

# Anatomy of a Bubble

A 2005 Investigation into the  
U.S. Housing Market

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Author: Mohamad B. Shaaf.





## A Familiar Feeling: Is History Repeating Itself?

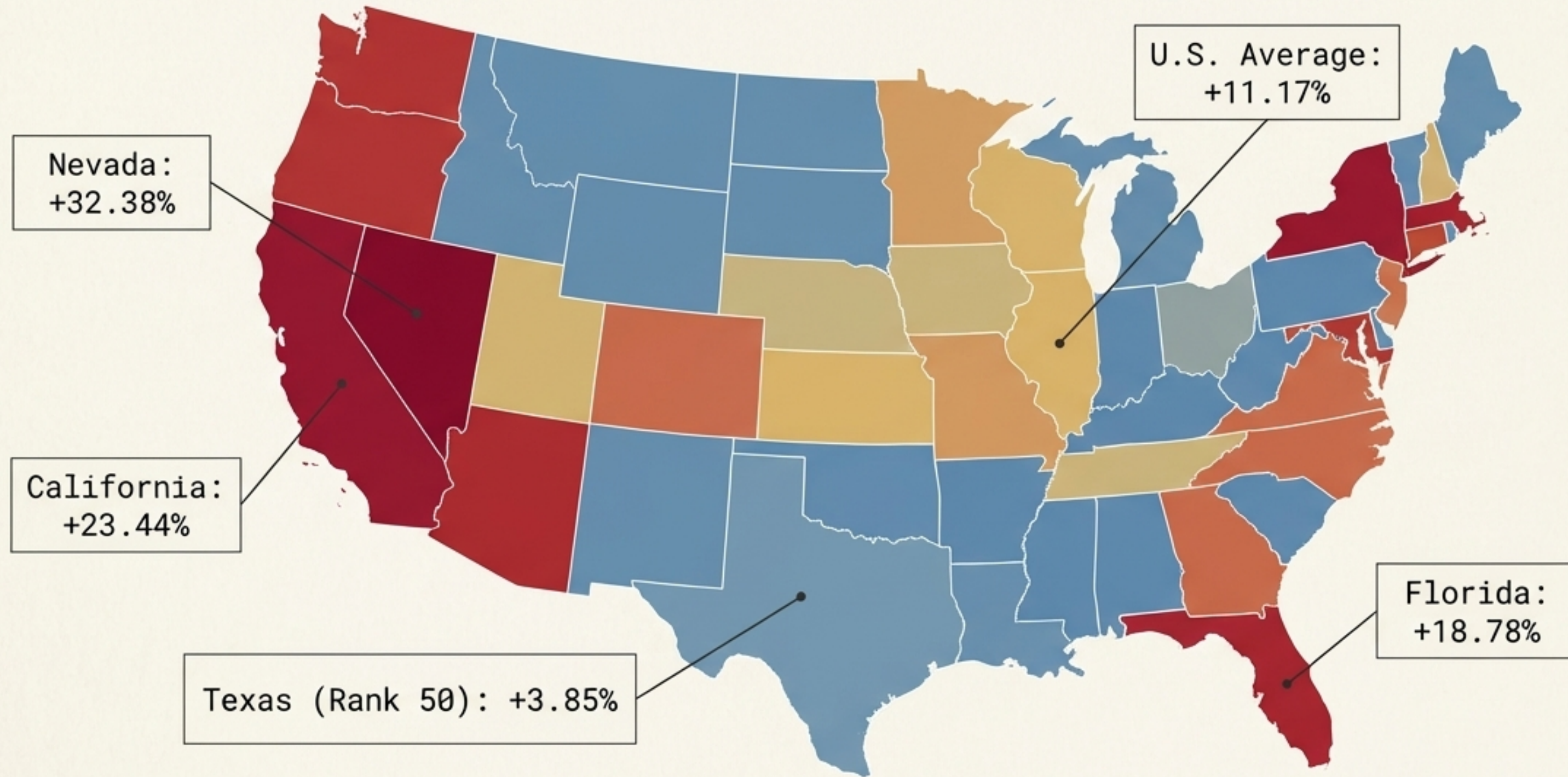
“In recent years a real estate-boom began in America appearing similar to the stock market obsession of the late 1990s.”

- **Frenzied Activity:** In some cities, “houses have been bought twice in a single day, similar to stock market day trading.”
- **Record Highs:** The U.S. housing price index is at a record level. In 2004, prices surged an average of 10.7%, the highest yearly increase in 25 years.
- **Investor Mindset:** An estimated 25% of home purchases in 2004 were for investment, not residency. ■

“An alarming question is whether this recent housing boom will end with a crash.”



# The Boom is Not Everywhere, But Where It's Hot, It's Scalding



“Housing price inflation has not been uniform across the country. Many cities and states have had price increases... while in some parts of the country there have actually been decreases.”



# The Experts on the Stand: Boom or Bubble?



## THE BULL CASE

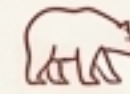
### David Lereah

Chief Economist, National Association of Realtors

“The long-term fundamentals for housing remain strong... far from a real estate ‘bubble.’ What we are experiencing today is a phenomenon that takes place only once every other generation: a long-term real estate market expansion.”

#### Key Drivers:

- Strong demand from baby boomers, innovations in mortgage markets, demand by foreigners.



## THE BEAR CASE

### Robert Shiller

Economist, Yale University

“Shiller argues that in the long run, discounting for inflation, housing prices cannot exceed the growth of real GDP.” He warns about the bubble just as he did with stocks.

#### Key Drivers:

- Credit excess from the 1990s creating huge debt and inflated asset prices, fueled by “easy, innovative, and sub prime lending.”



# Deconstructing the Demand: What's Fueling the Fire?





# The Supply Side: Physical and Financial Constraints



## Housing Construction

If the growth of new construction doesn't match population growth, prices will increase. This can be due to physical limitations of land.



## Regulatory Burdens

Fees, rules, zoning laws, and other procedures can slow down or increase the cost of building new homes, limiting supply.



## Interest Rates

Higher interest rates make construction financing more expensive for developers, which can reduce the new housing supply and lead to higher prices for finished homes.

**Key Insight:** Supply in the housing market is inherently less flexible than demand, creating a natural upward pressure on prices during a boom.



# Is This Déjà Vu? Or a Different Case Entirely?

The stock market crashed. Does that mean the housing market will follow?



## 1. Local & Segmented

Housing markets are local. Prices can boom in California while falling in Oklahoma. Stocks are traded on national and global markets.



## 2. Tangible Asset

Houses require management and maintenance. Stocks are paper claims. This limits the scale of speculation.



## 3. High Transaction Costs

Real estate is illiquid. It's slow and expensive to sell, making a sudden panic less likely and corrections less severe.



## 4. Permanent Demand

People need shelter. This creates a floor for demand and downward price rigidity not present in stocks.

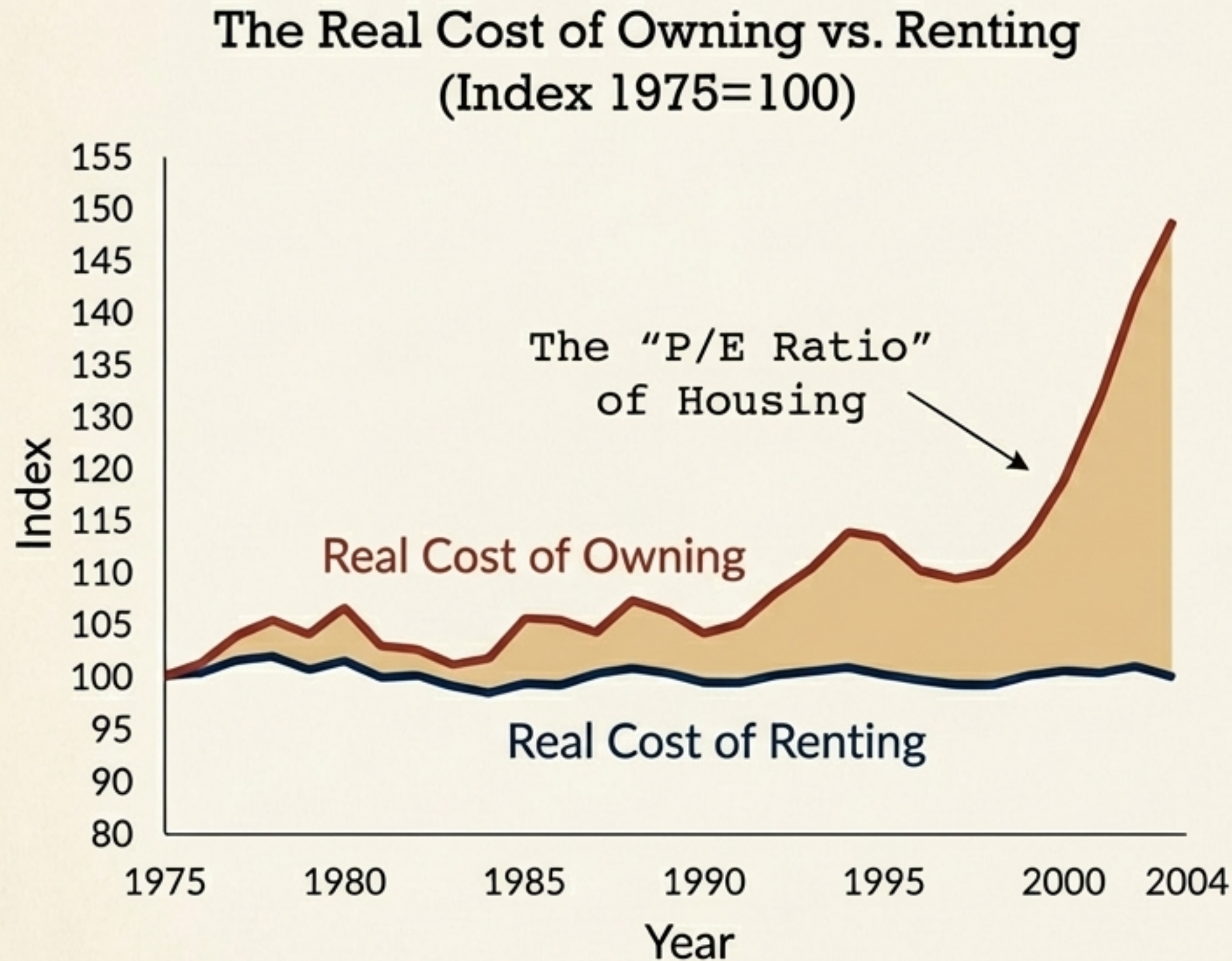


## 5. Different Timing

In Japan, stock and housing bubbles grew concurrently. In the U.S., the housing boom *followed* the stock market crash, suggesting a different dynamic.



# Exhibit A: The Widening Chasm Between Owning and Renting



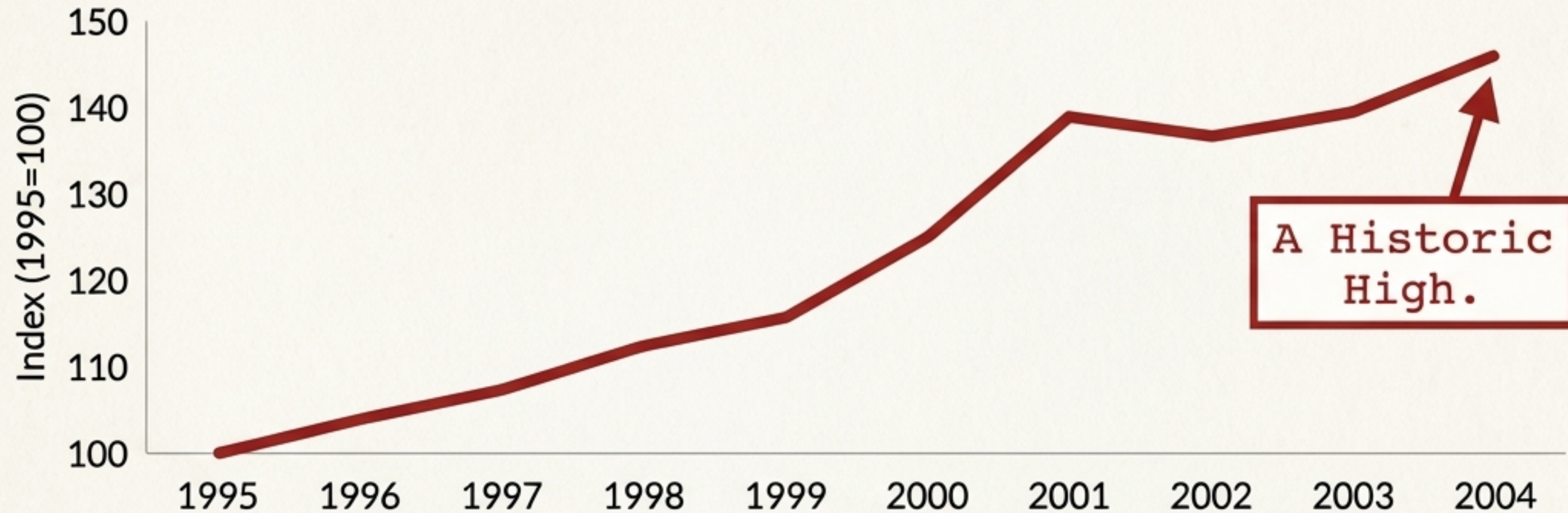
- “The gap between the cost of owning a home and renting one has been widening significantly.”
- Considering rent as the ‘earning’ on a rental house, this is the equivalent of a price-to-earnings ratio in the housing market reaching a historic high.

**This is only sustainable if we expect permanently higher housing prices. If that expectation is wrong, we are in a bubble.**



# Exhibit B: Affordability Reaches a Breaking Point

U.S. Housing Price to Income Ratio (1995-2004)



The Price-to-Income ratio is a key measure of home ownership affordability.

“If the ratio is high and rising, it suggests the income needed to pay for homes has not increased proportionately.”

**The Inescapable Logic: “This trend cannot continue indefinitely.”**



# Case File: The Oklahoma County Anomaly

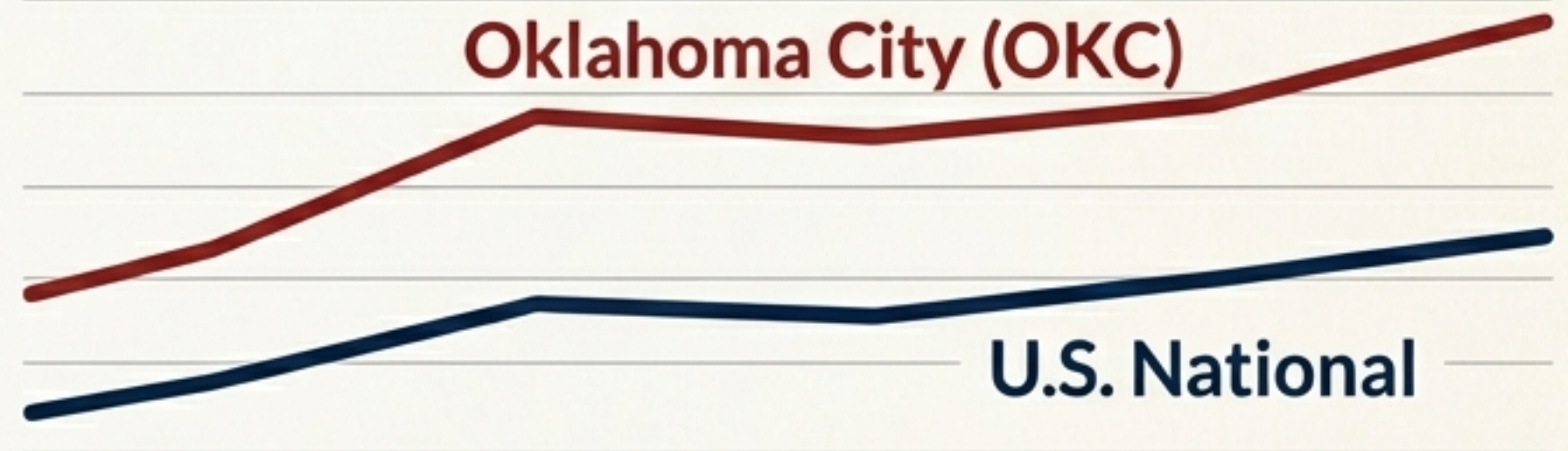
## The Premise

Let's examine a market that isn't one of the "hot spots." Oklahoma County's housing prices showed only a moderate increase.

Median Home-Price Appreciation (2002-2005)
Oklahoma City: <b>14%</b>
U.S. National: 22%

The local economy is relatively strong, with job growth boosted by the energy sector.

## Price-to-Income Ratio (Snippet)

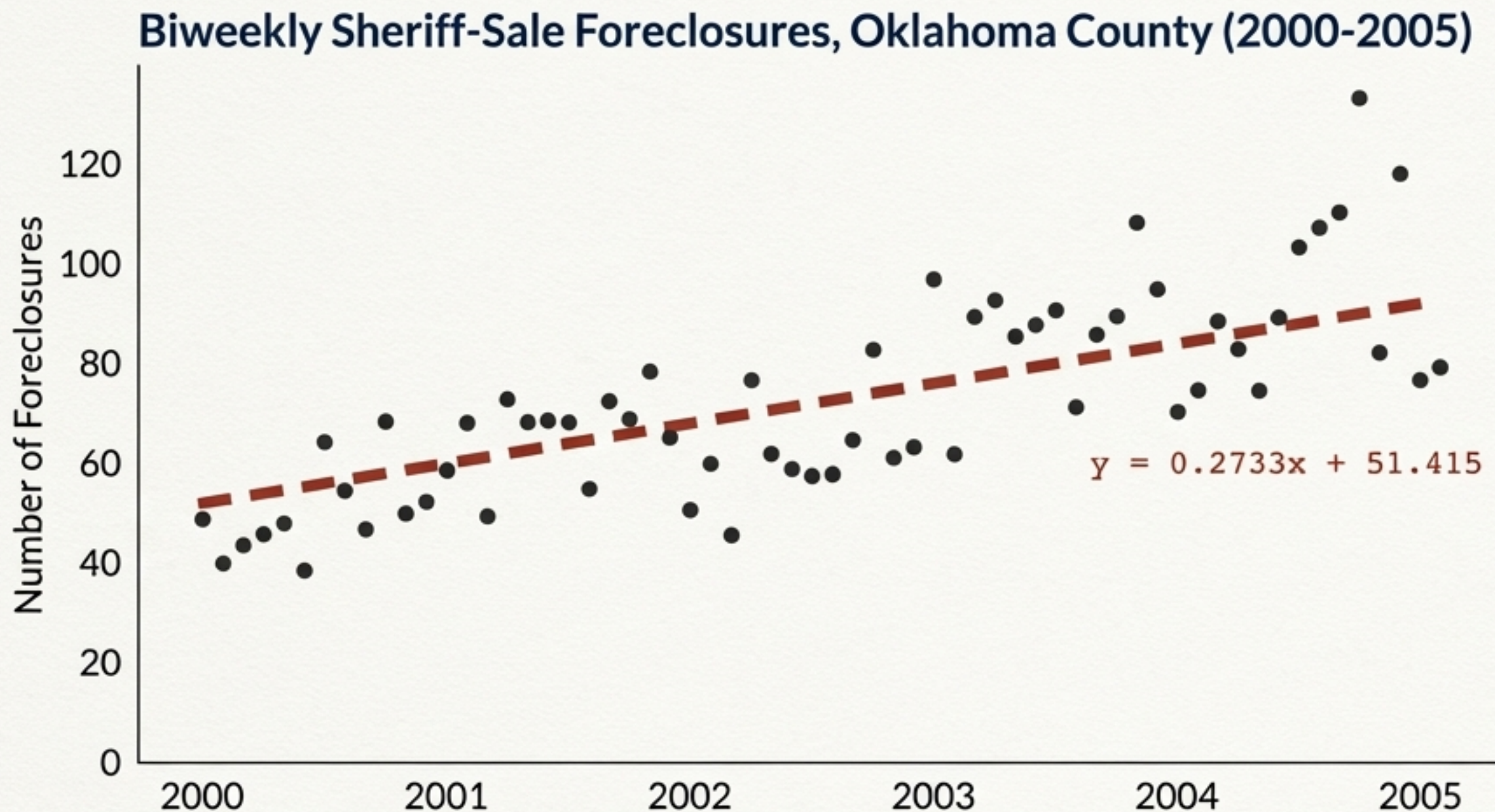


## The Twist

- "Despite slower price growth, Oklahoma City's Price-to-Income index has been *far above the national market*."
- This pattern was due more to slower income growth in Oklahoma City... than rising housing prices."
- This implies the affordability problem is even more serious in Oklahoma City than in the national market."



# A Quiet Alarm in the Heartland: Foreclosures Are on the Rise



## The Trend

“The number of foreclosures has been increasing by 7.1 houses per year since 2000.”

## The Numbers

The average number of foreclosures per year has risen steadily, from 52 in 2000 to 90 in just the first nine months of 2005.

## The Investigator's Conclusion:

“The upward surge of housing foreclosures in Oklahoma County is alarming... [This is] another indication of a bubble in that market.”



# The 2005 Verdict: A Pattern of Localized Bubbles, Not a National Firestorm... Yet.

## NATIONAL

“It is hard to conclude if there is a national housing bubble. If so, it is not yet serious.”

[Source: FDIC 2005 Report]

## LOCAL

Price hikes in some “hot markets” with high speculative demand clearly resemble bubbles. These specific cities could experience a crash.

[Source: FDIC 2005 Report]

## INDICATORS

The rising gap between owning vs. renting and soaring price-to-income ratios are “alarming” signs of imbalance.

[Source: FDIC's Report]

## WEAK SPOTS

Rising foreclosures in a moderate market like Oklahoma County are a clear sign of deterioration.

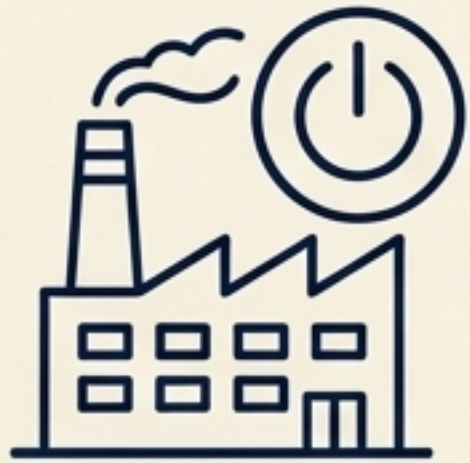
[Source: FDIC '06 Report]

*“While there are housing price hikes in some hot markets that resemble bubbles there is not a general national bubble, at least not yet.”*



# Tipping Points: Four Factors That Could Trigger a Crash

"The severity of a housing crash depends on the future state of the economy... and also interest rates."



## Economic Recession

A slowdown from either a supply shock (e.g., "**prolonged high cost of energy**") or weak demand could lead to widespread defaults.



## Interest Rate Hikes

If the Federal Reserve raises rates to fight inflation or defend the dollar, mortgage payments will rise, reducing affordability and triggering defaults, especially on flexible-rate loans.



## Extreme Leverage

Households, corporations, and the government are all **highly leveraged** with debt, making the entire system vulnerable to a shock.



## Foreign Capital

The economy's reliance on "**borrowing from abroad**" is a weakness. If foreign lenders reduce investment, U.S. interest rates could spike.



# Epilogue: The Report from the Future

2006: Paper Published

Localized bubbles  
Alarming affordability  
Rising foreclosures

2008: Global Financial Crisis

The 2005 analysis correctly identified the key symptoms: localized bubbles in hot markets, alarming affordability metrics, and rising foreclosures even in stable areas.

It also identified the triggers: a potential recession, rising interest rates, and the systemic risk of high leverage.

By 2008, these conditions converged. The “easy, innovative, and sub prime lending” mentioned as a contributing factor became a primary catalyst, turning local housing troubles into a global financial meltdown.

**The investigation was closed. The evidence had been there all along.**