

# Lecture 13: Banks

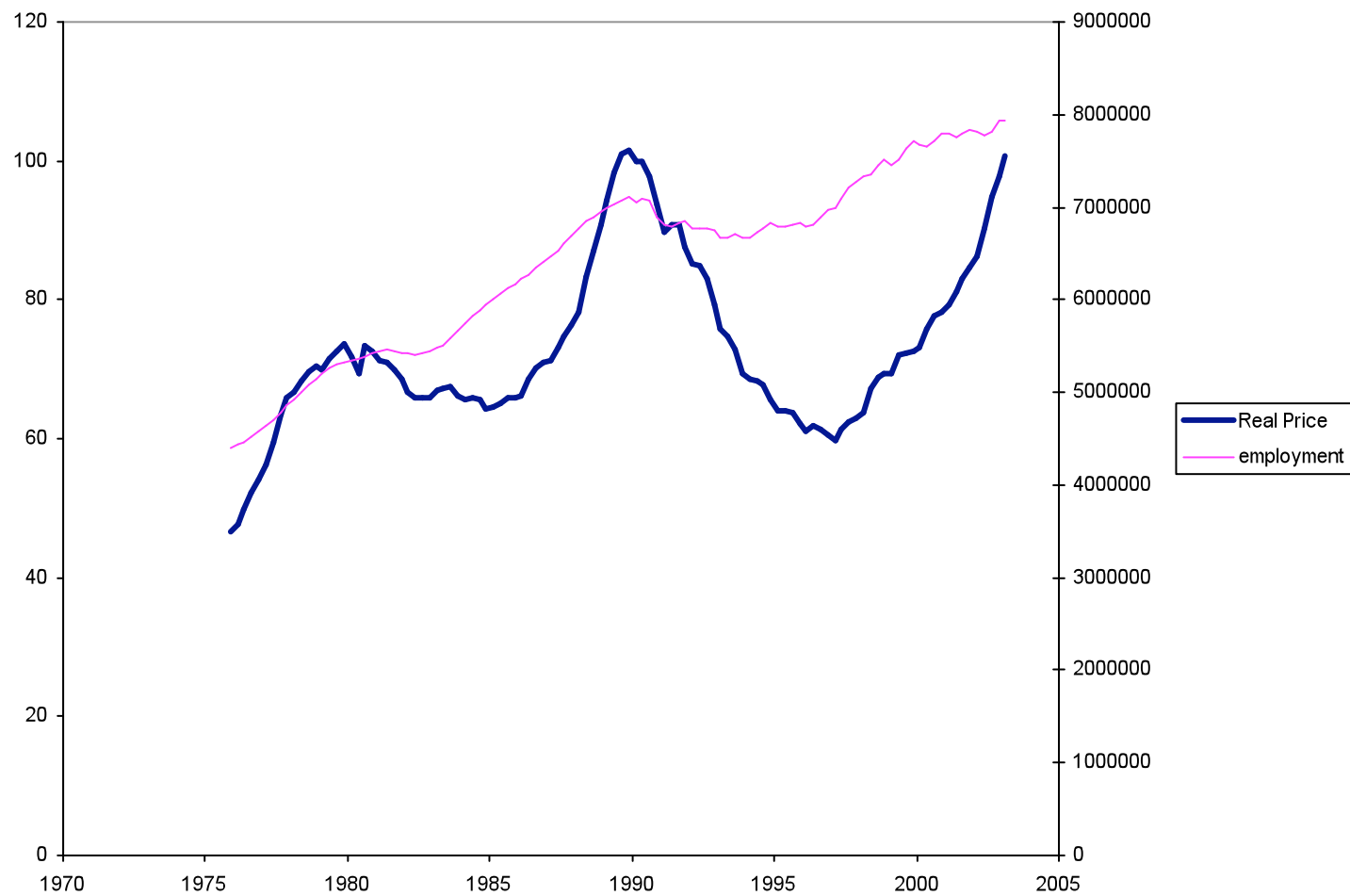
Economics 252, Spring 2008

Prof. Robert Shiller, Yale University

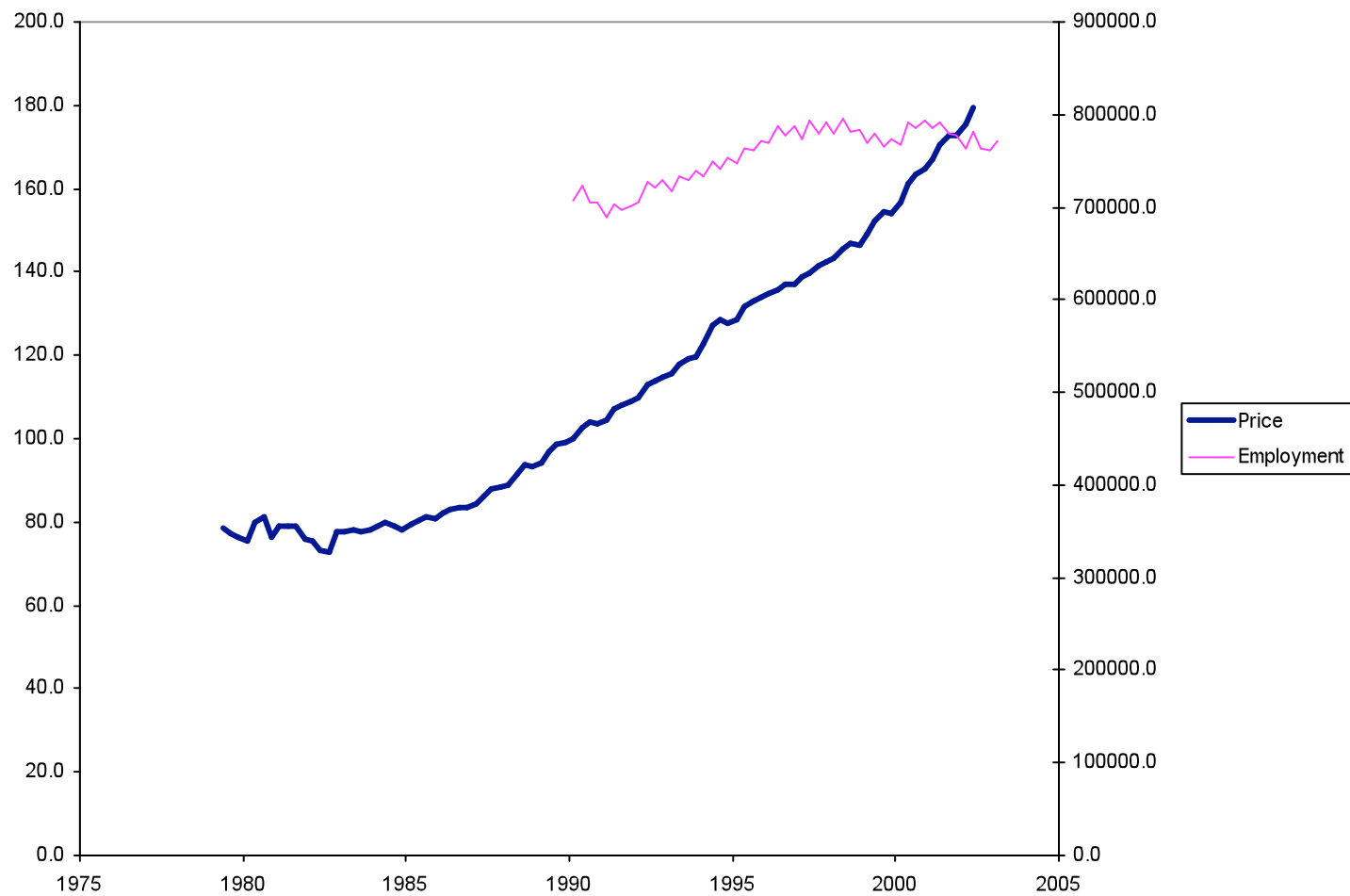
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**Figure 5 Los Angeles Real Home Price Index and Employment**



**Figure 8 Milwaukee Real Home Price Index and Employment**



# Long-Term Expectations

“On average over the next ten years, how much do you expect the value of your home to change each year?” (median answer)

Los Angeles

1988	2003	2006
10%	8%	6%

Milwaukee

1988	2003	2006
4%	5%	6%

# Fears of Being Left Out

“Housing prices are booming. Unless I buy now, I won’t be able to afford a house in the future.”

	Los Angeles			Milwaukee		
	1988	2003	2006	1988	2003	2006
Agree	79.5%	48.8%	52.3%	27.8%	36.4%	43.6%
Disagree	20.5%	51.2%	47.7%	63.6%	73.6%	56.4%

# Perceptions of Excitement

“There has been a good deal of excitement surrounding recent housing price changes. I Sometimes I think I may have been influenced by it.”

	Los Angeles			Milwaukee		
	1988	2003	2006	1988	2003	2006
Yes	54.3%	46.1%	58.0%	21.5%	34.8%	43.1%
No	45.7%	53.9%	32.0%	78.5%	65.2%	56.9%

# “Stock Market is Best Investment”

“The stock market is the best investment for long-term holders, who can just buy and hold through the ups and downs of the market.”

	1996	1999	2000	Oct 2001	-Feb 2002
1. Strongly agree		69%	76%	63%	60%
2. Agree somewhat		25%	20%	34%	31%
3. Neutral		2%	2%	2%	3%
4. Disagree somewhat		2%	1%	1%	5%
5. Strongly disagree		1%	1%	0%	1%

(U. S. Individual investors; numbers for 2000 are mid-year, after peak of market.)

# “Real Estate is Best Investment”

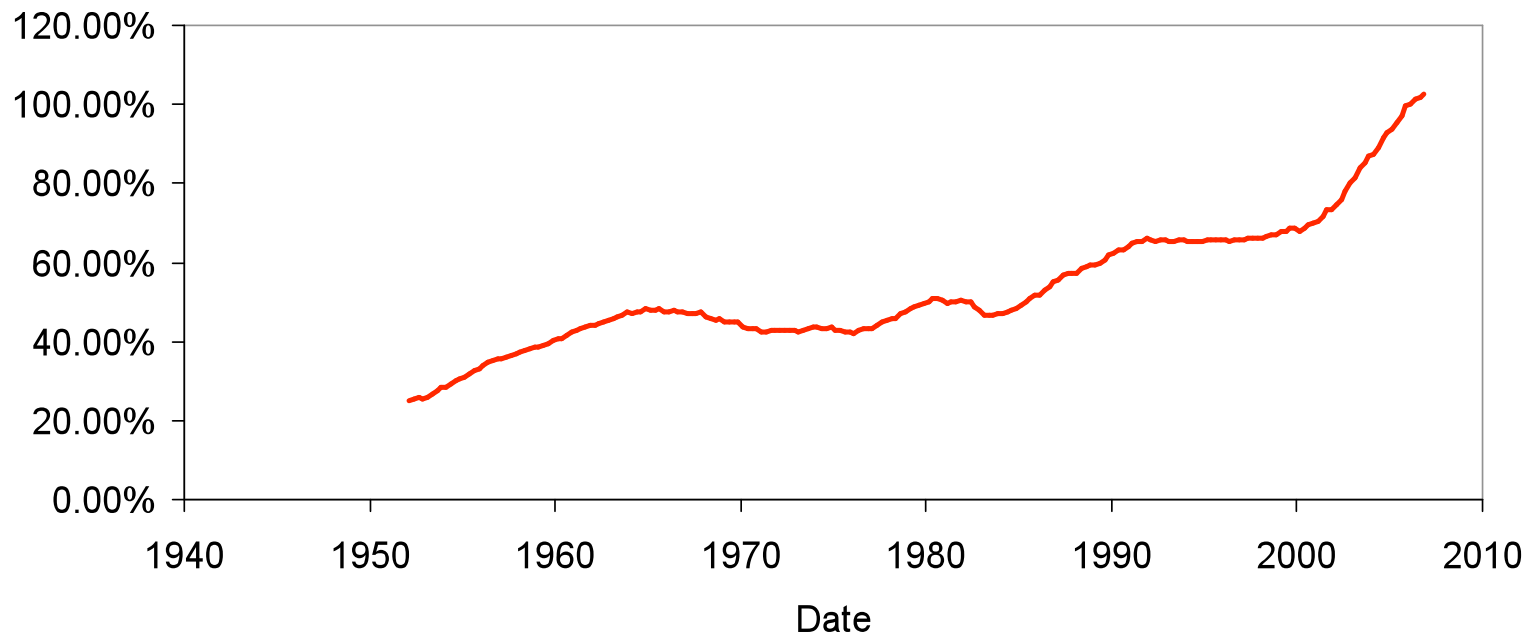
“Real estate is the best investment for long-term holders, who can just buy and hold through the ups and downs of the market.”

	Los Angeles		Milwaukee	
	2003	2006	2003	2006
1. Strongly agree	31.3%	41.3%	53.7%	37.7%
2. Agree somewhat	45.9%	34.9%	33.1%	62.3%
3. Neutral	17.5%	10.3%	0.0%	11.3%
4. Disagree somewhat	6.4%	2.7%	0.0%	9.1%
5. Strongly disagree		0.0%	0.0%	2.1%
				0.0%



# Mortgage Debt Accelerates Uptrend Since 2000

Mortgage Debt/Personal Consumption Expenditure  
1952-2006



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# Mortgage Defaults 2007

- 4.95% of all mortgages are delinquent in 2006-IV
- 1.19% of all mortgages are in foreclosure
- 3.39% of prime ARM loans are delinquent
- 14.4% of subprime ARM loans are delinquent

# What Are Banks?

- Commercial Banks: Principal activity: receives deposits and makes loans.
- Investment banks (US): Purchaser or underwriter of large blocks of securities, reseller of them. The word “bank” is misleading, since according to the Glass Steagall Act 1933 they could not accept deposits.
- Central Banks

# Other Depository Institutions

- Savings Banks: The savings bank movement began in the UK early 19<sup>th</sup> century to help relieve penury. Eleemosynary. Survivors from long ago.
- Saving and Loan Associations (from building society movement UK) Movement that created them emphasized pooling resources to buy homes.
- Credit Unions: Cooperative organizations that accept deposits and make loans to members.

# Adverse Selection Problem with Securities Solved by Banks

- Adverse selection: Issuers of securities have trouble getting a good price for them, since the market as a whole cannot distinguish good from bad companies. So, only the bad companies are willing to issue securities. The market for securities can break down, owners can't sell them.
- Public good nature of information: No one will take trouble to collect information about companies and give it away, can't sell it for a high price either since others will give it away.

# Moral Hazard Problem with Securities Solved by Banks

- Managers or stockholders in a firm have an incentive to take big risks unseen by the bondholders. If bondholders are dispersed, none of them is willing to spend the time to monitor the firm, and none has ability to control management.
- Banks more prominent in economies of less developed countries because information asymmetry is more of a problem there.

# Banks Generate Liquidity

- Because of adverse selection and moral hazard problems, firms often tend to be closely held by people connected to them and knowledgeable about them. But such holdings are inherently illiquid. Banks come to the rescue.
- Banks create liquidity by accepting short-term deposits and making short-term (effectively long term) business loans. Monitor the loans, threaten to call them. Banks specialize in intimate knowledge of businesses in their own community, fostered by their continuing connection with them.

# U.S. S&L Crisis early 1980s

Depository Institutions Deregulation and Monetary Control Act 1980 phased out deposit rate ceilings

Ronald Reagan belief in free markets loosened regulation, but forgot to cancel their insurance

Regulators lax in the past had no incentive to reveal their own past mistakes: they kept quiet and hoped that good fortune would prevent their errors from creating a banking crisis.



# Mexican Crisis 1994-5

- Crisis was preceded by privatization of large Mexican banks in early 1990s.
- Mexican government did not rapidly establish good regulation
- Bank lending boom: loans rose from 10% of GDP in 1988 to 40% by 1994
- Banks thought Mexican government would likely bail them out in trouble. Bad loans extended in a carefree way.
- Colosio assassination, 1994, and rise in US interest rates led to collapse of peso

# Asian Crisis 1997-8

- Thai Baht attack, Korean scandals revealing “crony capitalism”
- International banks, which had been financing the Asian growth boom, suddenly wanted their money back
- Currency collapse, bank failures, stock market collapse, effects spread around world
- Russian bond crisis, Long-Term Capital Management collapse in US 1998
- Systemic risk

# Argentine Crisis 2000-2002

- Dec 10, 1999 Fernando de la Rúa elected on antibribery and end-the-recession campaign, replacing Carlos Menem.
- May 29, 2000 Announces \$1 billion in budget cuts, fiscal austerity. 20,000 people march in protest
- Worries build that Argentina will default on its debt (as, it turned out later, it in fact did)
- December 18, 2000 IMF announces \$40 billion aid package for Argentina
- March 2001, Argentine stock market tumbles

# Argentine Crisis 2000-2002

- July 10, 2001 Domingo Cavallo, economy minister, announces more spending cuts
- Dec 1, 2001 Government announces freeze on bank accounts, to stop a run on the banking system. Angry crowds bang on doors of banks, “thieves, we want our money back!”
- Dec 13, 2001 Unemployment rate soars to 18%. Massive nationwide strikes, riots in streets, de la Rúa (with Cavallo) resigns
- January 2, 2002 Eduardo Duhalde sworn in as fifth president in two weeks, pursues more IMF assistance.

# Argentine Crisis, 2000-2002

- January 11, 2002, Devaluation of peso, two exchange rates, official and market
- Roque Maccarone, head of central bank, resigns
- February 11, 2002. Peso allowed to float, at less than half its 2001 value. Argentines now allowed to cash entire paychecks (no longer limited to 1,500 pesos a month)
- February 26, 2002 Duhalde announces because of sharp drop in tax receipts, cannot pay government workers

# Risk-Based Capital Requirements

- Basel Accord 1988 created framework for capital requirements, G-10 countries
- US Fed created risk based capital requirements, 1989
- Defines Tier 1 capital (core capital) as stockholders' equity plus preferred stock (and other items)
- Defines Tier 2 capital (supplementary capital)

# Basel Capital Requirements

- Four credit risk categories defined, each asset assigned to a class
- Weights are assigned to the categories, 0%, 20%, 50% and 100% to define risk-weighted assets
- Tier 1 capital must be 4% of book value
- Tier 1 + tier 2 capital must be 8% of risk-weighted assets

# Basel II

- Propose that the weights should in the future depend on the riskiness of the borrowers, not just the class of borrowers.
- Three pillars: minimum capital requirements based on risk-based weighting system, review of capital coverage by national regulators, and disclosure obligations
- Signing mid 2004, to come into force December 31, 2006, live date for USA extended to January 2009