

# ECON4335 The economics of banking

## Lecture 1: Introduction

# This lecture

- A. Some practical information
- B. Some basic concepts and facts
- C. The first model

Slides and lecture notes on the net

# Practical information

- New main text: Allen and Gale
- Lectures and lecture notes necessary
- Freixas and Rochet Chapter on regulation – Compendium
- Vale: Afternoon lectures
- Exam in two parts:
  - Highly structured model related questions, interpretation, derivation
  - Open question where formal derivations are not expected
- Seminar on current topics?

# This lecture

1. What is a bank? What do banks do?
2. The role of banks in the financial system
3. Banks versus securities markets
4. Money, liquidity and the relation between banks and central banks

*Allen and Santomero's article*

# What do banks do?

- Take deposits from general public (legal def.)
- Make loans
- Provide payment services
  
- Deposits short-term, often on demand
- Loans more long-term
- Need to keep liquid reserves

# Balance sheet. Norwegian banks 2008.

Percent of total assets, branches of foreign banks not included.

Assets		Liabilities and equity	
Cash and deposits	11.6	Deposits from	
Securities (current)	11.6	- customers	38.5
Loans to non-financials	59.4	- domestic financials	4.5
Other lending	11.3	- foreign financials	12.9
Loan loss provisions	-0.3	Norges Bank	1.8
Fixed assets and others	6.4	Other deposits / loans	4.5
		Certificates	5.4
		Bond debt	19.0
		Other liabilities	5.5
		Subordinated loans	2.5
		Equity	5.4
Total assets	100	Total	100

Source: Norges Bank Financial Stability Report 2 2009, Appendix Table 6

# What do central banks do?

1. Issue currency (coins and notes)
2. Bank for the banks (central banking proper)
3. (Bank for the government)
  - A. Monetary stability (macro stability)
  - B. Financial stability
  - C. (Low cost, high return for government)

# Central banking proper

- Take deposits from banks
- Lend to banks (usually against collateral)
- Settling transactions between banks

Transactions between banks in NOK are settled by moving money between their folio accounts in Norges Bank

Setting short-run interest rates



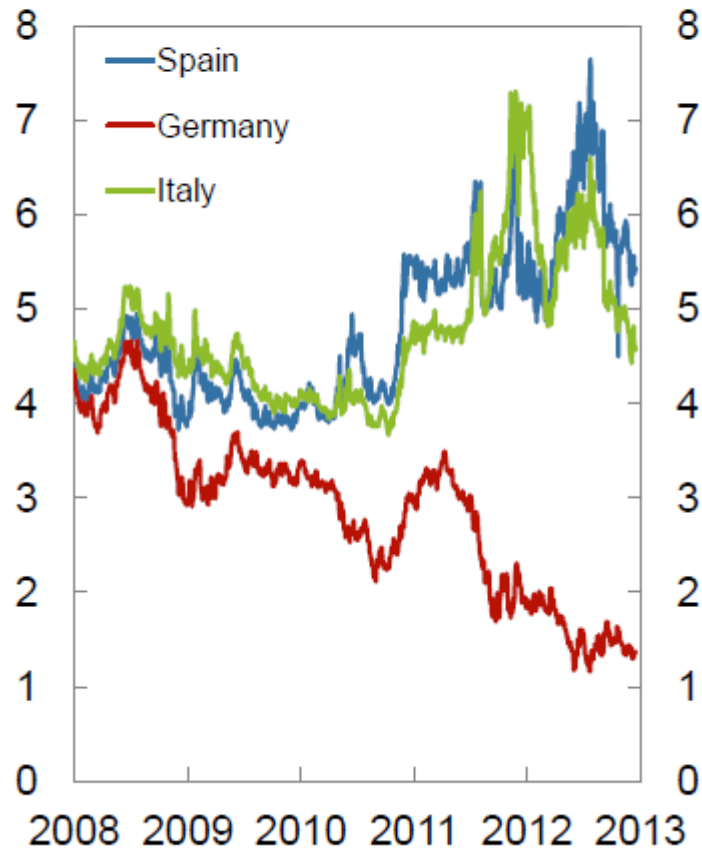
# Banks create money

- Deposits are commonly accepted means of payment
- Loans create deposits
- A new loan can always be financed by the deposits it creates if banks work together
- Deposits in banks may increase demand for deposits in central bank
- CB has to accommodate to keep market rate at policy rate

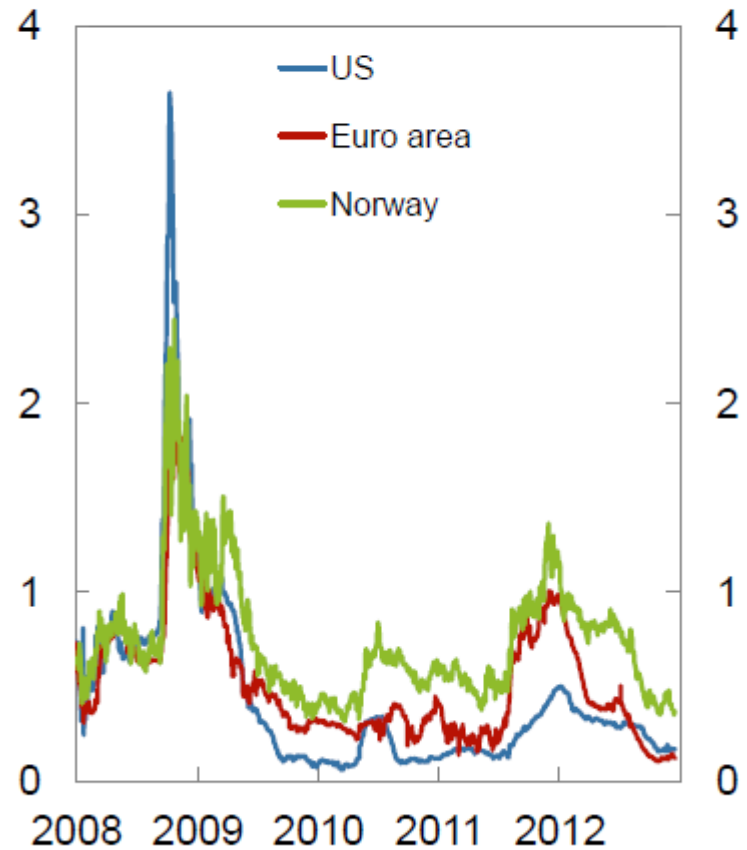
# Preparing for withdrawals

1. Deposits at central bank
2. Deposits and credit lines in other banks
3. Bonds and bills (marketable, accepted by CB for repo and as collateral)

Yields on 10-year government bonds  
Percent



3-month money market premiums  
Percentage points



Sources: Bloomberg, Thomson Reuters and Norges Bank

# Reasons for intermediation

Economies of scale and scope in lending

- Transaction costs
- Costs of information gathering
- Repackaging, diversification
- Monitoring services

Dealing with adverse selection, moral hazard,  
excessive optimism, lack of self-control

# What makes banks different from other intermediaries?

- Maturity transformation
  - Borrowing short, lending long
  - Potential for runs on deposits
- Creates money, dominates payment system
- Households, firms have most of their *liquid* assets there

Main reasons for

- Bank regulation and supervision
- Deposit insurance
- Bank rescues

# What makes banks different from other intermediaries?

- Bank deposits major part of money supply
- Crucial in the transmission of monetary policy to the real economy
- Crucial for the financing of small and medium sized firms
  - Information contained in the customer relationship

# **BANKS VERSUS SECURITIES MARKETS**

## Distribution of household's financial assets (latest available year and including NPISH)

Assets	Norway	Germany	Japan	USA
Currency and deposits	34	36	49	15
Securities other than shares	1	7	4	9
Loans	3	0	0	2
Shares and other equity	13	25	18	44
Insurance technical reserves	36	31	25	30
Other accounts receivable	13	1	3	0
Total assets	100	100	100	100

Source: OECD.stat : financial accounts



# Financing of non-financial corporations

(latest year available, non-consolidated figures)

Liability	Norway	Germany	Japan	USA
Securities other than shares	5	3	5	11
Loans	45	32	26	20
Shares and other equity	35	51	52	54
Insurance technical reserves	0	5	0	0
Other accounts payable	15	10	16	15
Total liability	100	100	100	100

Source: OECD.stat , Financial accounts

# Direct versus indirect financing: International differences

- Households in US and UK invest more in market, less in bank deposits than households in Japan, Germany and France
- Firms in US and UK use the bond market more than firms in Europe and Japan
- Trend towards less reliance on banks and more on securities markets
- Households bear more risk in US and UK (or do they?)

*Allen and Santomero (2001)*

# Allen and Santomero's explanation

- Banks in Japan, Germany and France face less competition from securities markets
- They are able to run large surpluses in good times which they can draw on in bad times
- Consumers get shielded from variations in return through this intertemporal smoothing
- In US and UK this is not possible because consumers quickly leave the banks for alternatives

Why is competition from securities markets stronger in US and UK?

# Other explanations

- Banks have been more regulated and less efficient in US?
- Regulators have allowed a parallel banking system to grow in US
  - Money market funds, Credit card companies, Securitization

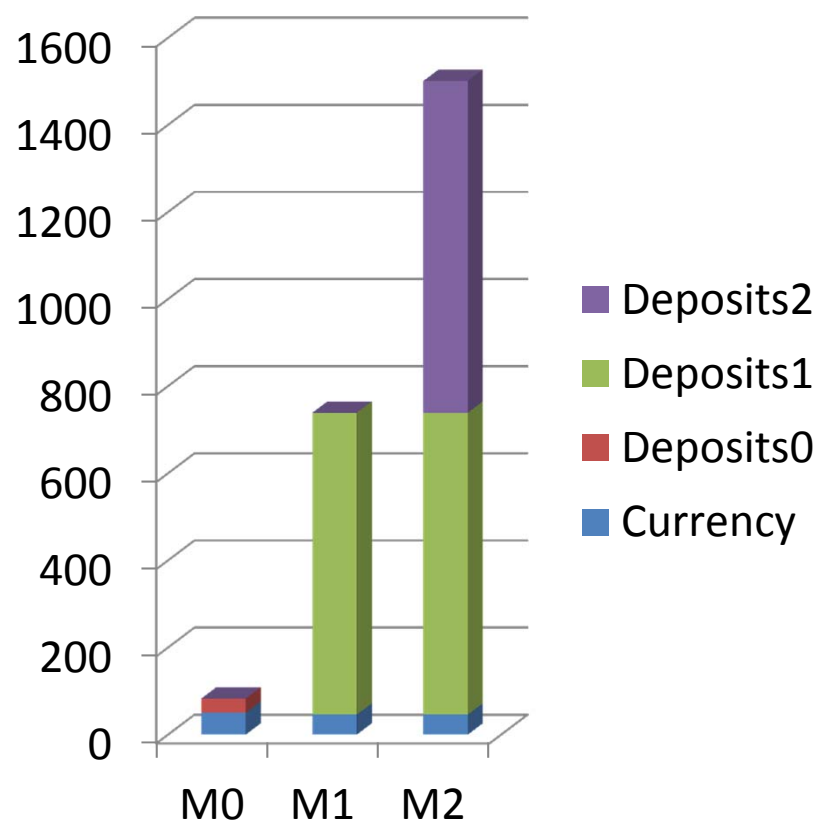
What is best for the economy, more bank financing or more equity financing?

US versus Germany

- Can a higher share of debt improve the performance of managers?
- Are banks better than shareholders at monitoring the performance of management?
- Corporate governance

*Econ 4245 Economics of the Firm*

# Money supply in Norway Nov 2009. Bn NOK



Currency in banks	7
Currency outside banks	43
Deposits0 in Norges Bank	33
Deposits1 on transaction accounts	693
Deposits2 on other accounts etc	762

# Financial assets and liabilities of banks 31/12 2008

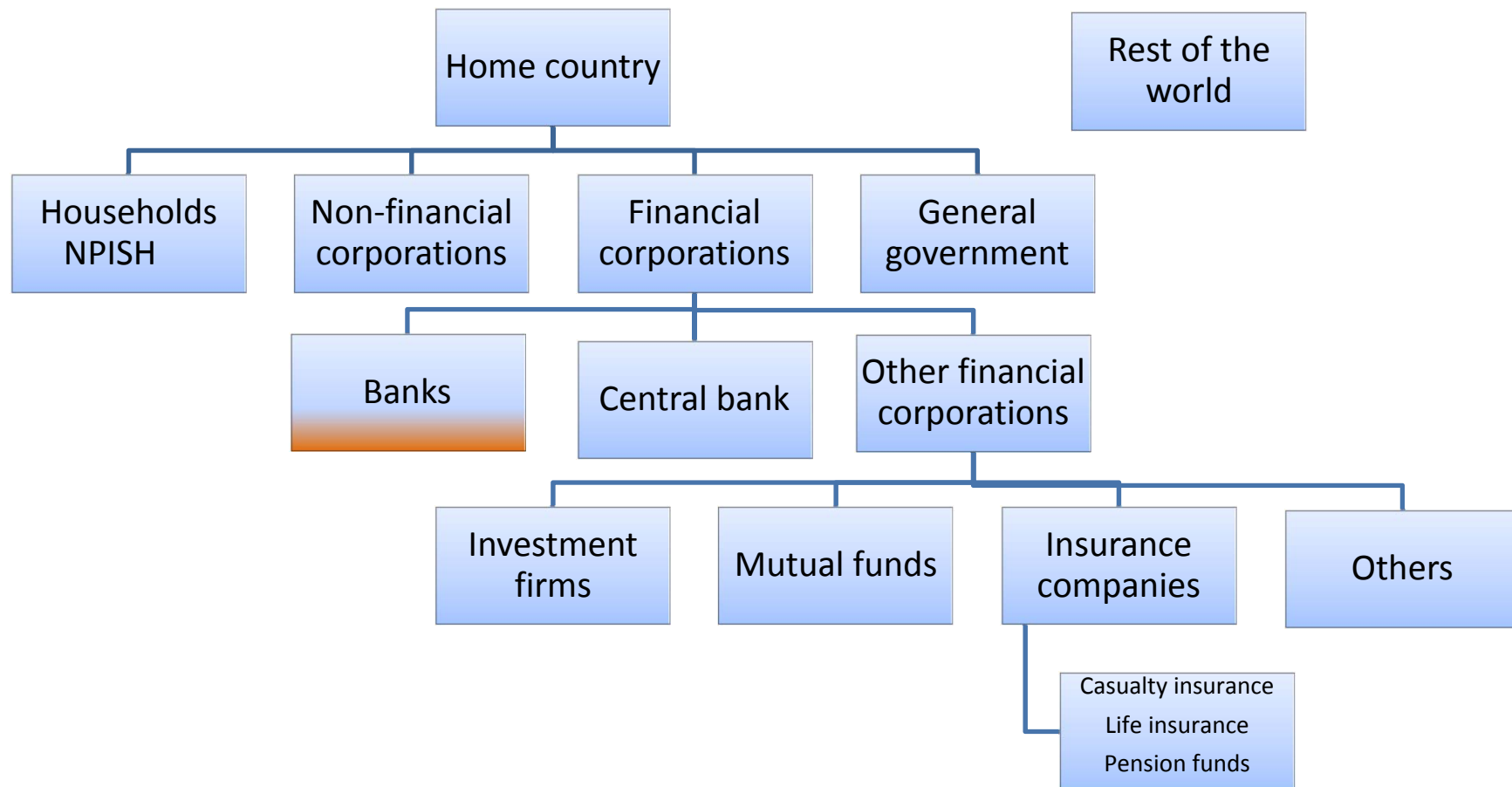
## Including Norwegian branches of foreign banks

Instruments	Assets bn NOK	Liabilities bn NOK
Currency	6	
Deposits / Loans in Norges Bank	101	136
Deposits in other banks	461	
Deposits from Norwegian customers		1 464
Deposits from Norwegian banks		51
Deposits from abroad		822
Loans	2 629	138
Bonds and certificates	338	836
Other claims / debt	255	213
Shares etc	51	88
Total	3 842	3 750

Source: Statistics Norway, Financial accounts

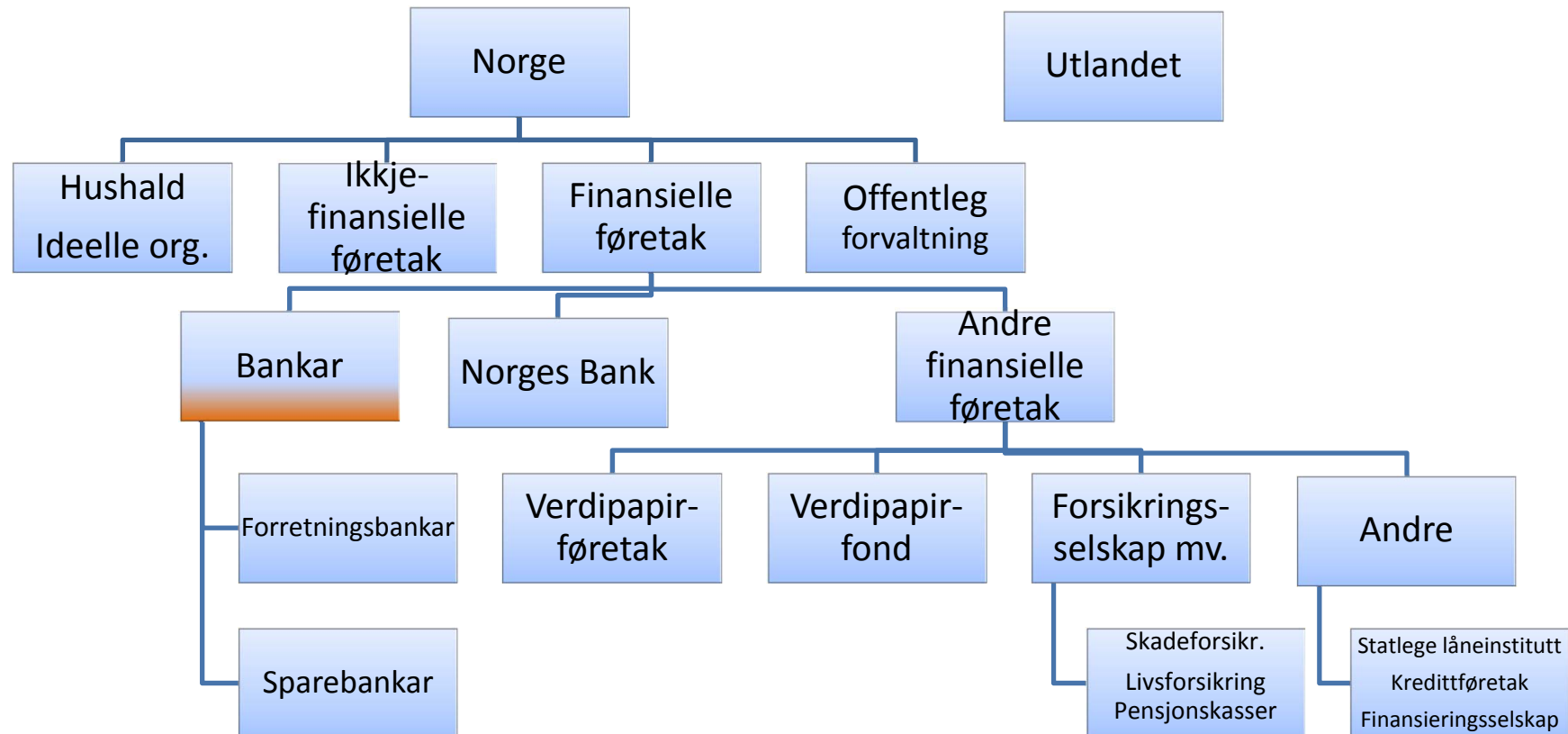
# Institutional sectors

Classification by legal status





# Institusjonelle sektorar



# Financial intermediary

Financial firms that borrow funds from savers or from other financial firms and invest them in loans or securities

Mainly investing in loans:

- Banks
- Finance companies
- Credit companies
- Government lenders

Mainly investing in securities:

- Investment firms
- Pension funds
- Insurance companies
- Mutual funds

# Investment banking versus deposit banking

- Investment banks
  - Prepare and underwrite issues of securities
  - Hold securities on their own account
  - Are brokers and dealers in securities
  - Do not take deposits
- Are not banks, but a subspecies of investment firms
- Universal bank = Bank and investment bank in one firm
- Financial conglomerate

Different countries require different degrees of separation between deposit banking and other activities

# “Shadow banking”

Avoiding the costs of regulation

Example:

- US Money Market Funds
- Securitization
- Hedge funds

# Financial assets and liabilities of Norwegian households

Assets	1995	2008
Currency and deposits	40	34
Bonds and certificates	1	1
Equity	13	13
Insurance reserves	36	36
Other financial assets	11	16
Total financial assets	100	100
Liabilities		
Loans from banks	53	61
Loans from government lenders	19	8
Loans from others	17	22
Other liabilities	11	9
Total liabilities	100	100

Source: Statistics Norway, Financial Accounts

# Financing of Norwegian non-financial corporations. Per cent

Instrument	Gross		Consolidated	
	1995	2008	1995	2008
Bonds and certificates	5	5	7	6
Loans	38	45	38	45
from banks	11	15	16	22
from other financials	4	3	6	5
from other non-financials	13	14	0	0
from abroad	7	11	11	16
Other debts	24	16	15	13
Equity	33	34	40	36
Total	100	100	100	100

Source: Statistics Norway