

A Brief History of Mortgage Insurance

Prepared for: CAS Annual Meeting 2008

Prepared by: Kyle Mrotek, FCAS, MAAA
Consulting Actuary
Milliman, Inc.

Overview

- I. Mortgage Insurance (MI) Background
- II. History of the Housing / Mortgage Market in the US
- III. Recent Developments Leading to the Present Crisis

Background

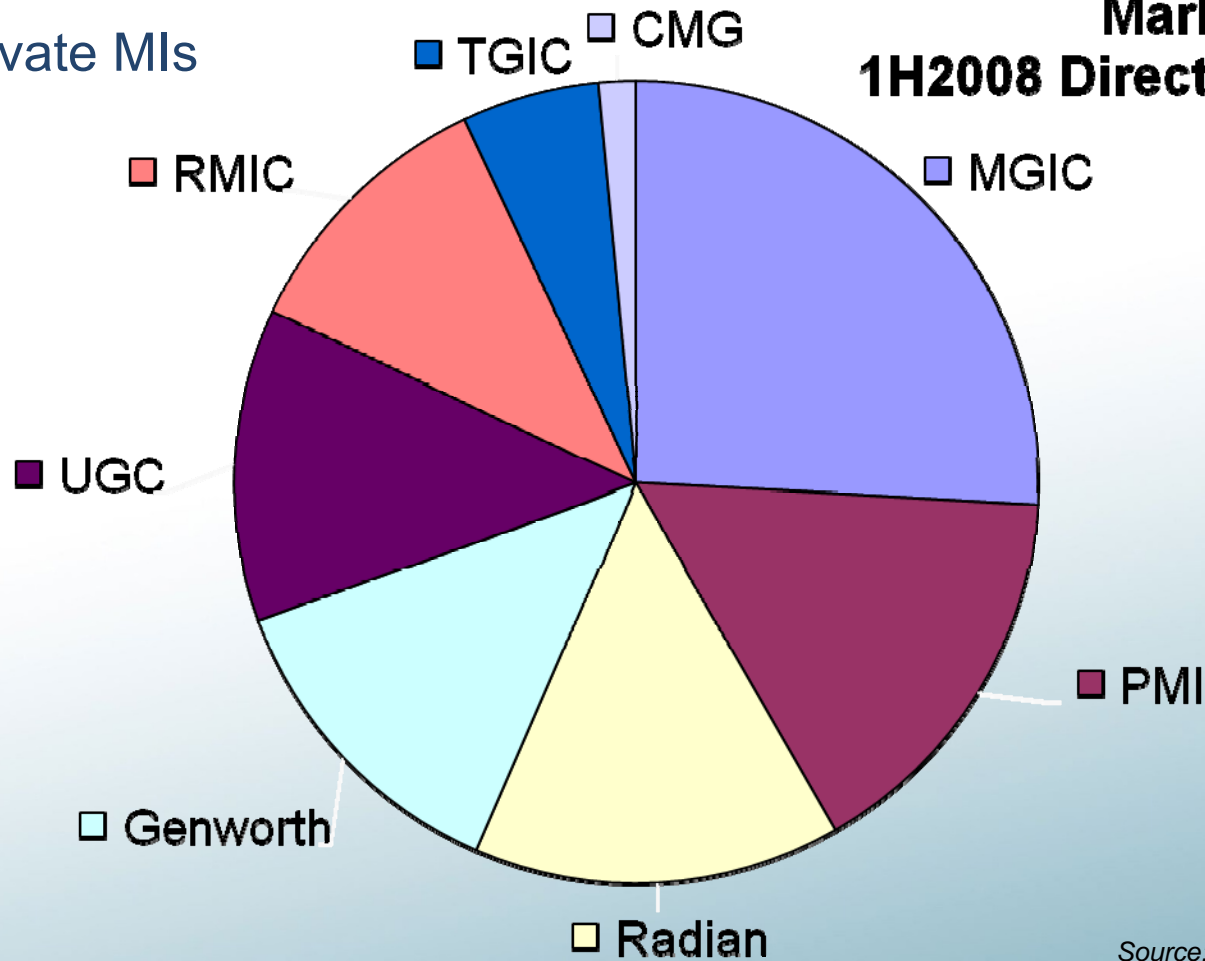
- Types of MI
 - Government
 - FHA
 - Provides insurance to lenders on loans for one to four-family houses
 - 100% coverage
 - VA
 - Guarantees loans made to eligible veterans
 - Limited coverage
 - Private
 - Provide insurance to mortgage originators on first-lien high LTV (>78%) loans
 - Limited coverage, greater flexibility

Source: Federal Housing Administration (FHA)

Background

- Private MIs

**Private MI Industry
Market Share
1H2008 Direct Premiums Earned**



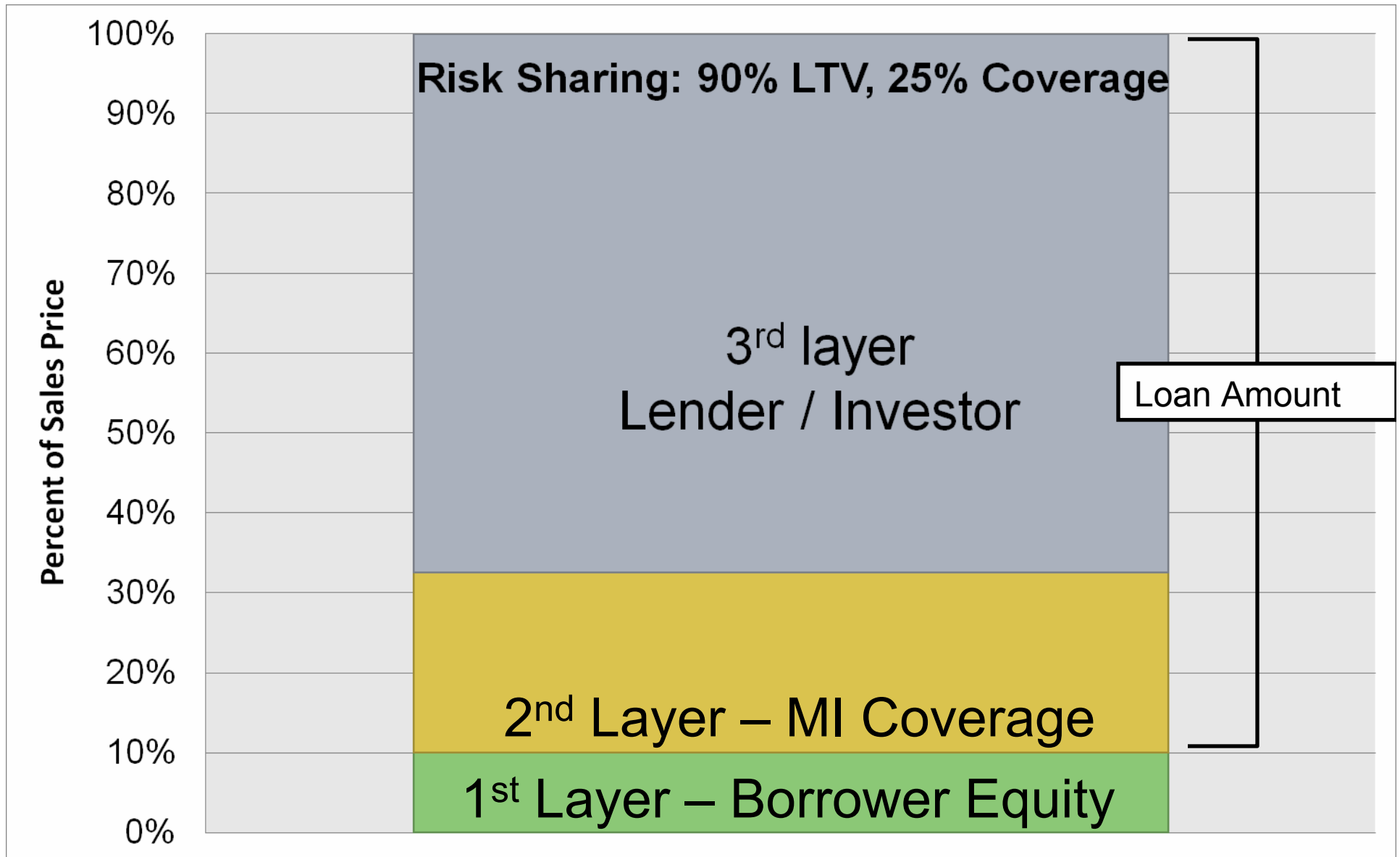
Source: Annual Reports from listed companies.

Background

- Coverage:
 - Varies from 6% to 40%, Generally averages 25-30%
 - Covers lender in case of borrower default on mortgage
 - Items covered:
 - Accumulated interest during delinquent period
 - Legal fees
 - Home maintenance and repair expenses
 - Real estate broker's fees and closing costs
 - Property resold for less than original sales price
 - Doesn't cover:
 - Damage to the property
 - Theft
 - Death of mortgagor

Source: Mortgage Insurance Companies of America (MICA)

Background

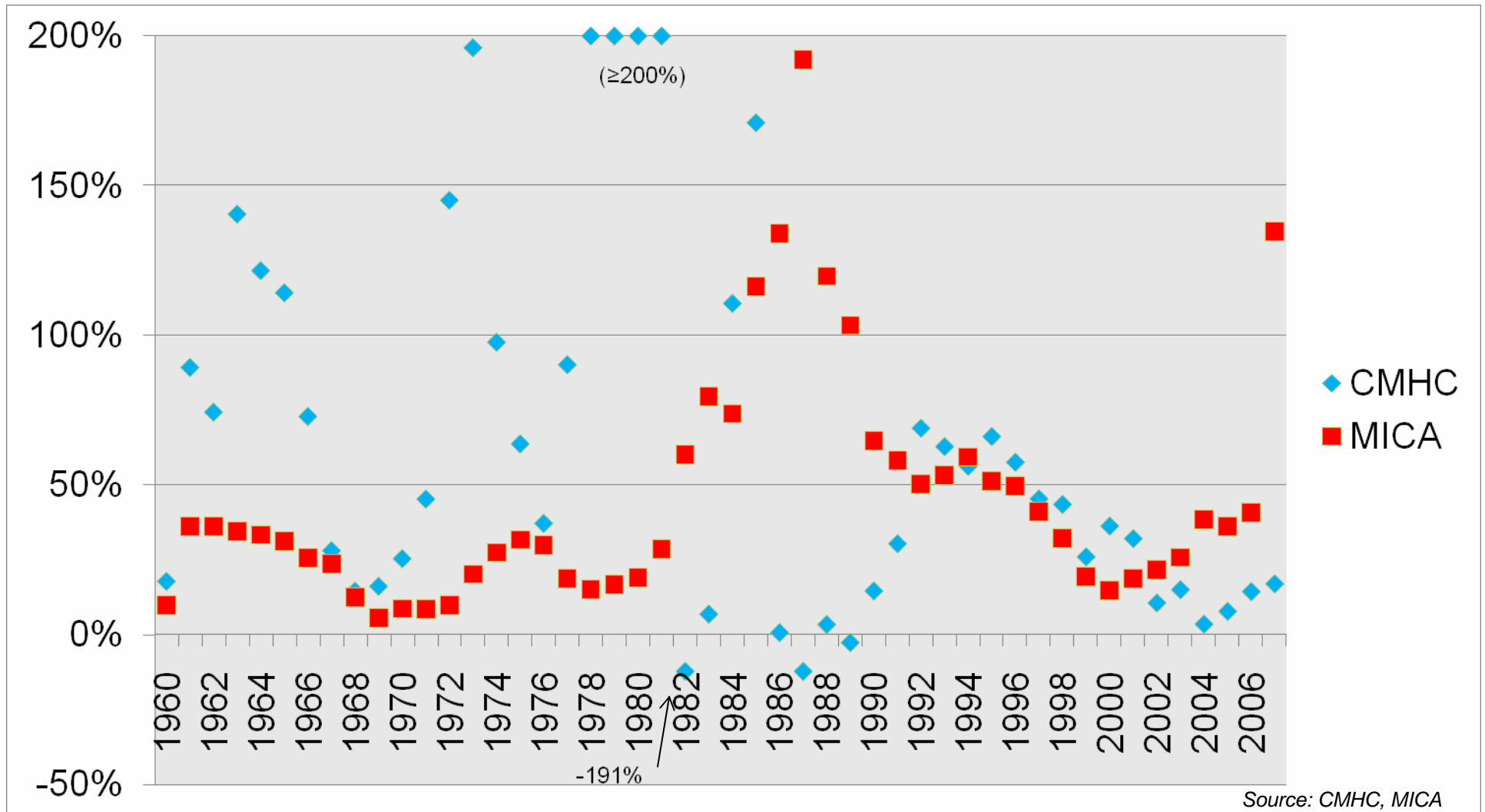


Background

- Cancellation
 - The insurance is non-cancelable by the insurer except in the case of fraud or non-payment of premium.
 - The borrower may cancel insurance only when certain conditions have been met:
 - The LTV ratio is <80%
 - There are no other loans on the house
 - The borrower is current on all payments
 - If these conditions are satisfied and the LTV < 78%, the insurance is automatically canceled.

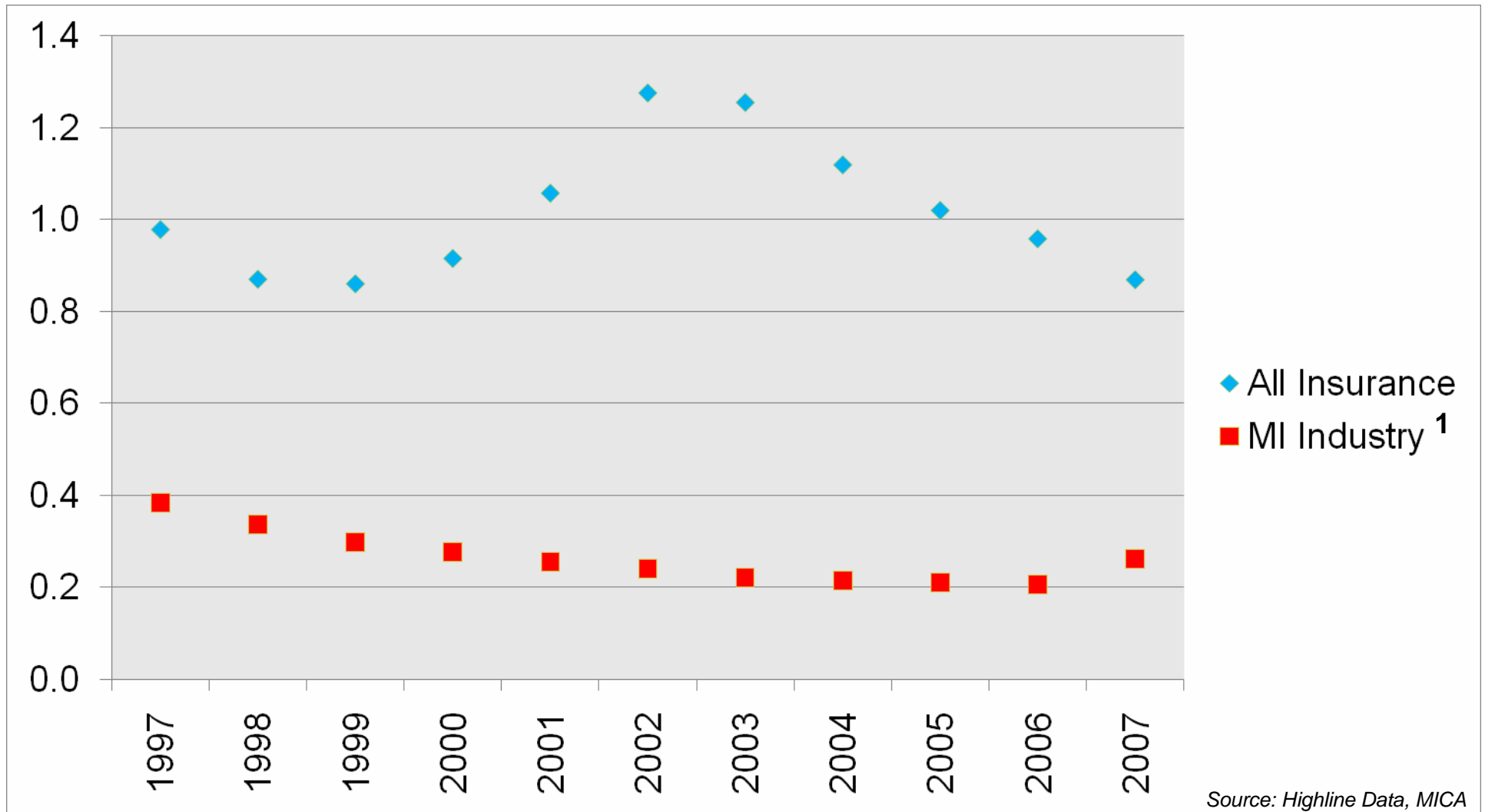
Source: Mortgage Insurance Companies of America (MICA)

Background – Loss Ratios



Source: CMHC, MICA

Background – NWP to Surplus Ratio



9 1: Includes Contingency Reserve

History-Pre Great Depression

- Title insurers provided guarantees on the mortgages
- Limited before WW1, boomed after when there was a housing expansion.
- Limited regulation but limited adverse issues
 - Booming real estate market
 - High risk to capital
 - Serious conflicts of interest
- Stock market crash of 1929→industry failure

Source: Report from George W. Alger to Governor of New York, 1934 pp. 4,8,15

History-Post Great Depression

- Federal Housing Authority (FHA) created in 1934
 - Restored confidence in mortgage investments
 - Easier to obtain mortgages
- Prior to FHA founding
 - LTV \leq 50%
 - Loan term three to five years
- FHA offers insurance at 100% coverage → banks increase max LTV
- Lower down-payment → mortgages more obtainable
- Modern private MI industry begins - MGIC founded in 1957 by attorney Max Karl

History-Modern Private MI

- Private MI vs FHA MI
 - Limited coverage (decreased premium rates)
 - Product development
 - Less strict underwriting guidelines
 - Service (quicker response time)
- } (Increased mortgage originations)
- Three historical economic stresses:
 - Oil Patch Crisis in Texas and Oklahoma (Mid 1980s)
 - Southern California Defense Crisis (Early 1990s)
 - New England (Mid/Early 1990s)

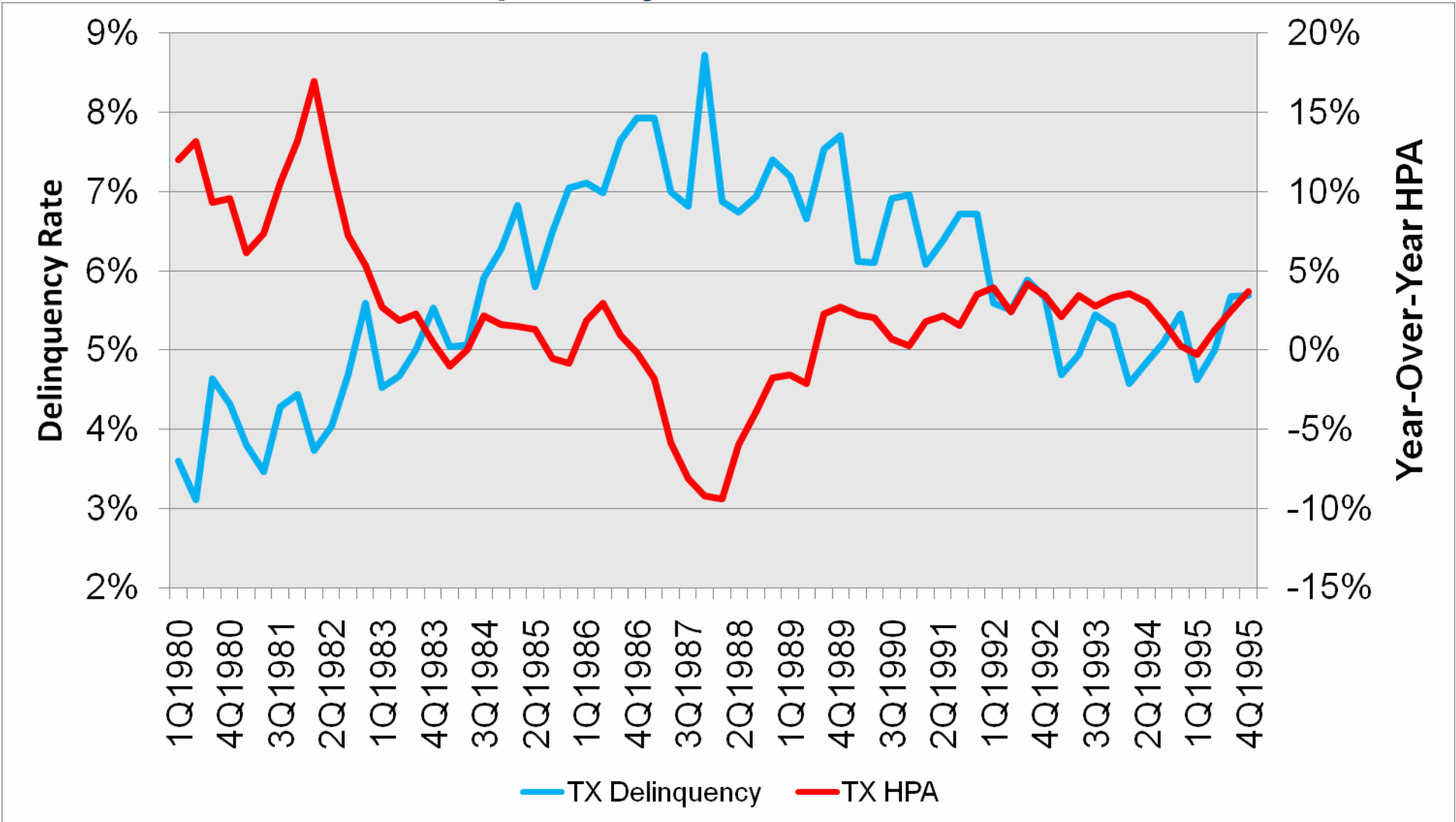
Source: Mortgage Insurance Companies of America (MICA) and New York Times Online Archive

History-Oil Patch Crisis

- Booming oil industry in the early 1980s in TX/OK/LA
- Influx of workers to region
- Demand for housing surges
- Home construction skyrockets
- House prices surge
- Oil market bottoms out
- Jobs evaporate/House prices drop
- Default rates reach nearly 30% in affected areas (e.g., Houston)
- Private MI priced to much lower default rates

Source: New York Times Online Archive

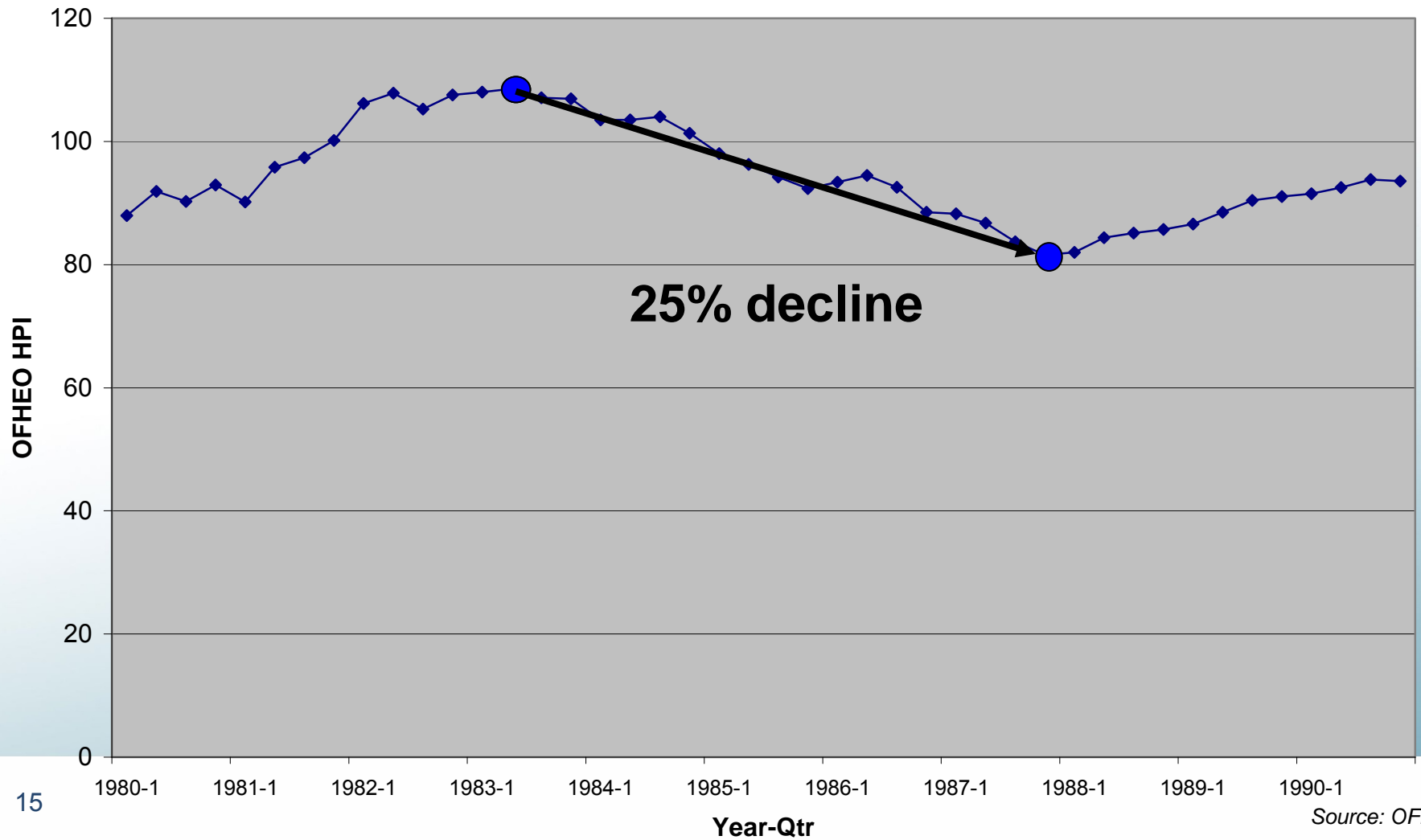
HPA and Delinquency Rate in TX



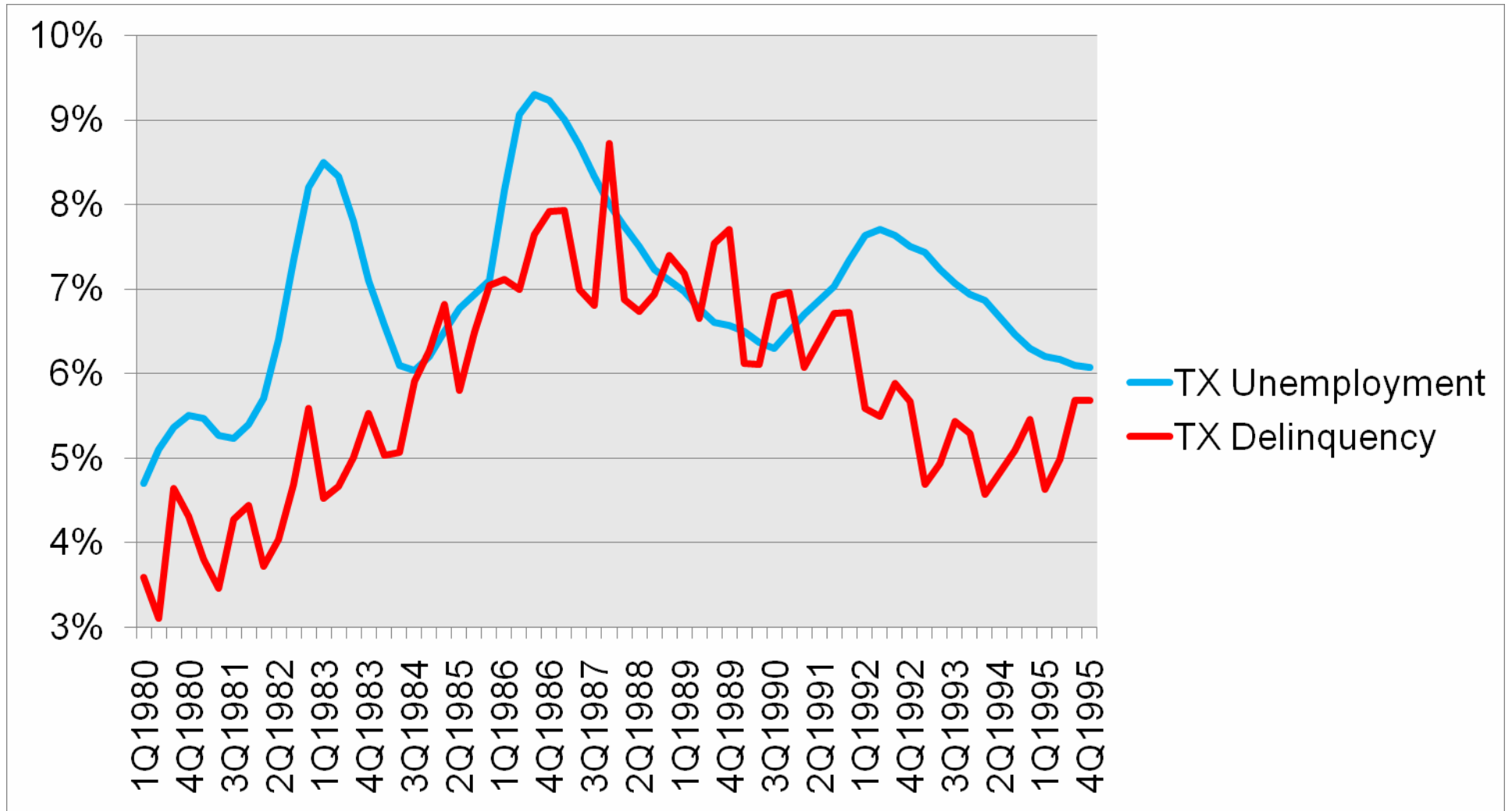
Source: MBA, OFHEO

Peak to Trough HPI

Houston MSA OFHEO HPI



Unemployment and Delinquency in TX



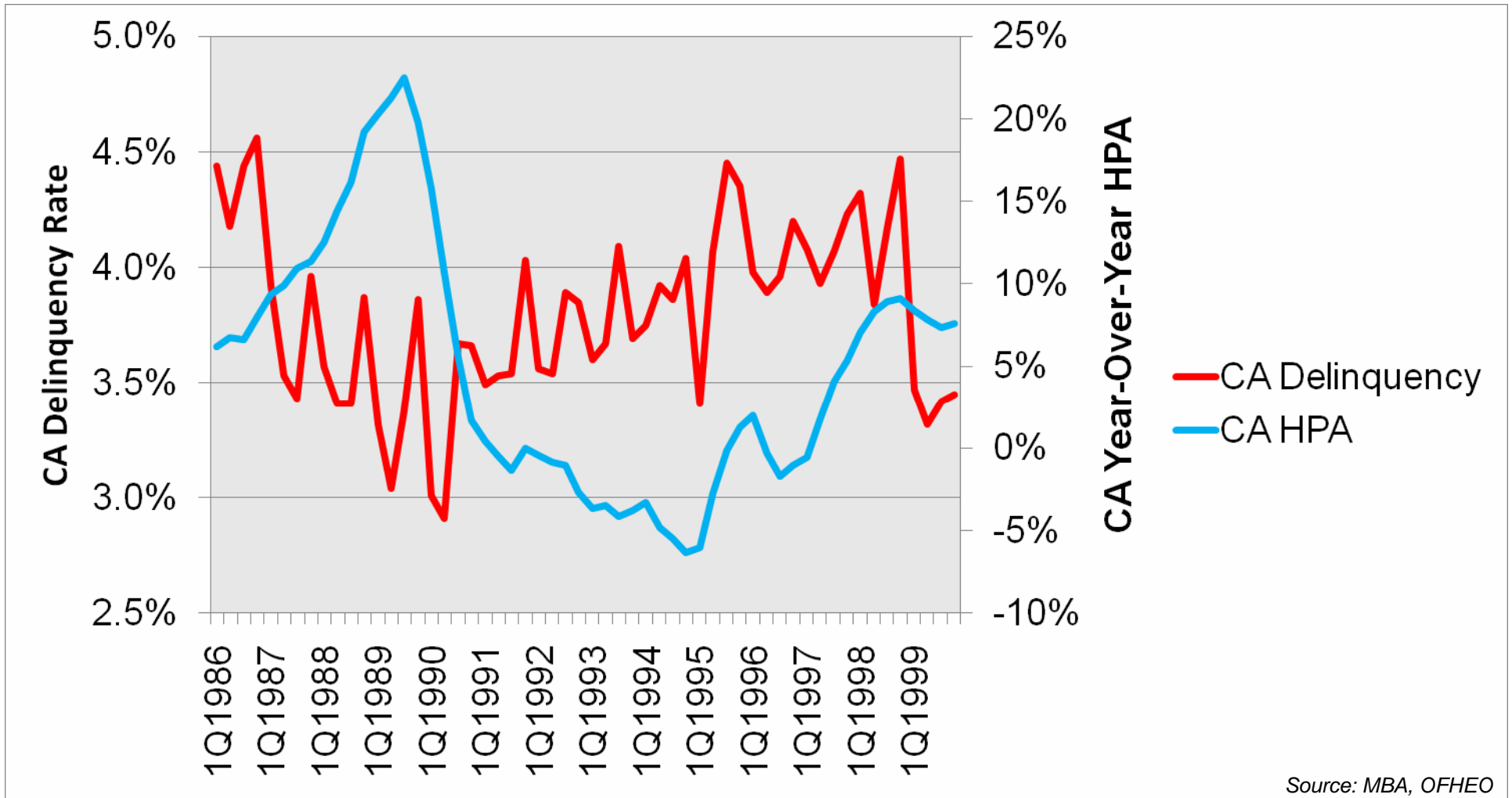
Source: MBA, Bureau of Labor Statistics

History-Southern California Defense Crisis

- A buildup of national defense jobs in southern California in the 1980s
- Influx of workers seeking jobs
- In the early to mid-90s, defense budgets were cut, and defense-sector employment dropped dramatically
- Similar to the “oil patch crisis” but less pronounced

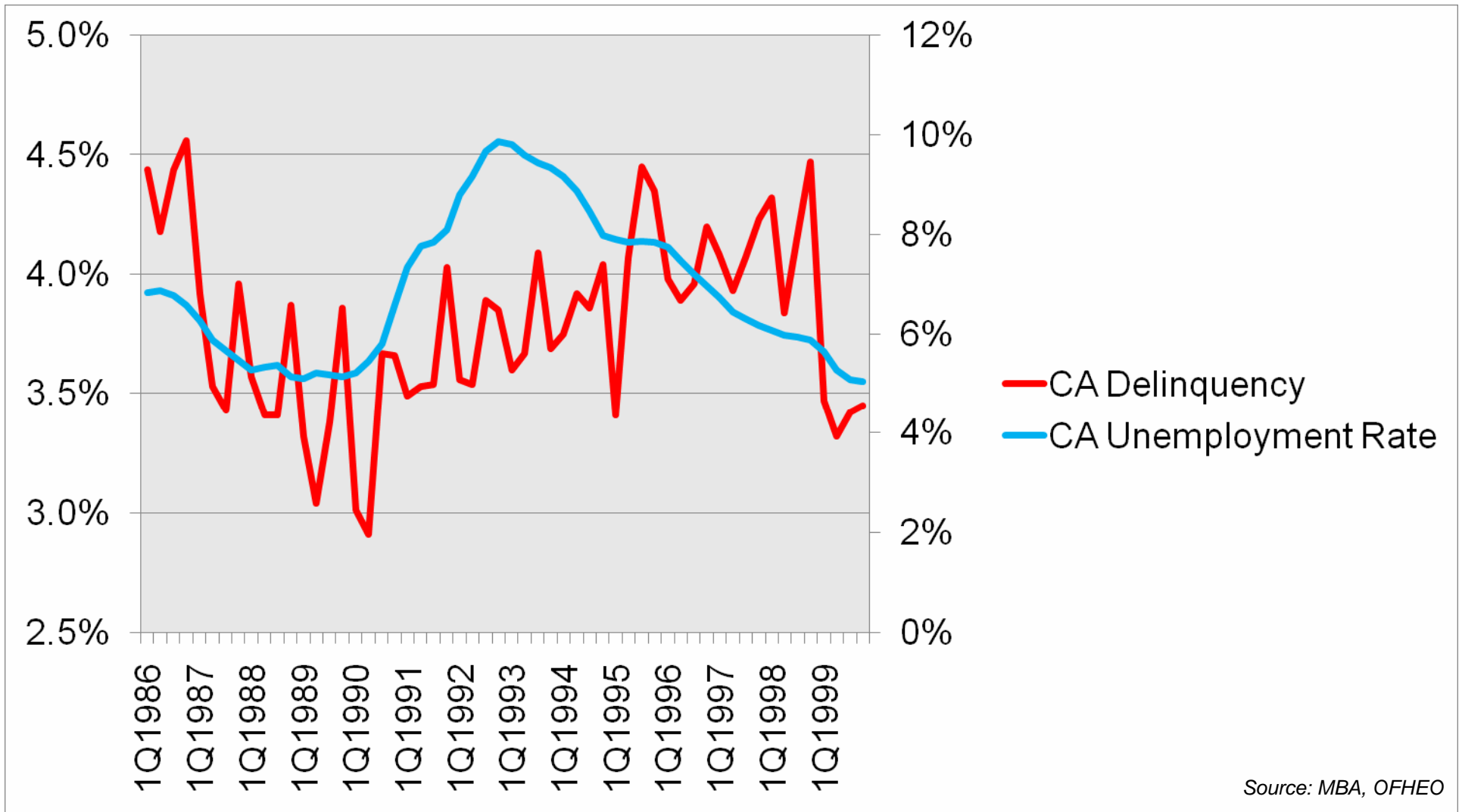
Source: New York Times Online Archives

HPA and Delinquencies in CA



Source: MBA, OFHEO

Unemployment and Delinquency in CA

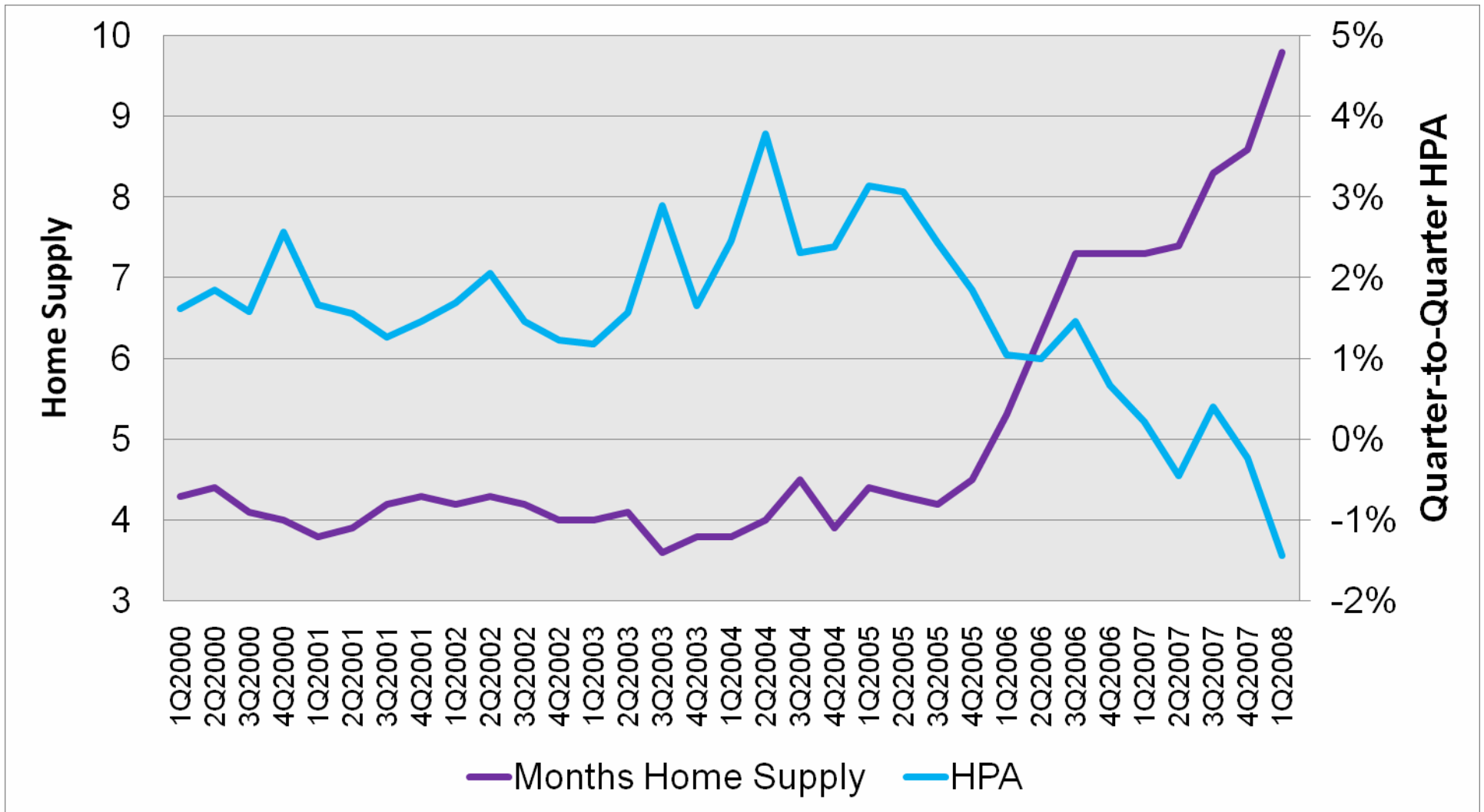


Source: MBA, OFHEO

History-Regional Crises

- Oil patch and southern California defense crises are microcosms of what is happening now on a national scale
- “[Senator Christopher Dodd said,] ‘Until we solve the foreclosure problem, we will not have any hope of solving the larger problem.’ Many economists believe the economy will continue to suffer as long as the pace of foreclosures keeps home prices from stabilizing.” — *WashingtonPost.com*, “*FDIC Details Plans to Alter Mortgages.*”

Divergence of HPA and Home Supply



Recent Events

- The market is more complex now than it was during the oil patch crisis or the southern California defense crisis.
 - Innovative Mortgage Products
 - MIs and MI Alternatives
 - Lax underwriting
 - Securitization / Rating Agencies