### **Banks**

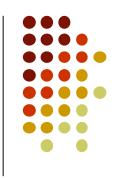
### Chapter 2





- Commercial banking
  - Taking deposits, making loans (wholesale or retail)
  - Money center banks operate in the wholesale market and often fund loans by borrowing
- Investment banking
  - Raising debt and equity for companies; advice on mergers and acquisitions, restructurings, trading, etc

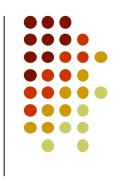
### Structure of Banking in the US



- Large international banks (small number)
- Regional banks (several hundred)
- Small community banks (several thousand)

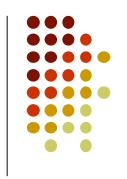
### History of Bank Regulation in US

(page 26-28)



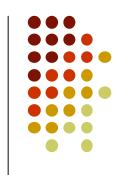
- McFadden Act (1927, 1933)
- Douglas Amendment (1956)
- Bank Holding Companies Act (1970)
- Riegel-Neal Interstate Banking and Branching Efficiency Act (1994)

# **Example of Simple Bank Balance Sheet: End 2023**



Assets		Liabilities	
Cash	5	Deposits	90
Marketable Secur	ities 10	Subord L.T. Debt	5
Loans	80	Equity Capital	5
Fixed Assets	5		
Total	100	Total	100

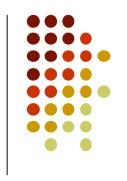




Net Interest Income	3.00
Provision for Loan Losses	(0.80)
Non-Interest Income	0.90
Non-Interest Expense	(2.50)

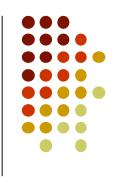
Pre-Tax Operating Income 0.60

#### **Year 2024**



 What happens in year 2024 if it is the same as year 2023 except that provision for loan losses is 4.0 instead of 0.8?

# What if Balance Sheet Had Been More Aggressive?



Assets		Liabilities	
Cash	5	Deposits	94
Marketable Securi	ties 10	Subord L.T. Debt	5
Loans	80	Equity Capital	1
Fixed Assets	5		
Total	100	Total	100





- Regulators set minimum levels for the capital a bank is required to keep
- Equity is an example of Tier 1 capital
- Subordinated long term debt is an example of Tier 2 capital





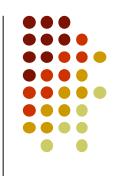
- Most countries have deposit insurance programs that insure depositors against losses up to a certain level
- In the US the FDIC has provided protection for depositors since 1933
- The amount insured was \$2,500 in 1933
- It has been increased several times
- Following the credit crisis it was increased from \$100,000 to \$250,000 in October 2008.
- Why might deposit insurance encourage a bank to take risks?





- Methods of raising debt or equity
  - Public offering
  - Private placement
  - Best efforts
  - Firm commitment

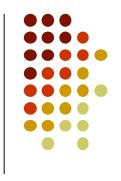
## **Best Efforts vs Firm Commitment** (page 32)



- 50 million shares are to be issued and target price is \$30 per share
- Best efforts would lead to a fee of 30 cents per share; firm commitment leads to bank buying the shares at \$30 per share

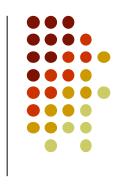
	Best efforts	Firm Commitment
Can sell at \$29	+\$15 million	-\$50 million
Can sell at \$32	+\$15 million	+\$100 million





- Usually on a best efforts basis
- Bank will set offering price sufficiently low that shares are almost certain to be sold
- Often price rises immediately after IPO
- Banks often offer shares only to fund managers and their best customers





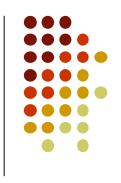
- Individuals and companies bid by indicating the number of shares they want and the price they are prepared to pay
- The price paid is the lowest bid that leads to all the shares being sold

## **Example:** How are 1 million shares allocated in this situation?



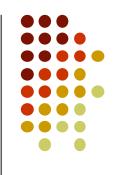
Bidder	Number of Shares	Price
Α	100,000	\$30.00
В	200,000	\$28.00
С	50,000	\$33.00
D	300,000	\$29.00
E	150,000	\$30.50
F	300,000	\$31.50
G	400,000	\$25.00
Н	200,000	\$30.25

## Google's IPO in 2004 (Business Snapshot 2.1)



- A Dutch Auction where Google retained the right to change the number of shares that would be issued and the percentage allocated to each bidder
- Investors who bid \$85 or more obtained
  74.2% of the shares they had bid for





- Exchange-traded vs OTC
- Why do banks trade?
- Brokerage services
  - Full service
  - Discount
  - On line

#### **Potential Conflicts of Interest**



- Bank recommends securities investment bank is trying to sell
- Commercial bank passes confidential information on a client to investment bank
- Stock recommended as a "buy" to please company's management in order to get investment banking business
- Investment bank sell securities for a company so that commercial bank can get rid of a loan

### Accounting (page 40)



- Banking book vs trading book
- Under a new accounting rule (IFRS 9 and an FASB update) lenders have to estimate expected credit losses and subtract them from the amount owed on loans





- Very popular way of handling mortgages during the 2000 to 2007 period
- Banks originated loans and then packaged them into products that were sold to investors
- This frees up funds to make more loans