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FINANCE

The love of money is the root of all evil.

THE NEW TESTAMENT

Lack of money is the root of all evil.

GEORGE BERNARD SHAW

COURSE OBJECTIVES

- To understand the basic operational rules of financial markets
- Able to analyse the current macroeconomic environment
- To evaluate the potential effect of various economic policy measures

COURSE CONTENT

Óra	Dátum	Előadás anyaga
I.	12/09/2014	1. Main branches of economic policies. Main goals and tools of fiscal and monetary policy
		2. Polak-model. How do the fiscal and monetary policy affect to the real economy? Maastricht criteria.
		3. Basic equation of economy. How can you access economic informations?
II.	26/09/2014	1. Public finance. Main taxes and fees.
		2. Tax policies and concepts
		3. Analysis of central budget
III.	10/10/2014	1. Exchange rate and international finance. How is the exchange rate determined?
		2. Elements and Analysis of balance of payments
		3. Camels analysis of financial institutions
IV.	07/11/2014	Presentations

TEACHING REQUIREMENTS

○ Requested readings:

- Rose: Money and capital markets (available in library)
- Slides and supplementary readings available at webside of departement http://gtk.unimiskolc.hu/uzleti/letoltesek?file_category_id=395&order_type=NAME&view_type=GRID

○ Offered readings:

- Kohn: Financial markets
- Johnson Hazel: Financial institutions and markets (Available in library)

○ Exam:

- Report on the activity of monetary authorities (National Bank) and of budget structure of a chosen country (non monetary union member) Deadline: Last day of semester (20 points)
- Verbal exam in the examination period (20 points)

STRUCTURE OF REPORT

- Introduction to the finance of the chosen country
 - Population, GDP/capita, economic growth, inflation, capitalization/GDP, total granted non-financial loans/GDP, activity rate, Lissabon competitiveness criteria, Maastrich criteria (Source: eurostat)
- Structure of central budget (12/13)
 - main expenses (functional distribution)
 - main revenues (tax structure)
 - budget deficit and its management – major instructions struggling against crisis (Source: Ministry of Finance)
- Analysis of balance of payment (12/13)
 - main export and import goods
 - current account deficit/surplus
 - analysis of financial accounts (Source: National Statistical Office or National Bank)
- Analysis of financial institution activity (12/13)
 - lending activity by sector and products
 - presentation of consolidated balance sheet of financial institutions
 - income statement (Source: National Supervisory Agency of Financial Institutions)
- Meet or not meet the requirements of Growth and Stability Pack
- Conclusions – strength and weaknesses



HISTORY OF MONEY

FUNCTIONS OF MONEY

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SUBJECT OF FINANCE

- Finance is a science dealing with the examination of the financial system, particularly
- - the internal operation of this system,
- - its effect on other subsystem of economy,
- - its institutional framework.

FIELDS OF FINANCE

- National and international finance
- Sectorial finance (banking, insurancing, public finance, etc.)
- Corporate Finance
- Financial Mathematics
- Financial Statistics

CONCEPT OF MONEY

- 1. Money is which fulfills its functions.
- 2. Money is the most liquid asset.
- 3. Modern money is a claim of non-bank economic actors against the bank system or alternatively the modern money is a special bank liability.

FUNCTIONAL APPROACH

- Money is:
 - Tool of economic calculation and accounting
 - Storage of wealth
 - Transaction tool
 - International money

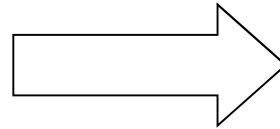
WHY DO THE PEOPLE NEED MONEY?

Problems of direct exchange

- Need for mutual interest for exchange
- Uncertain exchange rates
- Problem of equal values
- Problem of durability

WHAT CRITERIA DOES THE MONEY MEET?

- Acceptable
- Homogenous
- Scarcity
- Recognisability
- Transferable
- Splittable



Precious metals,
especially gold
and silver

MAX WEBER'S APPROACH

- The state duties have needed to finance
- The state collected goods to finance them
- The goods by which the taxpayers could meet the state's demand, became very attractive.
- Some attractive goods emerged and began to use as payment tool.
- The state authorities recognise the convenience to collect only one goods – this became the money.

IMPORTANT TO NOTE

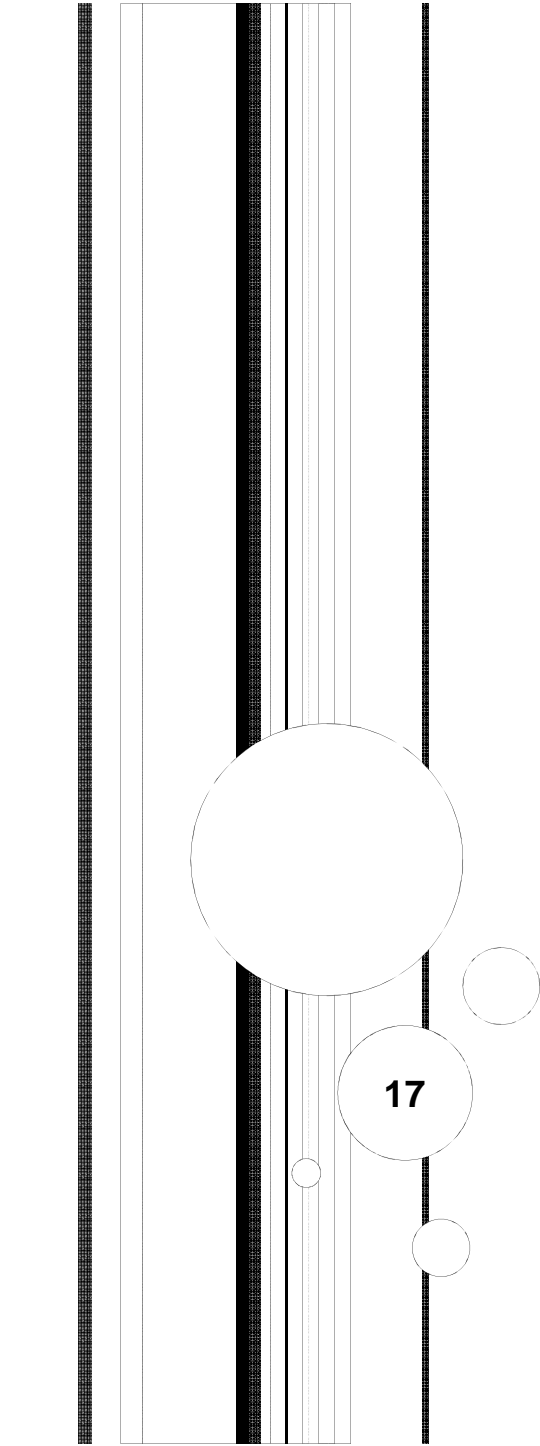
- The money is a social phenomena
 - requires an acceptance agreement among people
 - needs to be institutionalised
- Examples
 - Yap inlands – stone money (clearing house)
 - Etiope – salt bar
 - Western Africa – copper rings
 - China – cauri snail
 - Central-America – wampun-belt

CURRENCY SYSTEM

- The material of money, and the mechanisms determining its creation, transfer and destruction.
 - **1. Currency with intrinsic value**
 - **2. Metalcurrency systems (bimetal and monometal) with classical monetary substitutes**
 - **3. Credit currency systems**
 - **4. E-money???**

HISTORY OF MONEY

- History how the gold (precious metal) has lost its money functions
- History how to finance a war
- History how the members of a society can co-operate



MONEY MULTIPLICATON
FISHER EQUATION
ELEMENTS OF MONEY SUPPLY

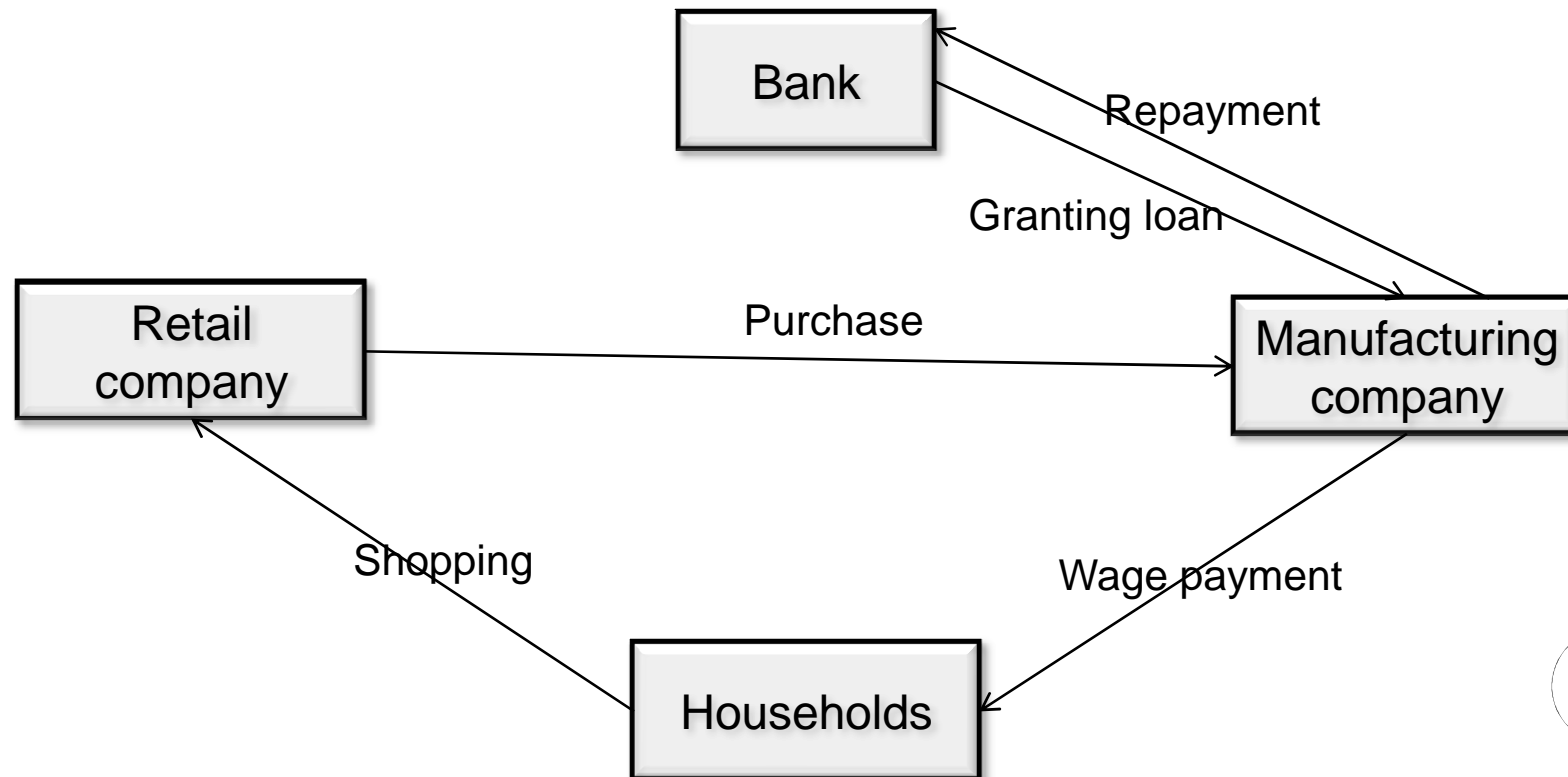
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THE BANK SYSTEM

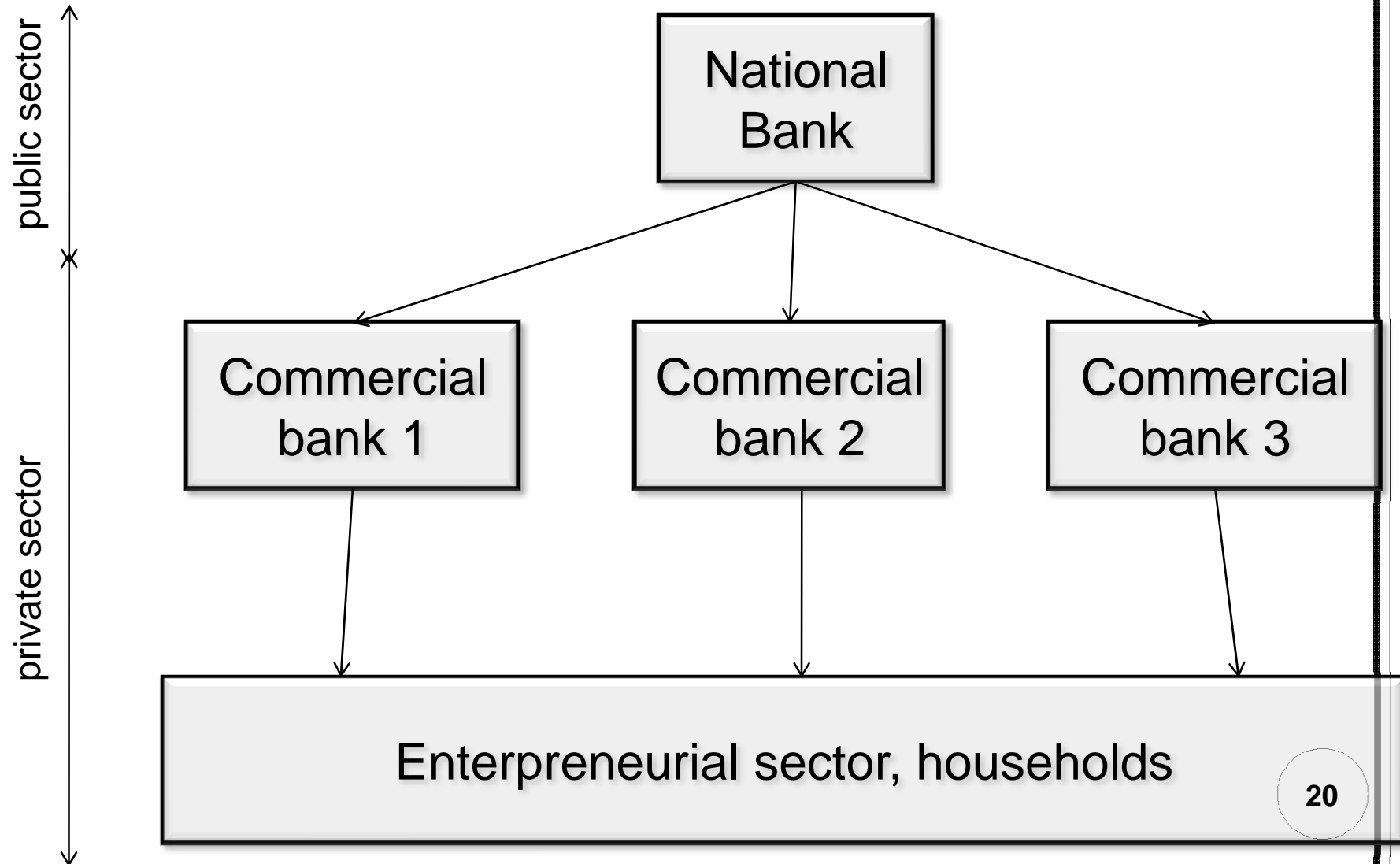
- The financial services providers, the institutional framework and the regulations
- Now – two tier bank system, with financial supermarkets and strict governmental supervision

CURRENT MONEY SYSTEM

- Current money = fiat money = credit money = bank liability
- Basic (simplified) circulation:



TWO-TIER BANKING SYSTEM



DUTIES OF NATIONAL BANK (FOLLOWS PUBLIC INTEREST)

- Providing money
- Ensuring the purchase power of money (anti-inflation) with monetary policy
- Management of foreign reserves and foreign debt
- (Managing and finance the state debt)
- (Lender of last resort)
- (Supervising the activity of financial institutions)
- Analysing the economy

TWO TYPES OF MONEY IN CIRCULATION

- Bank note (issued by the National Bank)
- Account money (created by the commercial banks)
- Account money is used to pay inside the client circle of a particular commercial bank
- Bank note is used to pay outside the client circle + for cash payment.
- International money is used for international payments.

MONEY CREATION LOAN

Current account of debtor

<hr/>	
	100

Loan account of debtor

<hr/>	
100	

MULTIPLICATION

- 1 unit of bank note creates more than 1 unit of money.
- Conditions:
 - National Bank grants loan to a commercial bank (€ 100)

$$\frac{\text{Reserve in National Bank}}{\text{Collected deposit}} = 10\%$$

- Constant reserve ratio (r) =

$$\frac{\text{Bank note in circulation}}{\text{Account money}} = 20\%$$

- Constant bank note ratio (c) =

PROCESS OF MULTIPLICATION

Number of turn	Amount of loan	Amount of deposit	Cash in circulation	Reserve in National Bank
1	M_0	$M_0 \cdot (1-c)$	$M_0 \cdot c$	0
2	$M_0 \cdot (1-c) \cdot (1-r)$	$M_0 \cdot (1-c)^2 \cdot (1-r)$	$M_0 \cdot c^2 \cdot (1-r)$	$M_0 \cdot (1-c) \cdot r$
3	$M_0 \cdot (1-c)^2 \cdot (1-r)^2$	$M_0 \cdot (1-c)^3 \cdot (1-r)^2$	$M_0 \cdot c^3 \cdot (1-r)^2$	$M_0 \cdot (1-c)^2 \cdot r^2$
.....	$M_0 \cdot (1-c)^n \cdot (1-r)^n$	$M_0 \cdot (1-c)^{n+1} \cdot (1-r)^n$	$M_0 \cdot c^n \cdot (1-r)^{n-1}$	$M_0 \cdot (1-c)^n \cdot r^n$
Total	$\frac{M_0}{c+r-c \cdot r}$	$\frac{M_0 \cdot (1-c)}{c+r-c \cdot r}$	$\frac{M_0}{1-c-c \cdot r}$	$\frac{M_0}{1-r-c \cdot r}$

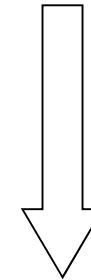
$$\frac{100}{0.3-0.02} = \frac{100}{0.28} = 357$$

ASSUMPTIONS OF MULTIPLICATION

- Infinite loan demand
- Constant reserve and bank note rate
- Very quick cash velocity

ENDOGENIOUS-EGZOGENIOUS MONEY CREATION

- Egzogenous (external) money:
 1. National Bank grants loan
 2. Deposit is put in commercial banks
 3. Unlimited demand for loan
- Endogenous (internal) money:
 1. Economic decisions
 2. Financial request, demand for loan
 3. Granting loan, money creation
 4. Refinancing



SOURCE AND CANCELLATION OF BANK NOTE

Source

- Granting loan
- Purchasing foreign currency
- Buying state security
- Rediscounting bill of exchange
- Interest payment

Cancellation

- Repaying loan
- Selling foreign currency
- Selling state security
- Collecting bill of exchange
- Collecting interest

MONETARY AGGREGATES

- Bank note: issued amount of bank note and coins. Called monetary basis. Split into money at banks and money in circulation.

$$M0 = C + R$$

- Commercial bank account money (DS)

- Further money aggregates:

$$M1 = \text{Cash in circulation} + DS$$

$$\underline{M2 = M1 + DT \text{ (short-term deposits)}}$$

$$M3 = M2 + MI \text{ (bank securities)}$$

$$M4 = M3 + TN \text{ (Treasury – notes)}$$

FISHER EQUATION

$$M * V = P * T$$

M – money supply

V – velocity of money

P – price level

T – volume of transactions

Assumption:

- Closed economy or export and import are equal
- Cash velocity is constant

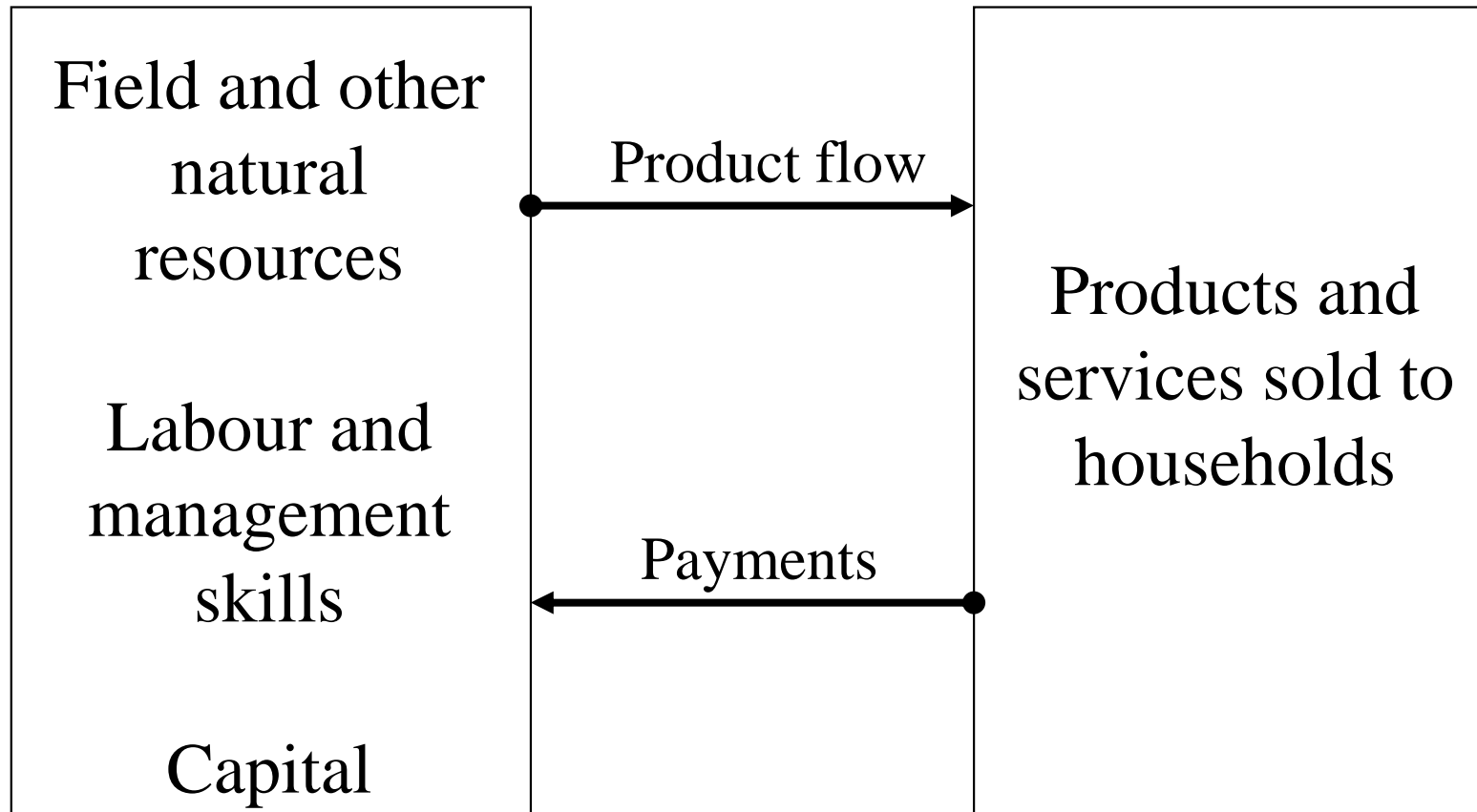


FUNCTIONS OF THE MONEY MARKETS FINANCIAL SERVICE PROVIDERS

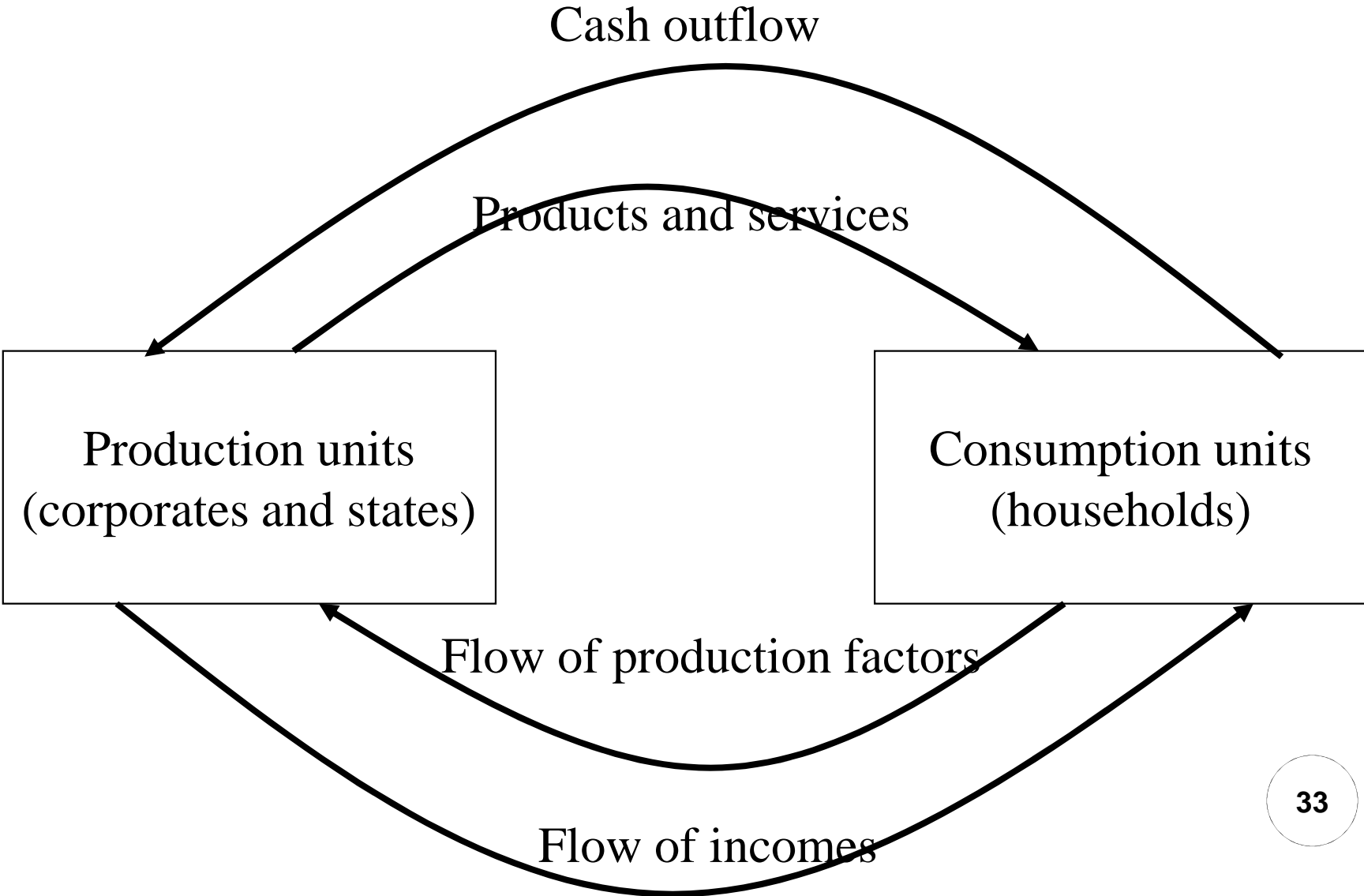
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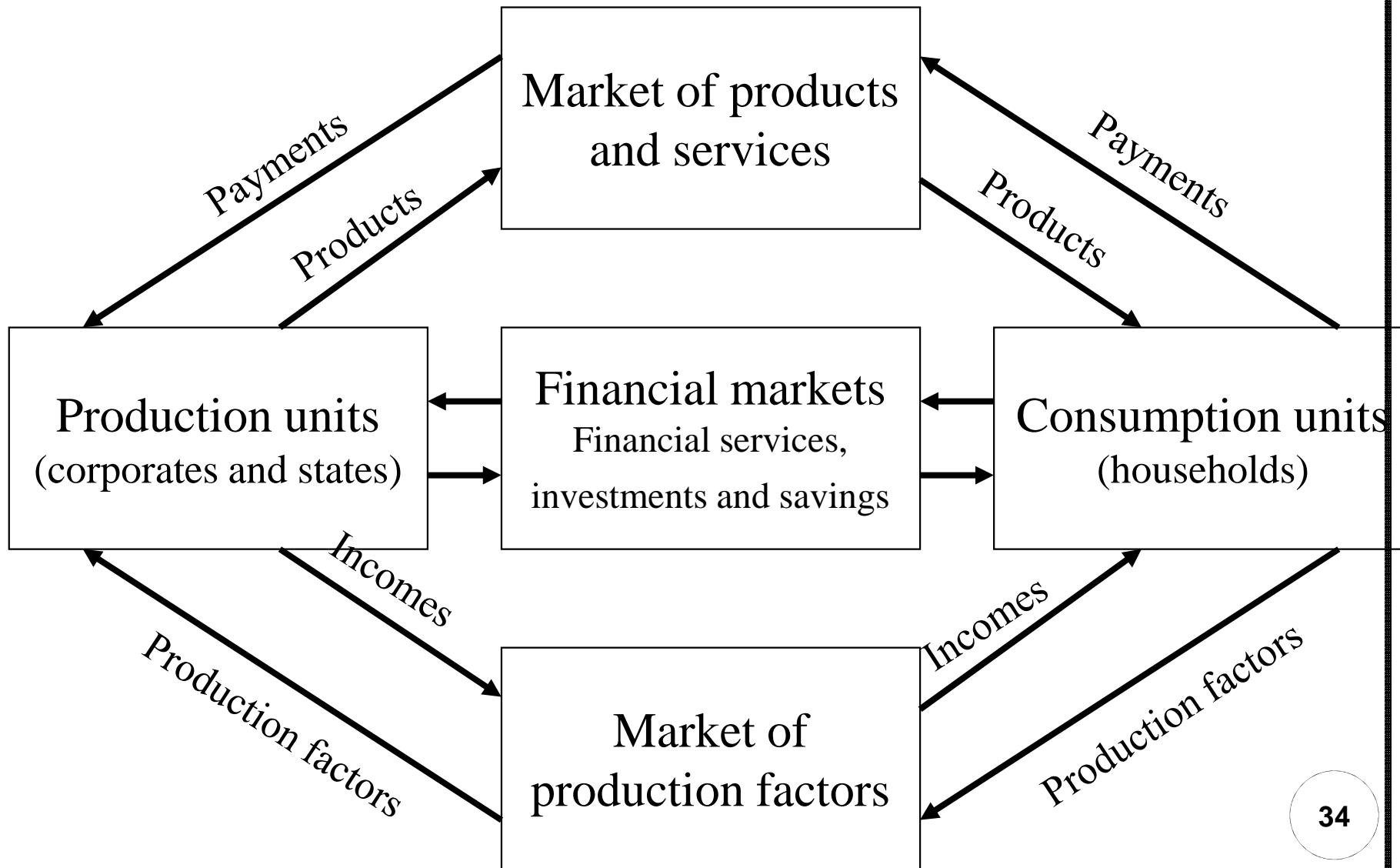
ECONOMIC SYSTEM



CIRCULATION OF INCOMES, WAGES, PRODUCTS AND SERVICES IN THE ECONOMIC SYSTEM



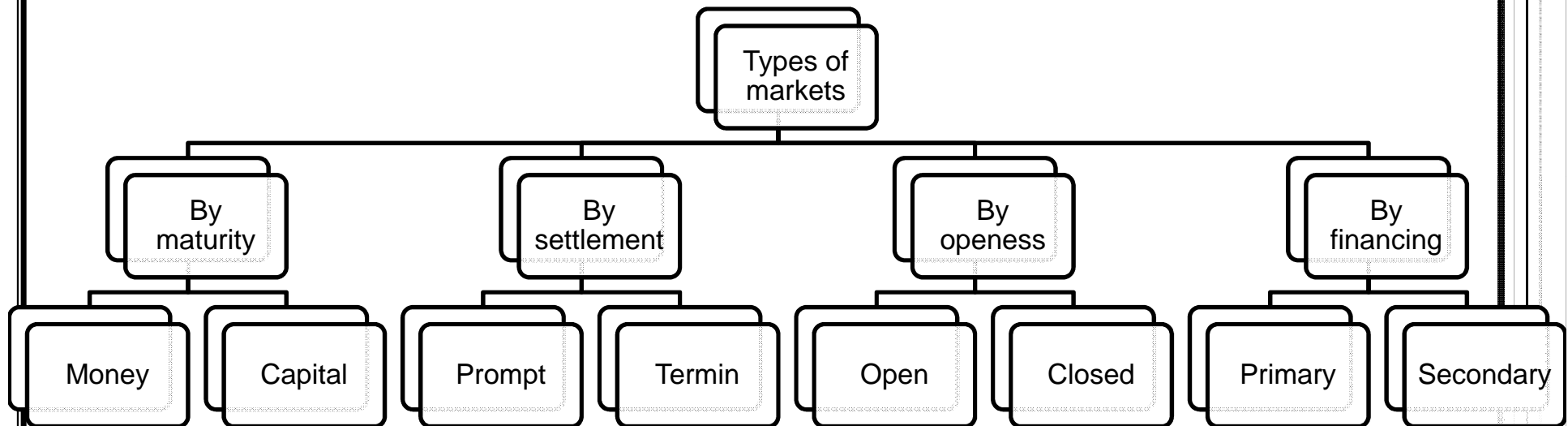
TYPES OF MARKET IN AN ECONOMY



FUNCTIONS OF FINANCIAL MARKETS

- **Saving** – to earn fixed income with short-term, low risk investment
- **Investment** – to earn high expected income with long-term, risky investment
- **Financing** –to finance corporate and household investment
- **Portfolio** – to invest in a bulk of investment for reducing the total risk
- **Liquidity** – to sell the investments before maturity
- **Transaction** – able to pay without using cash
- **Indicator** – to sign the current statement of economy
- **Policy** – the economic policy affects the real economy through the financial markets

TYPES OF FINANCIAL MARKETS



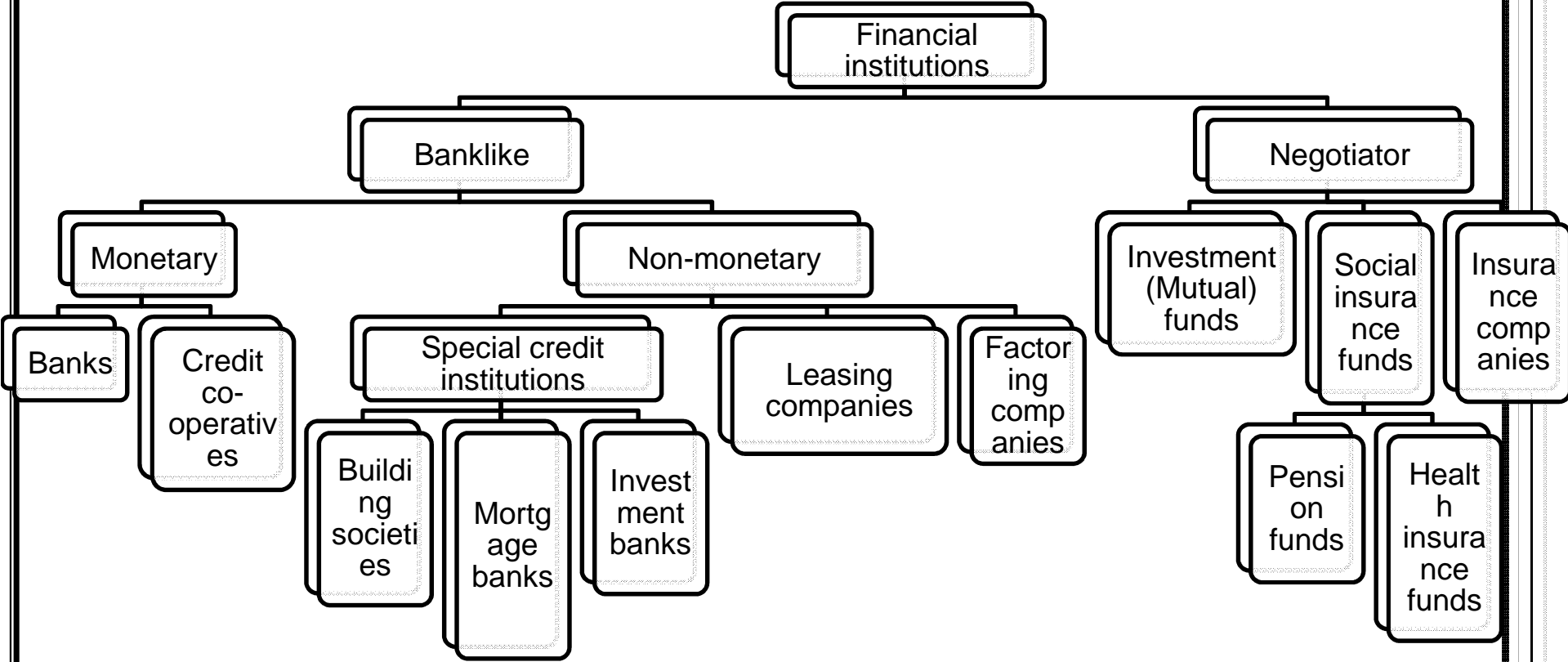
COMPARISON OF MONEY AND CAPITAL MARKETS

Aspects	Money market	Capital market
Maturity	Less than 1 year	More than 1 year
Major purpose of existence	Provide liquidity for daily operation	Provide financing source for investment
Major actors	Commercial banks	Investment and pension funds, economic „angels”
Major products	Short term loan, deposit, T-note, bill of exchange	Bonds, shares

COMPARISON OF PROMPT AND TERMIN MARKETS

Aspects	Prompt market	Termin market
Time between deal and settlements	2 working days	More than 1 week
Major purpose of existence	Exchange of financial market instruments	Trading, hedging, arbitrageing
Major products		Forward, futures, options, swaps

FINANCIAL SERVICE PROVIDERS





MAIN BRANCHES OF ECONOMIC POLICIES
MAIN GOALS AND TOOLS OF FISCAL AND
MONETARY POLICY

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BRANCHES OF ECONOMIC POLICY

Branches	Goal	Tools	Responsible organisation
Monetary policy	Price stability Monetary stability	open market operations reserve ratio	National bank
Fiscal policy	sustainable, long-term growth	tax policy social and economic transfers	Government
(Foreign exchange policy)	solvency exchange rate stability	reserve policy peg	National Bank (Government)

MONETARY POLICY

- Target: inflation below desired level (in Europe – 2%, in Hungary – 3%)
- Instruments:
 - Direct
 - reserve rate
 - loan limits
 - special loan facilities
 - moral pressure
 - Indirect
 - **open market operations**
 - refinancing

GOAL OF MONETARY POLICY

- Price stability
- Monetary stability

- Anchors:
 - Money supply
 - Exchange rate
 - Direct inflation targeting

MONEY SUPPLY AS ANCHOR

$$M * V = P * T$$

$$\Delta M * \Delta V = \Delta P * \Delta T$$

$$\Delta V := 1 \Rightarrow \Delta P = \frac{\Delta M}{\Delta T}$$

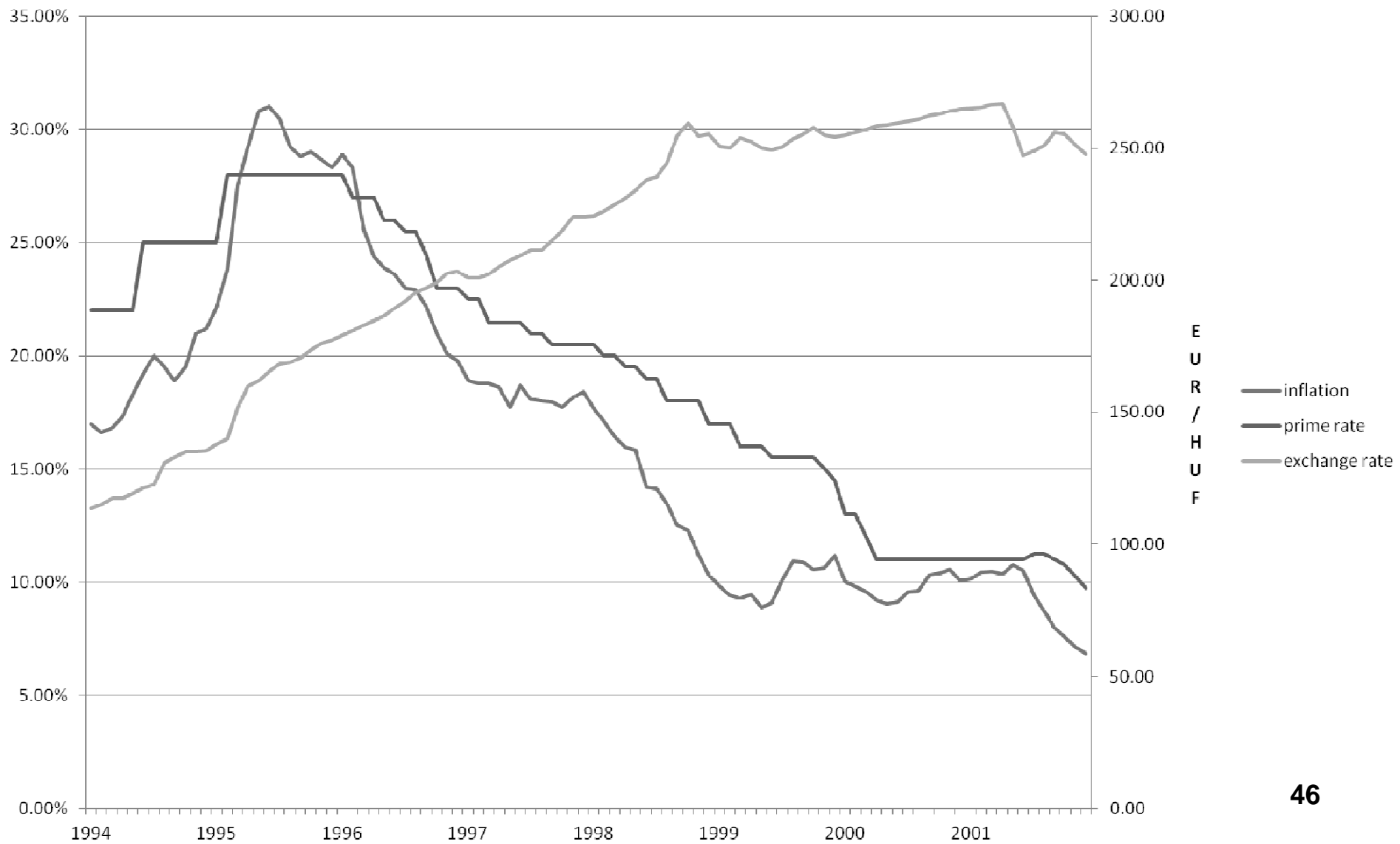
Assumption:

- Closed economy or export and import are equal
- Cash velocity is constant

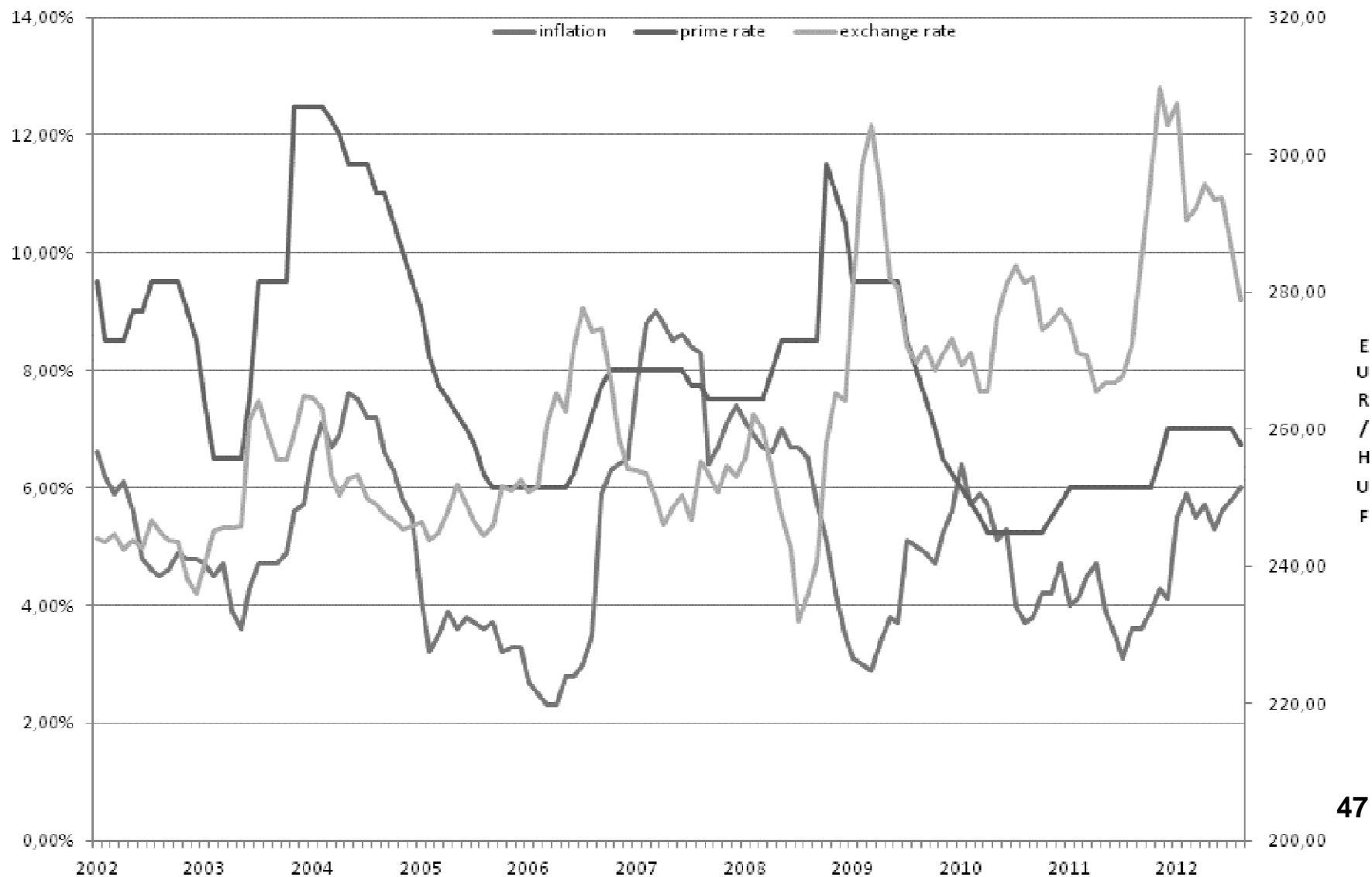
EXCHANGE RATE AS ANCHOR

- Devaluation of currency \implies Inflation increases
 - Price level of import goods increases
 - Price level of domestic goods increases through import purchase
 - Profit of exporters increases the disposable income
- Appreciation of currency \implies Inflation decreases
 - Price level of import goods decreases
 - Price level of domestic goods decreases through import purchase
 - Profit of exporters declines

Inflation, prime rate and EUR/HUF exchange rate



Inflation, prime rate and EUR/HUF exchange rate



INFLATION TARGETING (MISHKIN)

1. Declaring a fixed medium term inflation target.
2. The National Bank is committed to price stability -
> it should be independent.
3. The National Bank operates on a basis of a wide information base.
4. The monetary policy is transparent. One goal – one tool.
5. Reporting commitment.

FOUR ELEMENTS OF INDEPENDENCE

- Personal independence
- Political independence
- Financing independence
- Economic independence

Responsible body of Monetary Policy: Monetary Board



POLAK-MODEL
HOW DO THE FISCAL AND MONETARY
POLICY AFFECT TO THE REAL ECONOMY?
MAASTRICHT CRITERIA

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MUNDELL'S OPTIMAL CURRENCY BELT

Assymmetric shock – output of country decreased – devaluation if every country has got own currency

If there is a common currency, devaluation is not an option. Rather

- to make the production factors flexible – liberalisation of capital and labour movement
- to transfer some money to the poor region – poor means that the GDP/capital doesn't exceed the two third of EU average

Optimal currency belt:

- Strong economic connection
- At the same phase of economic cycle
- Easy to migrate the capital and labour force

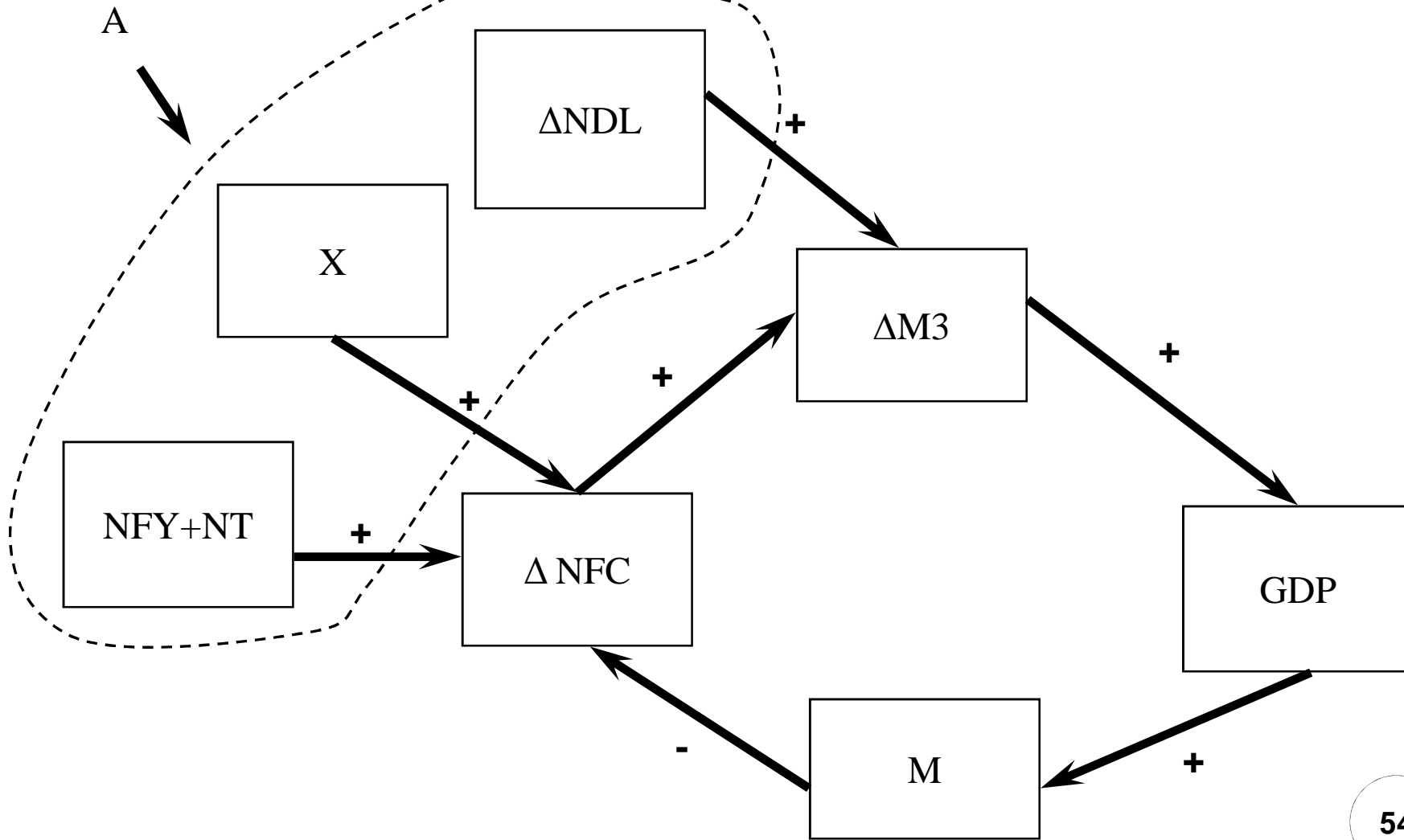
CRITERIAS OF MAASTRICHT-TREATY

- price stability – keep your inflation below 1% over the average inflation rate of three countries with lowest inflation figure
- convergence of long term interest rates – keep your long interest rate 1.5% over the average long term interest rate of three countries with lowest long term interest rate figure
- foreign currency rates stability – fix your currency against euro with a 15% peg during 2 years
- stability of public finance –
 - public deficit should be lower than 3% of annual GDP
 - public debt should be lower than 60% of annual GDP
 - (Primary balance is positive)

WHY IS THE POLAK MODEL?

- Belongs to the mainstream
- Used by IMF (country report)
- Entire – covers the whole macrostatistics
- Egzact – based on computational linkages
- Focuses on the problems of indebted, open economies

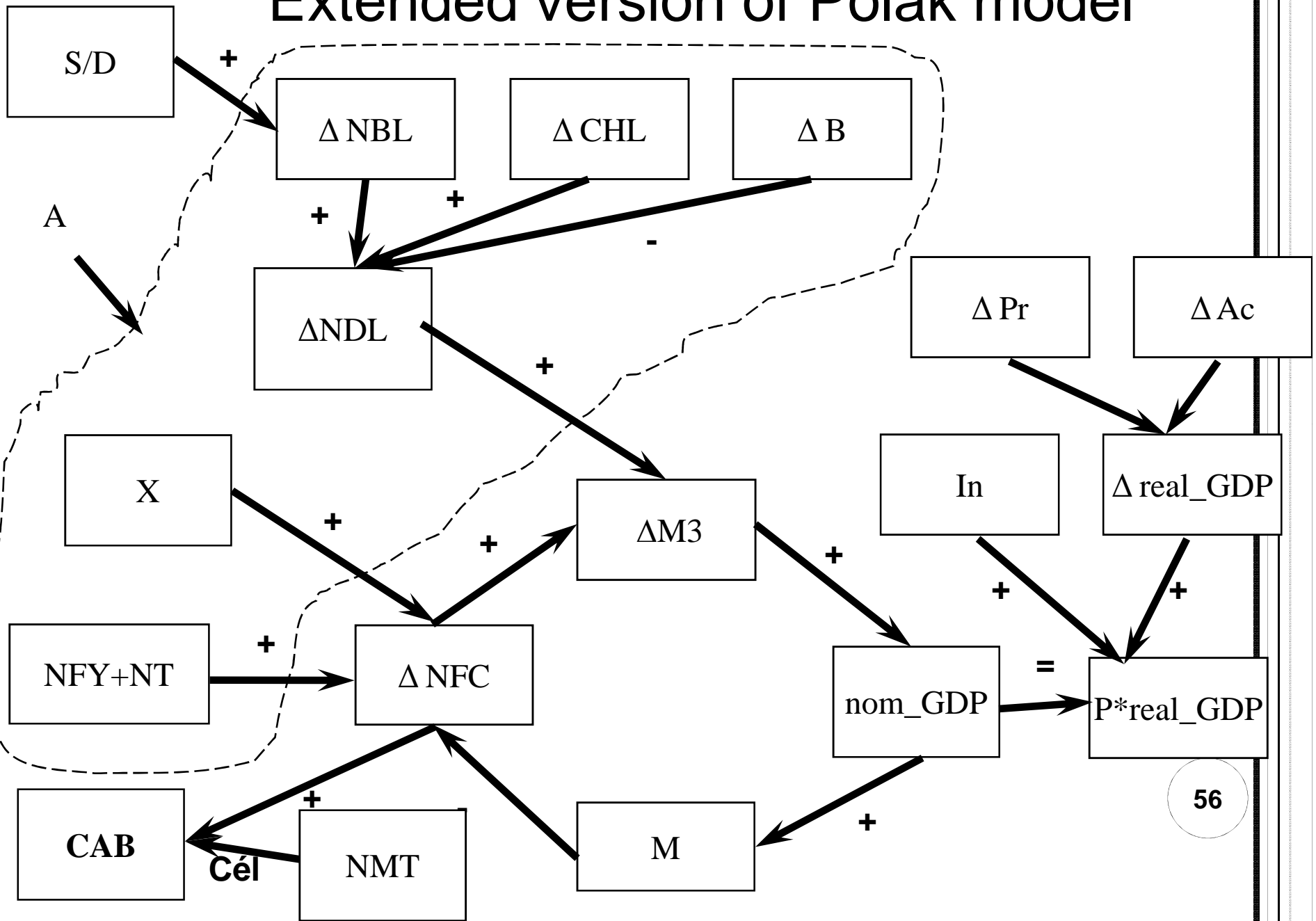
POLAK MODELL



MEANINGS OF ABBREVIATIONS

- Δ NDL – change in net domestic loan
- M3 – change in money supply M3 (cash + deposit in sight and short term deposit)
- GDP – Gros Domestic Product
- M – import
- Δ NFC – change in net foreign claims
- NFY – net factor yield
- NT – net transfer
- X – export

Extended version of Polak model



MEANINGS OF NEW ABBREVIATIONS

- Δ NBL – change in net budget loans
- Δ CHL – change in corporate/households loan
- Δ B – change in long term bank liabilities
- CAB – current account balance
- S/D – budget surplus/deficit
- P – price level
- In – inflation
- Δ real_GDP – economic growth
- Δ Pr – change in productivity
- Δ Ac – change in activity

WORKING OF MODEL

Budget deficit and loan demand of corporates and households increase the net domestic loan. Its increase enhances the money supply, which leads greater income. The greater income is spent in three way. The income leads to greater real GDP growth or/and leads to higher inflation or/and leads to bigger import. The import decreases the net foreign claims, so it leads to foreign indebtedness. The influancing factors are the followings:

- Demand flexibility of import
- Flexibility of production factors
- Inflation expectations
- Exchange rates and interest rates

ELEMENTS OF NET FOREIGN CLAIMS

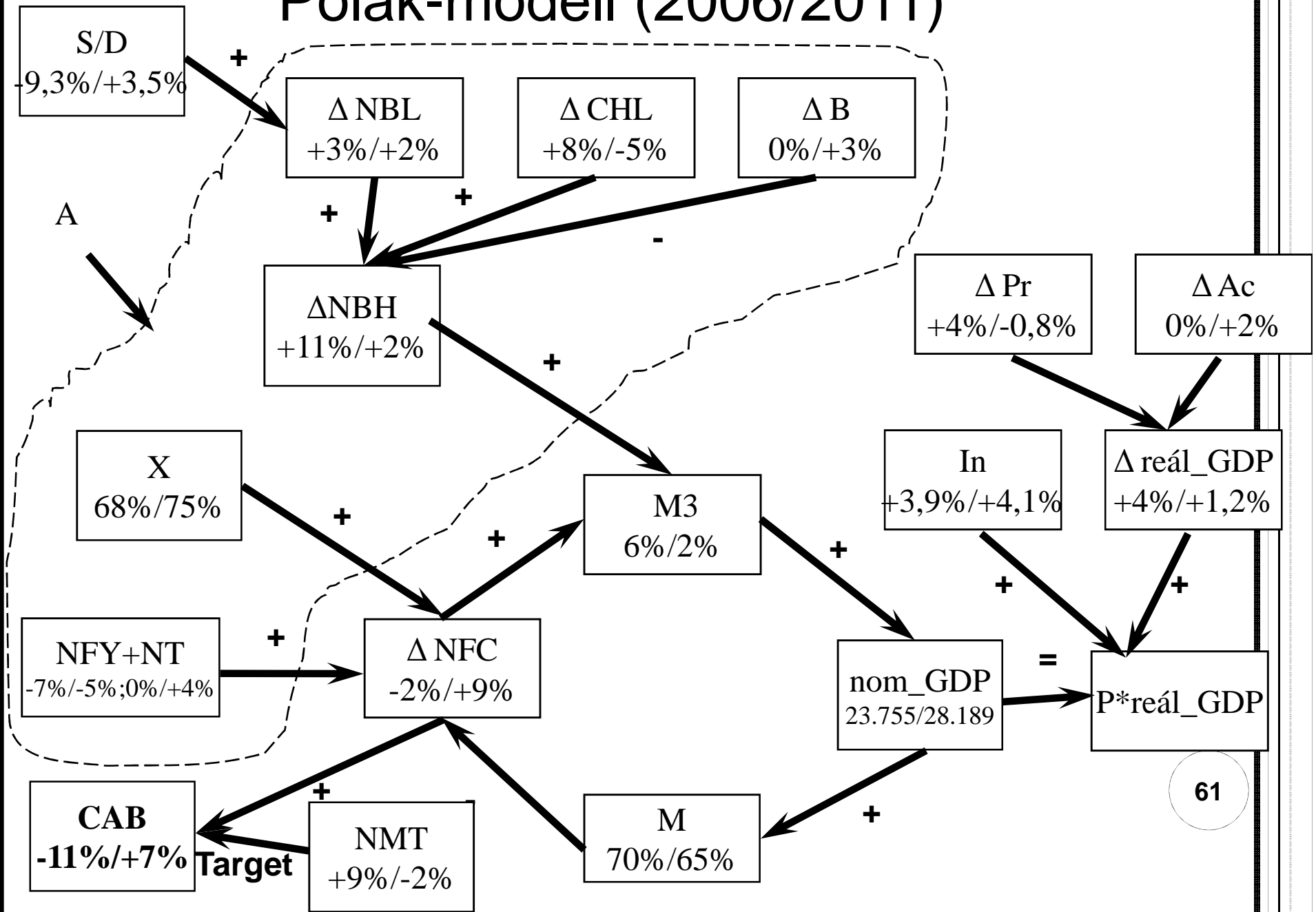
- CAB – current account balance
 - X - export
 - M - import
 - NFY – net factor yields
 - NT – net transfers
- NMT – non monetary transfer (direct foreign investment)

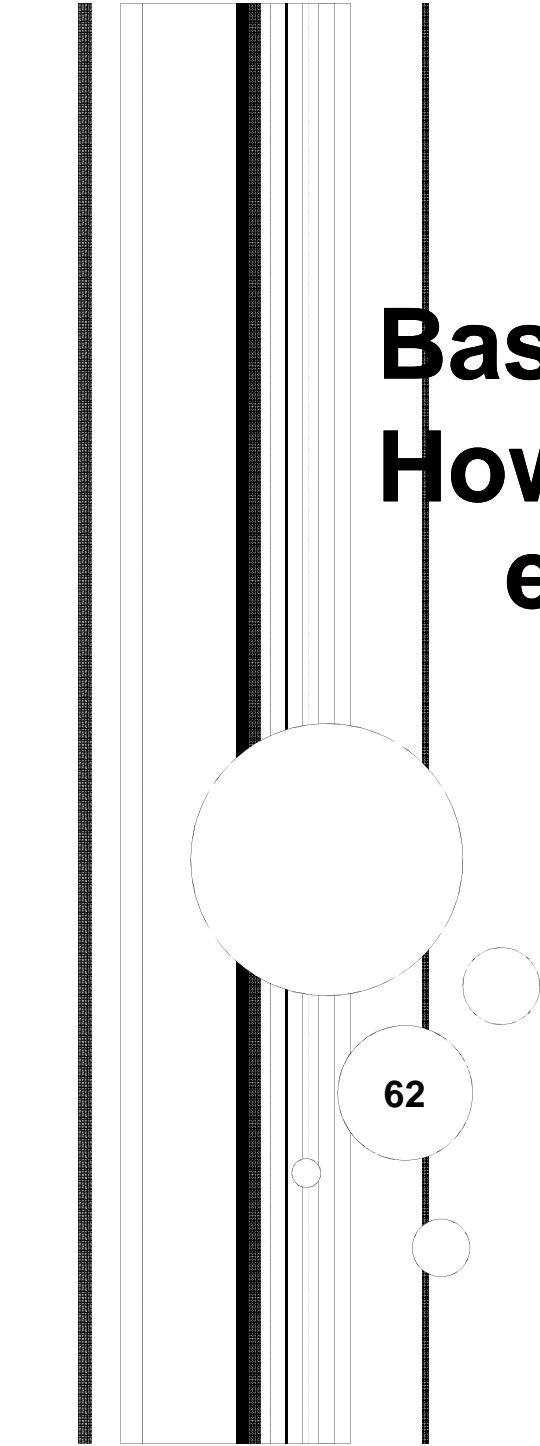
EXOGENIOUS FACTORS(ADSORPCIÓ)

They are independent from the monetary policy (structural factors)

- X – export (depends on international competitiveness)
- NFY – net foreign yield (depends on ownership structure)
- Δ NDL – change in net domestic loan (depends on loan demand of state, corporates and households)
- NMT – non monetary transfer (depends on investment climate)

Polak-modell (2006/2011)





Basic equation of economy
How can you access
economic informations?

MEASURING THE MACRO OUTPUT

SNA (System of National Accounts)



- o Worked out by the UN
- o Introduced in 1953, updated in 1993
- o Reworked version for Europe: ESA95

EXAMPLE ON VALUE ADDED

Gros output (HUF)

	Wheat	Flavour	Bread	Total
Output :	100	220	350	= 670 (GO)
- Material :	..?..	100	220	= 320
Net output (Value added):				
	100	120	130	= 350 (GDP)
-Depreciation:	30	30	20	= 80
Income :	70	90	110	= 270 (NDP)

MAJOR SNA INDICATORS

Level of accumulation	Domestic 	National 	
Gros	GO		
Semi-net	GDP	GNI	GNDI
Net	NDP	NNI	NNDI

ABBREVIATIONS

- GO (gros output)
- GDP (gros domestic product)
- NDP (net domestic product)
- GNI (gros national income)
- NNI (net national income)
- GNDI (gros national disposal income)
- NNDI (net national disposal income)

LINKAGE AMONG THE INDICATORS

- $GDP = GO - \text{material cost}$
- $NDP = GDP - \text{depreciation}$
- $GNI = GDP + \text{net factor yield}$
- $NNI = GNI - \text{depreciation}$
- $GNDI = GNI + \text{savings}$
- $NNDI = GNDI - \text{depreciation}$

MEASURING THE GDP

1. Production side

- + Consumption(C)
- + Gros private investment (I)
- + Government expenses (G)
- + Net export

2. Income side

- + Salaries (w)
- + Interest, rent, dividend (i)
- + Indirect taxes (t)
- + Depreciation (d)
- + Profit (p)

3. Usage side

- + Consumption(C)
- + Savings (S)
- ± Budget surplus /deficit (T-TR)
- + NFY+NT

BASIC EQUATION

Production side

$$GDP = C + I + G + (X - M)$$

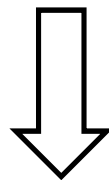
Income side

$$GDP = w + i + d + t + p$$

Usage side

$$GDP = C + S + (T - TR) + NFY + NT$$

$$C + I + G + (X - M) = C + S + (T - TR) + NFY + NT$$



$$X - M + NFY + NT = (T - TR - G) + (S - I)$$

Financial statements of banks



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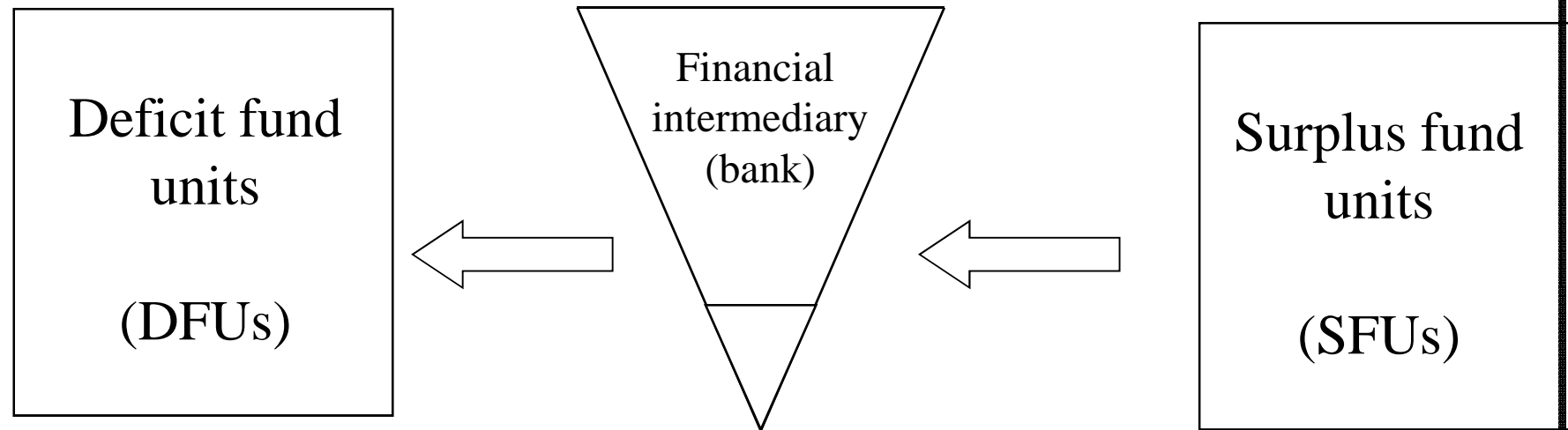
WHAT IS A BANK?

A bank is a special entitled corporation, which grants loans, accepts deposits and runs current accounts to manage the flow of payments among the actors of the economy.

Origin of the word „bank” –

- italian word „banco” means bench
- french word „banque” means chest of drawer

BANK, AS A FINANCIAL INTERMEDIARY



Needs of debtors:

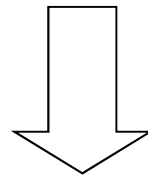
1. Long term loans
2. Lender takes significant risk
3. Big amount of loan
4. Convenience

Needs of creditors:

1. Liquidity
2. Security
3. Convenience
4. Small amount of savings

FINANCIAL SPECIALITIES OF BANKS

- High capital leverage
- Financial assets, non physical assets
- Mismatch between assets and liabilities
- Special constraints of activity
- Economy of scale
- Too big, to fail



Trust

Consolidated bank sector financial statements

MAJOR ASSETS OF BANKS

Description	Dec 2001 Audeted			Dec 2008 Audited			Dec 2010 audited			Jul 2012		
	HUF	F/X	Total	HUF	F/X	Total	HUF	F/X	Total	HUF	F/X	Total
Cash and settlement accounts	494,837	149,212	644,049	434,844	171,464	606,308	454,039	118,382	572,421	395,488	283,823	679,311
Securities for trading	459,690	27,522	487,212	1 886,431	17,382	1 903,813	2 321,791	172,633	2 494,424	2 911,875	178,294	3 090 169
Securities for investment*	780,427	223,168	1 003,595	2 323,909	445,828	2 769,737	2 615,259	944,753	3 560,012	2 875,792	808,748	3 684 540
Total securities	1 240,117	250,690	1 490,807	4 210,340	463,210	4 673,550	4 937,050	1 117,386	6 054,436	5 787,667	987,042	6 774 709
Central bank and interbank deposits	667,556	808,818	1 476,374	938,219	497,093	1 435,312	697,148	834,642	1 531,790	749,677	606,196	1 355 873
Of which: central bank deposits	365,046	127,364	492,410	496,328	3,416	499,744	274,824	29,883	304,707	301,895	0,000	301 895
interbank deposits	302,510	681,454	983,964	441,891	493,677	935,568	422,324	804,759	1 227,083	447,782	606,196	1 053 978
Loans (net portfolio)**	3 072,098	1 832,803	4 904,901	5 615,350	259,275	5 874,625	5 319,994	12 735,257	18 055,251	5 629,916	9 603,937	15 233 853
Of which: corporate loans***	2 075,950	1 099,733	3 175,683	2 729,894	4 216,862	6 946,756	2 381,315	3 622,742	6 004,057	2 276,862	2 941,312	5 218 174
Retail loans	655,710	21,531	677,241	2 090,443	5 039,635	7 130,078	2 090,613	5 103,529	7 194,142	2 358,504	3 448,250	5 806 754
Participations	146,512	9,695	156,207	230,681	397,902	628,583	251,876	422,770	674,646	267,985	425,966	693 951
Accrued interest receivable	87,911	21,327	109,238	367,239	94,159	461,398	245,098	61,790	306,888	243,719	58,973	302 692
Prepayments and other assets	73,561	15,943	89,504	831,267	84,045	915,312	305,329	94,618	399,947	499,787	69,079	568 866
Own assets	167,860	1,349	169,209	551,984	30,806	582,790	508,321	21,567	529,888	503,879	18,253	522 132
Total assets	5 950,452	3 089,837	9 040,289	13 179,924	15 997,954	29 177,878	12 718,855	15 406,412	28 125,267	14 078,118	12 053,269	26 131,387

Forrás: PSZAF

MAJOR LIABILITIES OF BANKS

Description	Dec 2001 Audited			Dec 2008 Audited			Dec 2010 audited			Jul 2012		
	HUF	F/X	Total	HUF	F/X	Total	HUF	F/X	Total	HUF	F/X	Total
Deposits	4 259,784	1 796,502	6 056,286	9 162,656	3 051,355	12 214,011	8 625,882	2 963,310	11 589,192	9 028,379	2 678,036	11 706 415
Of which: Corporate deposits*	1 357,027	358,532	1 715,559	2 395,117	1 052,554	3 447,671	2 323,402	1 187,817	3 511,219	2 353,339	1 123,492	3 476 831
Retail deposits	2 406,785	765,963	3 172,748	4 959,940	1 062,644	6 022,584	4 817,329	1 097,623	5 914,952	5 141,419	912,889	6 054 308
Interbank deposits	366,619	385,739	752,358	1 206,450	3 619,725	4 826,175	1 597,133	3 638,823	5 235,956	1 739,277	2 477,357	4 216 634
Loans taken	104,667	592,026	696,693	1 021,943	3 194,719	4 216,662	758,678	3 171,618	3 930,296	888,155	2 804,945	3 693 100
Debt securities	120,399	37,784	158,183	1 498,533	1 525,727	3 024,260	1 814,067	1 474,048	3 288,115	1 799,142	924,947	2 724 089
Accrued interest payable	38,615	16,113	54,728	369,400	122,584	491,984	221,636	55,572	277,208	238,071	71,651	309 722
Other accruals, deferred income and other liabilities	236,628	102,922	339,550	1 215,245	130,215	1 345,460	1 215,519	89,279	1 304,798	627,465	93,472	720 937
Subordinated liabilities**	18,551	107,257	125,808	23,497	616,922	640,419						
Provisions	87,452	2,512	89,964	214,552	19,173	233,725	165,051	12,689	177,740	184,215	8,357	192 572
Own capital	766,719	0,000	766,719	2 185,787	-0,605	2 185,182	2 321,952	0,010	2 321,962	2 567,762	0,156	2 567 918
Total liabilities	5 999,434	3 040,855	9 040,289	16 898,063	12 279,815	29 177,878	16 719,918	11 405,349	28 125,267	17 072,466	17 9 058,921	26 131,387

Forrás: PSZÁF

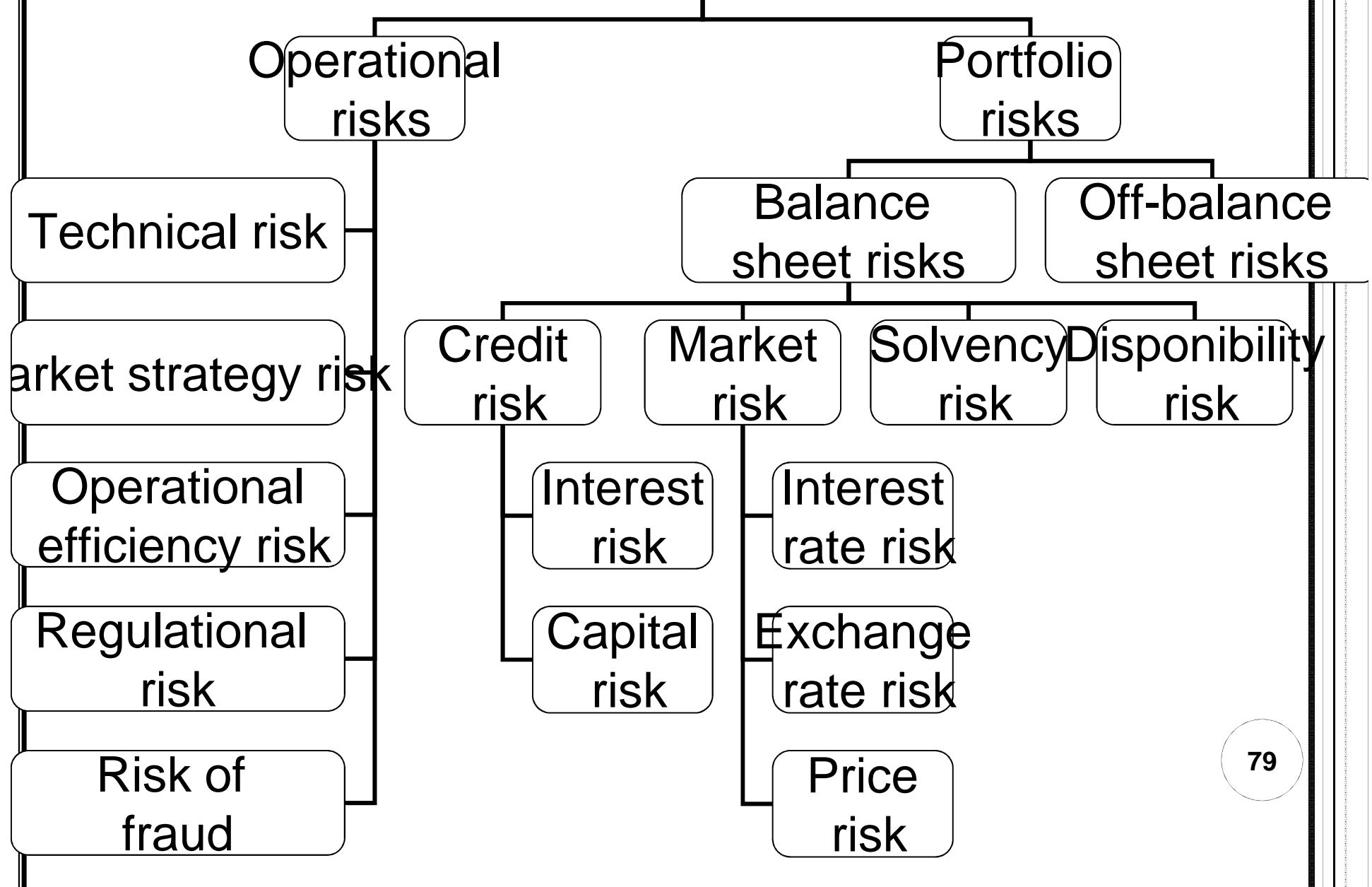
BAD DEBTS

Évek	Minősítési kötelezettség alá tartozó összesen (1) = (2) + (7)	Problémamentes (2)	Külön figyelendő (3)	Átlag alatti (4)	Kétes (5)	Rossz (6)	Nem problémamentes (7) = (3)+(4)+(5)+(6)
2002	7 359,625	6 518,092	572,200	131,049	71,241	67,043	841,533
2006	16 410,221	14 766,256	1 246,923	127,114	101,090	168,838	1 643,965
2008	23 966,957	22 350,658	924,887	256,146	198,273	236,993	1 616,299
2010	23 561,881	18 584,804	2 829,816	806,481	655,416	685,364	4 977,077
2012.06.	21 536,161	15 727,494	2 819,358	726,980	1 212,505	1 049,824	5 808,667

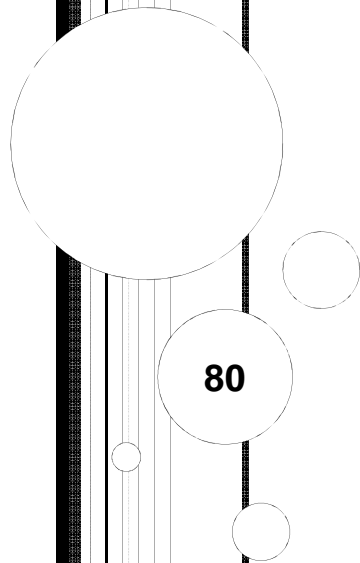
INCOME STATEMENTS

Description	2001 Audited	2004 Audited	2006 Audited	2008 Audited	2009 Audited	2010 Audited	2011 Audited	Q1-2 2012
Net interest income	340,695	549,581	697,794	713,943	756,393	865,746	848,391	405,077
Interest income	784,617	1 438,905	1 514,894	2 196,523	2 464,386	2 042,666	2 019,665	1 050 018
Interest expenditure	443,922	889,324	817,100	1 482,580	1 707,993	1 176,920	1 171,274	644 941
Non-interest income (net)	86,200	242,635	300,628	339,156	541,913	179,365	250,642	-141 609
Commissions and fees	98,594	181,015	229,933	242,646	258,172	262,056	232,574	111 254
Dividends	4,949	19,140	28,098	163,482	66,718	68,495	89,669	48 972
Net profit or loss on financial and investment services *	169,281	89,826	115,957	139,792	301,368	190,216	256,478	18 874
Other non-interest type profit *	-186,624	-47,346	-73,360	-206,764	-84,345	-341,402	-328,079	-320 709
Operating expenditures	301,013	417,949	525,547	642,276	588,059	598,777	566,971	280 465
Change in specific provisions and value adjustments **	n.a	-52,495	-76,699	-144,351	-442,530	-377,098	-681,948	57 679
Result of ordinary business activity	n.a	321,772	396,176	266,472	267,717	69,236	-149,886	40 682
Extraordinary profit/loss	7,193	0,196	29,694	14,760	-21,604	-34,822	-61,246	-82 294
Pre-tax profit	133,077	321,968	425,870	281,232	246,113	34,414	-211,132	8,388
Tax liabilities***	25,723	46,894	69,075	44,610	37,025	22,132	32,192	8 669
After-tax profit	107,354	275,074	356,795	236,622	209,088	12,282	-243,324	-0,281

Types of bank risks



Camels analysis



CAMELS

C

1. Capital
(Solvency risk)

M

3. Management
(Operational risk)

L

5. Liquidity

A

2. Assets quality
(Credit risk)

E

4. Earnings
(Profitability)

S

6. Sensitivity to
market risk
(Market risk)

1. CAPITAL

$$\text{Capital adequacy ratio} = \frac{\text{Guaranteed capital}}{\text{Risk weighted assets}}$$

2. ASSET QUALITY

$$\text{Non performing ratio} = \frac{\text{Bad and doubtful debt}}{\text{Total outstandings}}$$

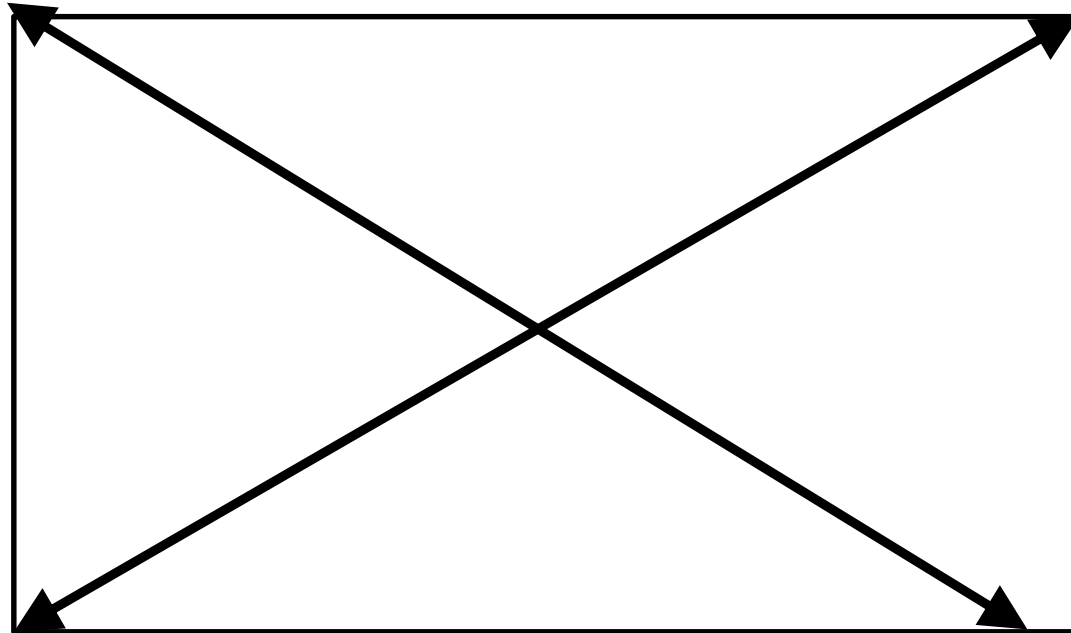
Public finance

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„MAGIC SQUARE OF ECONOMIC POLICY

Equilibrium

Economic
growth



Labour activity

Inflation

FUNCTIONS OF THE STATE

Public duties: Those duties which the other actors of the society cannot solve.

- *classical*: legal, administrative services (army, police, court, governmental bodies)
- *Social political*: social welfare, education, culture
- *Economical*: influencing the economy

AIMS AND TOOLS OF FISCAL POLICY

- Inflation (price stability)
- Balance (balanced central budget, and balance of payment)
- Activity (increasing)
- GDP (increasing)

- To reach a long-term sustainable growth of the living standard (GDP increase)
- Sustainable
 - Demografically
 - Ecologically
 - Economically (balanced central budget and balanced balance of payment)

FISCAL POLICY

If an economy is in a depression or a recession, the government may try to energize it by spending more money or by cutting tax rates.

During the Great Depression, John Maynard Keynes recommended massive government spending to re-start the U.S. economy.

CONTRACTIONARY POLICY

CONTRACTIONARY FISCAL POLICY occurs when the government deliberately reduces its deficit in order to slow down the economy (usually with the goal of reducing inflation).

The net effect of contractionary fiscal policy, all other things being equal, is to slow down the rate of growth of the economy.



CONTRACTIONARY POLICY

- In contractionary fiscal policy, the government cuts its spending (G) or raises taxes (T) or both.
- Contractionary fiscal policy slows down the economy by decreasing aggregate demand

EXPANSIONARY POLICY

- -- With an expansionary fiscal policy, the government raises its spending (G) or cuts taxes (T) or both.
- An expansionary fiscal policy expands the economy because it stimulates aggregate demand.

NEOLIBERAL APPROACH (MILTON FRIEDMAN)

- The government cannot change the long run growth rate, because it depends on the production factors.
 - unemployment is voluntarily
 - capacity are given
 - expansion leads to inflation
 - Import leads to foreign indebtedness

STRUCTURE OF GOVERNMENT SECTOR

- Central budget
- Local governments

Tax policies and concepts

TAX POLICY

- Tax policy means the types of tax employed, the way of taxation, and the economic concepts behind taxation

Principles

- Coverage
- Enacted by the Parliament
- Utilitarianism
- Fair treatment
- Transparency/Openness
- Economical

DIRECT VERSUS INDIRECT TAXES

Taxes	Indirect	Direct
Tax object	Sales	Income, property
What is taxed?	Consumption	Income
Tax avoidance	Smuggling, black sales	Black labour
Tax burden	Normative	Differentiate
Economic effect	Increases inflation/lower consumption	Decreases the incentive to work

KEYNESIAN AND MONETARY TAX POLICY

Viewpoint	Keynesian	Monetary
Progressivity of direct taxes	Strong	Weak (flat tax)
Tax allowance	Many	Limited
Taxation of capital yield	Yes	None
Main pillar of taxation	Direct	Indirect

Main taxes and fees

MAIN INCOMES OF CENTRAL BUDGET –

INCOMES FROM...

- Economic organisations (corporate tax, mining rent, corporate car tax)
- Indirect taxes (Value Added Tax, Excise Tax)
- Households (Personal Income Tax, Social insurance fees)
- Central budget institutions
- Local governments
- International organisations
- Debt service

Main way of incomes: **taxes, customs, charges**

CORPORATE TAX

Viewpoint	Corporate tax
Tax subject	Economic corporates
Tax object	Economic activity
Tax base	Adjusted pre tax profit
Tax rate	10%, above 500 million HUF 19%
Tax allowances	New investments, employment allowances,

PERSONAL INCOME TAX

Viewpoint	Corporate tax
Tax subject	Individual with domestic income, or Hungarian resident with foreign income
Tax object	Income
Tax base	Adjusted total income
Tax rate	16%
Tax allowances	Family allowance, personal allowance, farmer allowance

VALUE ADDED TAX

Viewpoint	Corporate tax
Tax subject	Economic organisation
Tax object	Sales
Tax base	Net sales
Tax rate	27%
Tax allowances	18% - food, traffic; 5% - book, some medicine

SOCIAL CONTRIBUTION TAX

Viewpoint	Corporate tax
Tax subject	Economic organisation
Tax object	Employment
Tax base	Net wages
Tax rate	27%
Tax allowances	Income from intellectual product selling

EXCISE TAX

Viewpoint	Corporate tax
Tax subject	Economic organisation
Tax object	Sales of alcohol, tobacco and oil
Tax base	Net sales
Tax rate	various
Tax allowances	various

Public budget cycle



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BUDGET

- **Budget:**
 - Financial plan enacted by the Parliament.
 - Financial fund, which is collected, spent, and controlled by the government.
- **Budget cycle:**
 - Planning
 - Budget Committee approval
 - Minister's proposal
 - Debate
 - Voting. Enacting.
 - Execution and control (ÁSZ)
 - Report

BUDGET

- Budget: Accounting the total revenues and total expenses of an organisational unit at a given period
 - Related to the future
 - It is published in a fixed form
 - Legal commitment
- Budget is based on budget of public institutions.
- Budgeting principles: completed, uniform, transparent, real, detailed

MAIN EXPENSES OF CENTRAL BUDGET – EXPENSES FOR

- Economic subsidies
- Consumption subsidies
- Accumulation
- Social insurance
- Central budget institutions
- Local governments
- Specialised state funds
- International organisations
- Debt service, interest payment
- General reserve

BALANCE OF STATE BUDGET

- 1. **Technical deficit:** incomes occasionally, expenses continuously – *short term bridge loan*
- 2. **Regulatory deficit:** due to imprecisiously measured income – *state securities*
- 3. **Real deficit:** expense unavoidable, but not enough income – *foreign loan, money creation*

INTERNATIONAL COMPARISON OF BUDGET

- Total expenses or deficit / GDP
 - Redistribution depends on:
 - Economic development
 - Market tradition
 - Social policy

SPECIALISED FUNDS

- Finance some particular duties of the state
- Use own taxes and contributions
- Advantages:
 - Some kind of independence from central budget
 - Attitude of taxpayers is better to see the precise goal of taxes
- Disadvantages:
 - Limited transparency
 - Decentralised cash management
 - Actual preferences of public finance are more difficult to ensure.



Local governments

Duties and local taxes

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LOCAL GOVERNMENTS

- 1. Finance the local public services
- 2. Encourage the economic development – investments
- Management:
 - *Taxes*: local taxes
 - *Subsidies*
 - *Own incomes*: from operation of public property

LOCAL TAXES

Viewpoints	Tax object	Tax subject	Tax base	Tax allowance
Building tax	Buildings	Owner	Square meter or market value	Church, public service
Site tax	Site	Owner	Square meter or market value	Same
Corporate communal tax	Employment	Enterprises	Number of employees	None
Private communal tax	Buildings, site, rent	Owner or tenant	Lump sum	Economic usage
Industrial tax	Sales	Enterprises	Net sales – material cost	Employment
Turism tax	Hotel service, building or accomodation	Owner of building	Lump sum, sales, night	Children, pensioner ¹¹⁴

Exchange rate and international finance

How is the exchange rate determined?

DIMENSIONS OF GLOBAL FINANCIAL GOVERNANCE

- Monetary order: exchange rate systems
- Lending facilities: short-term financial stabilisation; long-term developmental lending
- Macroeconomic policy supervision (limited)
- Banking supervision; regulation of financial markets

3 FUNCTIONS OF MONETARY SYSTEM

- Gives order and stability to foreign exchange markets (fixed vs. floating exchange rates)
- Encourages the elimination of balance-of-payments problems
- Provides access to international credit in emergency situations (lender of last resort)
- B Eichengreen: 'glue that binds national economies together'.

FLUCTUATIONS IN MONETARY HISTORY

- Greater friction and discontinuity than trade order
- 4 monetary systems in last 100 years:
 - Before 1914: Gold Standard; high capital mobility;
 - Interwar years: Collapse of GS; decline in capital flows
 - After 1945: Bretton Woods system; gradual recovery of capital flows
 - After collapse of BWS: free floating exchange rates; high capital mobility

LESSONS FROM PAST 100 YEARS

- Difficulty in creating a stable and lasting monetary order
- Greater hurdles for establishing fixed exchange rates: democratisation of economic policy
- Decline of state power (Susan Strange)?
 - Capital mobility after 1973
- Or continued power of states (Kapstein; Helleiner)?
 - Regulatory role of state

BRETTON WOODS SYSTEM

- Dollar/gold base for monetary system;
- Fixed ('pegged') exchange rates
 - but adjustable if fundamental disequilibrium
- Controls permitted on international capital flows; gradual phase out;
- 'Scarce currency' clause: import controls against countries with persistent payments surpluses
- New institutions: International Monetary Fund (IMF), to monitor economic policy and provide short-term financial aid

BWS IN PRACTICE

- Currency rate adjustments applied too rarely
- IMF resources insufficient; no ‘super bank’
- IMF had no teeth in controlling national economic policy
- But: capital controls worked well in 1950s; key to success of early BWS; eased pressure on governments to adjust currency rates;
- Once capital controls were lifted: inevitable collapse of BW?

COMPARISON OF IMF AND IBRD

Aspects	IMF	IBRD
Corporate's goal	Maintain the stability of the international financial system	Encourage the recovery of economy of member countries
Debtor of outstanding loans	State (National Bank)	Corporates (co-operating with local banks)
Purpose of loan	Free	Fixed (by tender)
Conditions	Stand-by (to macroeconomic conditions)	Stand-by (to microeconomic conditions)
Constraints	Linked to the quota	Linked to the equity
Maturity of loan	Generally short and medium (1-3 years)	Generally long (over 5 years)

COLLAPSE OF BRETTON WOODS

- Greater capital mobility undermines fixed exchange rates
- Inflationary policy in US: undermines central role of US currency and gold peg
- Devaluation of US\$ needed, but politically controversial
- Nixon Administration: forced devaluation in 1971; end to BWS in 1973
- Key factors:
 - Design faults of BWS
 - Lack of political support in key states (USA, Europe)

AFTER BRETTON WOODS

- Move towards flexible exchange rates
- Major advantage: allows countries to prioritise domestic policy objectives (e.g. inflation; employment)
- But: fluctuations and greater instability
- Europeans favour fixed rates (higher trade dependency): move towards European monetary system (EMS), later European monetary union (EMU)

MILESTONES OF THE EUROPEAN MONETARY UNION

- 1958 - convertibility in export and import (in frame of Bretton-Woods system)
- 58 – 68 – matching the fiscal policy (mainly indirect taxes)
- 68-78 – matching the exchange rates
- 69 – Werner-plan – towards to monetary union – failure
- 1971 – 1975 Currency snake - pegged in $\pm 2,25\%$
- 1975 – basket currency – ecu
- 1979 – European Monetary System – every currency pegged in ± 2.25 against ecu; European Monetary Cooperation Fund
- 1989 – Delors-plan
- 1992 – Maastricht-treaty
- 1994 – full convertibility
- 1999 – introduction of euro as bank money
- 2002 – introduction of euro as bank note

Elements and Analysis of balance of payments

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The balance of payments is
“a statistical statement that systematically
summarizes, for a specific time period,
the economic transactions of an economy
with the rest of the world.”
(IMF official definition)

CURRENT ACCOUNT

Measures the *net* flow of goods, services, and unilateral transfers between a country and all foreign countries.

- merchandise trade balance
- trade in services
- net investment income
- unilateral transfers

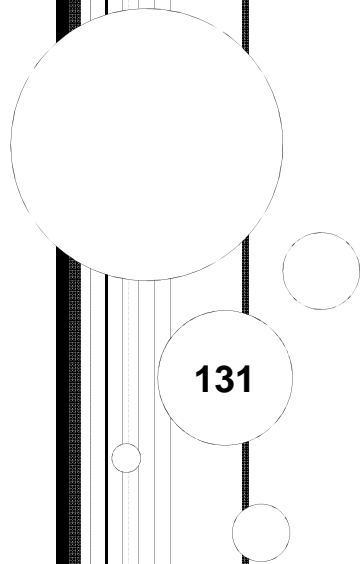
INTERNATIONAL ASSET TRANSACTIONS (*NET FINANCIAL FLOWS*)

- Two broad categories:
 - governments' transactions (*official settlement balance, or reserve balance*)
 - private capital flows
 - portfolio investment
 - direct investment
- Other minor asset transactions

$$\begin{aligned} &\text{Current Account Balance} \\ &+ \\ &\underline{\text{Net Financial Flows}} \\ &= 0 \end{aligned}$$

A current account deficit *must* be financed by capital inflows, or it cannot be incurred in the first place

Consultation



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