

## Methodology of Compilation of the Statistical Bulletin of the Central Bank of Armenia

### Chapter I. Periodicity of Information in Statistical Bulletin of the Central Bank

1. The periodicity of presentation of the indicators set forth in point 2 hereunder is established taking account of the importance and availability of the data for analysts and users. Monthly periodicity is applied to the monetary and financial system indicators, as well as to indicators reflecting relations between the state budget and the Central Bank and to inflation indicators, which closely relate to the monetary policy. The quarterly and annual periodicity is applied to key indicators, which describe the macroeconomic situation. The source of these indicators is National Statistical Service of Armenia and the Ministry of Finance and Economy of Armenia. These agencies disseminate such indicators on quarterly and annual bases. “International Reserves of the Republic of Armenia” is presented on a quarterly basis which is related to the periodicity of their official publication by the Central Bank of the Republic of Armenia (the Central Bank).

2. The data reflected in “Statistical Bulletin of the Central Bank” is presented by the following periodicity:

2.1. Monthly data, which includes:

- i) “Price indices”,
- ii) “Inflation” (also data for the previous 5 years),
- iii) “The Central Bank Relations with the Treasury”,
- iv) “Liabilities of the Banking system to the Government of RA”,
- v) “Structure of Monetary Base”,
- vi) “Commercial Bank Survey of RA”,
- vii) “Structure of Broad Money”,
- viii) “Monetary Aggregates”,
- ix) “Monetary Aggregates excluding frozen accounts”,
- x) “Seasonally Adjusted Monetary Aggregates” (time series presented since 1996),
- xi) “Balance sheet of the Central Bank”,
- xii) “Consolidated Balance Sheet of Commercial Banks of RA”,
- xiii) “Banking Survey of RA”,
- xiv) “Net Foreign Assets of the Central Bank”,
- xv) “Financial Market Interest Rates”,
- xvi) “AMD/USD Exchange Rate” (also data for the previous 5 years),
- xvii) “Volumes of Allocation and Yield of T-Bills”,
- xviii) “Volumes of Allocation and Yield of Medium-term Coupon Bonds”,
- xix) “T-Bills Secondary Market Operations”,
- xx) “Interbank Repo Operations”,
- xxi) “Volumes and Annual Average Interest Rates of Deposits and Lombard Loans of the Central Bank”,
- xxii) “Volume and Dynamics of the Foreign Exchange Market”,
- xxiii) “Volume and Annual Average Interest Rates of Repo and Reverse Repo agreements of the Central Bank”,
- xxiv) “Investments in Government Bonds by Residents and Non-residents”,
- xxv) “Foreign Currency Loans by Sectors of Economy”,

- xxvi) “Dram Loans by Sectors of Economy”,
- xxvii) “Loans by Sectors of Economy”,
- xxviii) “Proportion of Commercial Banks’ Overdue Loans of in Total Loans”,
- xxix) “Loans of Commercial Banks by Sectors of Economy”,
- xxx) “Interbank Deposits and Loans of Commercial Banks”,
- xxxi) “Correspondent Accounts of Foreign Banks with Armenian Resident Banks”,
- xxxii) “Deposits of Commercial Banks by sectors of Economy”.

2.2. Monthly data also includes data for December of the previous year or annual data.

2.3. Quarterly data, which includes:

- i) “Basic Macroeconomic Indicators”,
- ii) “Inflation” (also data for the previous 5 years),
- iii) “Foreign Trade”,
- iv) “Balance of Payments”,
- v) “State Budget Revenue, Expenditures and Deficit”,
- vi) “Structure of International Reserves of RA”,
- vii) “AMD/USD Exchange Rate”,
- viii) “Main Indicators and Prudential Standards of Commercial Banks of RA”,
- ix) “Tables of the PaymentSystem”.

2.4. Quarterly data also includes data for the 4-th quarter of the previous year or annual data.

2.5. Annual data, which includes:

- i) “Inflation” (also data for the previous 5 years),
- ii) “Foreign Trade” (also the data for the previous year),
- iii) “Balance of Payments” (also the data for the previous year),
- iv) “State Budget Revenue, Expenditures and Deficit” (also the data for the previous 2 years),
- v) “AMD/USD Exchange Rate” (also the data for the previous 5 years),
- vi) “T-Bills Secondary Market Operations” (also the data for the previous year),
- vii) “Indicators of the Payments System” (also the data for the previous 5 years).

3. In case that adjustments are made in the data published in “Statistical Bulletin of the Central Bank”, the adjusted data for previous periods shall be reflected in new issues of the publication. The adjusted data for previous periods relating to the real, external and public sectors shall be reflected in the Central Bank Bulletin, if those data are officially published by the Ministry of Finance and Economy of Armenia and the National Statistics Service of Armenia.

## Chapter II. Structure of Statistical Bulletin of the Central Bank

4. The Statistical Bulletin of the Central Bank of RA has 10 sections.

4.1. The Section “Real Sector Indicators” has 3 tables:

4.1.1. The table “Basic Macroeconomic Indicators” presents output of the sectors of economy, incomes and expenditures of households and the labor market indicators of the reference year. The data are cumulative on quarterly basis. The real growth indices are presented on a cumulative basis, according to the official data of the National Statistics Service of Armenia. In case of absence of certain indicators (real GDP growth and deflator against the previous quarter, inflation against the previous quarter, Nominal GDP per employed and real

growth against the same period of the previous year, real growth rates of household incomes and expenditures against the same period of the previous year), the Central Bank's estimations are presented with relevant indications in footnotes.

4.1.2. The table "Price indices" presents indicators describing changes in prices, i.e. Deflator of the Gross Domestic Product and the relevant price indices, and Consumer Price Index and its components. The data are shown on monthly basis. The table also presents the Gross Domestic Product Deflator to the previous month (estimated by the Central Bank), for comparison with monthly inflation. Cumulative indices are applied for industry prices. Those indices are used for comparison with the cumulative Deflator of the Gross Domestic Product and cumulative Price Indices of the industries.

4.1.3. The table "Inflation" reflects monthly, quarterly and annual levels of inflation, based on the main objective of the monetary policy of the Central Bank.

4.2. Data of the section "External Sector" are shown on an annual basis of the previous year and on quarterly and annual bases of the current year, based on periodicity of official information provided by the National Statistics Service of Armenia. The revised numerical data of Balance of Payments for the 4-th quarter of the reference year and for the previous quarters are officially published by the National Statistics Service of Armenia by the end of the first semester of the next year. A graph delineates the quarterly changes of the real effective exchange rate of the Armenian Dram, which is necessary for analyses of external economic relations.

4.3. Section "State Budget Indicators" has 3 tables:

4.3.1. The data of the table "State Budget Revenue, Expenditures and Deficit" are provided on a quarterly basis, pursuant to the information published at the National Assembly of the Republic of Armenia by the Ministry of Finances and Economy of Armenia. Monthly state budget indicators are published only in the monthly report "Socio-economic Situation in Armenia" of the National Statistics Service of Armenia. This report is published after the Monthly Bulletin of the Central Bank.

4.3.2. The table "The Central Bank Relations with The Treasury" provides the Treasury's claims on and liabilities to the Central Bank, on monthly basis. The source of the data is the Central Bank. These contain information on relationship between the Central Bank and the Government of Armenia.

4.3.3. The table "Liabilities of the Banking system to the Government of RA" provides more general liabilities of the Central Bank and commercial bank to the Government of Armenia. The source of data shown in the table is the Central Bank. These contain information on relationship between the Central Bank and the Government of Armenia.

4.4. Section "Monetary Indicators" has 8 tables:

4.4.1. The table "Structure of Monetary Base" is the Central Bank survey. The table provides stock values along with flows and percentage changes to the previous period.

4.4.2. The table "Commercial Bank Survey of RA" is prepared as set out in point 4.4.1. The values of the data are simple sums of the identical balance sheet items of commercial banks operating in Armenia.

4.4.3. The table "Structure of Broad Money" contains the banking survey of Armenia. The table provides the indicators of the monetary policy with flows and percentage changes of such indicators to previous periods, relationship of the banking system with the rest of the world and other sectors of Armenian economy, and the structure of broad money of the Republic of Armenia. Notes to the table provide description of the certain components. Inclusion of the accrued interests on financial assets and liabilities of commercial banks in the monetary

aggregates is dependent on purposes analysis and the monetary policy. The table also gives the broad money without frozen accounts.

4.4.4. The table “Monetary Aggregates” presents the main monetary aggregates of Armenia, i.e. currency in circulation, dram demand deposits, dram term deposits, all foreign currency deposits. All data are presented without accrued interests. This table supplements the table “Structure of broad money”, where the monetary aggregates are not shown individually, but the entire broad money is presented. To consider individual broad money components, the users should make some groupings themselves.

4.4.5. Money aggregates in the table “Seasonally Adjusted Monetary Aggregates” are shown as netted from seasonality, and the methodology of adjustment is determined in “Adjustment of time series smoothing of the monetary aggregates of the Republic of Armenia” published in “CBA Statement” (quarterly), 2nd quarter, 2001.

4.4.6. The table “Balance Sheet of the Central Bank” represents the statistically classified balance sheet of the Central Bank, where accounts are not netted against each other. Exception is only for commercial banks’ reverse repo agreements and deposits, which are expressed in the assets side with negative values. This table too is necessary for those users who wish to review the individual components of the monetary base. Since the table “Structure of monetary base” represents monetary data, and this table represents balance sheet data, there are some differences in the values between respective indicators which are explained in the relevant footnotes.

4.4.7. The table “Consolidated Balance Sheet of Commercial Banks of RA” is constructed as described in the point 4.4.6. The values of the balance sheet accounts represent simple sums of the same balance sheet items of all commercial banks operating in Armenia.

4.4.8. The table “Banking Survey of RA” is constructed based on the data from the summary balance sheets of the Central Bank and commercial banks operating in Armenia and from the table “Structure of Broad Money”. Differences in identical data between this table and other related tables are explained in the relevant notes. Here, all interests accrued are included in their respective instruments.

4.5. Section “International Reserves” has 2 tables:

4.5.1. The table “Structure of International Reserves of RA” represents the international reserves of the Republic of Armenia in an internationally accepted structure. The notes to the table describe Armenia’s features related to the technique of calculation of the international reserves.

4.5.2. The table “Net Foreign Assets of the Central Bank” presents the Central Bank’s foreign assets and foreign liabilities in convertible currencies. Unlike the other tables, this table provides more detailed presentation of the accounts included in calculation of the net foreign assets of the Central Bank.

4.6. Section “Financial Market” has 9 tables:

4.6.1. Columns of the table “Financial Market Interest Rates” present average interest rates of transactions of the commercial banks on monthly basis. These rates are weighted by volumes of transactions.

4.6.2. The table “Volume and Dynamics of the Foreign Exchange Market” represents total operations in the interbank foreign exchange market. Furthermore, operations of the Central Bank are presented separately. The column “Exchange rate” indicates average monthly exchange rates weighted by transactions.

4.6.3. The table “AMD/USD Exchange Rate” shows the average monthly, quarterly and annual and end-of-period exchange rates for the last 5 years. The quarterly end-of-period

exchange rate corresponds to the exchange rate of the last month of quarter, the annual end-of-period exchange rate corresponds to the exchange rate of the last month and the last quarter of the year.

4.6.4. The table “Volumes of Allocation and Yield of T-Bills” provides information on the results of primary allocation of Armenian treasury bills. The monthly yield presented in the third column is the average interest rate weighted by volume of all issues during a month.

4.6.5. The table “Volumes of Allocation and Yield of Medium-term Coupon Bonds” is constructed based on the same principle as stated in 4.6.4. This table contains data on the volume of allocation and the yield of medium term government coupon bonds.

4.6.6. The table “T-Bills Secondary Market Operations” is constructed as described in points 4.6.1. – 4.6.4. The operations of the Central Bank are not included here.

4.6.7. The table “Interbank Repo Operations” provides thorough information on the secondary market of interbank repo operations, and is constructed as described in points 4.6.1. – 4.6.5.

4.6.8. The tables “Volumes and Annual Average Interest Rates of Deposits and Lombard Loans of the Central Bank” and “Repo and reverse repo agreements, and average interest rates” summarize monthly results of transactions between the Central Bank and commercial banks.

4.6.9. The table “Investments in Government Bonds by Residents and Non-residents” presents the nominal volume of investment in government bonds by residents and non-residents as at end of period. The line “Residents” includes the Central Bank, commercial banks and non-bank investors.

4.7. Section “Commercial Bank Loans” has 5 tables:

4.7.1. The table “Loans by Sectors of Economy” (in foreign currency, Armenian dram and total) presents the structure of commercial bank loans by Industry, Agriculture, Construction, Transport and Communication, and Trade.

4.7.2. The table “Proportion of Commercial Banks’ Overdue Loans in Total Loans” presents total loans of commercial banks, including the loans to non-residents and the interbank loans, and the share of overdue loans in total loans.

4.7.3. The table “Loans of Commercial Banks by Sectors of Economy” presents loans of commercial banks, by currency and sectors of economy. According to the rules of statistical sectorization, loans to non-residents are not setorized further but are classified by currency. Loans to resident economy are classified in detail by sectors of the economy.

4.7.4. The table “Interbank Deposits and Loans of Commercial Banks” contains information on volume of operations in the interbank market.

4.7.5. The table “Correspondent Accounts of Foreign Banks with Armenian Resident Banks” presents information necessary for analyzing the relationship of Armenian commercial banks with the rest of the world.

4.8 Section “Commercial Bank Deposits” has one table:

4.8.1. The table “Deposits of Commercial Banks by sectors of Economy” is constructed as described in point 4.7.3.

4.9. Section “Main Indicators and Prudential Standards of Commercial Banks of RA” has 7 tables. This section presents data concerning supervisory statistics. The term “banking system” covers only commercial banks operating under general supervision in Armenia.

4.9.1. The table “Main Indicators of the Armenian Banking System” gives an overview of the main indicators of commercial banks in Armenia. The data expressed in the table indicate

performance of Armenia's commercial banks. The table classifies the assets and liabilities of banks by instruments.

4.9.2. The table "Income and Expenditures of Commercial Banks" contains summary information on income and expenditures, on the provisioning for assets loss reserves, and on returns from those reserves. The item "Dividends" shall be used to indicate dividends on preferred shares, as the decision on dividend payments on common shares is made by the board of shareholders in the course of the next financial year.

4.9.3. The table "Cash Flow Statement of Banks" contains information on cash and cash equivalents of commercial banks at the beginning of reporting period, on cash flows of commercial banks during the reporting period, and on the balances of cash and cash equivalents of commercial banks at the end of reporting period.

4.9.4. The table "Change of Total Capital" contains information on changes in total capital of commercial banks and other changes made during the reporting period.

4.9.5. The table "Structure of Loans and Receivables by Risk Groups" provides summary information on loans and receivables of commercial banks and on provisions for such assets. Classification of loans and receivables is done according to the procedure on "Classification of Loans and Receivables of Commercial Banks and Establishment of Assets Loss Reserve Fund" which has been approved by the Central Bank and the Ministry of Finance and Economy.

4.9.6. The table "Structure of Loans by Sectors of Economy" summarizes the structure of loans by maturity, residency, and sectors of economy. In terms of maturity loans are also broken down into term, prolonged, and overdue loans.

4.9.7. The table "Capital Adequacy and Liquidity Standards" presents the standards for core and total capital adequacy and liquidity for commercial banks operating in Armenia.

4.9.8. The table "Maturity Structure of Attracted and Allocated Funds" provides summary information on attracted and allocated funds (including prolonged and overdue assets). Those liabilities of commercial banks, which are subject to be written off, are not reflected here as they are not considered attracted assets. Cash, fixed assets and other non-financial assets of commercial banks, as well as accrued accounts are not reflected here as those are not considered allocated or attracted (on the part of the accrued accounts) funds.

4.10. The section "Payments and Settlements System" has 8 tables providing detailed information on the payments and settlements sector of Armenia. The section describes the activity of payment services to households. Information of this section contains data on the payments and settlements systems, payment instruments and operations. The source of the data is the Central Bank.

4.10.1. The table "Payment Activity of Individuals" and table "Demand accounts of customers and closing balances at banks" provide information on the number of banking institutions in Armenia, on the number of customers and their accounts. These tables describe intensity of banking services to customers.

4.10.2. The tables "Volume of Transfers via Payment Systems of the Central Bank" and "Quantity of Transfers via Payment Systems of the Central Bank" present quarterly data on the volume and number of transfers effected via the payment systems of the Central Bank (gross settlements/paper-based and electronic transfers, net settlements /clearing/ system, government securities registry and settlement system). The tables also provide comparative developments of the transfers.

4.10.3. The tables "Volume of Transfers in Armenian Banking System via Non-cash Payment Instruments" and "Quantity of Transfers in Armenian Banking System via Non-cash

Payment Instruments” represent volumes and quantities of transfers by different payment instruments, i.e. payment instructions (paper-based and electronic), checks, debit instruments and others. The tables also contain data on payment instruments used by banks and their customers.

4.10.4. The table “Checks Issued and Serviced by Banks Operating in Armenia” includes detailed data on the checks issued and serviced by banks (checks guaranteed, checks held by banks and their customers, checks of foreign banks, traveler’s checks), by volume and quantity.

4.10.5. The tables “Quantity of ATMs and POS Terminals” and “Operations Conducted by Cards in Armenia” provide data on the number of facilities servicing plastic cards in Armenia (ATMs, terminals and imprinters at the commercial and service centers) and the organizations (banks, hotels, commercial centers) holding such facilities. The tables also provide information on volume and quantity of operations effected via card servicing facilities, and on the comparative developments.

4.10.6. The tables “Quantity of Cards in Circulation”, “Quantity of Operations by Cards” and “Volume of Operations by Cards” provide information to the users of the number of processed plastic cards and the quantity and volume of operations effected by such cards. The tables allow obtaining summarized information, by type of cards (“ArCa”, “VISA” “MasterCard”, “HSBC Debit”, “AMEX” and etc.).

4.10.7. The table “Participation of Armenian Banks in SWIFT” and table “SWIFT messages to/from Domestic Users” present data provided by the SWIFT system and contain concise information on the messages from/to financial institutions in Armenia as members of the SWIFT system.

4.10.8. The tables “Volume of Transfers by International Money Transfer Systems” and “Quantity of Transfers by International Money Transfer Systems” provide summarized data on money transfers (by volume and quantity) sent and received via international money transfer systems existing in Armenia (“Western Union”, “MoneyGram”, “Anelik”, “Unistream”, “Express”, and etc.).