THE BANK'S BALANCE SHEET

Lecture 3
Monetary policy

THE BANK'S BALANCE SHEET

- Like any balance sheet, bank balance sheet lines up the assets on one side and the liabilities on the other side.

- Two sides equal each other.

total assets = total liabilities + capital

The trick that makes them equal is the convention that the bank's capital is listed on the liabilities side, not the assets side of the balance sheet.

The fact that capital is listed on the liabilities side of the balance sheet is convenient, not just because it makes the liabilities and asset sides equal, but also because it separates the uses and sources of funds.

Table 1: THE BANK'S BALANCE SHEET

ASSETS		LIABILITIES	
1. Reserves with the central bank 1.1. Cash in vaults 1.2. Bank's deposits with central bank - settlement account - statutory reserves 2. Securities 2.1. Government securities 2.2. Other securities 3. Loans 3.1. Interbank 3.2. Loans to enterprises 3.3. Loans to government 3.4. Loans to individuals 4. Other assets 4.1. Real estate 4.2 Foreign assets	6 % 20 % 70 % 4 %	1. Deposits 1.1. Transactions deposits 1.2. Saving and time deposits 2. Borrowing 2.1 Credit from Central bank 2.2 Borrowing at other financial institutions 3. Other liabilities 3.1. Foreign liabilities 4. Capital (assets – liabilities)	70 % 10 % 5 % 15 %
TOTAL ASSETS	100 %	TOTAL LIABILITIES AND CAPITAL	100 %

The liabilities side includes several types of claims on the bank's assets.

These claims consist of deposits; the bank's borrowing at central bank or other financial institutions, and the claims of the bank's stockholders.

- Thus, the liabilities side of bank's balance sheet represent sources from which bank obtained the funds.
- The bank obtains funds by borrowing and by issuing other liabilities such as deposits.

The assets side of the bank's balance sheet represents the use that the bank has made of its funds.

The bank uses these funds to acquire assets such as securities and loans.

- The funds obtained form issuing liabilities are used to purchase income-earning assets.
- The bank makes a profit by charging an interest rate on its holdings of securities and loans that is higher then the expenses on its liabilities

1. The bank's liabilities

CAPITAL:

Banks have to meet a minimum capital requirement.

- bank equity capital or primary capital is the stockholders' equity in the bank
- it is represented on the balance sheet mainly by outstanding stock, surplus, and retained earnings

- (in addition to equity capital, banks can count as part of their long-term funds they have obtained by selling bonds and notes – sometimes called a secondary capital but that is a kind of borrowing (and a part of liabilities)

DEPOSITS:

The most important items of banks' liabilities are **deposits** collected by households, business sector, central government, local government, and by other financial institutions (for example: insurance companies).

- banks issue transactions deposits, and saving and time deposits
- the difference between them is in their functions, their levels of liquidity, and in the interests which banks must pay their holders

A. **The transaction deposits** include funds on the banks' accounts on which are possible write a check or payments with debit cards.

- such account are called as **checkable deposits**

demand deposits (Croatia) =
= deposit money (theoretical framework) =
= checkable deposits (US) =
= overnight deposits (Euroarea)

📖 **in case of Croatia** they include **demand deposits** on current and giro accounts which can be used for every day payments as form of deposit money

- this deposits are part of money supply

→ **M1 = Curreny outside banks + deposit money**

- since they have transaction function and a high level of liquidity they include lower interests which banks have to pay their owners

📖 **in United States** transactions deposits (checkable deposits) include all accounts on which checks can be drawn: non-interest-bearing checking accounts (demand deposits), interest-bearing NOW(negotiable order of withdrawal) accounts, and money market deposit accounts (MMDA)

- in US banks are not allowed to pay interest on **demand deposits**
- however, although banks cannot pay "explicit interest" on these deposits, banks pay "implicit interest" by providing free services and by providing some benefits for their clients (lower interest rates on bank's loans to firms and persons which keeps a large demand deposit with it)

NOW accounts are checkable deposits that pay interests (in the U.S.)

- they a part of money supply M_1

- corporations are not allowed to hold these interest-bearing accounts, but must hold their checkable deposits as demand transactions deposits

→ **M1 = Curreny outside banks + demand deposits + other checkable deposits** (like deposits on NOW accounts …)

The other checkable deposits component of M1 consists of negotiable order of withdrawal (NOW) accounts and automated transfer service (ATS) balances at banks, thrifts, and foreign related institutions, credit union share draft balances, and demand deposits at thrifts.

MMDAs have features similar to those of money market mutual funds and are included in the checkable deposits category (in US)

- however, MMDAs differ form checkable deposits in that they are not subject to reserve requirements as checkable demand deposit are, and they are not included in the M1 definition of money. They are part of monetary aggregate M2.

B. Non-transaction deposits include two basic types of deposits: saving accounts and time deposits

savings deposits can be in the form of passbook account and in a form of written agreement between the depositor and the bank

- this funds can be withdrawn at any time

time deposit have a fixed maturity length, ranging from several months to over five years, and have substantial penalties for early withdrawal

BORROWING:

Other liabilities of banks include borrowing at central bank and other financial institutions (at other banks).

- on this way banks can obtain the funds to meet their reserve requirement, but also to obtain funds for additional lending
- the most of interbank borrowing are one-day or overnight loans (by banks to other banks)
- other sources of borrowed founds are loans made to banks by their parent companies (banks holding companies), loan arrangements with corporations (such as repurchase agreements) …

- one of important reasons for banks borrowing on interbank market is an inadequate level of bank's liquidity (liquidity refers to an organization's ability to meet its financial obligations)
- in this case banks often borrow at central bank – discount loans
- this borrowing includes central bank's credit to commercial banks and lending in conditions of repurchase agreements

Repurchase agreements - repos – RPs means as follows:

- commercial bank sells a security to central bank with agreement to repurchase it at a certain date at and agreed-upon price
- thus *repos* represents a secured borrowing and therefore a liability of bank

2. The Bank's assets

RESERVES:

- All banks hold some of the funds they acquire as deposits in an account at the central bank.
- reserves are these deposits plus currency that is physically held by banks (called **vault cash** because it is stored in bank vaults overnight)
- some reserves, called **required reserves** (statutory reserves), are held because of **reserve requirements**, the regulation that for every amount of deposits (in US checkable deposits) at bank, a certain fraction (10 percent, for example) must be kept as reserves
- this fraction of 10 percent is called the required reserve ratio
- banks hold additional reserves, called **excess reserves** (on their settlement account), because they are the most liquid of all bank assets and can be used by a bank to meet its obligations when funds are withdrawn, either directly by a depositor of indirectly when a check is written on an account

SECURITIES:

- state and local government securities, and other securities characterized by different levels of liquidity
- in terms of assets, **liquidity** is the ease with which assets can be converted into cash (e.g. marketable securities are more liquid than loans)

LOANS:

- interbank loans (in US overnight loans in federal funds market); - loans to enterprises (commercial and industrial loans); - loans to government; - loans to individuals; - real estate loans

2012., Croatian banking system

Table D1 Banks' accounts
end of period, in million HRK

	2012 Aug.
ASSETS	
1 Reserves with the CNB	45,222.4
1.1 In kuna	40,082.0
1.2 In f/c	5,140.4
2 Foreign assets	43,967.8
3 Claims on central government and funds	67,336.7
4 Claims on other domestic sectors	248,235.0
4.1 Claims on local government	2,516.1
4.2 Claims on enterprises	118,716.6
4.3 Claims on households	127,002.3
5 Claims on other banking institutions	671.3
6 Claims on non-banking financial instituions	2,672.1
Total (1+2+3+4+5+6)	408,105.3
LIABILITIES	
1 Demand deposits	33,581.9
2 Savings and time deposits	43,109.4
3 Foreign currency deposits	150,440.6
4 Bonds and money market instruments	2,182.1
5 Foreign liabilities	83,048.3
6 Central government and funds' deposits	17,958.0
7 Credit from central bank	11.8
8 Restricted and blocked deposits	2,528.8
9 Capital accounts	79,202.0
10 Other items (net)	–3,957.5
Total (1+2+3+4+5+6+7+8+9+10)	408,105.3

Banks obtain funds from stockholders (capital), depositors, and other lenders and use them to make loans, hold securities and reserves, and invest in other types of assets (real estate, foreign assets).

🕮 It means that banks firstly have to collect available funds from deposits and other types of their liabilities and then approve loans to households, business sector and other clients.

The assets side is determinate by liabilities side.

2012.

Table Banks' accounts • Banks' accounts include data on banks' claims and liabilities. Banks' mutual claims and liabilities are consolidated.

Required reserves held at the central bank include kuna and foreign currency reserves. Kuna reserves include vault cash and kuna funds held in accounts at the central bank. Foreign currency reserves include foreign currency held in the CNB's foreign currency accounts.

Foreign assets are the following forms of kuna and foreign currency claims on foreign legal and natural persons: foreign cash in vaults, current account balances with foreign banks and time deposits with foreign banks (including loro letters of credit and other forms of collateral), securities, loans, and equities.

Claims on central government and funds are the following forms of claims in kuna and foreign currency: securities and loans.

Claims on other domestic sectors include the following claims in kuna and foreign currency: money market instruments, bonds, loans (including acceptances), and equities.

The same forms of kuna and foreign currency claims are included in claims on other banking institutions and non-banking financial institutions, with one difference: Claims on other banking institutions also include deposits with those institutions.

Items Demand deposits, Savings and time deposits, Foreign currency deposits as well as Bonds and money market instruments comprise banks' liabilities to other domestic sectors, other banking institutions and non-banking financial institutions.

Demand deposits include giro and current accounts balances and banks' obligations arising from kuna payment instruments issued, minus currency in the payment system, i.e. checks in banks' vaults and checks in collection.

Savings and time deposits are kuna sight deposits as well as kuna time and notice deposits.

Foreign currency deposits are foreign currency sight deposits as well as foreign currency time and notice deposits.

Bonds and money market instruments are banks' liabilities for securities issued (net) and loans received. Issued subordinated and hybrid instruments, purchased by foreign investors, are excluded from this item.

Foreign liabilities comprise the following forms of kuna and foreign currency liabilities to foreign legal and natural persons: giro and current accounts, savings deposits (including loro letters of credit and other forms of collateral), time deposits, loans received and liabilities due. Issued subordinate and hybrid instruments, purchased by foreign investors, are also included in loans received.

Central government and funds' deposits are all forms of banks' kuna and foreign currency liabilities (except restricted and blocked deposits) to the central government and funds.

Credit from central bank comprises loans received from the CNB and deposits by the CNB with banks. Repurchase of securities is also considered and treated as a loan.

Restricted and blocked deposits comprise the following banks' liabilities: kuna and foreign currency restricted deposits by other domestic sectors, other banking institutions, non-banking financial institutions, central government and funds as well as foreign legal and natural persons, and households' blocked foreign currency deposits, regulated by the Act on Converting Households' Foreign Currency Deposits into the Public Debt of the Republic of Croatia.

Capital accounts are share capital, profit or loss for the previous and current year, retained earnings (loss), legal reserves, reserves provided for by the articles of association and other capital reserves, hedging reserves, unrealised gains (losses) from financial assets classified as available-for-sale assets, value adjustments and collectively assessed impairment provisions.

Other items (net) are unclassified liabilities decreased by unclassified assets, including the fair value of derivative financial instruments.

Table D1 Credit institutions' accounts

end of period, in million HRK

2013…….

2014., Credit institutions in Croatia

	2009 Dec.	2010 Dec.	2011 Dec.	2012 Dec.[a]	2013 Dec.	2014				
						Mar.*	Apr.*	May*	Jun.	Jul.
ASSETS										
1 Reserves with the CNB	45,902.1	45,745.5	51,114.0	49,411.3	49,707.5	50,813.7	48,814.6	51,022.1	48,154.1	47,663.0
1.1 In kuna	40,860.4	40,169.1	45,590.6	44,316.8	45,288.8	46,379.9	44,385.3	46,580.3	43,774.0	43,252.9
1.2 In f/c	5,041.7	5,576.4	5,523.5	5,094.5	4,418.8	4,433.8	4,429.3	4,441.8	4,380.1	4,410.1
2 Foreign assets	49,577.0	47,878.2	40,044.9	39,118.6	36,681.3	38,446.1	36,606.5	35,369.2	37,783.7	40,543.9
3 Claims on central government and social security funds	40,031.2	46,162.1	53,474.4	60,838.0	67,853.7	67,969.1	68,604.2	69,304.5	67,218.9	67,986.6
4 Claims on other domestic sectors	240,114.6	250,291.1	261,980.1	247,813.8	246,627.9	247,295.8	246,673.5	245,878.8	244,328.5	245,383.4
4.1 Claims on local government	2,074.2	3,348.1	3,563.3	3,500.1	4,231.8	4,112.8	4,047.7	3,997.4	4,420.8	4,550.4
4.2 Claims on non-financial corporations	112,167.5	116,802.9	126,938.8	114,622.2	114,963.8	115,659.1	115,605.7	114,913.8	113,377.9	113,711.8
4.3 Claims on households	125,872.8	130,140.1	131,478.0	129,691.5	127,432.3	127,523.9	127,020.1	126,967.6	126,529.8	127,121.2
5 Claims on other banking institutions	633.9	....	....	....	....	....	....	....	....	....
6 Claims on non-banking financial institutions	1,109.9	....	....	....	....	....	....	....	....	....
7 Claims on other financial intermediaries	....	4,587.5	5,975.1	9,366.9	7,899.3	6,623.8	6,569.6	5,927.2	5,705.2	6,130.8
8 Claims on financial auxiliaries	....	967.9	1,022.8	1,065.5	1,276.3	1,308.1	1,310.9	1,330.0	1,321.0	1,345.0
9 Claims on insurance corporations and pension funds	....	654.3	132.6	243.1	754.5	565.9	181.2	415.1	1,121.7	802.0
Total (1+2+3+4+5+6+7+8+9)	**377,368.7**	**396,286.6**	**413,744.0**	**407,857.2**	**410,800.5**	**413,022.5**	**408,760.6**	**409,246.9**	**405,633.2**	**409,854.8**
LIABILITIES										
1 Demand deposits	31,901.5	32,933.9	35,064.8	35,241.9	40,761.3	39,382.4	38,882.0	39,673.9	41,472.6	42,825.1
2 Savings and time deposits	44,874.3	38,885.2	42,558.9	40,590.0	41,846.5	42,394.2	42,703.2	42,882.3	42,293.4	43,160.8
3 Foreign currency deposits	135,509.1	147,320.5	144,486.8	152,649.2	154,921.2	155,961.8	152,995.3	152,072.0	151,444.1	155,246.8
4 Bonds and money market instruments	16,866.7	17,231.3	16,750.4	17,768.7	16,215.6	16,326.0	16,062.7	16,036.4	15,820.9	15,971.7
5 Foreign liabilities	80,451.5	82,099.3	90,348.3	73,675.1	69,342.9	71,106.0	70,630.3	70,346.2	66,809.0	63,206.3
6 Deposits of central government and social security funds	2,307.2	3,362.6	4,079.1	3,910.1	3,684.8	3,538.6	4,085.7	3,759.9	3,695.6	3,771.5
7 Credit from central bank	13.5	12.9	139.1	11.8	11.3	11.2	11.0	11.0	11.0	11.1
8 Restricted and blocked deposits	2,548.4	2,374.9	3,183.9	2,413.9	2,735.9	2,527.0	2,766.8	2,759.7	2,978.5	3,029.8
9 Capital accounts	66,784.4	72,555.2	77,208.3	80,700.6	83,245.1	84,331.1	84,002.1	84,537.8	85,056.5	85,739.3
10 Other items (net)	−3,888.0	−489.3	−75.6	896.0	−1,964.3	−2,555.7	−3,378.4	−2,832.3	−3,948.6	−3,107.5
Total (1+2+3+4+5+6+7+8+9+10)	**377,368.7**	**396,286.6**	**413,744.0**	**407,857.2**	**410,800.5**	**413,022.5**	**408,760.6**	**409,246.9**	**405,633.2**	**409,854.8**

2014.

Table D1 Credit institutions' accounts • Credit institutions' accounts include data on claims and liabilities of credit institutions.

As from CNB Bulletin No. 190, data on all the items have been revised from July 1999 onward to include housing savings banks . Mutual claims and liabilities between banks, savings banks and housing savings banks are consolidated.

CREDIT INSTITUTIONS ACT

in Croatia

(1) 'Credit institution' means a legal person authorised by the competent authority, whose business is to receive deposits and other repayable funds from the public and to grant credits for its own account.[1]

(2) A credit institution having its registered office in the Republic of Croatia may, under the conditions laid down in this Act, be established as a bank, savings bank or a housing savings bank.[2]

Read only

Banking services
Article 4

(1) Banking services are the acceptance of deposits or other repayable funds from the public and the granting of credits for own account from these funds.

Core and additional financial services
Article 5

(1) For the purposes of this Act, core financial services are as follows:
1) acceptance of deposits or other repayable funds;
2) lending, including consumer credit, mortgage credit and, where permitted by a special law, financing of commercial transactions, including export financing based on the purchase at a discount without recourse of non-current, non-matured receivables collateralised with a financial instrument (forfeiting);
3) repurchase of receivables with or without recourse (factoring);
4) financial leasing;
5) issuance of guarantees or other commitments;
6) trading for own account or for the accounts of clients in:
– money market instruments;
– transferable securities;

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– foreign exchange, including currency exchange transactions;
– financial futures and options;
– exchange and interest-rate instruments;
7) money transmission services in accordance with special laws;
8) credit reference services, such as collection, analysis and provision of information on the creditworthiness of legal and natural persons that conduct their business independently;
9) issuing and administering other means of payment, if the provision of such services is not considered the provision of services within the meaning of item (7) of this paragraph and pursuant to a special law;
10) safe custody services;
11) money broking;
12) participation in issues of financial instruments as well as the provision of services relating to issues of financial instruments in accordance with the law governing the capital market;
13) portfolio management and advice;

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14) safekeeping of financial instruments and services related to the safekeeping of financial instruments in accordance with the law governing the capital market;
15) advice to legal persons on capital structure, business strategy and related issues as well as the provision of services relating to mergers and the acquisition of shares and holdings in other companies;
16) issuance of electronic money; and;
17) investment and ancillary services and activities prescribed in the special law governing the capital market and not included in services referred to in items (1) to (16) of this paragraph.

(2) For the purposes of this Act, additional financial services are as follows:
1) activities related to the sale of insurance policies in accordance with the law governing insurance;
2) payment systems management services in accordance with the provisions of a special law;
3) other services which a credit institution may provide in accordance with the provisions of a special law; and
4) other services similar to financial services referred to in paragraph (1) of this Article and listed in the credit institution's authorisation.

Monetary authority account

MONETARY AUTHORITY = THE CENTRAL BANK

- MONETARY BASE = RESERVE MONEY

= PRIMARY MONEY = M0

The Croatian National Bank account

Table C1 Monetary authorities accounts

end of period, in million HRK

	2014 Jul.
ASSETS	
1 Foreign assets	94,598.3
1.1 Gold	–
1.2 Holdings of SDRs	2,665.5
1.3 Reserve position in the IMF	1.4
1.4 Currency and demand deposits with foreign banks	4,014.5
1.5 Time deposits with foreign banks	17,239.8
1.6 Securities in f/c	70,677.1
1.7 Non-convertible foreign exchange	–
2 Claims on central government	–
2.1 Claims in kuna	–
2.2 Claims in f/c	–
3 Claims on other domestic sectors	2.2
4 Claims on credit institutions	11.1
4.1 Loans to credit institutions	11.1
Lombard loans	–
Short-term liquidity loans	–
Other loans	11.1
Reverse repo transactions	–
4.2 Overdue claims	–
5 Claims on other financial institutions	–
Total (1+2+3+4+5)	**94,611.5**

LIABILITIES	
1 Reserve money	64,366.8
1.1 Currency outside credit institutions	19,866.8
1.2 Credit institutions' cash in vaults	5,013.5
1.3 Credit institutions' deposits	38,219.5
Settlement accounts	12,772.9
Statutory reserve in kuna	21,785.1
CNB bills on obligatory basis	3,661.5
Overnight deposits	–
1.4 Deposits of other financial institutions	1,266.9
2 Restricted and blocked deposits	4,523.5
2.1 Statutory reserve in f/c	4,410.1
2.2 Restricted deposits	113.4
2.3 Blocked f/c deposits	–
3 Foreign liabilities	459.2
3.1 Use of IMF credit	–
3.2 Liabilities to international institutions	77.9
3.3 Liabilities to foreign banks	381.4
4 Deposits of central government and social security funds	9,823.9
4.1 Demand deposits	2,836.7
Central government demand deposits	2,836.7
Demand deposits of social security funds	–
4.2 Central government f/c deposits	6,987.2
4.3 CNB bills	–
5 CNB bills	–
5.1 CNB bills in kuna	–
5.2 CNB bills in f/c	–
6 Capital accounts	16,396.8
7 Other items (net)	–958.6
Total (1+2+3+4+5+6+7)	**94,611.5**

RESERVE MONEY /

PRIMARY MONEY/

MONETARY BASE /

M0

MONETARY SURVEY - Croatia

CENTRAL BANK + CREDIT INSTITUTIONS

Table B1 Monetary survey

end of period, in million HRK

	2009 Dec.	2010 Dec.	2011 Dec.	2012 Dec.[a]	2013 Dec.	2014				
						Mar.*	Apr.*	May*	Jun.	Jul.
ASSETS										
1 Foreign assets (net)	44,925.2	44,498.4	33,998.2	50,225.4	65,283.6	59,228.5	53,866.0	61,821.7	64,179.2	71,476.8
2 Domestic credit	275,430.1	295,198.1	317,322.1	315,273.2	307,282.3	312,123.1	313,210.1	306,192.7	305,548.9	308,054.6
2.1 Claims on central government and social security funds (net)	33,567.5	38,693.6	48,208.0	56,781.3	50,722.1	56,327.3	58,472.6	52,639.3	53,070.3	54,391.2
2.2 Claims on other domestic sectors	240,118.1	250,294.2	261,982.9	247,816.4	246,630.2	247,298.1	246,675.7	245,881.0	244,330.6	245,385.5
2.3 Claims on other banking institutions	633.9	....	....	....	....	....	....	....	....	....
2.4 Claims on non-banking financial institutions	1,110.6	....	....	....	....	....	....	....	....	....
2.5 Claims on other financial intermediaries	....	4,588.1	5,975.8	9,366.9	7,899.3	6,623.8	6,569.6	5,927.2	5,705.2	6,130.8
2.6 Claims on financial auxiliaries	....	967.9	1,022.8	1,065.5	1,276.3	1,308.1	1,310.9	1,330.0	1,321.0	1,345.0
2.7 Claims on insurance corporations and pension funds	....	654.3	132.6	243.1	754.5	565.9	181.2	415.1	1,121.7	802.0
Total (1+2)	**320,355.3**	**339,696.6**	**351,320.4**	**365,498.7**	**372,565.9**	**371,351.6**	**367,076.0**	**368,014.3**	**369,728.1**	**379,531.3**
LIABILITIES										
1 Money	47,195.7	48,301.4	51,934.5	52,780.4	58,532.7	57,099.0	57,414.0	57,880.7	61,512.1	63,958.8
2 Savings and time deposits	44,874.3	38,885.2	42,558.9	40,590.0	41,846.5	42,394.2	42,703.2	42,882.3	42,293.4	43,160.8
3 Foreign currency deposits	135,509.1	147,320.5	144,486.8	152,649.2	154,921.2	155,961.8	152,995.3	152,072.0	151,444.1	155,246.8
4 Bonds and money market instruments	16,866.7	17,231.3	16,750.4	17,768.7	16,215.6	16,326.0	16,062.7	16,036.4	15,820.9	15,971.7
5 Restricted and blocked deposits	2,598.3	3,580.9	3,399.7	5,274.1	4,718.4	2,788.7	2,948.0	2,912.6	3,107.0	3,143.2
6 Other items (net)	73,311.1	84,377.1	92,190.1	96,436.2	96,331.5	96,782.0	94,952.9	96,230.2	95,550.6	98,050.1
Total (1+2+3+4+5+6)	**320,355.3**	**339,696.6**	**351,320.4**	**365,498.7**	**372,565.9**	**371,351.6**	**367,076.0**	**368,014.3**	**369,728.1**	**379,531.3**

Read only

Table B1 Monetary survey • The monetary survey shows consolidated data from the Monetary authorities accounts (Table C1) and Credit institutions' accounts (Table D1).

As from CNB Bulletin No. 190, data on all the items have been revised from July 1999 onward to include housing savings banks in addition to the Croatian National Bank, banks and savings banks.

Foreign assets (net) is a difference between total foreign assets and total foreign liabilities of the CNB and credit institutions.

Domestic credit is the sum of the corresponding items in the Monetary authorities accounts and the Credit institutions' accounts. Claims on the central government are reported on a net basis, i.e. decreased by central government deposits with the CNB and credit institutions.

Money is the sum of currency outside credit institutions, deposits by other financial institutions with the CNB and demand deposits with credit institutions (item Demand deposits in the Credit institutions' accounts, Table D1).

Items Savings and time deposits, Foreign currency deposits as well as Bonds and money market instruments are entirely taken over from the Credit institutions' accounts, while item Restricted and blocked deposits represents the sum of the corresponding items in the Monetary authorities accounts (excluding credit institutions' blocked deposits with the CNB) and the Credit institutions' accounts. Other items (net) are unclassified liabilities decreased by unclassified assets.

MONEY SUPPLY M1

1 Money
63,958.8

=

NFA + DC

1 Foreign assets (net)	71,476.8
2 Domestic credit	308,054.6
2.1 Claims on central government and social security funds (net)	54,391.2
2.2 Claims on other domestic sectors	245,385.5
2.3 Claims on other banking institutions	....
2.4 Claims on non-banking financial institutions	....
2.5 Claims on other financial intermediaries	6,130.8
2.6 Claims on financial auxiliaries	1,345.0
2.7 Claims on insurance corporations and pension funds	802.0

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NML

2 Savings and time deposits	43,160.8
3 Foreign currency deposits	155,246.8
4 Bonds and money market instruments	15,971.7
5 Restricted and blocked deposits	3,143.2
6 Other items (net)	98,050.1

Factors that affect the **money supply M1**:

M1 = NFA + DC - NML

NFA (net foreign assets) – a result of the foreign currency transactions between monetary institutions and non-monetary agents
DC (domestic credit) – including loans (of credit institutions) to non-monetary agents and securities in asset of credit institutions
NML (non-monetary liabilities) – including time and saving deposits, foreign currency deposits or similar liabilities of credit institutions

In Croatia

Table A1 Monetary and credit aggregates

end of period, in million HRK and %

Year	Month	Reserve money	Money M1	Broadest money M4	Net domestic assets	Domestic credit	Monthly rates of growth				
							Reserve money	Money M1	Broadest money M4	Net domestic assets	Domestic credit
2000	December	11,717.8	18,023.2	76,005.6	46,988.4	60,949.6	7.20	9.93	3.68	10.06	2.67
2001	December	17,864.6	23,749.5	109,951.7	61,290.3	75,103.2	8.21	13.11	11.47	3.61	1.19
2002	December	23,066.6	30,889.4	120,915.3	88,097.9	97,841.8	10.83	6.18	1.88	7.91	2.32
2003	December	30,637.9	33,940.4	135,200.4	102,429.0	112,075.1	9.08	1.93	0.46	3.37	0.60
2004	December	33,925.5	34,563.2	148,819.7	117,087.8	127,929.0	8.46	2.66	0.70	2.62	2.02
2005	December	40,441.9	38,868.2	166,161.3	142,867.8	150,245.3	9.51	4.46	0.55	2.37	2.01
2006	December	46,338.0	48,527.8	196,724.2	169,171.5	184,879.1	3.18	4.76	1.86	3.57	3.06
2007	December	51,932.2	57,886.6	233,080.1	183,673.5	213,200.1	3.75	6.73	3.95	3.56	2.67
2008	December	49,752.8	55,237.9	244,134.1	202,476.0	241,827.1	–9.89	8.16	3.30	5.61	2.76
2009	December	56,153.9	47,195.7	244,445.9	199,520.7	241,862.6	4.57	3.16	0.67	0.25	0.01
2010	December	56,353.8	48,301.4	251,738.5	207,240.1	256,504.6	3.00	–0.12	–0.79	1.44	–1.02
2011	December	62,559.6	51,934.5	255,730.6	221,732.4	269,114.2	3.76	3.27	0.15	2.40	1.08
2012	December[a]	61,856.3	52,780.4	263,788.3	213,562.9	258,492.0	3.55	4.49	0.26	0.62	–1.74
2013	August	61,414.6	59,145.1	273,021.1	212,315.3	259,843.2	1.00	4.23	2.73	–0.92	–0.03
	September	61,495.7	57,836.8	274,523.0	213,530.7	260,439.8	0.13	–2.21	0.55	0.57	0.23
	October	61,329.7	57,000.5	273,210.9	213,364.1	257,958.7	–0.27	–1.45	–0.48	–0.08	–0.95
	November	61,623.6	56,798.7	270,889.6	205,579.6	258,229.3	0.48	–0.35	–0.85	–3.65	0.10
	December	63,043.9	58,532.7	271,516.1	206,232.5	256,560.3	2.30	3.05	0.23	0.32	–0.65
2014	January	65,728.1	57,082.5	271,169.0	206,464.6	254,254.2	4.26	–2.48	–0.13	0.11	–0.90
	February	62,524.9	56,524.5	269,989.4	207,698.5	254,723.8	–4.87	–0.98	–0.44	0.60	0.18
	March	64,079.6	57,099.0	271,780.9	212,552.4	255,795.8	2.49	1.02	0.66	2.34	0.42
	April*	62,903.9	57,414.0	269,175.2	215,309.2	254,737.5	–1.83	0.55	–0.96	1.30	–0.41
	May*	64,768.2	57,880.7	268,871.5	207,049.8	253,553.3	2.96	0.81	–0.11	–3.84	–0.46
	June	63,796.7	61,512.1	271,070.5	206,891.3	252,478.6	–1.50	6.27	0.82	–0.08	–0.42
	July	64,366.8	63,958.8	278,338.1	206,861.3	253,663.4	0.89	3.98	2.68	–0.01	0.47

In Croatia

Money (M1)

It comprises currency outside credit institutions, deposits with the CNB by other financial institutions as well as demand deposits with credit institutions.

Broadest money (M4)

Broadest money (M4) comprises money (M1), savings and time deposits, foreign currency deposits as well as bonds and money market instruments

Table A1 Monetary and credit aggregates • The table shows data on some basic monetary and credit aggregates, including their monthly growth rates.

As from CNB Bulletin No. 190, data on all the monetary aggregates have been revised from July 1999 onward to include housing savings banks in addition to the Croatian National Bank, banks and savings banks.

Reserve money is taken over in its entirety from the Monetary authorities accounts (Table C1).

Money (M1) is defined in the same way as the corresponding item in the Monetary survey (Table B1). It comprises currency outside credit institutions, deposits with the CNB by other financial institutions as well as demand deposits with credit institutions.

Broadest money (M4) comprises money (M1), savings and time deposits, foreign currency deposits as well as bonds and money market instruments (all components are taken over from the Monetary survey, Table B1).

Net domestic assets are defined as a difference between total liquid assets and foreign assets (net).

Up to November 2010, Domestic credit comprised banks' and housing savings banks' claims on other domestic sectors, other banking institutions and non-banking financial institutions.

From December 2010 on, Domestic credit comprises credit institutions' claims on other domestic sectors, other financial intermediaries, financial auxiliaries as well as insurance corporations and pension funds.

Appendix

- **What Does *Automatic Transfer Service - ATS* Mean?**

- **In the U.S.,** a banking service offered to customers that has both a general and specific meaning. On a general level, it can mean any automatic transfer of funds between customer accounts. For example, a regular transfer from a checking account to pay off a bank loan, or a monthly transfer from a checking account to a savings account.

  More specifically, it describes the overdraft protection provided when there is an automatic transfer of funds from a customer's savings account to his or her checking account when there are insufficient funds to cover unpaid checks or maintain a minumum balance. Ordinarily, the bank will transfer the exact amount of funds required to cover unpaid checks. The customer avoids any overdraft fees and all the hassle associated with returned checks.

- ATS accounts were first introduced by savings and loans and mutual savings banks in the 1970s to compete with traditional commercial banks. According to the Federal Reserve, in defining the money stock ATS accounts are included in M1, which also includes travelers' checks, demand deposits and other checkable deposits (i.e., negotiable order of withdrawal (NOW) accounts and credit union share drafts).

  Given the low rates of interest paid on checking accounts, these arrangements are the norm rather the exception, particularly for checking accounts at brokerage firms. Automatic transfer accounts are available to individuals and sole proprietors; organizations, units of government and other entities are not eligible for these accounts.

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