

METHODOLOGICAL EXPLANATIONS

MONETARY SECTOR

1. Applied methodological concept

Compilation and presentation of monetary and interest rates statistics data is based on the international recommendations and standards, in particularly:-

- ✓ Monetary and Financial Statistics Manual, IMF, 2000;
- ✓ Monetary and Financial Statistics Compilation Guide, IMF, 2008;
- ✓ System of National Accounts - SNA 93, UN.
- ✓ Regulation of the ECB concerning statistics on interest rates.¹

2. Reporting units

For the purposes of compiling monetary and interest rates statistics data, depository corporations that are residents of the Republic of Macedonia are considered reporting units. They include the National Bank of the Republic of Macedonia (the NBRM), banks and savings houses.

3. Legal framework, reporting methods and sources of data

Reporting units, for the purposes of monetary and interest rates statistics, submit data and reports to the NBRM, as required by Articles 35, 36 and 37 of the Law on the National Bank of the Republic of Macedonia ("Official Gazette of the Republic of Macedonia" no. 158/2010) and Article 101 of the Banking Law ("Official Gazette of the Republic of Macedonia" no. 67/2007, 90/2009 и 67/2010)).

Data and reports of the reporting units are obtained on a monthly basis, electronically, through electronic applications.

Sources of data on monetary and interest rates statistics include:

- data on the outstanding stock of assets and liabilities of depository corporations (KNJ-BIFO);
- reports on weighted interest rates on granted loans and received deposits of banks (KS-1) and
- report on lending and deposit interest rates of the National Bank of the Republic of Macedonia.

4. Data dissemination and revision policy

4.1. Data dissemination policy

The monetary balance sheets and surveys and data on the interest rates of the depository corporations are disclosed on the web site of NBRM on a regular monthly basis, in line with the set deadline provided in Advance Release Calendar (on the web site of NBRM - <http://www.nbrm.mk>). Also, the monetary

¹ - ECB/2001/18 (Regulation (EC) No 63/2002 of the ECB of 20 December 2001 concerning statistics on interest rates applied by monetary financial institutions to deposits and loans vis-à-vis households and non-financial corporations),
- ECB/2004/21 (Regulation (EC) No 2181/2004 of the ECB of 16 December 2004 amending Regulation (EC) No 2423/2001 (ECB/2001/13) concerning the consolidated balance sheet of the monetary financial institutions sector and Regulation (EC) No 63/2002 (ECB/2001/18) concerning statistics on interest rates applied by monetary financial institutions to deposits and loans vis-à-vis households and non-financial corporations (ECB/2004/21)), ECB/2009/7 (Regulation (EC) No 290/2009 of the ECB of 31 March 2009 amending Regulation (EC) No 63/2002 (ECB/2001/18) concerning statistics on interest rates applied by monetary financial institutions to deposits and loans vis-à-vis households and non-financial corporations (ECB/2009/7)), ECB/2010/7 (Regulation (EU) No 674/2010 of the ECB of 23 July 2010 amending Regulation (EC) No 63/2002 (ECB/2001/18) concerning statistics on interest rates applied by monetary financial institutions to deposits and loans vis-à-vis households and non-financial corporations (ECB/2010/7)), and
- MANUAL ON MFI INTEREST RATES STATISTICS REGULATION ECB/2001/18, October 2003.

balance sheets and surveys and data on the interest rates of the depository corporations are on users' disposal also in the quarterly publication of NBRM "Quarterly Report of NBRM - Statistical Appendix", which can also be found on the web site of NBRM.

4.2. Data revision policy

The disclosed data can be revised provided in following instances:

- obtaining new corrected information and data from the reporting units; or
- methodological changes in the procedure of preparation of the balance sheets and surveys and interest rate statistics.

According to the international recommendations, the revised data are marked in footnote providing adequate explanation for the performed changes. The revision of the data in the historical time series is performed from the moment of occurring of the event that resulted in change in the data.

If there is a change in the data presentation (publishing of new indicator - sector, instrument, other), the historical time series is revised starting from the moment of introduction of the new indicator, if appropriate.

5. General methodological notes for monetary sector

The data in the aggregate balance sheet of other depository corporations (banks and savings houses) and the balance sheet of the National Bank of the Republic of Macedonia (NBRM) have been disaggregated in line with the sector and currency criterion and according to the financial instrument underlying the creation of certain claims and liabilities. The data in the presented balance sheets refer to end balances at the end of the reference period. The amounts denominated in foreign currency have been converted according to the middle Denar exchange rate at the end of the reference period, applying the indicative NBRM exchange rate.

In the sector-by-sector classification defined in the IMF Monetary and Financial Statistics Manual (in consistence with the sector delineation provided in SNA93 and ESA95), the clients are divided into two basic groups: residents and nonresidents.

Residents are further classified in the following basic sectors and subsectors:

- Financial corporations:
 - Central bank (NBRM),
 - Other depository corporations (banks and savings houses);
 - Other financial corporations (other financial intermediaries, except insurance companies and pension funds, financial auxiliaries, insurance companies and pension funds);
- Nonfinancial corporations;
 - Public nonfinancial corporations;
 - Other nonfinancial corporations;
- Government:
 - Central government;
 - Local government;
 - Social security funds;
- Households
 - Individuals;
 - Self-employed individuals;

- Nonprofit institutions serving households.

For the purposes of monetary balance sheets, the household sector and the nonprofit institutions serving households are presented jointly as a sector of other residents.

The National Bank of the Republic of Macedonia and other depository corporations (banks and savings houses) constitute the depository corporations of the Republic of Macedonia.

The depository corporations' assets and liabilities are classified in the following aggregated categories: monetary gold and special drawing rights (SDR), currencies and deposits (including the transferable deposits and other deposits), securities other than shares, loans, shares and other equities, other claims and liabilities (including the trade credits and other accounts).

Table 7. National Bank of the Republic of Macedonia - Balance Sheet

The NBRM balance sheet is prepared on the basis of accounting records of all NBRM assets and liabilities to other economy sectors, including the nonresident sector. The NBRM balance sheet is published at the end of the month, including data on the preceding month.

A. NBRM balance sheet assets include the following categories: foreign assets, claims on Central Government and other assets.

The NBRM foreign assets consist of foreign reserves and other foreign assets. Foreign reserves consists of monetary gold, foreign currency in the form of cash foreign currency, transferable and other NBRM deposits in foreign banks, placements in securities issued by nonresidents (in foreign currency), placements in foreign currencies with international financial institutions and holding of Special Drawing Rights (SDR). Other foreign assets include other foreign currencies, checks, transferable and other foreign currency deposits, foreign currency securities and shares and other claims on nonresidents in Denars and in foreign currency which are not a part of the foreign reserves.

NBRM claims on the Central Government pertain to the relations with IMF (allocation of SDR and claims based on replaced IMF loans) and claims based on placements in securities. The placements in securities are a specific category. The issue of such securities is one of the mechanisms in the bank rehabilitation process for assuming the bad placements in the book of one bank. These securities are held by the Bank Rehabilitation Agency. They are depreciated under the agreement between the Central Government and the Central Bank.

Other NBRM assets include NBRM claims on other sectors based on its current operations, fixed assets, special purpose assets and according to special regulations, stock, inflows from interests, doubtful and contested claims on interest and fees.

B. The NBRM balance sheet liabilities consist of reserve money, currency held by other depository corporations, other NBRM liabilities to other depository corporations, restricted deposits, foreign liabilities, Central Government's deposits and other NBRM liabilities.

Reserve money includes currency in circulation, cash in the vault, banks and savings houses' accounts with the NBRM, other financial institutions' accounts with NBRM (mainly the deposit insurance fund). The currency in circulation is NBRM liability and includes currency in circulation held by nonbanking entities. The banks' accounts with NBRM consist of banks' accounts with NBRM (including the savings houses) and deposited Denar reserve requirement of other financial institutions with NBRM and allocated banks' foreign currency reserve requirement. The reserve requirement is calculated by using the defined reserve requirement rates applied to the average monthly balance of the respective deposits. Average system form reserve requirement maintenance is in place, according to which the bank may use the reserve requirement to maintain the daily liquidity up to 80% of the liability. The data on the currency in

circulation are taken from the NBRM Central Bank Operations Department, and the data on banks and savings houses' daily liquidity are based on their daily reports submitted to the NBRM.

Currency held by other depository corporations includes cash in the vault of the banks and the savings houses.

Other NBRM liabilities to other depository corporations primarily include the NBRM liabilities on issued CB bills. The CB bills auctions are the basic instrument of the NBRM monetary policy used for regulation of the global liquidity level and interest rates in the banking system, and for signaling the monetary policy guidelines. They were introduced for the first time in February 1994, and by definition have been intended for withdrawing liquidity from the banking system. The interventions with this instrument with maturity of 28 days have been carried out by auctions that could be organized as volume tender or interest rate tender (US type). The CB bills auctions lays upon market and flexible base, which ensures their permanent alteration, for increasing their efficiency and successful achievement of their established goals.

Central Government deposits include central government demand deposits in Denars (treasury account of the central government and other budget funds) and in foreign currency (deposits for special purposes on central government level and other deposits). Since March 2006, Denar government deposits also include cash mobilized through the issue of **treasury bills for monetary purposes**, deposited on a special account. On March 7, the NBRM in cooperation with the Ministry of Finance started issuing 3-month treasury bills for monetary purposes. The treasury bills for monetary purposes have been issued on regular central government securities auctions, with same features as the regular government securities. According to the Law on Public Debt, the treasury bills for monetary purposes are not considered a part of the public debt, because they have been issued for monetary policy purposes. In addition, the central government has no right to make the withdrawn funds available by issuing treasury bills for monetary purposes. The interest rate on treasury bills for monetary purposes has been charged to the NBRM, according to the average interest rate reached at the 3-month treasury bills. For regulating the mutual relations, the Ministry of Finance and the NBRM have concluded an Agreement on treasury bills for monetary purposes.

Foreign liabilities include NBRM liabilities to nonresidents based on checks and foreign currency L/Cs, and liabilities on used loans from the International Monetary Fund. This category also includes SDR allocation.

Other NBRM liabilities include capital accounts consisting of NBRM own funds, retained earnings, current year financial result, general and specific impairment and special reserve and valuation adjustments. This category also unclassified NBRM liabilities arising from various business relations with resident sector.

Table 8. Report form for other depository corporations (banks and saving houses)

The balance sheet of other depository corporations has been prepared on the basis of accounting records submitted by the banks and the savings houses (KNBIFO), being aggregate balance sheet assets and liabilities of all other depository corporations. The monthly balance sheet of other depository corporations has been published at the end of the month, containing data on the preceding month. The balance sheet includes data on the claims and liabilities (holders of monetary aggregates, as defined by the national definition) of other depository corporations (except for NBRM) to other sectors in the economy, including the nonresident sector. The data have been classified in standardized components by sector, financial instrument and accounting principle.

A. Assets in the balance sheet of other depository corporations include currencies and

deposits, securities other than shares, loans, shares and other equities, financial derivatives, other claims, nonfinancial assets.

Currencies and deposits have been divided by currency structure in Denars and foreign currency. Currencies include banknotes and coins in the vaults of other depository corporations issued by the central bank and foreign currencies issued by central banks of foreign states. Deposits consist of transferable deposits which include current accounts of other depository corporations with NBRM (which also include their reserve requirement in Denars deposited with NBRM) and bank accounts abroad. The group of deposits includes sight deposits, savings and other deposits (which also include the banks' compulsory deposit with NBRM).

Securities other than shares have been classified by currency structure and sector and include CB bills, treasury bills, government bonds, corporate bonds, commercial securities, transferable deposit certificates, etc.

Loans refer to assets provided to various sectors by other depository corporations. Loan data include accrued interest, whereas the expected losses, loan loss provisions and impairments have been excluded from this category. According to the currency distribution, the loans have been classified to Denar and foreign currency.

Shares and other equity include financial instruments which supply the holder with the right of ownership of the company of issue.

Other claims include trade credits and advances which refer to financial services provided by other depository corporations to other financial and nonfinancial corporations. This category includes all other items not included in other categories of financial instruments, and consists of dividends, settlement account, items in process of collection, etc.

Nonfinancial assets include tangible (fixed assets, stock, etc.) assets and intangible assets for which no respective liabilities have been recorded (patents, licenses, software, etc.).

B. Liabilities of other depository corporations include liabilities arising from accepted deposits, received loans, issued securities, other liabilities and shares and other equities.

Deposits are differentiated into deposits included and excluded from the broad money, further classified into Denar and foreign currency deposits.

Deposits included in the broad money contain transferable deposits and other deposits of domestic depository corporations included in the national definition of broad money. This category includes deposits of other financial corporations, nonfinancial corporations, households, nonprofit institutions serving households and local government.

Deposits excluded from the broad money include transferable and other central government deposits (except for the local government), depository corporations and nonresidents deposits.

Securities other than shares include commercial securities issued by other depository corporations for the purposes of strengthening the total financial potential.

Loans include funds provided to other depository corporations by various institutional sectors.

Other liabilities include trade credits (received for purchasing goods and services from households, nonprofit institutions and nonfinancial corporations) and advances received for current operations or operations about to start, and advanced payments for goods and services. This category also includes settlement accounts, liabilities on dividends, loss provisions for impaired financial assets, accumulated depreciation and losses arising from impairment and other liabilities. Other liabilities include all accounts n.e.c. in the balance sheet of other depository corporations.

Shares and other equity have been divided into equity investments, retained earnings, financial result from current year, general and specific impairment of value and special reserve and valuation adjustments.

Table 9. Depository corporations survey - NBRM, other depository corporations (ODI - banks and savings houses)

The survey of depository corporations is a consolidated survey of the accounts of banks, savings houses and NBRM, showing the combined assets and liabilities of the monetary system with respect to other resident and nonresident entities. Basic source of preparation of the survey of depository corporations are the NBRM survey and the survey of other depository corporations.

As a consolidated balance sheet of the monetary system, it is a basis for its continuous monitoring. Simultaneously, the survey also provides an analysis of the interactions of the basic macroeconomic sectors: the real, fiscal, external and the monetary sector.

The monthly survey of depository corporations has been published at the end of the month, containing data on the preceding month.

Major components of the Survey of depository corporations are the net foreign assets, domestic credits, money, deposits (restricted and other), liabilities to other financial corporations, capital accounts and other items (net).

Net foreign assets is the difference between the foreign assets and liabilities of the NBRM and other depository corporations (banks and savings houses). All foreign assets and liabilities of the NBRM and other depository corporations have been aggregated and presented as net foreign assets of the monetary system.

Domestic credits include claims of the depository corporations (NBRM, banks and savings houses) on central government (recognized on a net basis), claims on local government, public nonfinancial corporations, private sector and other financial corporations (recognized on a gross basis).

Claims on central government include claims on loans, securities and trade credits and advances. Sources of loans to the central government include foreign loans, credit lines, deposit potential and other sources. Claims on central government based on securities include claims on specific securities (issued by the central government in the process of rehabilitation of one bank, bonds issued for the old foreign currency savings).

Claims on local government include claims on local currency credits.

Claims on public nonfinancial corporations include claims on local and foreign currency loans to public enterprises.

Claims on private sector include total placements of depository corporations to the private sector based on approved loans, placements in securities and shares and other placements. Claims on private sector contain claims on other nonfinancial corporations, claims on households and claims on nonprofit institutions serving households.

Claims on other financial corporations include total placements of depository corporations based on approved loans, placements in securities and shares.

Money includes currency in circulation (currency outside other depository corporations), demand deposits of the local government and other financial corporations with NBRM and demand deposits of the sector of money holders with banks and savings houses.

Restricted deposits include deposits restrictedly used for a purpose specified by regulation. These deposits are intended for covering open L/Cs in the external payment operations, guarantees, bank remittances, etc.

Other deposits include time, savings and foreign currency deposits of sectors included in the definition of the broad money, with NBRM, banks and savings houses.

Liabilities to other financial corporations include total depository corporations' liabilities on deposits, securities and received loans.

Capital accounts unite the capital accounts of NBRM, banks and savings houses.

Other items (net) recognize all categories not included in the previously presented categories and all unclassified assets and liabilities of the depository corporations.

Table 10. Banks and savings houses' loans

Loans approved by other depository corporations to nongovernment sector have been classified by currency: loans in Denars and in foreign currency. They are further classified into short-term and long-term loans, accrued interest and doubtful and contested claims. Short-term and long-term loans have been divided in to loans with and without currency clause. Loans to nongovernment sector include loans to the following sectors: nonfinancial corporations, households, nonprofit institutions serving households, local government and other financial corporations.

Table 11. Monetary aggregates and components thereof (non-government sector)

Monetary aggregates, as a sum of financial instruments classified by liquidity level, have been defined in a manner compatible with the internationally accepted definitions and criteria (as specified by the IMF Methodology for monetary and financial statistics). Deposits included in monetary aggregates consist of the following sectors: other financial corporations, local government, nonfinancial corporations (other and public), households (individuals and self-employed individuals) and nonprofit institutions serving households.

Money supply M1 includes currency in circulation and demand deposits. Demand deposits, however, include current accounts with banks and savings houses and current accounts of other financial corporations with NBRM.

Currency in circulation is the difference between the total amount of banknotes and coins and the amount of cash in the banks' vaults, in the NBRM's vault and in the dispersed vaults.

Money supply M2 (liquid assets) includes the monetary aggregate M1 and short-term deposits. Short-term deposits have been defined as deposits which include sight deposits, time deposits with maturity of up to one year, in Denars and in foreign currency.

Money supply M4 (total deposit potential of the monetary system) includes monetary aggregate M2 and short-term deposits, i.e. deposits with maturity of over 1 year, in Denars and in foreign currency.

Table 12. Claims of other depository corporations (banks and savings houses)

Claims of other depository corporations include loans, placements in securities, shares and overdue claims and doubtful and contested claims on loans. Placements of other depository corporations have been decomposed by sector, maturity and currency. According to the accepted standards of the

monetary and financial consolidation statistics i.e. exclusion of the mutual claims and liabilities within a sector, the placements exclude the interbank claims.

Claims of banks and savings houses on nonfinancial corporations (other and public) include claims on loans, accrued interest on loans, overdue claims and doubtful and suspicious and contested claims on loans, securities and shares. All categories have been differentiated by currency, and the loans have also been differentiated by maturity. Other depository corporations approve loans from various sources of funding: deposits, own sources, foreign credits, received credit lines and other sources. Claims on securities include claims on short-term securities (checks and notes) and claims on long-term securities, i.e. holdings or investments of the banks and savings houses in securities of nonfinancial corporations. Claims which form the category of shares include financial instruments which supply other depository corporations with the right of ownership of the issuing nonfinancial entity.

Claims of banks and savings houses on households (individuals and self-employed individuals) include claims on loans, accrued interest on loans, overdue claims and doubtful and contested claims on loans. Claims on households have been differentiated by currency, maturity and purpose. By purpose, the loans have been disaggregated to consumer loans, auto loans, housing loans, credit cards and overdrafts, other loans and loans of self-employed individuals.

Claims of banks and savings houses on nonprofit institutions serving households, other financial corporations and local government include claims on loans, accrued interest on loans, overdue claims and doubtful and contested claims on loans, claims on securities, and claims on shares.

Claims of other depository corporations on Central Government include claims on loans, accrued interest on loans, overdue claims and doubtful and contested claims on loans, claims on securities, and claims on shares. Sources of loans to the Central Government include foreign loans, credit lines, deposit potential and other sources. Liabilities on Central Government based on securities include claims on specific securities.

Table 13. Liabilities of other depository corporations (banks and savings houses)

According to the dominant classic deposit and credit activity of **other depository corporations, the liabilities to nonfinancial corporations** include deposits of nonfinancial corporations and loans received from nonfinancial entities. Besides deposits and loans, this category also includes securities issued by nonfinancial entities. Deposits have been disaggregated by their maturity and currency structure. Loans and securities have been differentiated by their currency structure.

Liabilities of other depository corporations to households include current accounts, sight deposits, time deposits (up to three months, over three months, up to one year and over one year) and restricted deposits intended for covering L/Cs in the domestic payment operations.

Liabilities of other depository corporations to other clients - nonprofit institutions serving households, to local government, other financial corporations and liabilities to central government, respectively. The above are liabilities on various types of deposits differentiated by their maturity and currency structure, and liabilities on securities and other loan liabilities in Denars and foreign currency.

Table 14. Report of weighted interest rates on granted loans and received deposits of banks

Based on a Report on weighted interest rates on deposits and loans, which the banks submit to NBRM on regular monthly basis, aggregated survey on weighted interest rates of deposits and loans in Denar and in foreign currencies is prepared.

Interest rates on Denar loans include: interest rates on Denar loans without FX clause and interest rates on Denar loans with FX clause.

Interest rates on Denar deposits include: interest rates on Denar deposits without FX clause and interest rates on Denar deposits with FX clause.

Denar loans/deposits are further categorized by two criteria: sectoral classification and maturity. By sectoral classification, they are divided to: loans/deposits which refer to nonfinancial corporations (public and other), loans/deposits which refer to the households. By maturity, the loans are divided to: short-term and long-term; and the deposits: sight deposits, short-term and long-term time deposits.

Foreign currency loans/deposits are classified by three criteria: by sector, by currency and by maturity. By sector classification, they are divided to: loans/deposits which refer to nonfinancial corporations (public and other), loans/deposits referring to households. By maturity, loans are divided to: short-term and long-term; and the deposits to: sight deposits, short-term and long-term time deposits. By currency, they are divided to: credits/deposits in euros and in USA dollars.

Interest rates on loans and deposits are in percents on annual level.

Table 15. Interest rates of the National Bank of the Republic of Macedonia

1. Discount rate is valid interest rate in the current month.
2. Interest rate on credits over night - Lombard credit is the valid interest rate in the current month.
3. Interest rate on repo transactions for creating liquidity in the banking system is shown as average weighted interest rate achieved at the auctions in that month.
4. Interest rate on CB bills is shown as average weighted interest rate achieved at the auctions with maturity of 28 days in that month. The interest rate is differentiated by the type of tender which can be: volume tender or interest rate tender.
5. Interest rate on repo transactions for liquidity withdrawal from the banking system is shown as average weighted interest rate achieved at the auctions in that month.

Table 16. Reserve requirement of banks and saving houses

Banks and saving houses allocate reserve requirement based on the average deposit stock in the previous month. The period of maintaining the reserve requirements covers the period from the 11th in the current month to the 10th in the following month. The fulfilling of the banks' reserve requirement in denars is on average basis, whereas the saving houses' reserve requirement in denars and the banks' reserve requirement in foreign currency are on fixed basis.

Table 17. Interest rates on Government securities

Interest rates on Government securities are shown as average weighted interest rate achieved on the auctions in the adequate month with fixed maturity.