Makroökonomie I/Grundlagen der Makroökonomie

Ergänzungen zu Kapitel 4: Geld- und Finanzmärkte

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Structure of Financial Markets (Mishkin, The economics of money, banking and financial markets, 2009)

- **Money and Capital Markets:**
  - Money markets deal in short-term debt instruments
  - Capital markets deal in longer-term debt and equity instruments

Principal Money Market Instruments

Type of Instrument	Amount Outstanding ($ billions, end of year) 1980	1990	2000	2008
U.S. Treasury bills	216	527	647	1060
Negotiable bank certificates of deposit (large denominations)	317	543	1053	2385
Commercial paper	122	557	1619	1732
Federal funds and Security repurchase agreements	64	387.9	768.2	2118.1

Sources: Federal Reserve Flow of Funds Accounts; Federal Reserve *Bulletin; Economic Report of the President.*

Principal Capital Market Instruments

Type of Instrument	Amount Outstanding ($ billions, end of year) 1980	1990	2000	2008
Corporate stocks (market value)	1,601	4,146	17,627	19,648
Residential mortgages	1,106	2,886	5,463	12,033
Corporate bonds	366	1,008	2,230	3,703
U.S. government securities (marketable long-term)	407	1,653	2,184	3,621
U.S. government agency securities	193	435	1,616	8,073
State and local government bonds	310	870	1,192	2,225
Bank commercial loans	459	818	1,091	1,605
Consumer loans	355	813	536	871
Commercial and farm mortgages	352	829	1,214	2,526

Sources: Federal Reserve Flow of Funds Accounts; Federal Reserve *Bulletin*. 2008, 3rd Quarter.

Flows of Funds Through the Financial System

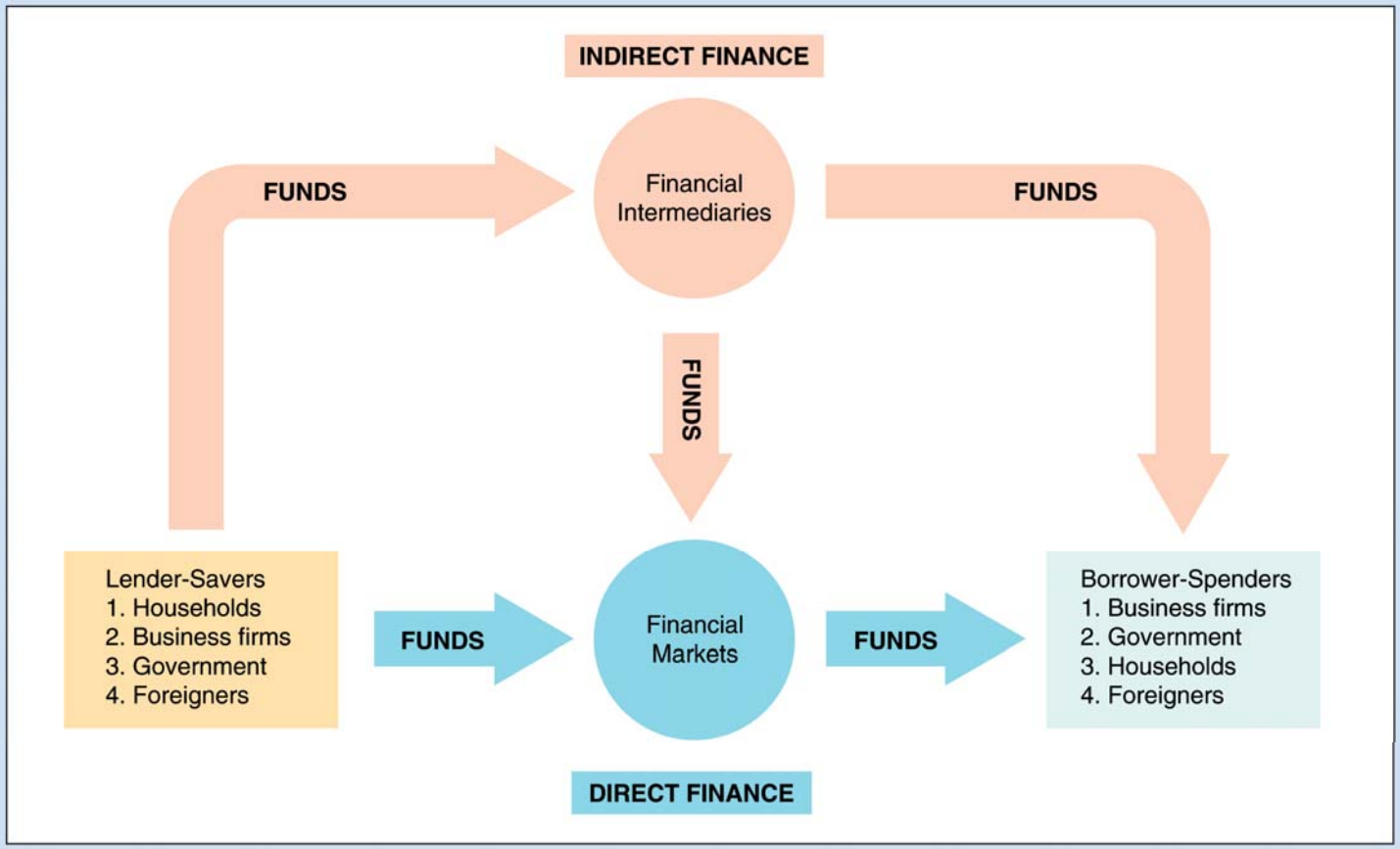


FIGURE 1 **Flows of Funds Through the Financial System**

Principal Financial Intermediaries and Value of Their Assets

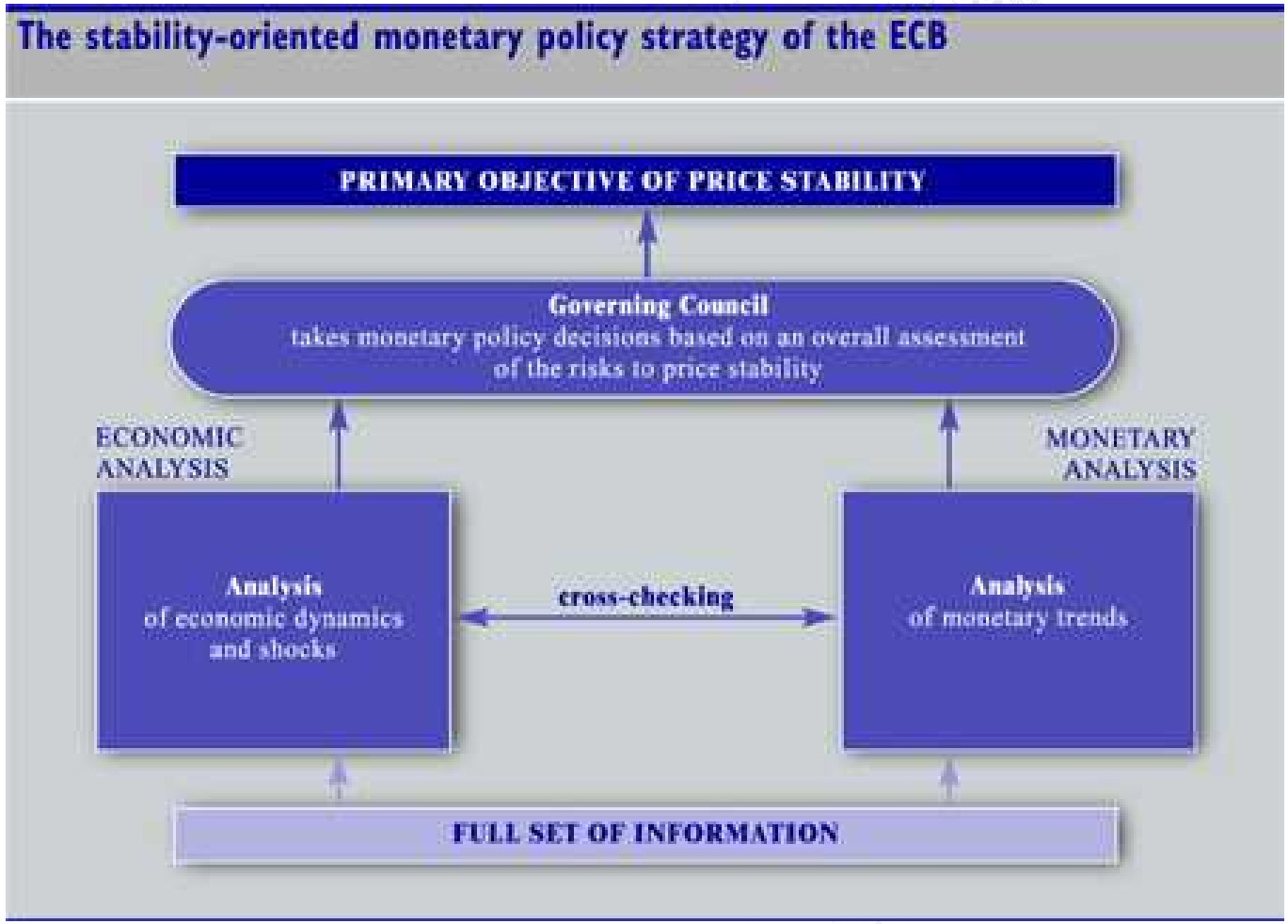
Type of Intermediary	Value of Assets ($ billions, end of year) 1980	1990	2000	2008
Depository institutions (banks)				
Commercial banks	1,481	3,334	6,469	12,272
Savings and loan associations and mutual savings banks	792	1,365	1,218	1,518
Credit unions	67	215	441	801
Contractual savings institutions				
Life insurance companies	464	1,367	3,136	4,798
Fire and casualty insurance companies	182	533	862	1,337
Pension funds (private)	504	1,629	4,355	5,193
State and local government retirement funds	197	737	2,293	2,730
Investment intermediaries				
Finance companies	205	610	1,140	1,910
Mutual funds	70	654	4,435	6,588
Money market mutual funds	76	498	1,812	3,376

Source: Federal Reserve Flow of Funds Accounts: www.federalreserve.gov/releases/Z1/.

Primary Assets and Liabilities of Financial Intermediaries

Type of Intermediary	Primary Liabilities (Sources of Funds)	Primary Assets (Uses of Funds)
Depository institutions (banks)		
Commercial banks	Deposits	Business and consumer loans, mortgages, U.S. government securities and municipal bonds
Savings and loan associations	Deposits	Mortgages
Mutual savings banks	Deposits	Mortgages
Credit unions	Deposits	Consumer loans
Contractual savings institutions		
Life insurance companies	Premiums from policies	Corporate bonds and mortgages
Fire and casualty insurance companies	Premiums from policies	Municipal bonds, corporate bonds and stock, U.S. government securities
Pension funds, government retirement funds	Employer and employee contributions	Corporate bonds and stock
Investment intermediaries		
Finance companies	Commercial paper, stocks, bonds	Consumer and business loans
Mutual funds	Shares	Stocks, bonds
Money market mutual funds	Shares	Money market instruments

EZB-Strategie: Zweisäulenstrategie



EZB-Strategie: Zweisäulenstrategie

- Economic analysis (http://www.ecb.int/mopo/strategy/ecana/html/index.en.html):

  "The economic analysis assesses the short to medium-term determinants of price developments. The focus is on real activity and financial conditions in the economy. The economic analysis takes account of the fact that price developments over those horizons are influenced largely by the interplay of supply and demand in the goods, services and factor markets."

EZB-Strategie: Zweisäulenstrategie

- Monetary analysis (http://www.ecb.int/mopo/strategy/ecana/html/index.en.html):

  "The monetary analysis focuses on a longer-term horizon than the economic analysis. It exploits the long-run link between money and prices. The monetary analysis mainly serves as a means of cross-checking, from a medium to long-term perspective, the short to medium-term indications for monetary policy coming from the economic analysis. ."

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EZB-Strategie: Zweisäulenstrategie

Box 3.7 The ECB's reference value for monetary growth

The prominent role for money in the ECB's strategy is signalled by the announcement of a reference value for the growth of the broad monetary aggregate M3. The choice of M3 is based on the evidence, supported by several empirical studies, that this aggregate possesses all the desired properties: in particular, it has a stable money demand relationship and leading indicator properties for future price developments in the euro area. The reference value for the growth of M3 has been derived so as to be consistent with the achievement of price stability. Substantial or prolonged deviations of monetary growth from the reference value would, under normal circumstances, signal risks to price stability over the medium term.

The derivation of the reference value is based on the relationship between (changes in) monetary growth (ΔM), inflation (ΔP), real GDP growth (ΔYR) and velocity (ΔV). According to this identity, which is widely known as the "quantity equation", the change in money in an economy equals the change in nominal transactions (approximated by the change in real GDP plus the change in inflation) minus the change in velocity. The latter variable can be defined as the speed with which money is transferred between different money holders and thus determines how much money is required to service a particular level of nominal transactions.

$$\Delta M = \Delta YR + \Delta P - \Delta V$$

Quelle: The monetary policy of the ECB (2004)

Quantitätheorie: Langfristbeziehung zwischen Geldmenge und Preisen

- Quantitätstheorie:

$$MV = PY$$

  - M: Geldmenge
  - P: Preisniveau
  - Y: Reales Einkommen
  - V: Geldumlaufgeschwindigkeit
- Es besteht eine inverse Beziehung zwischen V und der Bereitschaft, Geld zu halten (Geldnachfrage)

Definition of Euro Area Monetary Aggregates

Definitions of euro area monetary aggregates

	M1	M2	M3
Currency in circulation	X	X	X
Overnight deposits	X	X	X
Deposits with an agreed maturity up to 2 years		X	X
Deposits redeemable at a period of notice up to 3 months		X	X
Repurchase agreements			X
Money market fund (MMF) shares/units			X
Debt securities up to 2 years			X

Der Geldschöpfungsprozeß

TABLE 1 **Creation of Deposits (assuming 10% reserve requirement and a $100 increase in reserves)**

Bank	Increase in Deposits ($)	Increase in Loans ($)	Increase in Reserves ($)
First National	0.00	100.00	0.00
A	100.00	90.00	10.00
B	90.00	81.00	9.00
C	81.00	72.90	8.10
D	72.90	65.61	7.29
E	65.61	59.05	6.56
F	59.05	53.14	5.91
.	.	.	.
.	.	.	.
.	.	.	.
Total for all banks	1,000.00	1,000.00	100.00