. It is reported in the financial account. Credits show earnings from capital invested abroad. Debits show expenses for capital invested in Austria by nonresidents (which, from the Austrian point of view, is debt).

Inward FDI

Under the directional principle, FDI is typically shown as either direct investment abroad or direct investment in the reporting economy.

⁸⁸ In the absence of available data, prepaid coupons are, at present, not recorded under trade credits to nonfinancial corporations.

Capital invested by nonresidents in Austria qualifies as inward FDI when a nonresident entity owns at least 10% of the voting capital of a resident entity. Inward FDI also includes so-called other direct investment capital, mainly intragroup loans from inward investors to direct investment enterprises. Conversely, inward FDI volumes are lowered by loans from resident subsidiaries to their nonresident parent companies (“reverse investment”).

IIP

See “international investment position.”

Main aggregates

The main aggregates (internally referred to as “XINTIP” positions – eXtended INternational Investment Positions, or extended IIP positions) are derived from five different matrix dimensions:

- global
- regional
- sectoral
- industries
- currencies

As the aggregation tables are populated, the system calculates and saves the corresponding balance of payments positions. It is possible to populate specific tables only, and data versioning is available. The main aggregates are finalized for release or transmission through a process of data clustering, data enrichment using master data and final transformation steps. The results serve as a toolbox for generating a broad set of statistical products.

Monetary financial institutions (MFIs)

Monetary financial institutions include **credit institutions**, money market funds as well as the OeNB (i.e. the central bank). Thus, they refer to institutions whose business is to take in deposits and/or close substitutes, and to grant credit and/or invest in securities.

Other direct investment capital

Other direct investment capital (i.e. intragroup credit transactions) refers to loans offered and taken (incl. loans in the form of debt securities, trade credits and nonparticipating, preferred shares which are treated as debt securities) among direct investors and subsidiaries, branches and minority-owned associated companies. Receivables of direct investment enterprises from the direct investor are also recorded as direct investment capital.

Other investment

Other investment includes all financial transactions that are not covered by direct investment, portfolio investment, financial derivatives or reserve assets. Apart from core banking business, i.e. deposits and loans, this aggregate also reflects corporate liquidity management transactions and central bank operations. Austrian receivables arising from other investment abroad and Austrian cross-border liabilities are recorded at the end of the reporting period.

Outward FDI

Under the directional principle, FDI is typically shown as either direct investment abroad or direct investment in the reporting economy.

Capital invested by Austrians abroad qualifies as outward FDI when a resident entity owns at least 10% of the voting capital of a nonresident entity. Outward FDI also includes so-called other direct investment capital, mainly intragroup loans from direct investors to direct investment enterprises. The volume of outward FDI volumes is lowered by any loans nonresident subsidiaries may have extended to their Austrian parent companies (“reverse investment”).

Portfolio investment

Portfolio investment is cross-border securities trade (provided it does not lead to ownership of more than 10% since this would require them to be classified as FDI). Portfolio investors primarily invest for profit (yield), whereas direct investors primarily invest with a view to obtaining voting power. Cross-border

securities trade (incl. accrued interest) is reported in the balance of payments. The stocks of foreign securities held by residents and the stocks of domestic securities held by nonresidents is reflected in the international investment position. Portfolio investment is recorded at market value.

Production database

Microdata production database in which incoming data and corresponding gap estimates are stored in granular form. From the production database, the data are migrated into the data warehouse, which serves as the basis for all further aggregations.

The production database displays the BoP indicators in their respective dimensions on a debtor/creditor level, following cleanup operations and calculations and as adjusted for gap estimates.

The production database supports versioning of all basic aggregates and main aggregates calculated.

Furthermore, the production database serves as an important technical interface between different OeNB functions.

Reconciliation

Reconciliation is relevant only for the financial account/the IIP (reconciliation is not relevant for the current account, since the current account includes only transactions in credit (C), debit (D), and net (N) transactions).

	IS (initial stocks)
+/-	(+ C – D = N) (transactions)
+/-	P (asset price changes)
+/-	X (exchange rate movements)
+/-	O (reclassifications)
+/-	R (residual)
=	RS (resulting stocks)

Key:

IS	Initial stocks (= balances carried over from the previous period) of financial assets and liabilities
C	Credit – current account credit (= income gained through exports) or financial account credit (= assets or liabilities accumulated through exports)
D	Debit – current account debit (= capital spent on imports) or financial account debit (= reduction of assets/liabilities)
N	Net – net result of credit minus debit
P	Asset price changes – non-flow changes in capital markets (e.g. changes that result from fluctuations in securities prices)
X	Exchange rate movements – changes in foreign exchange markets that do not result from transactions but from currency fluctuations
O	Reclassifications (other changes) – Changes not resulting from transactions but from changes in statistical categories (e.g. changes of sectors, changes of the functional categories).
R	Residual – balancing item, e.g. resulting from the recognition of previously unknown statistical units
RS	Resulting stocks. See initial stocks.

Reinvested earnings

Reinvested earnings include the direct investor's share in earnings of subsidiaries, associates and branches not distributed to shareholders. They are recorded as income, with corresponding capital transactions as their counterpart.

Repurchase agreements (repo)

Securities sale and repurchase transactions are transactions under which a natural or legal person (repo seller = cash borrower) transfers securities owned to another natural or legal person (repo buyer = cash provider) against payment of a specified amount, subject to an agreement that the same securities will subsequently be transferred back to the repo seller against payment of the price paid or another specified amount.

Under a real repo, the repo buyer agrees to return the securities to the repo seller on a date specified or to be specified by the repo seller (article 50 para. 2 of the Austrian Banking Act). Real repos are to be recorded as loans between the repo seller and the repo buyer in the balance of payments statistics, without adjustment of the underlying securities.

If the repo buyer merely has the right to retransfer the assets on a prespecified date or at a time to be specified by the repo buyer, then the repo is referred to as a sale with an option to repurchase (article 50 para. 3 of the Austrian Banking Act). Repos with a repurchase option are to be treated like securities sales and purchases.

Reserve assets

Official reserve assets comprise claims that have the following characteristics: They are subject to the control of the monetary authority, highly liquid, tradable and accepted as international currencies. In particular, these claims consist of claims denominated in currencies other than euro against debtors resident outside the euro area. Examples: Securities, credit, gold and special drawing rights as well as the reserve position in the IMF. Reserve assets are claims by definition, why the amount of claims equals net reserves.

Residents

For BoP purposes, residents are legal and natural persons with Austria as their predominant center of economic interest or residence. Citizenship is not the relevant criterion.

Securities lending

Securities lending is an arrangement whereby securities are transferred to a borrower for a fee for a specified period of time or until further notice under condition that securities of the same type and quality will be returned at the end of the lending period. The securities thus transferred onto a custody account maintained by the borrower are not removed from the lender's balance sheet. These transactions are not shown as securities transactions as a rule.

SNA

System of national accounts.

Subsystems

Within the BoP subsystems, which largely reflect the functional categories of the balance of payments (e.g. FDI, portfolio investment, etc.), granular data are transformed and enriched with master data. Ultimately, all data are aggregated across various dimensions in the production database.

Transactions

Transactions are defined as inflows and outflows (credits and debits) of goods and services, income and capital (receipts and payments). The current account shows credits and debits and the net balance thereof (credit – debit). The financial account shows net flows. See also "data reconciliation."

Value added during processing

Processing refers to goods that are exported for refinement and subsequently reimported. Since there is no change in ownership of the goods, value added during processing is a service performed abroad. For the purpose of international trade statistics, value added during processing has to be deducted in the goods account.

3. Methodical basis

- European System of National Accounts, [ESA 2010](#), European Union, 2013⁸⁹
- System of National Accounts, [SNA 2008](#), European Commission, International Monetary Fund, Organisation for Economic Co-operation and Development, United Nations and World Bank, 2009⁹⁰
- [Manual on Government Deficit and Debt \(MGDD\)](#), Implementation of ESA 2010, European Union, 2019⁹¹
- Balance of Payments and International Investment Manual, [6th Edition](#), International Monetary Fund, 2011⁹²
- [Handbook](#) on Financial Production, Flows and Stocks in the System of National Accounts, United Nations and European Central Bank, 2013⁹³
- [Understanding National Accounts](#), Second Edition, Organisation for Economic Co-operation and Development, 2014⁹⁴
- [Understanding Financial Accounts](#), Organisation for Economic Co-operation and Development, 2017⁹⁵
- [Volkswirtschaftliche Gesamtrechnungen, VGR Jahresrechnung](#) – Standard-Dokumentation Metainformation, Statistics Austria, 2016⁹⁶
- [Volkswirtschaftliche Gesamtrechnungen, Nichtfinanzielle Sektorkonten Jahresrechnung](#) – Standard-Dokumentation Metainformationen, Statistics Austria, 2018⁹⁷
- [Financial Accounts for Austria in line with ESA 2010](#) – Manual on sources and methods, 2018

⁸⁹ <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2013:174:0001:0727:EN:PDF>

⁹⁰ <http://unstats.un.org/unsd/nationalaccount/docs/SNA2008.pdf>

⁹¹ <https://ec.europa.eu/eurostat/documents/3859598/10042108/KS-GQ-19-007-EN-N.pdf/5d6fc8f4-58e3-4354-acd3-a29a66f2e00c>

⁹² <http://www.imf.org/external/pubs/ft/bop/2007/bopman6.htm>

⁹³ <http://unstats.un.org/unsd/nationalaccount/docs/FinancialHB-Unedited.pdf>

⁹⁴ <http://www.oecd.org/sdd/understanding-national-accounts-9789264214637-en.htm>

⁹⁵ <http://www.oecd.org/sdd/na/understanding-financial-accounts-9789264281288-en.htm>

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⁹⁷ http://www.statistik.at/wcm/idc/idcplg?IdcService=GET_PDF_FILE&RevisionSelectionMethod=LatestReleased&dDocName=016810

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4. Overview of reporting templates

	D1	D6	D7	S1-S4	S5-S6	Asset 14	SA-SD	F1 Transactions	F1 Stocks
Names	FDI transactions	Inward FDI	Outward FDI	Loans/Deposits	Interest receivable/Interest payable	Loans/deposits/interest receivable	Trade credits	Derivative	Derivative
Description	Occasional reports of FDI transactions, such as equity increase and reductions in existing investments, investments in start-ups, M&A deals and profit distributions	Annual FDI survey to determine the shareholdings of foreign investors in Austrian companies	Annual FDI survey to determine Austrian investors' shareholdings in foreign companies	Claims and liabilities from loans and credits, bank deposits, settlement accounts, cash pooling accounts, shares in companies of less than 10% that are not acquired in form of securities, finance leases and other claims and liabilities (from fiduciary transactions, ABS transactions, etc.)	Income and expenses generated from cross-border other investments ("interest payments")	Claims and liabilities of MFIs generated from other investments against foreign enterprises, subdivided into deposits and loans	Claims and liabilities from trade credits within the enterprise (SC/SD) and outside the enterprise (SA/SB)	Regional income and outcoming payments relating to cross-border transactions in financial derivatives (purchased options, written options, futures and other financial derivatives)	Regional valued portfolios of claims and liabilities from cross-border financial derivative transactions (purchased options, written options, futures and other financial derivatives)
Reporting thresholds	EUR 500.000	>10% share of capital	>10% share of capital	EUR 10 mn.	-	-	EUR 10 mn.	EUR 1 mn.	EUR 5 million
Reporting deadline	15th of the following month	on demand	on demand	15th of the following month	15th of the following month	15th of the following month	15th of the following month	15th of the following month	
Frequency	in the event of cause / monthly	Annual	Annual	Monthly	in the event of cause / monthly	Monthly	Monthly	Monthly	Quarterly
Reporting period allocation	Month in which the transaction took place	balance sheet date	balance sheet date	Final stock	Due date	Final stock	Final stock	Booking date	Final stock
Reports below the reporting thresholds	Mandatory for disinvestemnt	on demand	on demand	yes 6 reporting periods or last „Null“	-	-	yes 6 reporting periods or last „Null“	yes 1 reporting period	
Reportable objects	3859	2075	1231	850	1299	573	400	357	357

Names	L4	P1	P2		P4		L1	L7	L8	L9
	Capital transfers	Securities custody account report for domestic custodian account holders	Securities not held in custody with domestic custodians		Reports of repos with securities and securities lending transactions (only transactions with foreign partners)		Cross-border services	Cross-border insurance and reinsurance services	Cross-border insurance and reinsurance services	Reports of major claims for cross-border insurance services
Description	Regional cross-border real estate investments, renting/leasing and asset transfers	Domestic MFIs and other custodians report own and externally on a security by security basis	Reports of securities held in own custody or foreign custody accounts	Reports of securities held in own custody or foreign custody accounts	Individual transactions and stocks in repos with securities and securities lending, which are operated with foreign counterparties	Individual transactions and stocks in repos with securities and securities lending, which are operated with foreign counterparties	"Matrix reporting", in which income from exports of services and expenditures on imports of services are reported separately by partner country and type of service	Reports of revenues (gross premiums) and benefits earned plus claims payments (expenses)	Since estimates can be made in the quarter for reinsurance, in particular for claims payments, on the basis of available accounting documentation during the year, the final reinsurance statement must also be reported once a year.	When a single insurance claim reaches € 10,000,000
Reporting thresholds	EUR 100.000	none	EUR 30 million	EUR 5 million	EUR 30 million	EUR 5 million	EUR 10 million	EUR 10 million	EUR 10 million	EUR 10 million
Reporting deadline	15th of the following month	within 10 bank working days after reporting date	15th of the following month	31st of the following month	15th of the following month	15th of the following month	15th of the following month	15th of the following month	15th of February of the following year	15th of the following month
Frequency	in the event of cause / monthly	Monthly	Quarterly	Annual	Quarterly	Quarterly	Quarterly	Quarterly	Annual	in the event of cause
Reporting period allocation	Month in which the transaction took place	Booking date	Booking date		Booking date		Booking date	Booking date	Booking date	Booking date
Reports below the reporting thresholds	-	-	possible	possible	possible	possible	possible	possible	possible	possible
Reportable objects	182	591	94		3		452	49	1	0