

## Methodological notes

### Content, objective and purpose of the financial accounts

*Complexity of the national accounts*

The production process of an economy is shaped by countless interactions between economic agents. The statistical recording of these interactions is essential for various purposes, including empirical analysis and the provision of information for decisions on economic policy and, above all, on monetary policy. Such data must be recorded systematically and consistently to ensure historical and geographic comparability<sup>1</sup>. Economic entities are aggregated into sectors, transactions into accounts and instruments, and dynamics into temporal periods (quarters). This is the purpose of the **national accounts**.

*Financial accounts as part of the national accounts*

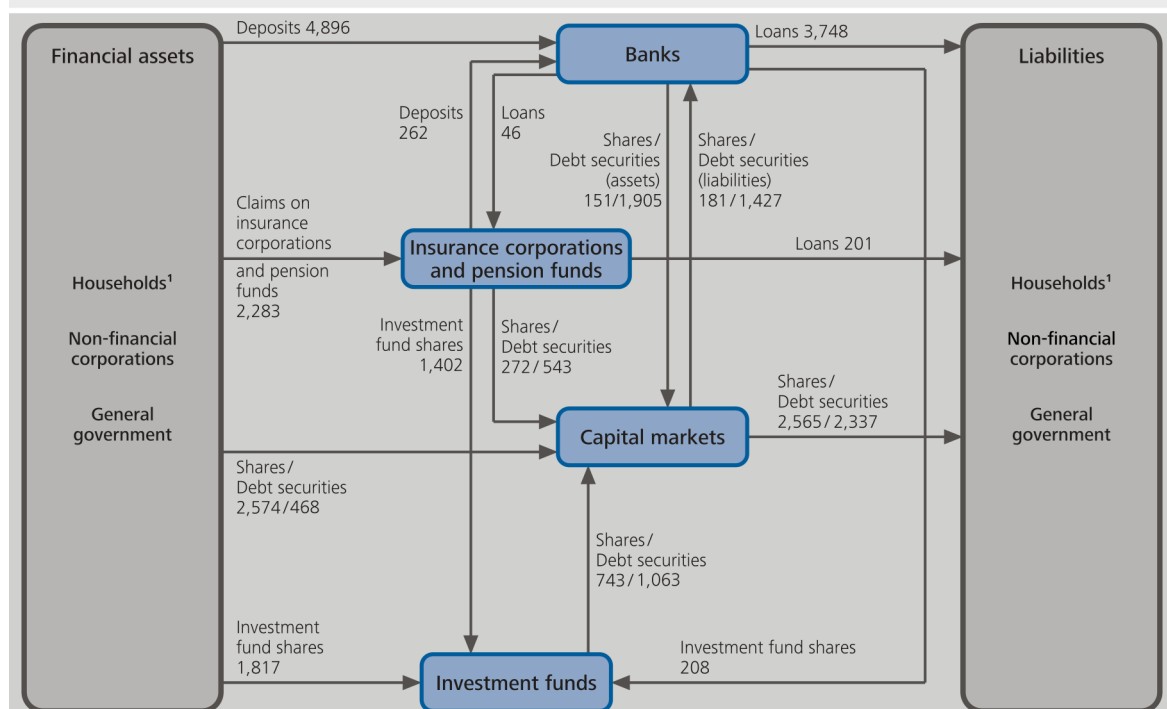
A complex economy consists of the production, distribution and utilisation of goods (**real economy**) and the corresponding financial activities and intermediation (**financial economy**). The real economic part of the national accounts reflects the goods and services produced during a specific period as well as the associated income. By contrast, the financial accounts, as an integral part of the national accounts, look at financial activities: who provided

or took up financial resources on what scale and in which form in an economy, and which financial intermediaries were involved in the financing cycle. The financial accounts record financial transactions in the period under review as well as the sectors' stocks of assets and liabilities at a specific reporting date. They thus provide an impression of both the underlying structure of the financial system and the financial behaviour of households, non-financial corporations and other sectors.

<sup>1</sup> In this publication, all time series are linked to the macroeconomic time series database on the Bundesbank's website. Clicking on any one of the time series in this publication will take you to the corresponding time series in the data-base. For reasons of clarity, certain time series in this publication are only shown in aggregate form, whereas all the components are shown separately in the database. This applies in particular to the data on creditor-debtor relationships. For example, whereas this publication shows the extent to which financial corporations as a whole have issued shares, the above-mentioned database only contains separate data on the respective financial corporations (insurance corporations, monetary financial institutions, etc.).

### Simplified structure of the German financial system\* (including according relationships with the rest of the world)

As at 31-12-2025, € billion

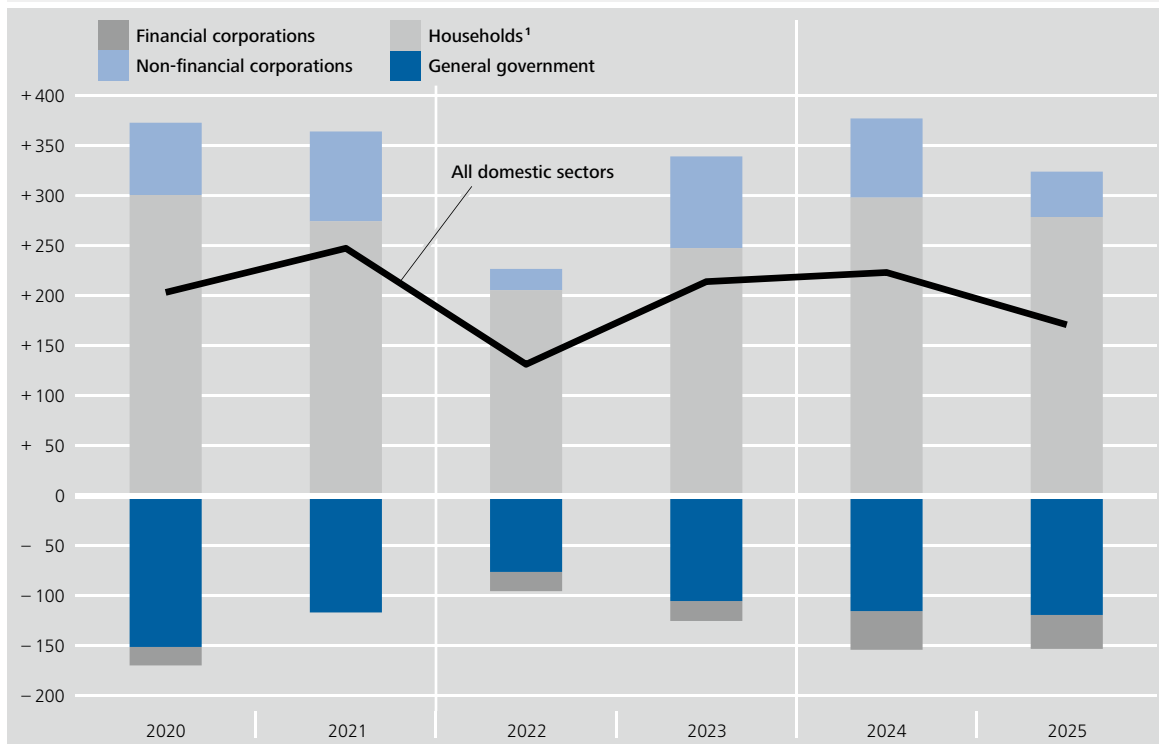


\* Direction of arrow indicates a claim. <sup>1</sup> Including non-profit institutions serving households.

Deutsche Bundesbank

### Net lending/net borrowing by institutional sectors

€ billion



¹ Including non-profit institutions serving households.  
 Deutsche Bundesbank

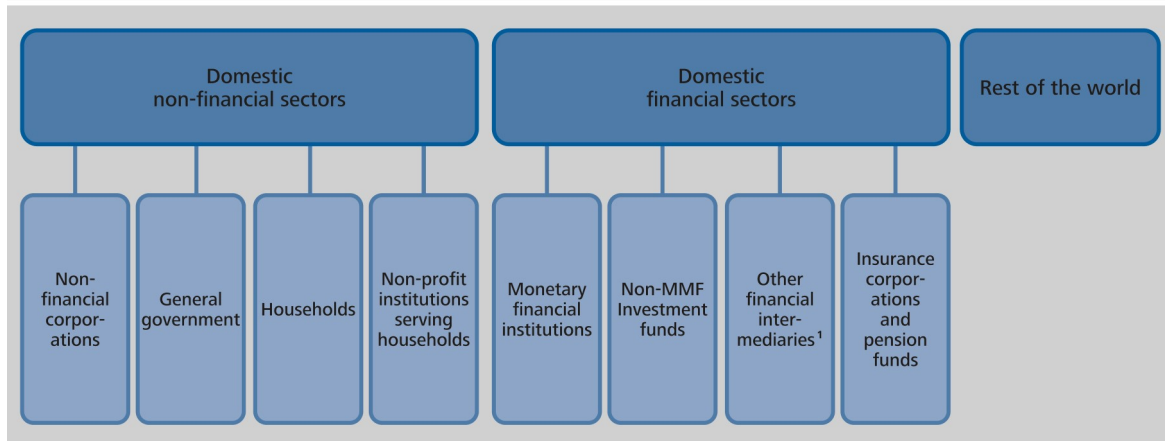
*Financing...* Financing is understood to be the **provision of funds** for use in financial or real economic activity. **External financing** occurs when economic agents obtain funds from other economic agents, either domestically or internationally. **Internal financing** occurs where economic agents use internally generated payment surpluses (for enterprises, for example, this means profit).

*... and acquisition of assets* The acquisition of assets is the counterpart of financing. It essentially comprises financial and non-financial assets, with non-financial assets consisting primarily of real estate and financial assets of financial lending and money creation.

*Linkage of financial accounts and national accounts* The starting point for the compilation of the financial accounts is data from the national accounts regarding the acquisition of non-financial assets and saving. The balances resulting from saving plus capital transfers, on the one hand, and the acquisition of non-financial assets, on the other, show how much net funding individual sectors have provided or received (**net borrowing/lending**). These net lending and net borrowing aggregates correspond conceptually to the balances arising from the acquisition of financial assets and external financing of the individual sectors. Any deviations are normally due to statistical discrepancies.

*Uses* The Bundesbank itself uses the results of the financial accounts in many ways. These include studies on the portfolio structure of non-banks as part of monetary analysis. Moreover, knowledge of the financing structure and dynamics of non-banks as well as of the respective determinants are helpful with regard to monetary transmission. The Bundesbank's interest is mainly focused on the relationship between the credit operations of domestic banks, on the one hand, and on other sources of funding (such as securities markets, other financial intermediaries, insurance corporations and foreign lenders), on the other. Its aim is, inter alia, to uncover the links between the credit and securities markets. In this context, it also examines questions concerning the development and sustainability of (sectoral) debt. The Bundesbank – in addition to its business cycle analysis – looks at the pattern of asset acquisition and financing of enterprises and households in connection with real economic variables of the national accounts (especially capital formation and saving).

## Sectors of the financial accounts



<sup>1</sup> Including financial auxiliaries as well as captive financial institutions and money lenders.  
 Deutsche Bundesbank

*Statistical systems: SNA and ESA*

The United Nations created the System of National Accounts (SNA)<sup>2</sup> in order to establish international consistency and standardisation. Within the European Union (EU), a more detailed version with specific definitions is required to manage and monitor economic and monetary union. The European System of Accounts (ESA) satisfies this requirement and provides a standardised methodological framework that is prescribed to all EU Member States<sup>3</sup> in the form of a regulation.<sup>4</sup> It essentially contains the integrated components of domestic output, distributive and capital transactions and input-output accounts, and includes the definitions and characteristics of transactions, economic entities, etc. that are needed to prepare the standardised EU national accounts (and therefore also financial accounts). ESA allows financial and real economic flows to be reported in their entirety on a consistent basis and used for analytical purposes.

*Development of the financial accounts in Germany*

The Bundesbank began to develop national financial accounts data very early on. The first publication appeared in 1955.<sup>5</sup> Since then, financial accounts data have been discussed and commented on in various Bundesbank publications. In the course of further developing the original statistics, stock data on financial assets and liabilities of the individual sectors were published for the first time in 1971. Since then, financial balance sheets have been part of the standard publication programme.<sup>6</sup> The complete annual financial accounts appear at regular intervals as a separate special series (under the name “Special Statistical Publication 4” up until 2019). Since the beginning of 2007, the current quarterly data for the households and non-financial corporations sectors have been published in the statistical section of the Monthly Report. Additionally, the cor-

responding data for these and other sectors can be found in the time series database on the Bundesbank’s website.<sup>7</sup>

## ■ Methodological structure

### Basic principles

The financial accounts form a closed-loop system. Consequently, total **assets** equal total **liabilities**. Transactions are divided into **acquisition of financial assets** and **external financing**, and stocks into **financial assets** and **liabilities**.

*Financial assets and liabilities*

<sup>2</sup> See United Nations (2009), System of National Accounts 2008, New York, available at <http://unstats.un.org/unsd/nationalaccount/docs/SNA2008.pdf>.

<sup>3</sup> For the differences between ESA 2010, in force since 1 September 2014, and the 2008 SNA, see ESA 2010, Section 1.51.

<sup>4</sup> See Regulation (EU) No 549/2013 of the European Parliament and of the Council of 21 May 2013 on the European system of national and regional accounts in the European Union.

<sup>5</sup> See Stöß, E. (2009), Gesamtwirtschaftliche Finanzierungsrechnung der Deutschen Bundesbank, in Kategorien der Volkswirtschaftlichen Gesamtrechnungen, Vol 4, Marburg, pp. 375 ff.

<sup>6</sup> For detailed information concerning the preparation of integrated balance sheets for financial and non-financial assets for Germany, see Deutsche Bundesbank (2008), Integrated sectoral and overall balance sheets for Germany, Monthly Report, January 2008, pp. 31–45.

<sup>7</sup> Available at <https://statistiken.bundesbank.de/statistiken-en/search/BBAF3>

## Sectoral breakdown

*Residence concept and classification by sector (S)*

The financial accounts show the financial relationships between all economic entities permanently domiciled in Germany (residence concept). Foreign employees and the production sites of foreigners in Germany are thus treated as Domestic Economic Entities (sector S.1), whereas German facilities domiciled abroad are regarded as non-residents and are thus assigned to the sector Rest of the world (sector S.2). Domestic entities are grouped in institutional sectors according to their economic and financial nature. Because of the creditor-debtor relationship of financial assets and liabilities, each creditor sector has a counterpart debtor sector.

*Non-financial corporations (S.11)*

The primary function of economic entities in the sector Non-financial corporations (sector S.11) is to produce (real) goods and services for the market. From these, they have to identify and invest in economically advantageous projects. The investment can be financed both through financial resources already available to the firm (internal financing) and through those provided by third parties (external financing). The sector Non-financial corporations includes genuine corporations (public limited companies, private limited companies, etc.) and quasi-corporations (chiefly partnerships, i.e. general partnerships and limited partnerships).

By contrast, the main task of the economic entities in the sector Financial corporations (sector S.12) is to provide financial services. This sector is disaggregated into monetary financial institutions (MFIs, sectors S.121 – S.123), investment funds (except money market funds, sector S.124), other financial intermediaries (OFIs) including financial auxiliaries, captive financial institutions and money lenders (sectors S.125 – S.127), insurance corporations and pension funds (sectors S.128 – S.129).

*Financial corporations (S.12)*

The primary focus of the sector General government (S.13) is the fulfilment of sovereign tasks. In line with the federal structure, it comprises the central, state and local government as well as social security funds sub-sectors. General government's main source of financing is compulsory payments (taxes, fees and contributions) and borrowing on the financial markets. The supplementary pension funds for public-sector employees fall within the scope of the (private) pension funds sector. By contrast, the Bundesbank is not part of the general government sector, but is considered an MFI.

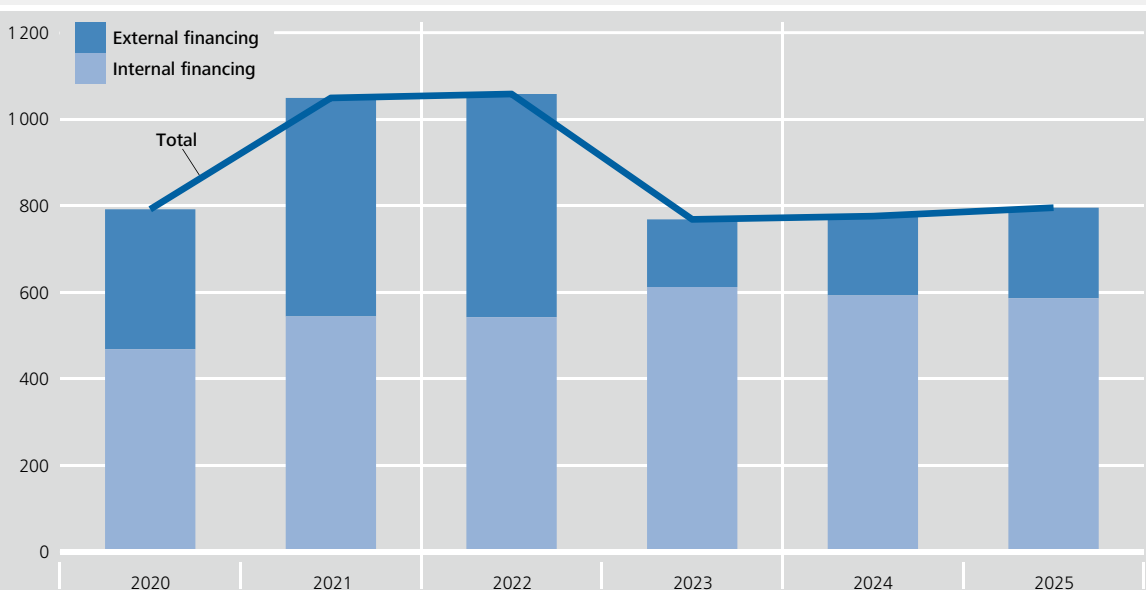
*General government (S.13)*

The sector Households (sector S.14) includes all persons or groups of persons who are characterised primarily by the consumption of real and financial goods and services. It also includes persons or groups of persons who produce market goods and/or services, insofar as no quasi-corpora-

*Households (S.14)*

### Financing structure of non-financial corporations

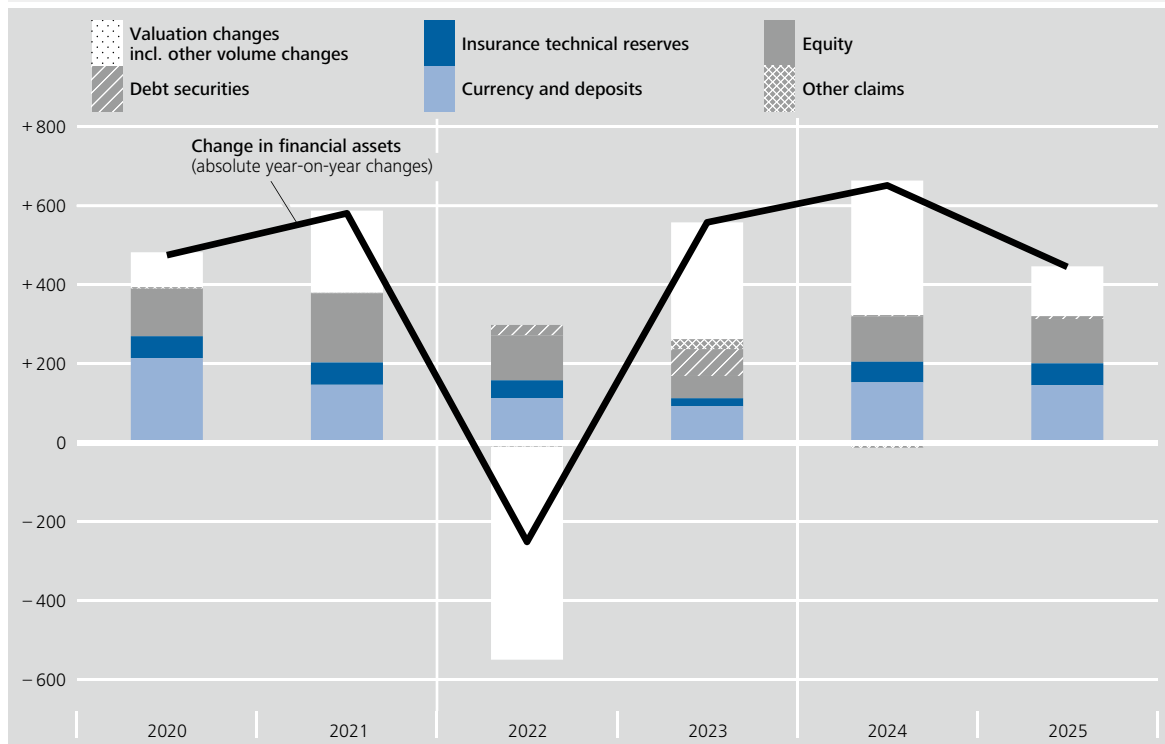
€ billion



1 Domestic and foreign.  
 Deutsche Bundesbank

## Development of financial assets of households\*

Transactions and valuation changes incl. other volume changes in € billion



\* Including non-profit institutions serving households.  
 Deutsche Bundesbank

tions were formed for this purpose.<sup>8</sup> Consequently, sole proprietors, independent professionals, self-employed farmers, etc. also belong to this sector.

Households' financial assets and their development are key variables in the macroeconomic analysis. Financial assets comprise the universe of financial instruments (see the next section). Households are an important source of funding for other domestic sectors and non-residents.

*Non-profit institutions serving households (S.15)*

Non-profit institutions serving households (sector S.15) are institutions which constitute independent legal entities that serve households as private other non-market producers. These include political parties, trade unions, private foundations and churches.<sup>9</sup>

*Rest of the world (S.2)*

Residents' assets and liabilities vis-à-vis non-residents are offset in the sector Rest of the world (S.2). Only the basic financial relationships and connections with non-residents are shown; non-residents are not divided into individual foreign sectors. Consequently, only those asset items arising from links between residents and non-residents are shown in this sector. The specific breakdown of the total asset and liability position of non-residents can only be determined based on the results of all foreign financial accounts.

## Recording of financial instruments

Within the sectors, economic entities are structured according to their primary economic operations. These (financial) operations are, in turn, broken down into various instruments. The instruments are structured according to their liquidity, maturity and legal characteristics (see the classification of instruments below).<sup>10</sup> Owing to the creditor-debtor relationship, both creditor and debtor positions are recorded for each instrument.

*Instruments used for financial transactions and stocks (F)*

<sup>8</sup> This group of persons was reclassified to the sector Households upon the entry into force of ESA 1995 mainly because it was felt that the relevant entrepreneurial activities were not being recorded adequately for statistical purposes and that they would be better reflected under other private lifestyles. For more detailed information, see Deutsche Bundesbank (2000), Overall financial flows in 1999, Monthly Report, June 2000. ESA 2010 has not altered this classification.

<sup>9</sup> Non-profit institutions serving households, which were always recorded together with households under ESA 95, have been shown separately since the introduction of ESA 2010.

<sup>10</sup> The breakdown by maturity is based on the lifetime or the period of notice originally agreed. Claims or liabilities repayable on demand or in one year or less are normally classified as short-term, while those with longer maturities are deemed to be long-term.

*Monetary gold and special drawing rights (F.1)*

Monetary gold (financial gold, F.1) is gold held by central banks. It is part of a country's international reserves. Special drawing rights (SDRs) are currency units defined and maintained by the International Monetary Fund (IMF), which are covered by the most commonly used international currencies. They are used as a means of settlement between central banks and international institutions.

*Currency and deposits (F.2)*

Currency comprises the banknotes issued by the central bank and coins in circulation. Generally speaking, currency is a liability of the institutional sector that issues it. As a form of debt money, banknotes are a liability of the central bank. By contrast, coins are a central government liability in many countries, including Germany, due to the "coinage prerogative". Deposits are deposits at MFIs, which are either directly available (transferable deposits) or available after a fixed term or period of notice (other deposits). Currency and transferable deposits are used mainly as payment instruments for real economic or financial transactions, i.e. as direct payment methods. Savings and time deposits, by contrast, are chiefly used for savings, with short-term ones considered potential means of payment given their "near-money" status.

*Debt securities (F.3)*

Debt securities (F.3) comprise borrowed capital that has been converted into negotiable securities through securitisation. They are marketable and divided into short-term (original maturity of up to one year) and long-term (original maturity of over one year) debt securities.

*Loans (F.4)*

Loans (F.4) are unsecuritised assets which, unlike securities, are not directly tradable. Based on their original maturity, they are broken down into short-term (maturity of up to one year) and long-term loans.

*Shares (F.5)*

Shares (F.5) comprise ownership rights in corporations. This equity generally enables the owner to influence corporate decisions. Shares first and foremost include direct holdings of shares, irrespective of whether or not they are listed. They include holdings in other corporations (private limited companies and cooperative societies) and in partnerships. Substantial capital is tied up in such companies due to the corporate structure in Germany. Finally, investment fund shares are also included in this category.

*Claims on insurance, pension and standardised guarantee schemes (F.6)*

Claims on insurance, pension and standardised guarantee schemes (F.6, also referred to as insurance technical reserves) encompass claims arising in connection with possible future events. These usually relate to insurance corporations and pension funds as debtors. However, in the case of employers' pension commitments in connection with company pension schemes, the liability remains in the relevant debtor sector, e.g. Non-financial corporations.

## Financial instruments in the financial accounts

Monetary gold and special drawing rights  
Monetary gold  
Special drawing rights (SDR)

Currency and deposits  
Currency  
Transferable deposits  
Time deposits  
Savings deposits  
Savings certificates

Debt securities  
short-term debt securities  
long-term debt securities  
Additionally: Debt securities by issuer

Loans  
short-term loans  
long-term loans  
Additionally: Loans by lender

Equity and investment fund shares  
Listed shares (by issuer)  
Unlisted shares  
Other equity  
Investment fund shares  
Money market fund shares  
Non-MMF investment fund shares

Insurance, pension and standardised guarantee schemes  
Non-life insurance technical reserves and provisions for calls under standardised guarantees  
Life insurance and annuity entitlements  
Pension entitlements<sup>1</sup>

Financial derivatives and employee stock options

Other accounts receivable/payable  
Trade credits and advances  
Other accounts receivable/payable

---

<sup>1</sup> Pension entitlements, entitlements to non-pension benefits and claims of pension funds on pension managers.

	Claims on social security funds (state pensions) are not covered in the financial accounts.			
<i>Financial derivatives and employee stock options (F.7)</i>	Financial derivatives (F.7) are financial instruments based on another instrument which allow special risks to be traded separately from the underlying instrument. Their value is derived from the underlying instrument, which can either be another financial asset (e.g. options on securities), an index (e.g. DAX futures), a commodity (e.g. commodity futures) or an event (e.g. credit default swaps). Employee stock options entitle employees to acquire a certain number of their employer's stocks at a pre-determined price, either at a fixed point in time or within a certain time-frame.	The use of market prices for valuing financial flows and stocks leads to flow-stock discrepancies. These may be attributable to valuation adjustments, for example. In addition, other volume changes may occur when instruments are reclassified to another institutional sector within one sector or when, owing to a change in classification, individual entities are reclassified to another institutional sector. However, such <b>reclassifications</b> occur only irregularly. Other volume changes may be due to other causes. These include the use of new data sources or methodological adjustments.		<i>Other changes in volume</i>
<i>Other accounts receivable/payable (F.8)</i>	Other claims and liabilities (F.8) comprise financial operations that tend to be the by-product of other business activities, e.g. early or late payments for goods and services. They include enterprises' trade credits and prepayments/accrued income as well as government tax claims and payment arrears.	Financial flows are shown net in the German financial accounts, i.e. the increases in claims (or liabilities) of a specific type are offset against the relevant decreases in the period concerned.		<i>Net recording</i>
	<b>Capturing the dynamics</b>	The system of <b>double-entry bookkeeping</b> in the financial accounts results from the creditor-debtor relationship. All assets are therefore matched by counterpart liabilities, broken down by instrument and sector and subdivided according to transactions and stocks. Unlike with non-monetary assets, one party's monetary assets are another's monetary liabilities.		<i>Consistency</i>
<i>Stocks and flows</i>	The financial instruments held and issued by the sectors are measured both over time periods and at specific points in time. Flows (including transactions and other changes in volume) encompass the issue, exchange, transfer or utilisation of financial assets or liabilities over a period of time, whereas stocks reflect these values at a particular point in time.	<b>Statistical sources</b>		
<i>Reporting periods and frequency</i>	The financial accounts document the financial stocks and flows of the various sectors on a quarterly basis. The time lag between the reporting date/period and publication is at present about three-and-a-half months and is mainly used for the compilation and verification of the data.	Worldwide, hardly any statistics are collected separately for the specific purposes of the financial accounts. As a consequence, existing statistical information which predominantly serves other purposes usually has to be used in compiling them. A case in point is the banking statistics, which are collected by central banks primarily in connection with performing their monetary policy and supervisory functions. The same applies to securities statistics for analysing the capital market and to various statistics for compiling the balance of payments. The financial accounts therefore assume the character of <b>secondary statistics</b> which are based on statistical components from diverse financial areas which are linked consistently with one another. The disadvantage of this method is that these statistics do not necessarily satisfy the specific requirements of the ESA. In such cases, statistical procedures and adequate additional information are used in an attempt to fill the gaps.		<i>Financial accounts as secondary statistics</i>
<i>Consolidation</i>	Economic entities may carry out financial transactions with entities within the same sector or with those from other sectors. The <b>unconsolidated</b> approach takes into account transactions which take place within one sector. This reflects the overall activity of the sector. Under the consolidated approach, the financial relationships within a particular sector are netted out to produce <b>consolidated</b> data. This approach illustrates the external relationships of a particular sector with other sectors.	The most important sources for the financial accounts are the statistics of financial intermediaries, particularly the monthly balance sheet statistics of banks (MFIs), the securities holdings statistics and the quarterly data on insurance corporations and pension funds. Further data are provided, for example, by the capital market statistics, the investment funds statistics, the balance of payments statistics, the international investment position, corporate finan-		<i>Main sources</i>
<i>Assessment</i>	The financial accounts aim to reflect stock and transaction values at <b>market prices</b> , as these contain implicit information on the subjective valuation of stakeholders.			

cial statement statistics and various government financial statistics.

### Compilation

*Financial accounts process*

The financial accounts statistics are generally compiled according to the bottom-up principle, i.e. data for the top sector are calculated summing up available data for the sub-sectors and sub-categories of financial instruments. At the same time, the consistency of instruments (horizontal consistency) and sectors (vertical consistency) is checked and ensured. Horizontal consistency ensures that the financial instruments are correctly aligned between the sectors, so that claims and liabilities match within a given period. Vertical consistency, on the other hand, examines the

alignment between the real economy's national accounts and the financial accounts. This means that the financing of real economic activities is reflected through corresponding financial transactions.

The results of the financial accounts are revised from time to time. Such adjustments, which are also implemented retroactively, are essentially made for any of three reasons. First, changes in the data of the primary statistics used are taken into consideration in this way. Second, as the availability of suitable primary statistics changes over time, the additional inclusion of new or the replacement of previous data leads to revisions of the financial accounts. Third, methodological changes in the financial accounts themselves necessitate revisions.

*Revisions*