

METHODOLOGICAL NOTES

Monetary and financial statistics are one of the four main sets of macroeconomic statistics, apart from national accounts, government finance statistics, and balance of payments statistics, and cover monetary statistics, financial markets statistics, financial accounts statistics of the financial corporations' sector and statistics on the Financial Soundness Indicators.

MONETARY STATISTICS

General methodological notes

Monetary statistics consist of a comprehensive set of data on the financial corporations' sector and its subsectors' claims on and liabilities to other sectors of the domestic economy and non-residents.

The monetary statistics of Ukraine comprise stock and flow data on the financial and non-financial assets and liabilities of the financial corporations' sector. Presently, the monetary statistics of Ukraine cover 100 percent of banks established and operating in the territory of Ukraine (except for banks under liquidation), as well as insurance corporations, pension funds, collective investment schemes (investment funds), credit unions, financial companies, legal entities engaged in financial leasing, pawnshops and financial auxiliaries. The National Bank of Ukraine is responsible for compiling monetary statistics in accordance with the Law of Ukraine "On the National Bank of Ukraine".

The main report forms for the submission of monetary data are sectoral balance sheets and surveys of the financial corporations' sector and its subsectors.

The data source for compiling the monetary statistics is a statistical reporting of the banks and the National Bank of Ukraine, reporting of participants of non-bank financial services market submitted to the National Bank of Ukraine, as well as data of the National Commission on Securities and Stock Market and data provided by the State Statistical Service of Ukraine, calculations and estimates of the National Bank of Ukraine.

Monetary statistics are compiled and disseminated on a monthly basis. Monetary statistics are instrumental in devising the monetary policy and overseeing its implementation. They provide a statistical basis for the macroeconomic analysis and assessment of financial sector stability. They are also necessary to inform a broad circle of users: authorities, residents and non-residents that are engaged in transactions with the country's financial corporations.

Indicators of the monetary statistics are disseminated on the official website of the National Bank of Ukraine, and, pursuant to the Special Data Dissemination Standard of the International Monetary Fund, and in the statistical database of the International Monetary Fund "[International Financial Statistics](#)" ([IFS](#)).

Monetary statistics are compiled in accordance with the international standards given in the [Monetary and Financial Statistics Manual and Compilation Guide \(IMF\)](#) and in line with guidelines and recommendations on statistics of the European Central Bank.

The methodology for compiling the monetary statistics meets the requirements of the System of National Accounts, Balance of Payments and International Investment Position Manual (IMF), Government Finance Statistics Manual (IMF), other official editions of the International Monetary Fund, as well as other international organizations guided by the following principles and concepts.

Classification of institutional units

Residency. Economic entities engaging in economic activities and transactions – institutional units are classified as residents and nonresidents pursuant to the legislation of Ukraine and international standards.

Sectorization. Resident institutional units, similar by their objectives, functions and activity, are grouped into five sectors of the economy according to the Classification of Institutional Sectors of the Economy of Ukraine (CISE), approved by the order of the State Statistics Service of Ukraine of 3 December, 2014, No.378 (as amended):

- 1) financial corporations;

- 2) general government;
- 3) non-financial corporations;
- 4) households;
- 5) non-profit institutions serving households.

Classification of institutional sectors of the economy pursuant to the international standards is given in Table

Sectorisation in the monetary statistics of Ukraine					CISE code
Resident sectors	Money-issuing sectors	Financial corporations	Deposit-taking corporations	National Bank of Ukraine	S.121
				Other deposit-taking corporations (banks: public, private, foreign-controlled)	S.122
	Money-holding sectors		Other financial corporations	Money market funds (MMFs)	S.123
				Non-MMF investment funds	S.124
				Other financial intermediaries except insurance corporations and pension funds	S.125
				Financial auxiliaries	S.126
				Captive financial institutions	S.127
				Insurance corporations	S.128
				Pension funds (public, private, foreign-controlled)	S.129
	Money-neutral sector		General government	Central government	
				among them: social security funds	S.1313
	Money-holding sectors	State and local government		S.1312	
				among them: social security funds	S.1313
		Non-financial corporations	Public non-financial corporations		S.11001
	Other non-financial corporations (private, foreign-controlled)		S.11002 + S.11003		
Households	Employers, own-account workers		S.141 + S.142		
	Recipients of property and transfer incomes		S.143 + S.144		
	Non-profit institutions serving households (private, foreign-controlled)		S.15		
Nonresidents		Rest of the world		S.2	

Financial corporations' sector consists of all residents principally engaged in financial intermediation or in auxiliary financial activities which are closely related to financial intermediation: National Bank of Ukraine, other deposit-taking corporations (banks established and operating in the territory of Ukraine) and other financial corporations (insurance companies, pension funds, investment funds, financial companies etc.). The other deposit-taking corporations (banks) sub-sector consists of financial corporations that are engaged in financial intermediation as a principal activity and that issue liabilities in the form of deposits or other instruments that are close substitutes for deposits in mobilizing financial resources and included in the monetary aggregates.

General government sector includes legal entities, whose main activity is to exercise legislative, executive or judicial authority over other institutional units within a specific area, and is subdivided into sub-sectors: central government, state and local government, social security funds.

Non-financial corporations' sector consists of corporations engaged primarily in the production of market goods and non-financial services, and is subdivided into sub-sectors: public non-financial corporations, private non-financial corporations and foreign-controlled non-financial corporations.

Households include employees, own-account workers, employers, recipients of property, pensions and other transfer incomes.

Non-profit institutions serving households are legal or social entities that provide non-market goods and services to their members or to other households without charge or at prices that are not economically significant: political parties, consumers' associations, churches or religious societies, charities, relief and aid organizations, social, cultural, recreational and sports clubs of non-financial and financial corporations.

Breakdown by type of industry. Resident institutional units are classified by types of industry according to the National Classifier of Ukraine DK 009:2010 Industrial Classification of all Economic Activities approved by the order of the State Committee of Ukraine on Technical Regulation and Consumer Policy No.457 of October 11, 2010 (as amended).

Classification of financial assets

According to the 2008 SNA financial assets are classified in the following main categories of assets and liabilities:

- monetary gold and special drawing rights (SDRs) (central bank's asset);
- currency and deposits;
- debt securities;
- loans;
- equity and investment fund shares;
- insurance, pension and standardized guarantee schemes;
- financial derivatives and employee stock options;
- other accounts receivable/payable.

Monetary gold and SDR holdings are financial assets having for which there are no corresponding financial liabilities.

Monetary gold consists only of gold held by National Bank of Ukraine and as part of official reserve assets (international reserves). Gold holdings that are not part of official reserve assets are classified as non-financial assets.

SDRs are international reserve assets created by the International Monetary Fund (IMF) and allocated to members to supplement existing official reserve assets. SDR holdings represent unconditional rights to obtain foreign exchange of other reserve assets from other IMF members.

Currency consists of banknotes and coins that are issued by the National Bank of Ukraine and are of fixed nominal values. Funds in cash in foreign currency represent liabilities of central banks of foreign countries.

Deposits include claims on the National Bank of Ukraine, other deposit-taking corporations that are represented by evidence of deposit. Deposits comprise transferable deposits and other deposits.

Transferable deposits comprise financial assets that are exchangeable on demand at par and without penalty or restriction and directly usable for making payments.

Other deposits comprise non-transferable deposits that are convertible into cash or transferable deposits in short terms such as demand deposits, that are not used directly to make payments, time deposits and savings deposits.

Debt securities are negotiable instruments serving as evidence that units have obligations to settle by means of providing cash, a financial instrument, or some other item of economic value. Some common types of securities are corporate bonds, government bonds of Ukraine, domestic municipal bonds, treasury bills, promissory notes etc.

Loans are financial assets that are created when a creditor lends funds directly to a debtor, and are evidenced by non-negotiable documents. This category includes all loans and advances – except accounts receivable/payable.

Equity and investment fund shares comprise all instruments and records acknowledging, after the claims of all creditors have been met, claims on the residual value of a corporation: shares, investment certificates etc that provide for participation in the residual value on dissolution of a corporation. On the liabilities side of balance sheet the index comprise funds contributed by owners, retained earnings, current year result, general and special reserves, valuation adjustment.

Insurance, pension and standardized guarantee schemes consist of non-life insurance technical reserves, life insurance and annuity entitlements, pension entitlements, claims of pension funds on pension managers, provisions for calls under standardised guarantees.

Financial derivatives and employee stock options are options, forward and futures-type contracts, swap agreements, employee stock options.

Other accounts receivable/payable include trade credit and advances, that are not included to the category «loans», and other accounts.

Trade credit and advances include amounts receivable/payable in respect of extended trade credit and advances for work that is in progress and prepayment for goods and services.

Financial assets and liabilities are classified by institutional sectors of the economy of creditors and debtors.

Accounting rules

Valuation of stocks and flows. Stocks measure the value of non-financial and financial assets and liabilities at a certain point in time and are linked with flows. Flows measure the changes in stocks over the period of time. Stock data reflect the value of outstanding amounts of assets and liabilities at the end of the accounting period. Data on flows reflect transactions, revaluations and other changes in the volume of assets during the accounting period.

Time of recording. Data on stocks and flows of assets and liabilities are compiled on the accrual basis of accounting. On this basis, revenue and gains are recognized in the period when they are earned, and expenses and losses when they are incurred. Accrued income and expenditures under deposits, loans and securities are included in the outstanding amount of a financial asset or liability.

Valuation of financial assets. Financial assets are recorded at the prices at which the assets are acquired or disposed of (at an original value or a fair value). The alignment of the value of financial assets with a fair (market) value is carried out through their revaluation on the balance sheet date.

Stocks and flows in national and foreign currencies. Stocks and flows denominated in foreign currency are converted into national currency amounts, using the official exchange rate of hryvnia versus foreign currencies set by the National Bank of Ukraine on the basis of quotations in the interbank foreign exchange market of Ukraine during the previous day with taking into account some other indicators.

Maturity. Financial instruments are classified by the original maturities during which full repayment of the principal amount and payment of the accrued interest take place.

Data aggregation and consolidation

Monetary statistics data are compiled on an aggregated basis. *Aggregation* refers to the summation of data across all institutional units within a particular sector (sub-sector) and, for a given sector (sub-sector), the summation of all data within particular asset or liability category in sectoral balance sheets for financial corporations.

For analytical purposes, monetary data are consolidated to produce the surveys of financial corporations. *Consolidation* refers to the elimination of the data about financial claims and corresponding obligations that occur between institutional units within the financial sector or sub-sector covered by a particular survey.

Monetary statistics data are compiled on a gross basis. It means that claims on a particular transactor (an institutional unit or a sector) are not netted against the liabilities to that transactor. However, for analytical purposes, some categories of data are compiled on a net basis. In the surveys of financial corporations sector and its sub-sectors, the data about claims on and liabilities to the general government and non-residents, other assets and other liabilities are netted in the categories «net claims on general government», «net foreign assets», and «other items (net)».

Special methodological notes

Balance sheets, surveys

Sectoral balance sheet of deposit-taking corporations (excluding National bank of Ukraine), Sectoral balance sheet of other financial corporations, the National Bank of Ukraine survey, Deposit-taking corporations survey (excluding National bank of Ukraine), Deposit-taking corporations survey (including National bank of Ukraine), Other financial corporations survey, and Financial corporations survey contain detailed information across the categories of assets and liabilities of financial corporations.

Sectoral balance sheets comprise data on outstanding amounts of assets and liabilities at the end of the accounting period and on financial flows (transactions) during the accounting period across the categories of assets and liabilities of sub-sectors of financial corporations' sector.

Data on financial transactions are calculated using the following formula:

$$T = CS - OS - VC - OCVA,$$

where T – transactions;

CS – outstanding amounts at the end of accounting period;

OS – outstanding amounts at the beginning of accounting period;

VC – valuation changes (revaluations);

OCVA – other changes in the volume of assets.

Transactions refer to financial flows that arise, by mutual agreement between institutional units, from the creation, liquidation, or change in ownership of financial assets or liabilities. Changes in ownership occur through the sale, transfer, or other discharge of all rights, obligations, and risks associated with a financial asset or liability.

Data on transaction include the accrued interest for the period.

Valuation changes (revaluations) refer to financial flows arising from changes in the prices of financial assets and/or the exchange rates that affect the domestic currency values of assets and liabilities denominated in foreign currency.

Other changes in the volume of assets refer financial flows that arise from asset changes other than those arising from transactions and revaluations. Included are write-offs of claims, reclassification of assets or changes that arise from losses of assets due to their destruction by disasters, etc.

Surveys are an analytical form of presenting the statistical data of the financial corporations where data of sectoral balance sheets are consolidated into generalized categories of assets and liabilities and balance sheet identity is provided.

The National Bank of Ukraine survey comprises data on the liabilities of the National Bank of Ukraine that are included in the monetary base and underlie the monetary aggregates.

Deposit-taking corporations survey (including National bank of Ukraine) comprises data on the liabilities of deposit-taking corporations that are included in the monetary aggregates. The balance sheet identity in Deposit-taking corporations survey (including National bank of Ukraine) reflects the link of monetary aggregate M3 and other items with claims of deposit-taking corporations on residents and non-residents that can be presented as the equation:

Net foreign assets + domestic claims = monetary aggregate M3 + other items

Financial corporations survey is the result of consolidation of three surveys: National Bank of Ukraine survey, Deposit-taking corporations survey (excluding National bank of Ukraine), and Other financial corporations survey.

Surveys of financial corporations comprise the following main indicators:

Net foreign assets mean a balance between claims and liabilities of financial corporations vis-a-vis non-residents. Claims on non-residents are reflected on the gross basis and include official reserve assets (international reserves) and other less liquid claims of deposit-taking corporations on non-residents by categories of financial assets. Liabilities to non-residents are reflected on a gross basis by the categories of liabilities.

Domestic claims includes net claims of financial corporations on the central government and claims on other sectors of economy in national and foreign currencies.

Net claims on the central government are a balance between claims and liabilities of financial corporations vis-a-vis central government. Claims on the central government are reflected on a gross basis and include claims under the investments in government securities, under the loans granted and other accounts receivable in national and foreign currencies. Liabilities to the central government are reflected on a gross basis and include liabilities under the funds of the State Budget, funds of the customers supported at the expense of the State Budget, funds of the off-budget and special funds, as well as under other accounts payables in national and foreign currencies.

Claims on other sectors include the claims of financial corporations under the loans, investments in securities etc with regard to state and local government, public and other non-financial corporations, households and non-profit institutions serving households in national and foreign currencies.

Monetary base comprises the National Bank of Ukraine liabilities in national currency that support the expansion of monetary aggregates and credit of the economy. Monetary base is not a monetary aggregate, because it is a measure of the funding base that underlies the monetary aggregates, rather than a monetary aggregate itself. Monetary base includes the currency issued in circulation by the National Bank of Ukraine and transferable deposits in national currency with the National Bank of Ukraine. Currency comprises banknotes and coins issued by the National Bank of Ukraine, except currency of the National Bank of Ukraine. Transferable deposits include liabilities of the National Bank of Ukraine under the funds on the correspondent accounts, funds of required reserves and other funds on demand of other deposit-taking corporations, as well as the funds on the accounts of other financial corporations, non-financial corporations in national currency with the National Bank of Ukraine.

Monetary aggregates consist of certain liabilities of resident deposit-taking corporations vis-a-vis resident sectors of the economy except general government and other deposit-taking corporations. Components of monetary aggregates are financial assets in the form of currency in circulation, transferable deposits, and debt securities issued by deposit-taking corporations and belongs, on the ownership right, to other financial corporations, nonfinancial corporations, households and non-profit institutions serving households.

The National Bank of Ukraine has defined the monetary aggregates M0, M1, M2 and M3. These aggregates differ with regard to the degree of liquidity of the financial assets included.

Monetary aggregate M0 includes currency in circulation outside the deposit-taking corporations.

Monetary aggregate M1 comprises monetary aggregate M0 and transferable deposits in national currency.

Monetary aggregate M2 comprises monetary aggregate M1 and transferable deposits in foreign currency and other deposits.

Monetary aggregate M3 (money supply) comprises monetary aggregate M2 and debt securities.

Claims on and liabilities to every sub-sector of deposit-taking corporations are presented separately in the National Bank of Ukraine survey and Deposit-taking corporations survey (excluding National bank of Ukraine) and consolidated in Deposit-taking corporations survey (including National bank of Ukraine). Seasonally adjusted time series for monetary aggregate M3 calculated based on monthly data by using the DEMETRA+ software (version 1.03.2005) has been developed by the European Statistical System (ESS), and applying the X-12-ARIMA method.

Liabilities to other deposit-taking corporations excluded from monetary base are the sum total of funds of other deposit-taking corporations with the National Bank of Ukraine in the form of transferable deposits in foreign currency, other deposits, debt securities, and other accounts payable in national and foreign currencies.

Deposits excluded from monetary are the sum total of funds with the National Bank of Ukraine in the form of transferable deposits of other financial corporations in foreign currencies other.

Deposits excluded from monetary aggregate M3 are the sum total of transferable and other deposits of state and local government in national and foreign currencies other.

Insurance, pension and standardized guarantee schemes comprise:
 non-life insurance technical reserves;
 life insurance and annuity entitlements;
 pension entitlements;
 claims of pension funds on pension managers;
 provisions for calls under standardised guarantees.

Equity in liabilities of financial corporations include funds contributed by owners, retained earnings, current year result, general and special reserves, and valuation adjustment.

Other items (net) is a balance between other liabilities and claims not included in the abovementioned items.

Official reserve assets are those foreign assets that are readily available to and controlled by the National Bank of Ukraine for direct financing of payments imbalances, for indirectly regulating the magnitudes of such imbalances through intervention in exchange markets to affect the exchange rate of hryvnia versus foreign currencies, and/or for other purposes. Official reserve assets are compiled in accordance with the methodology given in the manual «International Reserves and Foreign Currency Liquidity» (IMF). Official reserve assets are claims on non-residents in convertible foreign currencies and comprise foreign currency reserves, IMF reserve position, special drawing rights (SDRs), gold and other reserve assets that are available for use by the National Bank of Ukraine.

Foreign currency reserves comprise cash in convertible foreign currencies and claims of the National Bank of Ukraine on non-residents in the form of short-term deposits in convertible foreign currencies (except deposits in gold), and securities issued by non-residents.

IMF reserve position are claims of an IMF member on the IMF that are determined as a difference between the quota and IMF holdings in its (member's) currency minus the IMF holdings received by the member-country as IMF loans and balances on the IMF account No.2 which does not exceed 0.1% of the member's quota. The IMF reserve position is a part of the member's international reserves.

Special drawing rights (SDRs) are Ukraine's assets within the special drawing rights that are held on the account of the National Bank of Ukraine with the IMF Treasury.

Gold is monetary gold placed with foreign banks and held in the vault of the State Treasury of the National Bank of Ukraine. Monetary gold is high-fineness gold in the form of coins, bullions, or bars of not less than 995 fineness, belonging to the National Bank of Ukraine. The weight of gold is defined in troy ounces. One troy ounce equals 31,103480 g.

The data (except gold and SDRs) in the US dollars are valued at the cross rates of foreign currencies against the US dollar, that are calculated with the use of the official exchange rate of hryvnia versus foreign currencies specified by the National Bank of Ukraine at the end of the period.

Deposits

Data on deposits attracted by other deposit-taking corporations are broken down by economic sector, type of deposits, currency and maturity. Deposits are classified by maturity as follows: on demand, up to one year, over one year and up to two years, over two years.

In addition, deposits of nonfinancial corporations are classified by type of economic activity.

Data source is the monthly statistical reporting about liabilities under attracted deposits that is provided by Ukrainian banks to the National Bank of Ukraine.

Loans

Data on loans granted by other deposit-taking corporations are broken down by economic sector, original maturity (up to one year, over one year and up to 5 years, and over 5 years), and currency. Data on loans granted to other financial corporations, non-financial corporations and to subsector of own-account workers from the household sector (private entrepreneurs) are broken down by size of enterprise according to Article 55 of the Commercial Code of Ukraine as loans granted to:

- large enterprises (which include entities (except for private entrepreneurs) with more than 250 employees and an annual income from any type of activity exceed the amount equivalent to 50 million Euros);
- small enterprises excluding microenterprises (which include entities with more than 250 employees and an annual income from any type of activity does not exceed the amount equivalent to 10 million Euros);
- microenterprises (which include entities with more than 10 employees and an annual income from any type of activity does not exceed the amount equivalent to 2 million Euros), in particular:
 - microenterprises with annual income from any type of activity exceeds the amount equivalent to 500 thousand Euros and does not exceed the amount equivalent to 2 million Euros;
 - microenterprises with annual income annual from any type of activity exceeds the amount equivalent to 50 thousand Euros and does not exceed the amount equivalent to 500 thousand Euros;
 - microenterprises with annual income from any type of activity does not exceed the amount equivalent to 50 thousand Euros;
- medium-sized enterprises (which include other enterprises not mentioned above).

Loans granted to non-financial corporations are classified by type of industry and with regard to the purpose of their use as commercial real estate loans and other lending.

Loans granted to households are classified with regard to the purpose of their use as consumer credits, residential real estate loans (loans granted for the purpose of investing in housing, including building and home improvements), and other lending. In addition, residential real estate loans to households are classified by maturity as follows: over 5 years and up to 10 years, and over ten years.

Loans to non-residents are geographically broken down.

Data source is the monthly statistical reporting about liabilities under loans granted that is provided to the National Bank of Ukraine.

Securities

Data on securities held by deposit-taking corporations (excluding the National Bank of Ukraine) comprise securities issued by residents (excluding deposit-taking corporations) and non-residents.

Data on debt securities issued by residents (excluding deposit-taking corporations) accounted at fair value through profit or loss, at fair value through other comprehensive income and at amortized cost are broken down by economic sector, currency and original maturity. Abovementioned debt securities are classified by maturity as follows: on demand, up to one year, over one year and up to two years, and over two years.

Data on equity, including investments in associates and subsidiaries, are broken down by economic sector.

Data on debt securities issued by deposit-taking corporations (excluding the National Bank of Ukraine) are broken down by economic sector, type, maturity and currency.

Data source on securities held by deposit-taking corporations (excluding the National Bank of Ukraine) and on debt securities issued by deposit-taking corporations (excluding the National Bank of Ukraine) is the monthly statistical reporting on securities provided by Ukrainian banks to the National Bank of Ukraine.

FINANCIAL MARKETS

Financial markets statistics covers statistics of interest rates of the National Bank of Ukraine, deposit-taking corporations (banks), and securities markets statistics.

Interest rates

In accordance with international standards, interest rates set by deposit-taking corporations are as follows:

- interest rates on new business, conducted during the accounting period;
- interest rates on outstanding amounts as of the end the reporting period.

Interest rates on new business, conducted during the accounting period, comprise: interest rates on new deposits attracted from non-financial corporations and households; interest rates on new loans granted to non-financial corporations and households.

Data about weighted average interest rates and new business volumes on loans/deposits extended by/placed during the reference period includes data on primary agreements concluded during the reporting period as well as additional agreements under which a change occurred either in the amount or the interest rate, or the amount and the interest rate.

Interest rates on loans/deposits are calculated as a weighted average (by corresponding business volume on loans/deposits, including «rolled over» or renewed loans/deposits) per annum, using the following formula:

$$\overline{\rho k} = \sum P_i V_i / \sum V_i ,$$

where $\overline{\rho k}$ – weighted average interest rate on loans/deposits;

P_i – interest rate and other income/expenses (commissions) for i -loan/deposit agreement;

V_i – new business volume for i -loan/deposit agreement.

Data on weighted average interest rates on loans are broken down by economic sector, original maturity, currency, type of economic activity and the purpose of their use.

Data on interest rates on loans to other financial corporations, non-financial corporations and to subsector of own-account workers from the household sector (private entrepreneurs) are broken down by size of enterprise according to Article 55 of the Commercial Code of Ukraine as interest rates on loans granted to:

- large enterprises (which include entities (except for private entrepreneurs) with more than 250 employees and an annual income from any type of activity exceed the amount equivalent to 50 million Euros);
- small enterprises excluding microenterprises (which include entities with more than 250 employees and an annual income from any type of activity does not exceed the amount equivalent to 10 million Euros);
- microenterprises (which include entities with more than 10 employees and an annual income from any type of activity does not exceed the amount equivalent to 2 million Euros), in particular:
 - microenterprises with annual income from any type of activity exceeds the amount equivalent to 500 thousand Euros and does not exceed the amount equivalent to 2 million Euros;
 - microenterprises with annual income annual from any type of activity exceeds the amount equivalent to 50 thousand Euros and does not exceed the amount equivalent to 500 thousand Euros;
 - microenterprises with annual income from any type of activity does not exceed the amount equivalent to 50 thousand Euros;
- medium-sized enterprises (which include other enterprises not mentioned above).

Data on weighted average interest rates on deposits are broken down by economic sector, original maturity and currency.

Interest rates on outstanding amounts as of the end the reporting period comprise: interest rates on outstanding deposits from nonfinancial corporations and households; interest rates on outstanding loans to nonfinancial corporations and households.

Outstanding amounts refer to the stock of all deposits placed by households and nonfinancial corporations at deposit-taking corporations and the stock of all loans granted by deposit-taking corporations to households and nonfinancial corporations.

Interest rates on outstanding amounts reflect the weighted average interest rate on stock of deposits and loans at a particular point of time. Interest rates on outstanding amounts of deposits cover all deposits placed by clients and not yet returned to them at all periods till the reporting date. Interest rates on outstanding loans cover all loans received by clients and not yet repaid in all periods till the reporting date.

Interest rates on outstanding loans/deposits reflect the aggregate reward including both a charge for usage of funds granted extended in the form of a nominal interest rate and commissions and fees paid to the bank, which are an integral part of financial instrument income/expenses (equivalent of effective interest rate). Calculation of interest rates is based on the data on all outstanding loans/deposits as of the reporting date and those redeemed during the reporting month.

Interest rates on outstanding loans/deposits are calculated as a ratio of recognized interest income/expenses on loans/deposits to average loan/deposit balances in per cent per annum, according to the following formula:

$$P = \frac{\Delta D}{\bar{y}} * 12 * 100\%,$$

where P – interest rate;
 ΔD – recognized interest income/expenses;
 \bar{y} – average balances of loans/deposits.

Interest rates on outstanding loans to nonfinancial corporations and households and those on outstanding deposits placed by nonfinancial corporations and households, broken down by currency and maturity.

Data source is the monthly statistical reporting provided by Ukrainian banks to the National Bank of Ukraine about interest rates on loans and deposits.

Securities statistics

Data on outstanding amounts at the end of the reporting period and net issues of debt securities (securities other than shares) over the reporting period are broken down by sector of the issuer, currency and type of security: corporate bonds, Ukrainian government bonds (domestic and external sovereign bonds), municipal bonds, treasury bills of Ukraine, promissory notes etc.

Data sources for compiling of debt securities statistics are statistical reporting of banks and the National Bank of Ukraine, reporting of participants of non-bank financial services market, as well as data provided by the National Commission on Securities and Stock Market of Ukraine, the Ministry of Finance of Ukraine, the State Statistics Service of Ukraine, and calculations and estimates made by the National Bank of Ukraine.

Data on yields on government securities placed on the primary market as well as data about the volumes of transactions on the government securities allocation on the open market. The data cover all domestic sovereign bonds with maturity of up to 1 year, 2 years, 3 years, 4 years and 5 years.

Weighted average yield means yield, under which uncompetitive bids are accepted, and that is calculated as the weighted average value based on the yield levels of securities and on the number of their acquisition on competitive bids that are accepted. Yield in the primary market is set by the Ministry of Finance of Ukraine on the basis of banks' bids coming to the auctions from participants of securities allocation.

Data of FSTS (the First Stock Exchange Trading System) comprise the official indicator of the exchange FSTS index calculated for the last business day of the reporting month (year), as well as the turnover for the reporting month (year) based on results of trading in securities of Ukrainian issuers information on issue of which is registered in accordance with the requirements of the legislation of Ukraine. The

FSTS index is based on the results of trading on the FSTS Stock Exchange and is calculated in real time during the trading session.

FINANCIAL ACCOUNTS

Financial accounts of financial sector corporation and its subsectors contains the quarterly balance sheets for financial assets and liabilities, covering outstanding amounts and financial transactions. Data sources for compiling the financial accounts are the data of monetary statistics presented in standardized forms of sectoral balance sheets covering outstanding amounts and financial transactions conducted by the National Bank of Ukraine, other deposit-taking corporations (banks) and other financial corporations, calculations and estimates by the National bank of Ukraine.

FINANCIAL SOUNDNESS INDICATORS

Financial soundness indicators are representative of the markets in which the financial institutions operates. Data contain information: (1) about the core financial soundness indicators of deposit-taking corporations (banks) regarding capital adequacy, asset quality, profit and profitability, liquidity, sensitivity to market risk and additional financial soundness indicators of deposit-taking corporations, as well as reports with components for their compilation; (2) on additional financial soundness indicators of other financial corporations (non-bank financial services market participants), as well as reports with components for their compilation. Financial soundness indicators are compiled on the basis of balance sheet data of banks, banking supervision data and reporting of non-bank financial services market participants, as well as data on real estate market prices in accordance with the methodology outlined in the [Financial Soundness Indicators: compilation guide \(IMF, 2019\)](#), and are distributed in the "Financial Soundness Indicators" data set on the IMF page on access to macroeconomic and financial data on the Internet.

Technical notes

1. The annual growth rate a_t for month t , i.e. change in the 12-months ending in month t , is calculated using of the following formula:

$$a_t = \left[\prod_{i=0}^{11} \left(\frac{L_{t-i}}{L_{t-1-i}} \right) - 1 \right] \times 100, \text{ where } L_t - \text{outstanding amounts at the end of month } t.$$

2. Data on transactions are calculating using the following formula:

$$T = CS - OS - VC - OCVA,$$

where T – transactions;
 CS – outstanding amounts on balance sheet accounts at the end of accounting period;
 OS – outstanding amounts on balance sheet accounts at the beginning of accounting period;
 VC – valuation changes (revaluations);
 OCVA – other changes in the volume of assets.

For financial assets in national and foreign currencies that are affected by price changes and/or exchange rates changes, data on valuation changes (revaluations) VC are calculating using the following formula:

$$VC = RA_1 - RA_0,$$

where RA_1 – outstanding amounts on balance sheet revaluation accounts at the end of accounting period;
 RA_0 – outstanding amounts on balance sheet revaluation accounts at the beginning of accounting period.

For financial assets denominated in foreign currency that are affected by exchange rates changes, data on valuation changes (revaluations) VC are calculating based on the data on stocks and exchange rates for each code of foreign currency using the formula:

$$VC = \sum_{i=1}^k \left(\left(1 - \frac{e_{Mi}}{e_{1i}}\right) CS_i - \left(1 - \frac{e_{Mi}}{e_{0i}}\right) OS_i - (1 - e_{Mi}) OCVA_i \right),$$

where e_0 – exchange rate at the beginning of the period;

e_1 – exchange rate at the end of the period;

e_M – average exchange rate for the period;

i – code of foreign currency.

Exchange rates for each code of foreign currency at the beginning and at the end of period are defined using the official exchange rate of hryvnia against foreign currencies determined by the National Bank of Ukraine versus each of foreign currencies.

The average exchange rate for each foreign currency is calculated as the average value of foreign currency expressed in the national currency over a period.

Data on other changes in the volume of assets OCVA are reflected in case of changes which occur over a period because of reclassification of assets or changes that arise from losses of assets due to their destruction by disasters, etc. Because of events cause these changes are rare, it is assumed that the other changes in the volume of assets $OCVA = 0$.