

Outline of this Lecture

- I. History of mortgage lending
- II. Commercial Real Estate Vehicles
- III. Residential Real Estate Vehicles
- IV. Real Estate Bubbles and the Origins of the 2000s financial crisis in real estate finance

Mortgage

주택 담보 대출

이자나 은행 상환을 명과
주택을 담보로 가진다

- OED says word mortgage comes from Latin Mortuus vadium (dead pledge), via French which made it into mort gage (gage meaning pledge in French) reached English by 1283
- Verb mortgage means commit property as collateral for a loan. Could mortgage your soul to the devil

History of Lending

- Valerie Hansen, professor of history here at Yale, has been studying Tang Dynasty 618-907 documents regarding the Silk Road trade with the east. Many detailed loan records survive.
- Chinese documents usually prescribed fines, including fines on relatives, for failing to pay

- Iranian documents, in Sogdian language, involve collateral, real estate, goods or slaves, and, pledges to maintain the collateral well.
[Sogdian language went extinct in 9th century, but modern Iranian is related to it]

Ngrams.googlelabs.com

- The word mortgage began to be common in the late 18th century, as part of the democratization of finance
- Property law wasn't so developed as to allow a lively mortgage industry
- Grundbuch invented in Germany that gave clear title, late 19th century

II. Commercial Real Estate Vehicles

Real Estate Partnerships as the Major Example of a DPP

부동산 투자
Real estate investment

- For accredited investors
인가된 투자자
- Real estate limited partnerships represent the most important example of a Direct Participation Program (DPP), a class of investments that also includes oil and gas exploration programs and equipment leasing programs
- “Direct participation:” DPPs are “flow-through vehicles” and investors can deduct program losses on personal taxes
- “Tax shelters” until the Tax Reform Act of 1986: losses used to offset “passive income.” Now, genuine businesses
↳ 1986年 대안자금을 설립한真正的企業
- DPPs escape the corporate profits tax 부동산 기업소득세 DPP는 기업소득세를 면제된다.
- IRS requirements, notably limitation of life

Limited Partnership Structure

- ① General partner runs the business, does not have limited liability
General合伙人具有无限责任
- General partner must own at least 1%
- ② Limited Partners are passive investors, with limited liability, rights to vote, can replace general partner
有限合伙人是被动投资者，具有有限责任，有投票权，可以替换普通合伙人
- General partner or associate usually runs the offering to sell units to investors
- Give additional performance-oriented compensation to the general partner

~~REITs~~ REITs

부동산 투자

조합

- Real Estate Investment Trusts (REITs) were created by US Congress in 1960 to allow small investors access to real estate investments
 ↳ DPP로 자금을 모아 부동산 투자를 가능
- Before 1960, public companies that owned real estate would be considered businesses, for which their earnings would be subject to corporate profits tax. So, until 1960, real estate was typically owned by partnerships, not suitable for small investors
- Today, institutions invest in REITs too
 (예전) 기관

REITs가 농지와 같은 투자를
하는 ETF와 같은 형태로 거래되는 제한

Restrictions on REITs

- 75% of assets must be in real estate or cash
- 75% of income must be from real estate
- 90% of their income must be from real estate, dividend, interest & capital gains
- 95% of income must be paid out → 수익을 남기면 안된다
부당금이 있다면 부록에 적어라
- No more than 30% of income from sale of properties held less than four years
 - These prevent regular businesses from being REITS

The 3 REIT Booms

- First boom: Late 1960s: interest rates rose above deposit rate ceilings at banks, depositors fled to mortgage REITs. But, with recession of 1974, many REITs defaulted. Economic Recovery Tax Act of 1981 favored partnerships.
- Second boom: Tax Reform Act of 1986 eliminated advantages of partnerships, so investors switched to REITs.
- Third boom: Starting 1992, many private real estate companies found it advantageous to go public as REITs, specialized REITs developed.

III. Mortgages

Size of Mortgages USA

미국 부동산 투자

- \$13.2 trillion mortgage debt
- There are 48 million mortgaged homes
- 10.9 million of these mortgages were under water (Corelogic) after the financial crisis when home prices bottomed in 2012

↳ 주택시장 징계로 Mortgage 대출금액 - 주택가격 = 집을 팔기 힘들게 되어

⇒ 거대한 부동산 손실 (Non-real estate) 인 사정으로 집값은 끝장난 모양

⇒ 대부분 사망한 경우 상속 = 부동산으로 차운 상속 = 소비 ↓ = 경제 침체 ↓

Mortgages in US

- In 1920s, 5-year term loans common, balloon payment due in five years, or refinance or sell house
- In 1930s, decline in nominal home prices and rise in unemployment caused massive defaults
- Mortgage lending industry turned to long-term annuities

Federal Housing Administration

연방 주택 관리국

- 1934 → 뉴딜 정부 주택 개혁 프로그램 Roosevelt 정부에 설립
- Required 15-year loans : 2 year → 15 year로 확장
- Insures the lender against loss
- Govt is betting on its own people!
- Recently, FHA in trouble ⇒ 저축·부동산·증권 ⇒ FHA 부채 증가
- Raised insurance premium from 0.5% to 1.5%, which is killing real estate

FHA 부채 증가

대출금 1% 증가

30-Year Mortgage Rate Compared with 10-Year Treasury



DESAFT
가장 일반적인 예금
(b)

Kinds of Mortgages

- Conventional, fixed rate mortgage (amortizing, long term)
- Adjustable rate mortgage (ARM)
- Price level adjusted mortgage (PLAM) payment adjusted to inflation so constant in real terms
- Dual rate mortgages (DRAMs) same as PLAM but interest rate floats
- Shared appreciation mortgages (SAMs)
- First mortgages: on purchase of home
- Home equity loans

Private Mortgage Insurance (PMI)

주택 담보 보험료

- Companies, such as MGIC, insure Fannie & Freddie against losses on their mortgages.
- Both Fannie & Freddie require that mortgagors buy mortgage insurance if down payment is less than 20%.
- Controversy: with recent real estate price increases, LTV has declined below 80% for many homeowners still paying for mortgage insurance.
The PMIs don't notify them. ↗ 주택가격 상승하여 LTV 하락하면 PMI 필요(?) 가정
↳ 호사증이 발급되지 않도록.
이제 자본금이 ...
- PMI Group Inc. declared bankruptcy in 2011.

Collateralized Mortgage Obligations (CMOs)

보증권화된 주택담보증권

- CMOs divide the cash flow of a mortgage pass-through security into a number of tranches in terms of prepayment risk. ⇒ 주택담보대출(Mortgage)은 투자자에게 전달되는 대출은 ⇒ 그 대출은 '보증권'으로 나누어 지분
- Sequential-pay CMOs (first created 1983): First tranche receives first principal payments, after it is paid off the second tranche receives principal payments.
 - ↳ 각각의 보증권에는 각각의 투자가 모두 차별화되어 차기지 지불 X.
예전에 AAA, AA 등급은 같은 대출을 여러 투자 → 차별화됨

Collateralized Debt Obligations (CDOs)

- Hold securities, typically mortgage securities as their assets
- Typically hold subprime mortgages
- CDOs divide the cash flow into a number of tranches in terms of *default* risk
- CDO debt crisis 2007
- Criticism of rating agencies for not downgrading them

* CMO, CDO 가 핫포트의 주인공들.

→ 예상 가격이 예상보다 높으면 주로 판매가 됨.

가격은 두 펀드에서 차이가 있으므로 두 펀드의 차익을 계산하는 경우!

Liar's Loan → 금융위기 촉발
(부동산 거품)

A Fix Begun in Europe

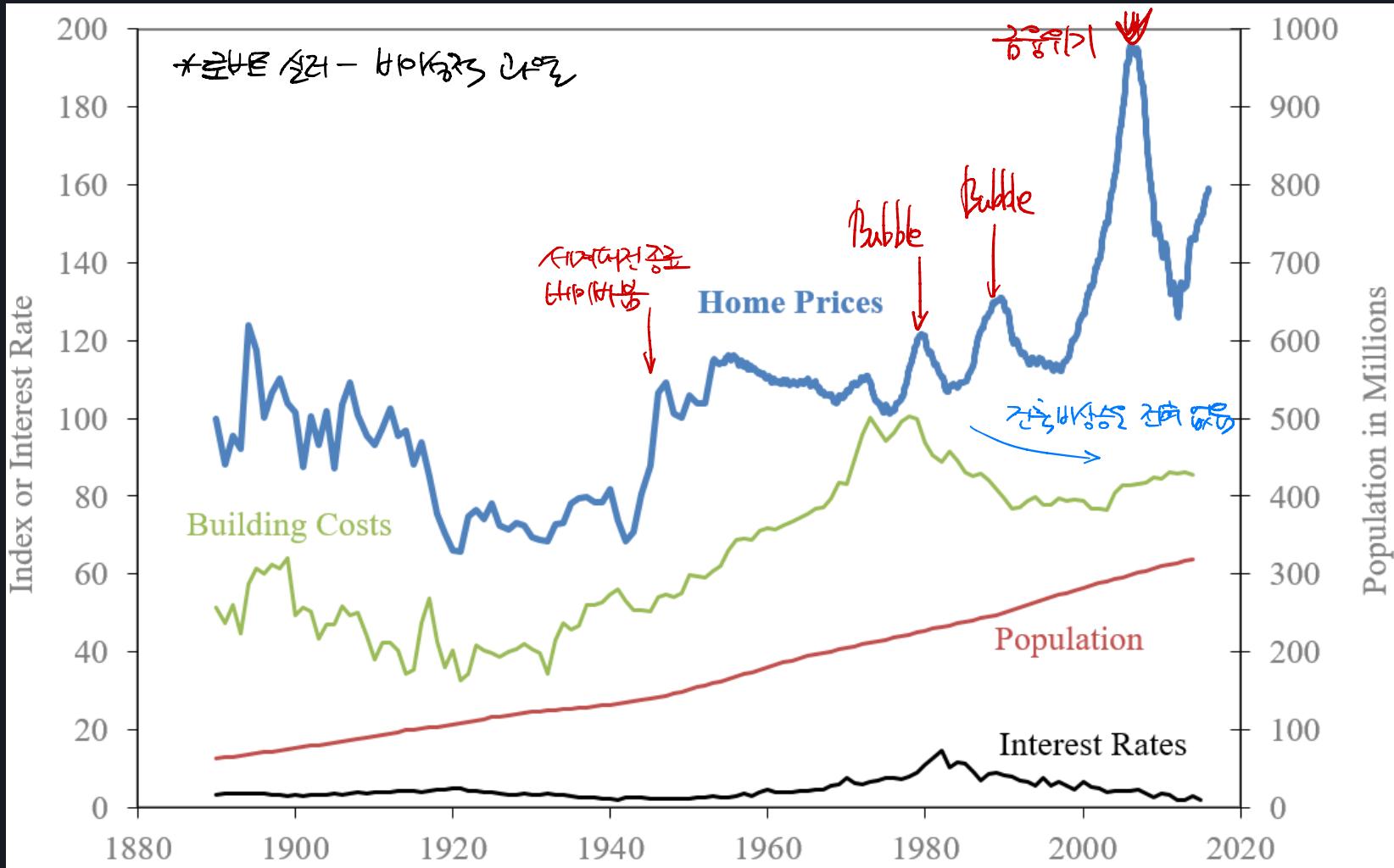
- 5% mortgage originator must hold 5% of mortgages,
European parliament → (유럽의회에서 5% 헤지 흐름을 확보하라!)
= 투자자금을 충당하기 위해 내보내도록...
- Dodd-Frank copies this idea ↗ 미국의 도드-프랭크 법안은 이를 따르고
단! QRM인 경우는 예외...
- Qualifying Residential Mortgages (QRM) are exempt
from requirement in USA
거주용 주택담보 대출
- But discord has prevented US government from
defining QRMs as of 2012

Requirements for QRM (as of 2014 Rule)

- Regular periodic payments that are substantially equal;
- No negative amortization, interest only or balloon features;
- A maximum loan term of 30 years;
- Total points and fees that do not exceed 3 percent of the total loan amount, or the applicable amounts specified for small loans up to \$100,000;
- Payments underwritten using the maximum interest rate that may apply during the first five years after the date on which the first regular periodic payment is due;
- Consideration and verification of the consumer's income and assets, including employment status if relied upon, and current debt obligations, mortgage-related obligations, alimony and child support; and
- Total DTI ratio that does not exceed 43 percent

IV. The Real Estate Bubble and Burst and Origins of the 2008 Financial Crisis

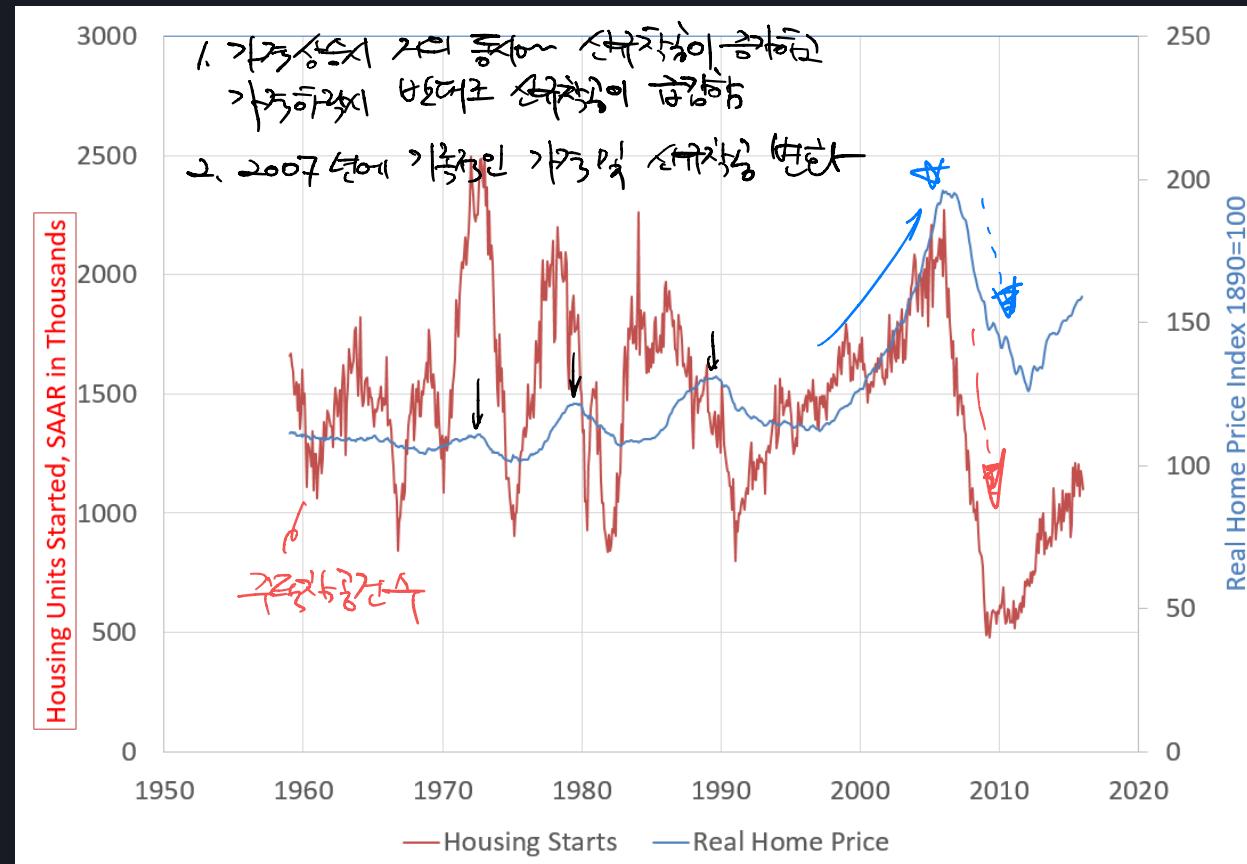
Real Home Prices and Fundamentals, 1890-2015 (Updated from Shiller Irrational Exuberance 3nd Ed. 2015)



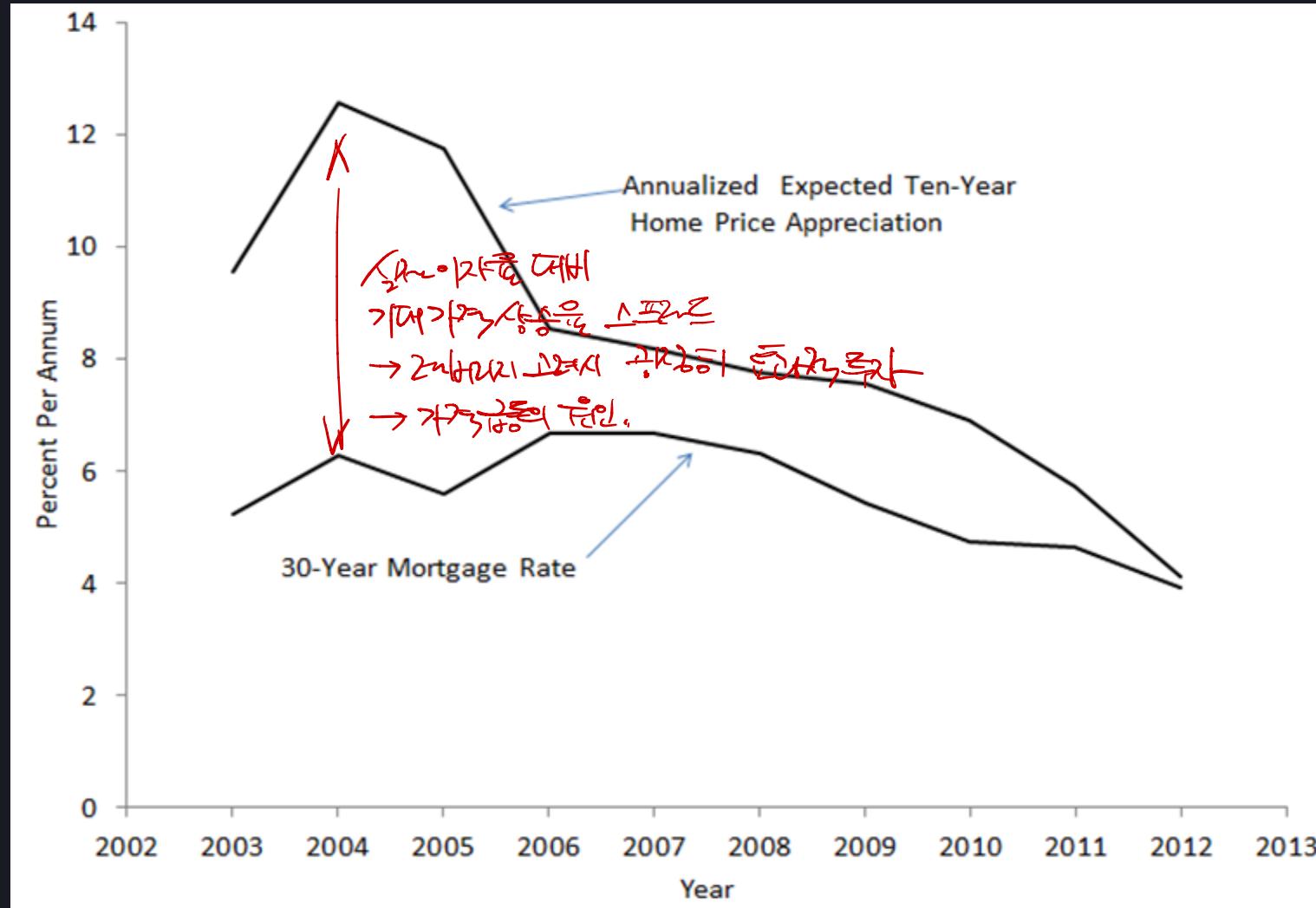
Evidence of Feedback Mechanism: Results of Home Buyer Survey: Real Estate Is the Best Investment



Housing Units Started 1959-2016 With Real Home Price



Ten-Year Expectations And 30-Year Mortgage Rate

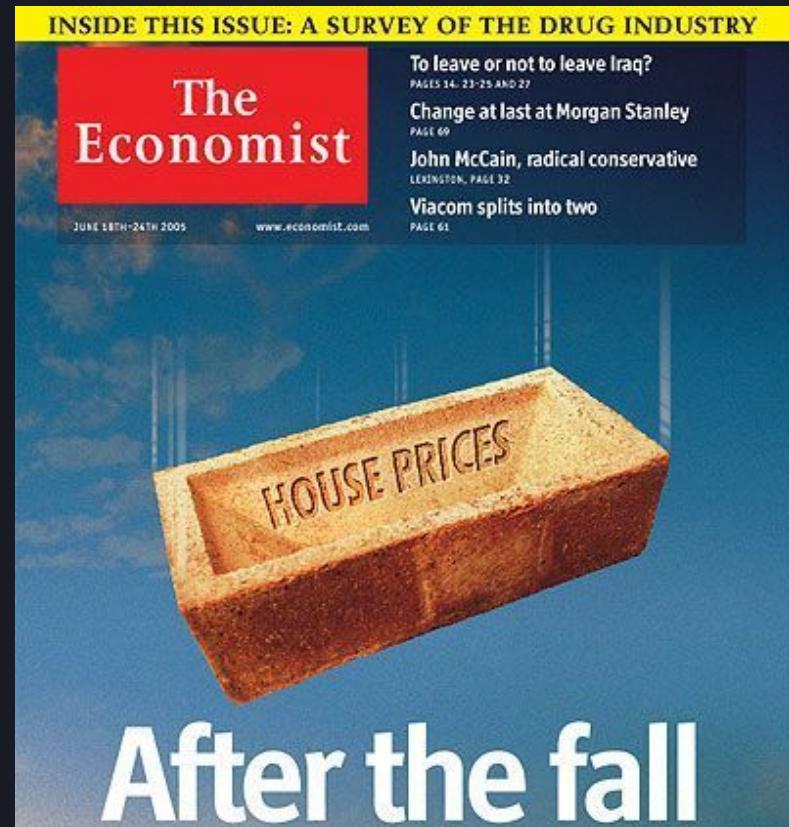


The Economist June 16, 2005

• “PERHAPS the best evidence that America's house prices have reached dangerous levels is the fact that house-buying mania has been plastered on the front of virtually every American newspaper and magazine over the past month.”

지난주 고등학교 때에 이미 2005년까지 예상.

도록가 예상했던 바와 같이 예상과 같았어!



Time Magazine, June 13, 2005



Barrons, Jon Laing, June 20, 2005

14 BARRON'S June 20, 2005

Economist Robert Shiller, whose book predicting a stock-market rout arrived just before the Nasdaq began its sickening slide in 2000, sees another bubble ready to burst. Home prices, he contends, could fall by as much as 50%, adjusted for inflation.

The Bubble's New Home

by Jonathan R. Laing



Shiller sees no rational reason for the sharp rise in housing prices over the past few years in many major markets, such as those shown in the charts below.

A Tale of Five Cities
Home prices, adjusted for inflation¹

City	1990	1995	2000	2004
Chicago	150	180	200	220
Los Angeles	200	220	250	280
Milwaukee	100	120	140	160
New York/Boston	200	220	250	280

Source: Federal Home Loan Bank Board. Data as of March 2005. Inflation rates from Bureau of Labor Statistics. 1. Adjusted for inflation from 1990=100.

YALE ECONOMIST ROBERT SHILLER DELIVERS HIS forecast for U.S. housing with a soberly effervescent air. He's located with a slightly offbeat smile that only slightly mutes his stark message: The market is in the throes of a bubble of unprecedented proportions that probably will end ugly.

Since starting his work at Yale, in 1984, especially from a low point in 1989, and more recently (beginning in 1999), he's strongly predicted housing's dismal fall in coming times in the past few years. But the Ivy League professor's forecasts of coming trouble have been right before. His best-seller *Irrational Exuberance*, predicting a home market in U.S. states hit the bookstores in March 2000, less than a week before the Nasdaq began a dizzying decline in a little over 25 years.

In the real-estate market, Shiller cautions, a price slide could begin at any time with the recovery of what he describes simply as "fads"—a word that he uses to cover everything from the recent *Twinkie craze* to the veneration of the *McMansion*—or houses that are so sprawling and lumbering in real estate to the breathless management teams of M&T and conducting "flipped" for profit half-construction before construction even begins.

The No. 1 topic of cocktail-party chatter these days, after all, is that nothing beats a house as an investment because prices just keep rising while the money gets to be invested at the old fashioned and decking-to-money-out.

"The home-price bubble feels like the stock-market mania in the fall of 1999, just before the stock bubble burst in early 2000, with all the hype, herd investing and absolute confidence in the invulnerability of continuing price-appreciation," says Dr. Shiller, a medical school graduate who is a centrist and other than a socialist on New Haven's ultra-liberal Hillhouse Avenue. "My bloodmaid slightly old (a medical party the other night when a recent Yale Medical School graduate told me that she was buying a condo in Boston during her year-long internship, so that she could flip it for a profit next year). *Tulipmania reigns.*"

Shiller, like any economist of repute, is somewhat

cautious about predicting how or when the housing bubble will burst. With so much price movement since the market began in 1997 and such low mortgage rates as well as strong demand, it would be hard to predict. Or it could burst suddenly, as it did recently in the once-red-hot Sydney, Australia, residential market, where real (inflation-adjusted) prices rose 12.9% in 2004 before dropping 2.5% in 2004 and remaining wobbly ever since.

Housing boats, unlike bear markets on Wall Street, often start slow and inexplicably and end slowly. They're also hard to predict. The best way to estimate future home price flux is comparable-home sales. If you come by them, you can look at tax records to calculate the prices fetched by two houses, each with four bedrooms and three baths and located in the same town. But determining precisely how their conditions, amenities and neighborhoods stack up isn't easy.

Adding to the uncertainty: Homeowners often live in denial of market realities by listing their properties at unrealistic prices or simply tacking their houses off the market to seek better times.

Shiller worries that the market has become so overextended in many areas of the U.S. that it's about to end in a massive bust. In particular, he's worried about the real-estate mortgages that have accounted for nearly half of all home loans in the second half of 2004. All begin to "reprice" at higher interest rates, potentially barging overly optimistic buyers sporting scant equity but hefty debt. Low-to-no-down-payment and interest-only mortgages used only add to the possible waggon of involuntary sellers if home prices continue to fall.

In Shiller's view, a real price decline of as much as 50% in U.S. home prices over the next decade isn't beyond the realm of possibility. Such a drop would be less catastrophic than it might seem at first blush. Like any economist, Shiller adopts an "equilibrium" perspective. In other words, he believes that a price decline of 50% in the market (with the loss of purchasing power from 5% annual inflation) is equivalent to the "removal of the real" (debt) 50%, so that would be a crushing blow to anyone caught on rising home values to bail him out of any financial problems.

Such real declines aren't unprecedented. Los Angeles-area home prices fell over 40% between 1989 and 1993, before beginning to rise again. That decline was largely attributed to job losses from a contraction of the aerospace and defense industries in Southern California in the late '80s and the '90s.

However, today's speculative real-estate bubble is so extreme that it wouldn't take an "apocalyptic" event like an economic recession or a recession to prick it, warns Shiller. Prices could drop even more than 50%.

Three months ago, Shiller released a heavily updated edition of *Irrational Exuberance* that includes a number of sections on the real-estate bubble and the trouble it faces for housing.

The Yale economist has done much work over the years

Misbehavior, Crises, and Regulation

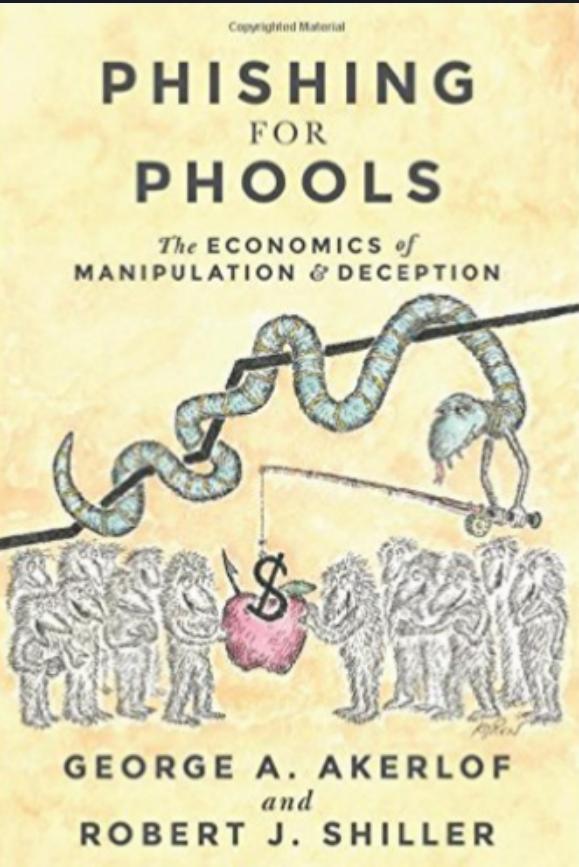
(미친
행동)

왜 규제정책이 잘 작동하나?
 - 다른 사람들의 돈을 빼앗아가는
 - 경쟁업체가 회사를 살 때 유리소용X

Regulation and Human Behavior

- Regulation is substantially aimed at dealing with human problems, manipulation and Deception
- Regulation goes beyond this, in dealing also with making the system work better, such problems as monopoly and externalities, such as “too big to fail”

- * 규제는 시스템이 잘 작동하나? 우려의 대상이다
→ 즉, 규제는 규제는 놀랄지 모르는
- * 피싱Fraud ⇒ 서로 속이는 경우가 많았으면 그들이 규제가 필요하다



MicroPrudential vs Macroprudential Regulation

- Most regulation just prior to the 2007-2009 crisis emphasized microprudential
- Macroprudential was nobody's business

Business Wants Regulation

- Without regulation, people are forced to do things in a competitive system that they think are bad for society } 그림| 풍경
- Forced to lowest common denominator
- Analogy to having a referee at a sports event
유사한
- Players hate referees, but without them they know game would deteriorate into something ugly

① 경쟁을 주제로 심판(재판) 가 있어야 한다

② 재판을 "Trade-off" 를 갖는다.
이익과 저익을 둘 중에 저익을 선택하는 것이다.

Outline of Lecture: Five Levels of Financial Regulation

- I. Within-firm regulation
기업 내 규제
2. Trade Groups
거래집단 → 기업의 자원봉사 조직
3. Local Government Regulation
지방정부 규제
4. National Government Regulation
중앙정부 규제
5. International Regulation

I. Within-Firm Regulation

외자회

The Board of Directors

- The Board of Directors acts like a regulator
→ 외자회가 규제하는 역할을 한다
- Outside directors represent a broader community
서로 외자
- In last lecture I emphasized that society functions to quarantine people with personality disorders, and people derive reputations
평균 좋은 사람으로 편향
→ 바탕은
- Putting outsiders of known reputations on a board is a signal to outsiders of regulation

Tunneling

→ 적운이 고집하게 흥미를 갖는 의미(물론 단계로 표시는 느낌)

- Johnson, LaPorta, Lopez-de-Silanos, and Shleifer, AER May 2000
 - Tunneling = Expropriation by minority shareholders (figuratively, as by an underground tunnel) 수면 사용
타고(터널) (운하 우선)
 - More common in civil law countries (especially French) than in common law countries (LaPorta et al. 1998). Hence, higher proportion of private and family-owned companies in civil law countries.
 - 영미법권과 대비되는 특수한 특징
 - 수상과 고급화에 따른 대체로 저렴한 투자
 - 경제학적 의사가 전통적으로, 인간 관계를 상호에 풀 수 있는 장점이 있어 대체로 풍부한
 - 개인화, 가족화된 회사의 경우, 최근 가중화 ↑

How Tunneling is Achieved

- Asset sales 자산 매각
 - Contracts, as for prices paid for inputs 비정상가 거래 + 알수 없는 비정상적인 긴
계약서
 - Excessive executive compensation 경영자 보수 과다
 - Loan guarantees 대출 보증
 - Expropriation of corporate opportunities 회사 기회를 탈취 (\rightarrow 개인 ...)
 - Dilutive share issues 주식 희석
 - Insider trading 내부자 거래 — 회사/학재를 발행 전 매수/매도

Directors' Duties to Prevent Tunneling

- Duty of Care: Act as a reasonable, prudent or rational person would
- Duty of loyalty: Prevent insiders from benefiting at expense of shareholders
- Common law countries give more judicial discretion to judge conformance with these duties, and so are more effective in preventing self-dealing transactions
- Interlocking boards: make it harder to tunnel

Tunneling in France

- SARL Peronnet, a French company owned primarily by the Perronet family leases a warehouse from the Peronnet family at a high price. When minority shareholders sued, French court ruled that the transaction had a legitimate business purpose, and that it was beyond the court to judge whether the price was too high. In US or UK, price would have been a factor.

가족 회사에게 물건을 판매하는 경우 판매가가 정당화된다.

법원은 판례로 인정한다.

미국이나 영국 같은 다른 국가에서는 판례로 판매가가 정당화되는 경우 판례로 인정된다.

II. Trade Groups

അക്സൈസ് ഡാറ്റി നിന്നും അവരുടെ വില വർദ്ധിച്ചതു കാണാൻ

Wow!

Text of Buttonwood Agreement | 1792

ബോർഡ് ഓഫ് ബ്രോക്കർ

- We the Subscribers, Brokers for the Purchase and Sale of Public Stock, do hereby solemnly promise and pledge ourselves to each other that we will not buy or sell from this day for any person whatsoever any kind of Public Stock, at a less rate than one quarter of one percent Commission on the Specie value and that we will give preference to each other in our Negotiations. In Testimony whereof we have set our hands this 17th day of May at New York, 1792 [!!]

Amroth &

We the Subscribers, Brokers for the Purchase
and Sale of Public Stock, do hereby solemnly
promise and pledge ourselves to each other, that
we will not buy or sell from this day forward any person
whatever, any kind of Public Stock, at a less rate
than one quarter per cent Commission on the Specie
value of it; and that we will give a preference to
each other in our Negotiations. In Testimony
whereof we have set our hands this 17th day
of May at New York. 1792.

John Blacker

Fulton & Hardy

Hugh Smith

Benjaⁿ Seaver

Matthew Barnwell

Sam^r March

John Henry

Born Hart

John A. Hartshorne

Alex^r Gunth^r

Sam^r Brattin

Horatio Burdett

J^r Ferre

정부?

개인 및 기관 투자자에게 어떤가?

From NYSE Web Site

- “At the heart of the Buttonwood Agreement was the need for fairness, responsibility and trust. Just two months earlier, Colonel William Duer, a wealthy former assistant secretary of the treasury, had defaulted on his debts, causing a brief panic in the New York financial markets. The importance of being able to trust those with whom you deal, paramount in the minds of the 24 merchant-brokers, remains central to this date.”

→
한국어
한국어판
한국어판

William Duer

- Duer was a man of questionable ethics, who borrowed heavily to buy into a stock market bubble, deceiving others, manipulating
- The US stock market crash of 1792 created macroprudential problems as well, to be resolved, some thought, by not trading with dubious people

Regulation of Commissions on Natural Monopolies

- May Day May 1, 1975 SEC under chairman Ray Garrett Jr. (BA Yale College, appointed by Nixon), under President Ford (Yale Law School) abolished fixed commissions (also begin of National Market System NMS)
- Big Bang London October 27, 1986, Margaret Thatcher abolished fixed commissions to eliminate “elitist old boy’s network.”
- Deutsche Boerse attempted to buy NYSE and Nasdaq 2010, but ^{독일증권거래소} Intercontinental Exchange bought NYSE, Nasdaq still independent
^{ICE}
- Deutsche Boerse is trying to buy LSE 2016
^{영국증권거래소}

1975년
영국은행
그레이트보더
대부회

영국증권
국내증권 거래소

3. Local Regulation

지방정부
지례

Banking Regulation

- Belonged to states until the National Banking Act of 1863

Securities and Exchange Commission

SEC, 證券交易委員會

- Louis Brandeis, *Other People's Money*, 1914 was intellectual origin.
Disclosure
- Blue Sky Laws of Progressive Era
20세기 초반 블루스카이 법령
여러 주마다 제정되었던 법령
- 1920s were period of much fraud, manipulation

Blue Sky Laws

청정법 → 투명거래법

전국적 규제가 가능해지게
세계적 규제가 가능



- Regulates the offering and sale of securities to protect the public from fraud, regulates brokers and advisers
- Require registration of Securities
- blue sky law was enacted in Kansas in 1911 at the urging of its banking commissioner, Joseph Norman Dolley, and served as a model for similar statutes in other states. Between 1911 and 1933, 47 states adopted blue-sky statutes

4. National Regulation

Local Regulation Failed

- ~~SEC~~ part of Roosevelt's New Deal, 1934
- Initially viewed by business as a radical, almost socialist, institution. Peculiar that it started in US, imitated by other countries
→ 1934
- ④ SEC의 주요한 특징 : "공개공시" - Disclosure!
 - 상장기업에게 현재 상황에 대한 추가적인 공개를 요구
이후 금융이 삼지 청탁금지 및 투명화
 - "EDGAR" — Financial Statement 자료를 전자화된 형태로 가짐

William O. Douglas (1898-1980), Served with early SEC

William O. Douglas

- As Prof., Yale Law School, led the “legal realist movement” taking account of human foibles, the actual application of law
- Served on the early SEC 1936-, became chair 1937-9, had acrimonious relation to business
- Later served on US Supreme Court (replacing Brandeis) (1939-74)
- His book *Democracy and Finance* 1940 recounts his adventures as SEC chair



Arthur Levitt *Take on the Street*

2 ~~TRUE~~ .

- Recounts an atmosphere of denial of problems among many prominent Wall Street people
- Recounts “vivid” memories of reactions from some of the self regulatory organizations (SROs) when he proposed tightening of standards
- Bull market of the 1990s: after deregulation of commissions in 1975 analysts fell to “the bottom of the food chain” and eventually became conspirators in selling securities to maintain their income

"증권"을 드러나는
일부는 증권 주식!
→ SEC 감독 필요

Public vs. Private Securities

- Motive was repeated examples of exploitation of minority or unobservant shareholders.
- Public securities: undergo approved process of issuance under SEC surveillance.
- Public companies must file public statements. ~~EDGAR~~ database on www.sec.gov.
- Initial Public Offering (IPO) is SEC procedure for going public.
기업공개
- Reverse direction: going private. → 법적 상장주식을 출자하는 경우

Hedge Funds

헷지 펀드

헷지 펀드
설정 목적

- For wealthy investors only
- Those structured as 3c1s can take no more than 99 investors, and they must be “accredited investors” as defined by the SEC which means income of \$200,000 or investable assets of \$1,000,000 (SEC proposal in 2006 to raise to \$2,500,000 did not happen)
- Those structured as 3c7s can take 500 investors, but they must be “qualified purchasers” as defined by the SEC, individuals with net worth of at least \$5 million or institutions with net worth of at least \$25 million.

SEC Rules

- Every broker must register with SEC
- Every stock exchange must register
- Every security issue must register
- Registration does not literally mean SEC approval

Insiders vs. Outsiders

- Insiders are people with special access to information about a company. → 내부자 거래에 대한 특별한 정보에 접근하는 사람 (내부인 → 투자자)
- Inside information represents wealth
- SEC tries to define access to this wealth, by disclosure rules.
- Regulation FD (Full Disclosure) 2000: requires that when a company tells any material fact to an analyst, it must immediately tell the public. → 회사가 분석가에게 중요한 사실을 알렸을 때, 즉시 일반 대중에게 공개
- Germany did not have any laws against insider trading until 1994
- Some argue insider trading is good. Hayne Leland

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Results of Market Surveillance

- May 1995 secretary at IBM was asked to Xerox documents related to secret plans to take over Lotus, to be announced June 5.
- She told husband, a beeper salesman.
- June 2 he told two friends who immediately bought.
- By June 5, 25 people spent half a million dollars to buy on this tip: pizza chef, electrical engineer, bank executive, dairy wholesaler, schoolteacher, and four stockbrokers. All caught by surveillance.

→ 가짜뉴스 전동

Emulex Corporation

- Mark S. Jacob, 23, had shorted stock of his former employer, stood to lose money.
- Sent fake news release to Internet wire, was picked up by Bloomberg, Dow Jones News Wire and CNBC. He immediately covered.
- FBI, using Internet Protocol Numbers, tracked down initial news to El Camino Community College library. Police questioned librarians, and eventually tracked him down.

선도거래 양동 (은행권 2001년 4월)

Front Running and Decimalization

- Front-Running occurs when a broker buys shares in front of a large order that will boost stock price.
- Decimalization on NYSE and Amex began January 29, 2001. (NASDAQ April 2001)
 - Decimalization favors front-running.
 - NYSE Surveillance has not found a serious problem.

Financial Accounting Standards Board

- FASB officially recognized as authoritative by SEC in 1973. Though SEC has statutory right to make accounting standards, prefers private sector do it.
- FASB (Norwalk CT) defines Generally Accepted Accounting Principles (GAAP), used for EDGAR
- <http://accounting.rutgers.edu/raw/fasb/facts/index.html>

Earnings Definitions

- GAAP Define “Net Income” which is the bottom line, traditionally, and “operating income,” revenue minus cost of doing business
- Operating earnings, Core Earnings, Pro Forma Earnings, EBITDA, and Adjusted Earnings are not GAAP
- FASB is at work on developing new definitions, but this takes years.
- Great confusion today about earnings

Goodbody & Co. Failure, 1970

- Top-five Brokerage firm Goodbody & Co. ran into financial difficulties, trouble maintaining SEC capital requirements
- Fears for the accounts of their 225,000 retail clients
- At the request of the New York Stock Exchange, Merrill Lynch took over company 1970
- New York Stock Exchange pledged \$30 million to cover losses Merrill might incur
- None of Goodbody's retail customers lost anything, because of the “heroism” of Merrill, NYSE

Securities Investor Protection Corporation (SIPC) 증권 투자자 보호 기관

- To plan for such events in the future, SIPC was created by US Congress 1970 (Sen. Ed Muskie)
- Protects customers of brokerage firm or clearinghouse against failure up to \$500,000 per account, \$100,000 for cash.
- SIPC much criticized. Very defensive, pays more to the lawyers than to claimants.
- Disallows claims that were not filed “promptly.”
- “not blanket protection that returns your money in all cases,” “doesn’t cover fraud claims” (SIPC web site)
- SIPC extremely slow to pay.

The 2008 Financial Crisis as Result of Regulatory Failure before Crisis

- Many home buyers were put into unsuitable mortgages, later to default
- Leverage ratio of the financial sector was allowed to reach historically high levels
- Banks and governments used off-balance-sheet accounting to conceal liabilities
- Home appraisers were in effect bribed
- Rating shopping compromised security valuation process

부디스, S&P 등 여러 평가사를 통해
높은 평가를 받은 부동산을 찾는 행위

Dodd-Frank Act 2010

- Creates Financial Stability Oversight Council
- Creates Bureau of Consumer Financial Protection

CFPB
બજર્ગત કાન્પ બેંક

European Supervisory Framework Created 2010

- European Systemic Risk Board (ESRB) Frankfurt
- European Banking Authority (EBA) London
- European Securities Markets Authority (ESMA) Paris
- European Insurance and Occupational Pension Authority (EIOPA) Frankfurt

5. International Regulation

Bank for International Settlements

BIS, 一
국제 결제은행

- Created 1930 by Hague Agreements
- Has 57 member central banks, who are in turn national regulators
- Basel Switzerland

Basel Committee

바젤 위원회

- Created by the G10 1974 to coordinate banking regulation
- Basel I 1988
- Basel II 2004
- Basel III 2009 Adopted by G20 at the Seoul Korea summit
in 2010 ↑ 주도권 회의에서 채택

G-7 Countries

- Finance ministers of Canada, France, Germany, Italy, Japan, United States, UK, 1976, when Canada joined

G20

- Group of Twenty Finance Ministers and Central Bank Governors (G-20, G20, Group of Twenty)
- Founded 2008
- Met in Ankara, 2015

Financial Stability Board

- Created by G20, April 2009, from the former Financial Stability Forum (which was founded 1999 by the G7 countries)
- Makes recommendations to the G20, which may end up adopted in many countries
- Basel Switzerland



Final Thoughts

- Regulation has to continually change through time as technology changes
- World economy dominates more and more, and so regulation will shift to international

① 설리고수님의 정부:

Regulation

Fair rule

- 자유시장의 성공비결은 경쟁 "규제" 연대 = 공정한 규제
- 시장은 경쟁 제한경우 부정적 결과를 만든다.