

Commercial Banks and Banking: An Introduction

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What is a Bank

- *“Bank is a place that will lend you money if you can prove that you don't need it.”*

Bob Hope

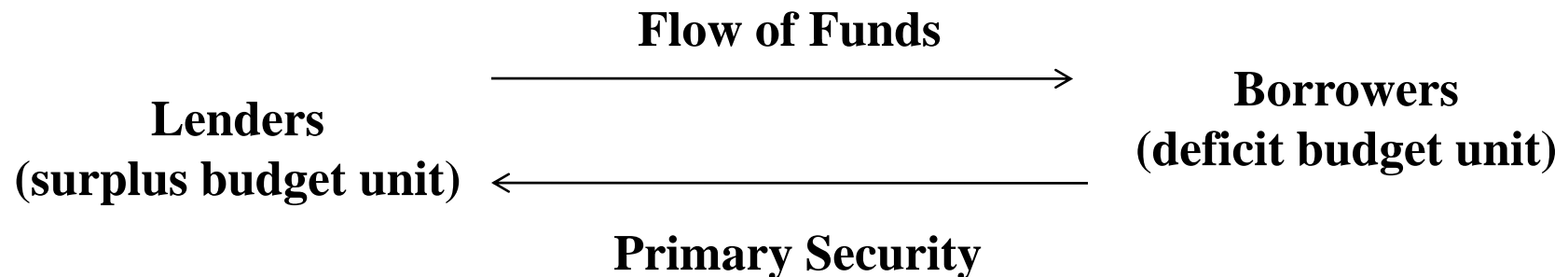
- Does a bank only lend and borrow ?
- A multitude of products and services.
- Public Trust.
- Caters to Individuals, Businesses, & Govt.
- Many types – Commercial, Cooperative, Investment, Wholesale, Universal, Virtual etc.

Why Study Banks?

- Banks an integral part of modern life
- Banks in national economies
- Simple functions of banks
 - Payments
 - Intermediation: From deposits to loans
- Regulatory limitations on:
 - Geographic Scope
 - Products and Services
- Banks and economic activity

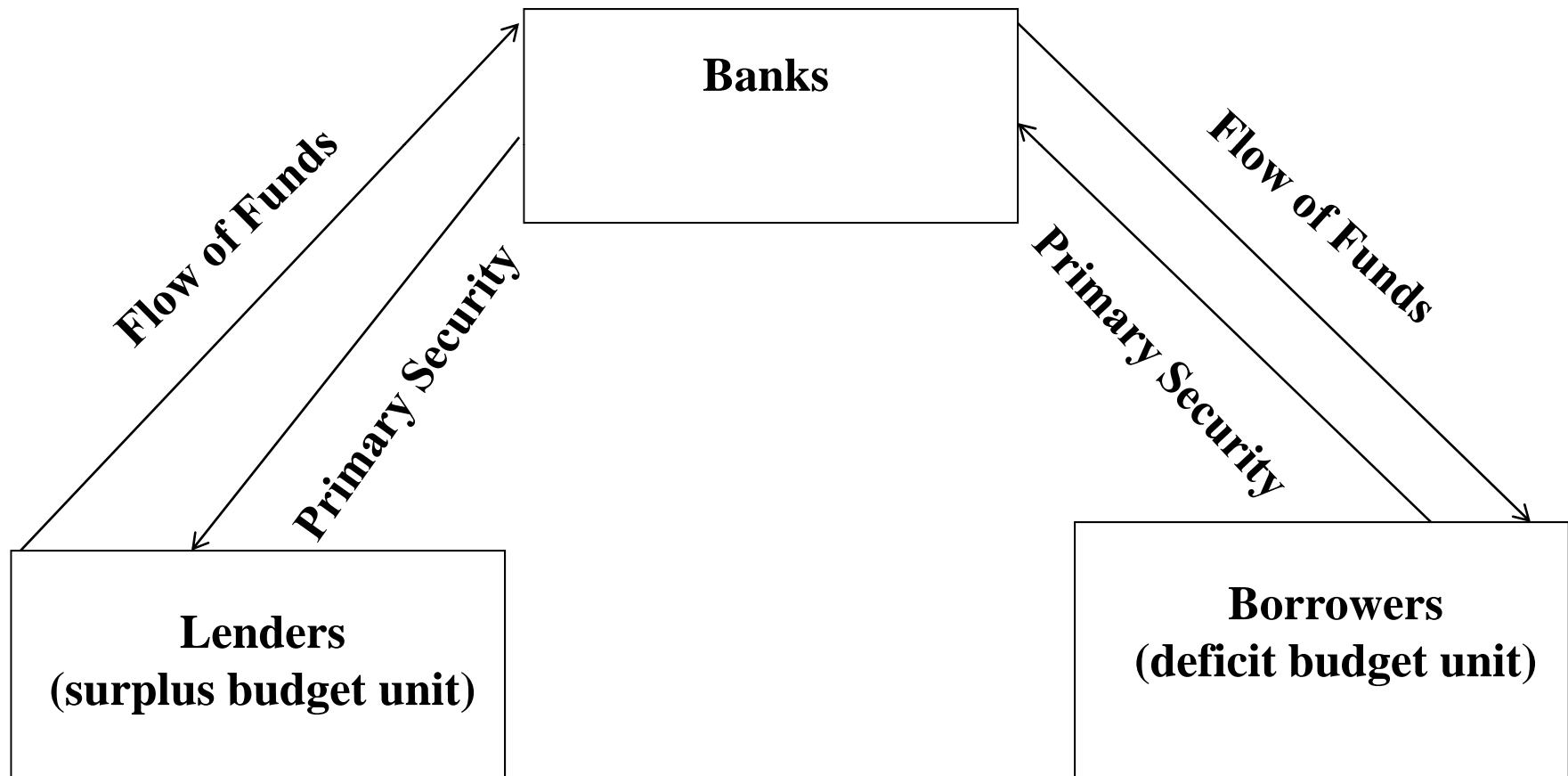
Intermediation Explained

- Intermediation as the traditional and most important role of banks
- Direct finance:



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- Intermediation (Indirect Finance)



Intermediation Explained

- Intermediation as reducing information costs of lenders and borrowers
- Bank intermediation as substituting default risk of borrower with default risk of the bank for lenders (depositors)
- This process is called “qualitative asset transformation”

What Makes Banks Special?

- Banks and Other Business Firms
 - Both finance themselves through equity and borrowed funds
 - Both invest funds raised in income generating assets
 - Surplus over expenses paid to providers of capital
- Too many similarities on the surface. But are they really similar??

Typical Balance Sheets

Assets	Manufacturing Firms	Banks
	(% of Total Assets)	
Net Fixed Assets	50%-60%	3%-5%
Investments	10%-20%	25%-30%
Current Assets	20%-40%	-
Loans & Advances	(incl. in Current Assets)	40%-50%
Reserve Balances with Central Bank	-	3%-5%
Inter-Bank Balances	-	5%-10%

Typical Balance Sheets (contd..)

Liabilities	Manufacturing Firms	Banks
	(% of Total Assets)	
Net Worth	40%-50%	5%-10%
Long-Term Borrowed Funds	30%-40%	0%-5%
Short-Term Borrowed Funds & Current Liabilities	10%-25%	0%-10%
Deposits from Customers	-	75%-90%

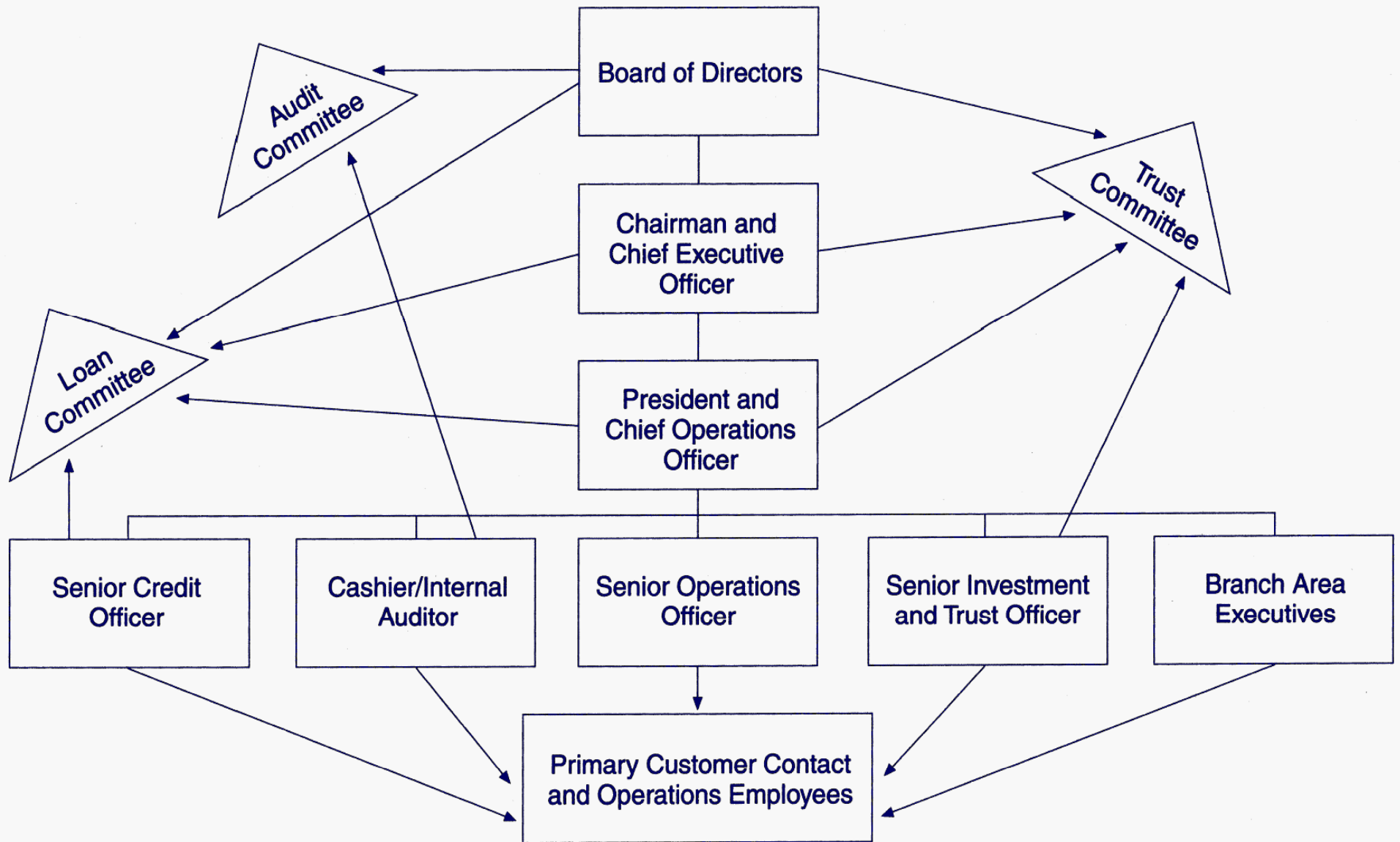
Some Comparisons

- Financial Assets as Major Component of Bank Assets
 - Loans as Primary Assets
- High Financial Leverage
 - Low Net Worth
- Deposits as Primary Source of Bank Funds
 - Typically interest cost of deposits is much lower than cost of borrowed funds for manufacturing firms
- Inter-Bank Balances and Reserve Balances

Some Comparisons (contd..)

- Much higher financial risks of banks relative to other firms
- Business of Banking
 - Taking up a variety of financial risks to make profits
- Reducing Financial Risks through reduction of leverage
 - Reduction of Profitability
- Off-Balance Sheet Transactions of Banks
- Way Out of this dilemma: Risk Management?

Organization Structure of a Typical Bank



Defining a Bank

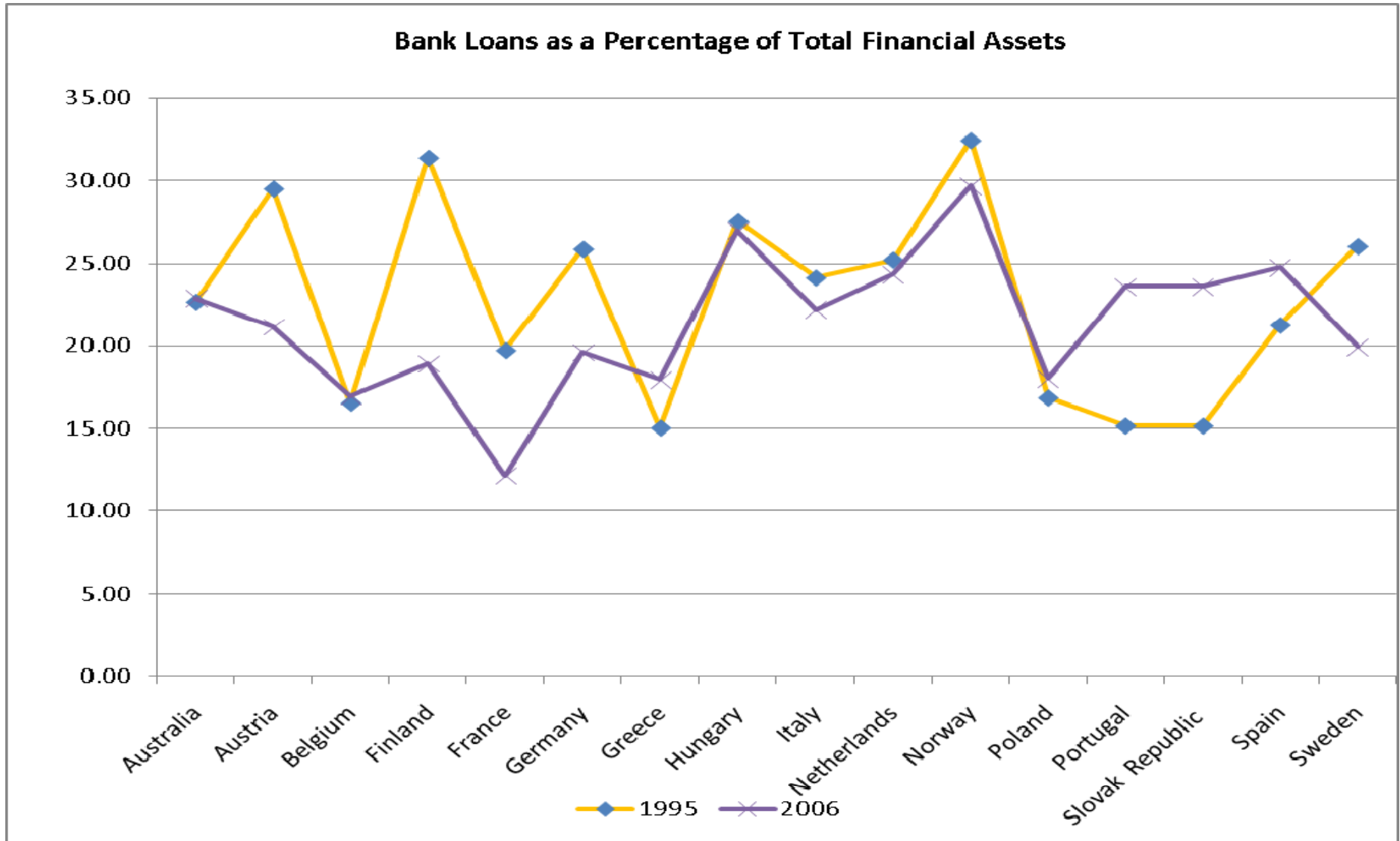
- Banks are financial institutions that accept deposits and make loans
- Commercial banks defined
 - “Banks are financial institutions that are *privileged by the laws of a nation* to have the power to issue deposits that are payable on demand *and* which deposits are also *generally accepted by economic agents in final settlement of transactions* between them.”
- Emphasis on legislation in setting boundaries between banks and other financial firms.

Banks in National Economies - Size does Matter!

	Number of Banks	Assets Size			
		< \$100 M	\$100M - \$1B	\$1B - \$10B	> \$10B
1995	10,242	7,123 (69.55%)	2,741 (26.76%)	331 (3.23%)	63 (0.62%)
1997	9,451	6,147 (65.04%)	2,900 (30.68%)	331 (3.50%)	73 (0.77%)
1999	8,580	5,157 (60.10%)	3,029 (35.30%)	318 (3.71%)	76 (0.89%)
2001	8,080	4,486 (55.52%)	3,194 (39.53%)	320 (3.96%)	80 (0.99%)
2003	7,769	3,911 50.34%	3,434 44.20%	341 4.39%	83 1.07%
2004	7,630	3,655 (47.90%)	3,530 (46.26%)	360 (4.72%)	85 (1.11%)

	Total Assets	Asset Size			
		< \$100 M	\$100M - \$1B	\$1B - \$10B	> \$10B
1995	\$4,116	\$310 (7.54%)	\$668 (16.22%)	\$1,077 (26.17%)	\$2,061 (50.07%)
1997	\$4,642	\$277 (5.97%)	\$711 (15.32%)	\$995 (21.45%)	\$2,658 (57.27%)
1999	\$5,735	\$243 (4.23%)	\$755 (13.16%)	\$915 (15.96%)	\$3,823 (66.65%)
2001	\$6,569	\$222 (3.37%)	\$819 (12.47%)	\$915 (13.93%)	\$4,613 (70.22%)
2003	\$7,603	\$201 (2.64%)	\$910 (11.97%)	\$947 (12.46%)	\$5,545 (72.93%)
2004	\$8,413	\$189 (2.25%)	\$953 (11.33%)	\$973 (11.57%)	\$6,297 (74.85%)

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Share of Loans in Bank Asset Portfolios

Country	1995	2001	2006
Australia	67.93%	69.94%	71.73%
Austria	60.87%	55.18%	49.76%
Belgium	36.07%	36.55%	39.15%
Finland	60.37%	57.34%	59.38%
France	44.12%	40.06%	35.04%
Germany	59.94%	53.79%	49.45%
Greece	38.49%	55.98%	54.17%
Hungary	55.35%	60.66%	62.18%
Italy	65.07%	69.91%	68.80%
Mexico	38.05%	29.49%	28.39%
Netherlands	57.71%	58.44%	56.11%
Norway	74.57%	77.73%	73.77%
Poland	36.65%	49.09%	53.56%
Portugal	52.49%	64.06%	62.42%
Spain	57.65%	63.55%	69.35%
Sweden	68.88%	64.01%	62.02%

Comparative Trends in Composition of Banking System Liabilities

Country	Financial Claims					
	Deposits			Borrowed Funds		
	1995	2001	2006	1995	2001	2006
Austria	73.98%	70.45%	66.89%	18.18%	21.66%	24.92%
Belgium	76.82%	78.68%	85.62%	16.78%	10.81%	4.64%
Finland	53.93%	58.43%	44.93%	29.85%	15.64%	28.85%
France	43.63%	39.28%	47.84%	13.69%	11.53%	15.93%
Germany	71.13%	67.76%	67.96%	20.50%	23.19%	22.69%
Greece	77.52%	77.44%	67.61%	5.55%	4.17%	1.73%
Hungary	53.62%	66.24%	57.85%	24.60%	17.69%	9.95%
Italy	72.44%	57.28%	52.42%	7.24%	19.71%	17.95%
Mexico	52.39%	41.59%	26.61%	8.53%	25.32%	54.63%
Netherlands	66.87%	68.31%	67.63%	12.75%	17.05%	19.72%
Norway	76.65%	64.42%	62.26%	9.61%	19.68%	20.51%
Poland	70.59%	73.07%	60.66%	3.62%	4.59%	4.23%
Portugal	78.67%	72.38%	71.92%	7.59%	8.39%	4.82%
Spain	85.72%	78.16%	73.79%	2.70%	5.00%	14.54%
Sweden	48.73%	56.58%	49.82%	40.88%	28.46%	31.71%

Differences across countries- Banking Laws, Extent of Economic Development, Development of Domestic Financial Markets

Roles Played by Banks

- Payments
- Intermediation
- Guarantors
- Risk Management
- Savings/Investment Advisory
- Investment Banking Role
- Agency Role
- Safekeeping/Certification of Value Role
- Public Policy Role

Products & Services by Non-Banks & Banks

- Currency Exchange
- Discounting Commercial Notes
- Making Business Loans
- Offering Savings and Term Deposits
- Offering Demand Deposits. Internet and Plastic Money
- Offering Trust Services

Products & Services by Non-Banks & Banks

- Granting Consumer Loans.
- Financial Advising.
- Managing Cash.
- Equipment Leasing.
- Making Venture Capital Loans.
- Selling Insurance Policies

Growth in Off-Balance Sheet Activities

- Tremendous growth in off-balance sheet activities of banks
 - Notional value of outstanding derivatives transactions by banks – app \$600 trillion (nearly 8 times size of global GDP)
- Driven by search for higher profits
- Typically, fee-based incomes and treasury income
- Circumvention of capital requirements (until late 1990's)

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- Some traditional off-balance sheet transactions of banks
 - Loan Commitments
 - Bank guarantees
 - Standby Letters of Credit
 - Interest Rate Swaps
 - Futures, Forwards & Options
 - Leases
 - Securitization

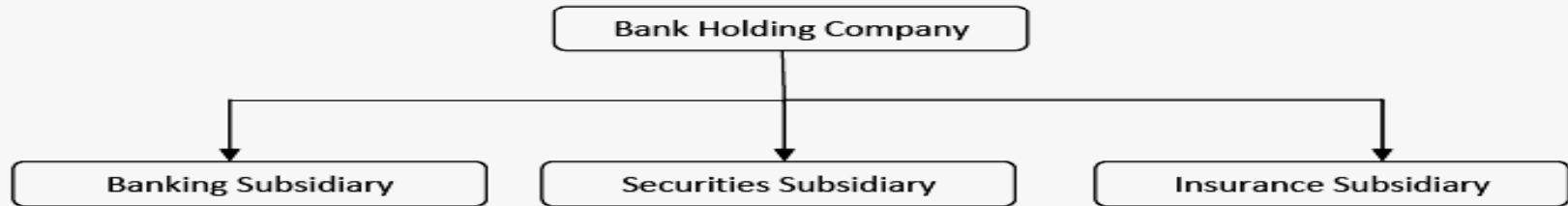
Some Business Models of Banks

- In Terms of Location
 - Global Banks
 - Nationwide Banks
 - Regional Banks
- In Terms of activities
 - Traditional Commercial Banks
 - Specialty Banks
 - Universal Banks
- Both categories not mutually exclusive

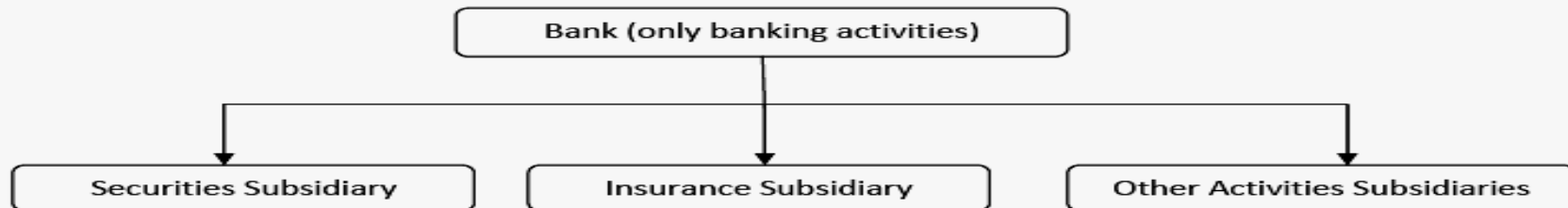
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Banking Structures in US, England and Germany

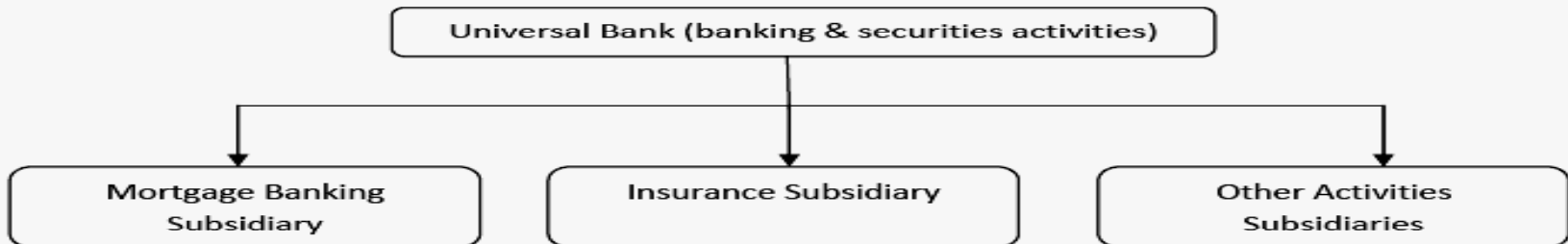
A. US Bank Holding Company Structure



B. UK Banking Company Structure



C. German Universal Bank Structure



Competition and Confusion – What Really is a Bank??

- “Non-Bank” Banks?
 - Securities Firms/ Investment “Banks”
 - Money Market Mutual Fund Checking Services
 - Insurance Companies & Pension Funds
 - Credit Unions (US)
 - Other Financial Services Firms
 - NBFC
 - Savings Associations
 - Electronic Payment Services

Innovations in Banking Services

- Consumer Lending
- Financial Advisory
- Venture Capital Funding
- Cash Management Services
- Insurance Services
- Pension Plan Management
- Securities Brokerage
- and so on.....

Drivers of Competition & Change in Banking

- Growing Consumer Incomes
- Importance of Corporate Treasury Function
- Deregulation/Reregulation
- Financial Innovation
- Securitization
- Globalization
- Advances in Technology

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- Lending as Traditional Income Earning Activity of Banks
- Shifts in Bank Activities and Balance Sheet Changes
- Introduction of a variety of financial instruments on liabilities side
- Increasing share of short-term assets and investments on assets side

Regulation and Banking

- Banks are highly regulated entities
 - High Financial Leverage
 - Payments
- Regulation as setting boundaries to bank activities
- Deposit insurance as a feature of bank regulation
- Minimum Capital Ratios back in fashion among bank regulators

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- Early forms of Bank Regulation
 - Maximum deposit rates
 - Maximum lending rates
 - Minimum lending requirements
 - Minimum legal reserve ratio
 - Maximum exposure ratio
 - Restriction on products and services
- Deregulation & shift towards greater freedom for making portfolio choices
- *The flip-side*: Greater Uncertainty as to Bank Profits and Risks

Competition and Banking

- Higher Competition in Banking
 - Within Banking Sector
 - Between Banking Sector and Other Financial Services Sector
- Outcomes
 - Wider range of services offered by banks
 - Consolidation and M&A activity in banking sector
 - Increasing costs of funds
 - Higher interest sensitivity of cost of funds and income on assets
 - Increased threat of bank failure

Financial Innovation and Banking

- Aspects of Financial Innovation
 - New financial products & financial markets
 - New organizational forms of banking (e.g. universal banking)
 - New operational policies (e.g. sub-prime loans)
 - New delivery mechanisms (e.g. internet banking)

Financial Innovation and Banking

- Drivers of Financial Innovation
 - Search for higher profits
 - Maintaining/ gaining competitive advantage
 - Driven by demand from customers- borrowers and depositors
 - Competition as an driving force
 - Getting around government regulations
 - Aided by technological development