

Oklahoma's Defining Industries:

Changes, Risks, and Opportunities



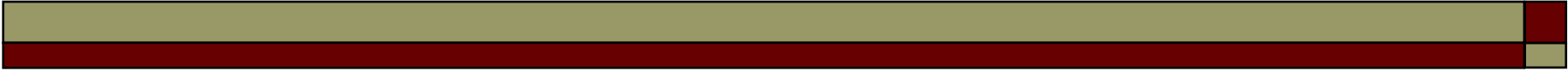
OIL WELLS OF OKLAHOMA



Oklahoma Economic Forums 2007

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The industrial structures of state economies have evolved over time

- During the 20th Century, most states' industrial structures—including Oklahoma's—shifted from being primarily agriculture-based, to heavily factory-based, to largely services-based
- Most state economies also came to look more like the nation, reducing regional variations in growth
- However, most states maintain fairly unique industrial structures – and Oklahoma ranks 5th in terms of being *dissimilar* to the nation

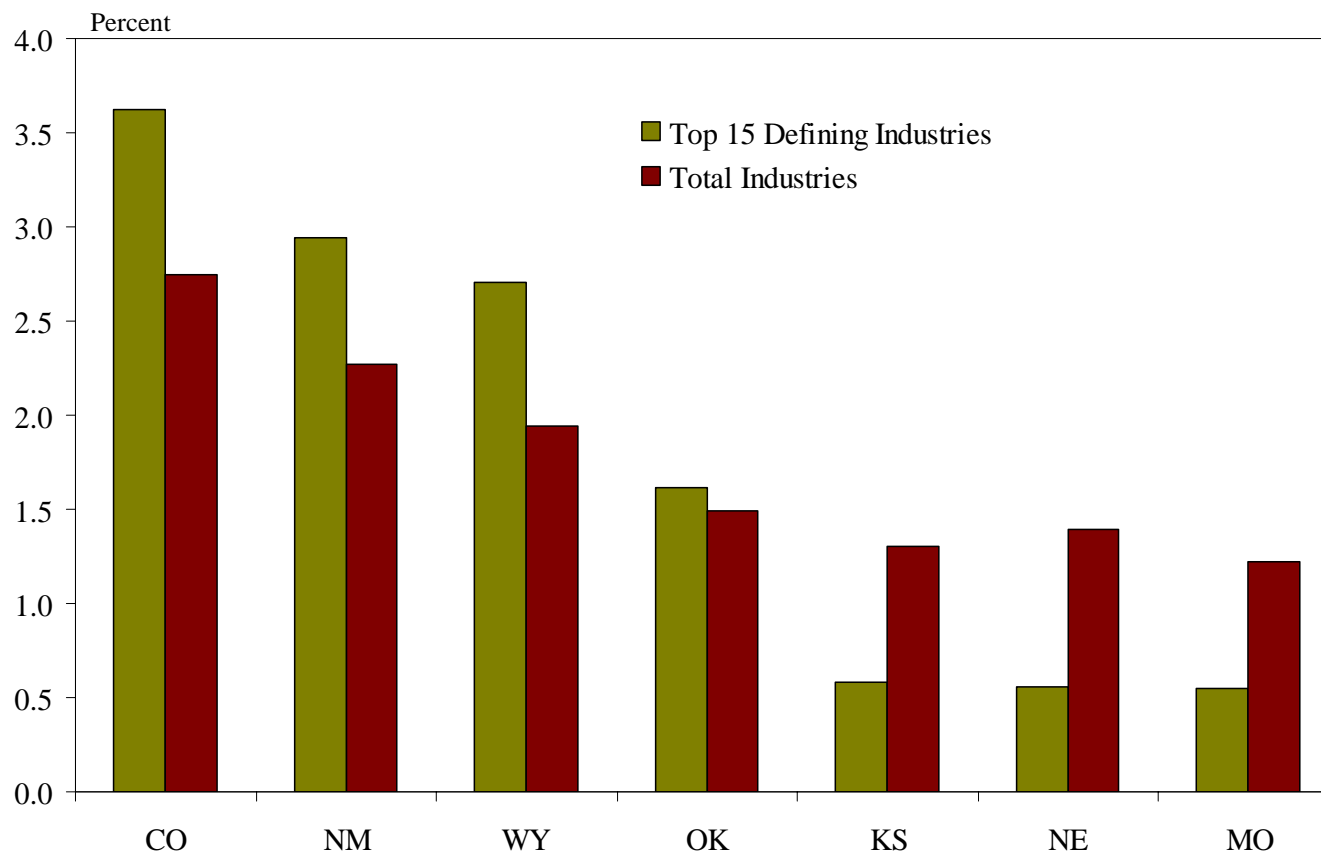


What are defining industries?

- Those that are heavily concentrated in a state relative to the nation
- A common measure is location quotient (LQ), or the ratio of an industry's share of state employment to its share of U.S. employment
- The higher its LQ, the more defining an industry is
- Data are available for nearly 300 industries

Why are defining industries important?

Average Annual State Job Growth, 1990-2005
Tenth Federal Reserve District States



Source: U.S. Bureau of Economic Analysis, U.S. Bureau of Labor Statistics, Railroad Retirement Board

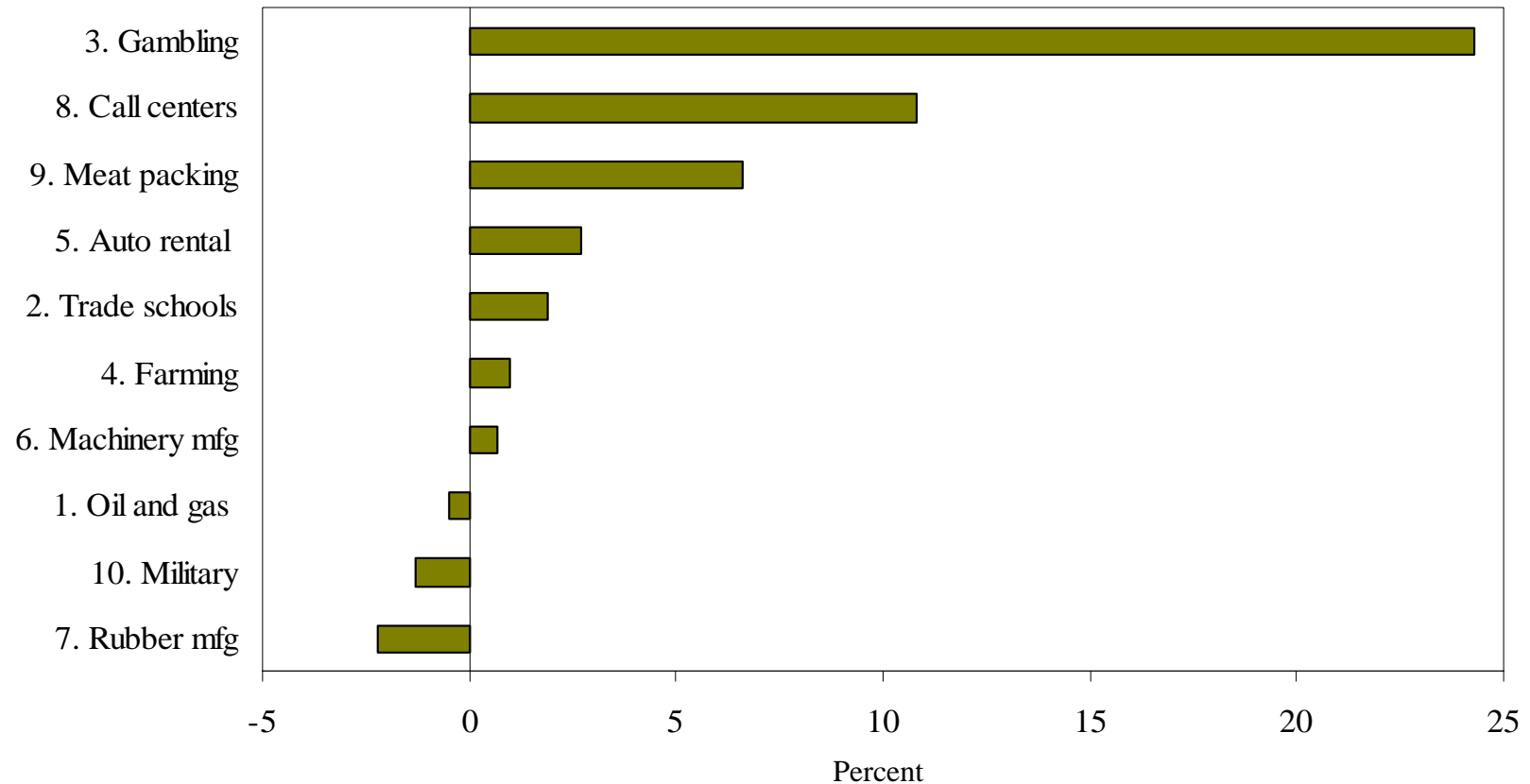


The Ten Industries that Most Define Oklahoma

Rank	Industry	LQ 2005	LQ 1990	Avg. Pay 2005
1	Oil & gas	8.2	8.5	\$66,972
2	Trade schools	4.5	4.0	\$33,924
3	<i>Gambling</i>	<i>3.4</i>	<i>1.0</i>	<i>\$21,335</i>
4	Farming	3.3	2.7	\$5,559
5	Auto rental	2.9	2.3	\$43,266
6	Machinery mfg	2.7	2.1	\$45,275
7	Rubber mfg	2.5	2.9	\$52,368
8	<i>Call centers</i>	<i>2.0</i>	<i>0.8</i>	<i>\$25,838</i>
9	<i>Meat packing</i>	<i>1.9</i>	<i>0.9</i>	<i>\$27,596</i>
10	Military	1.9	2.6	\$54,701

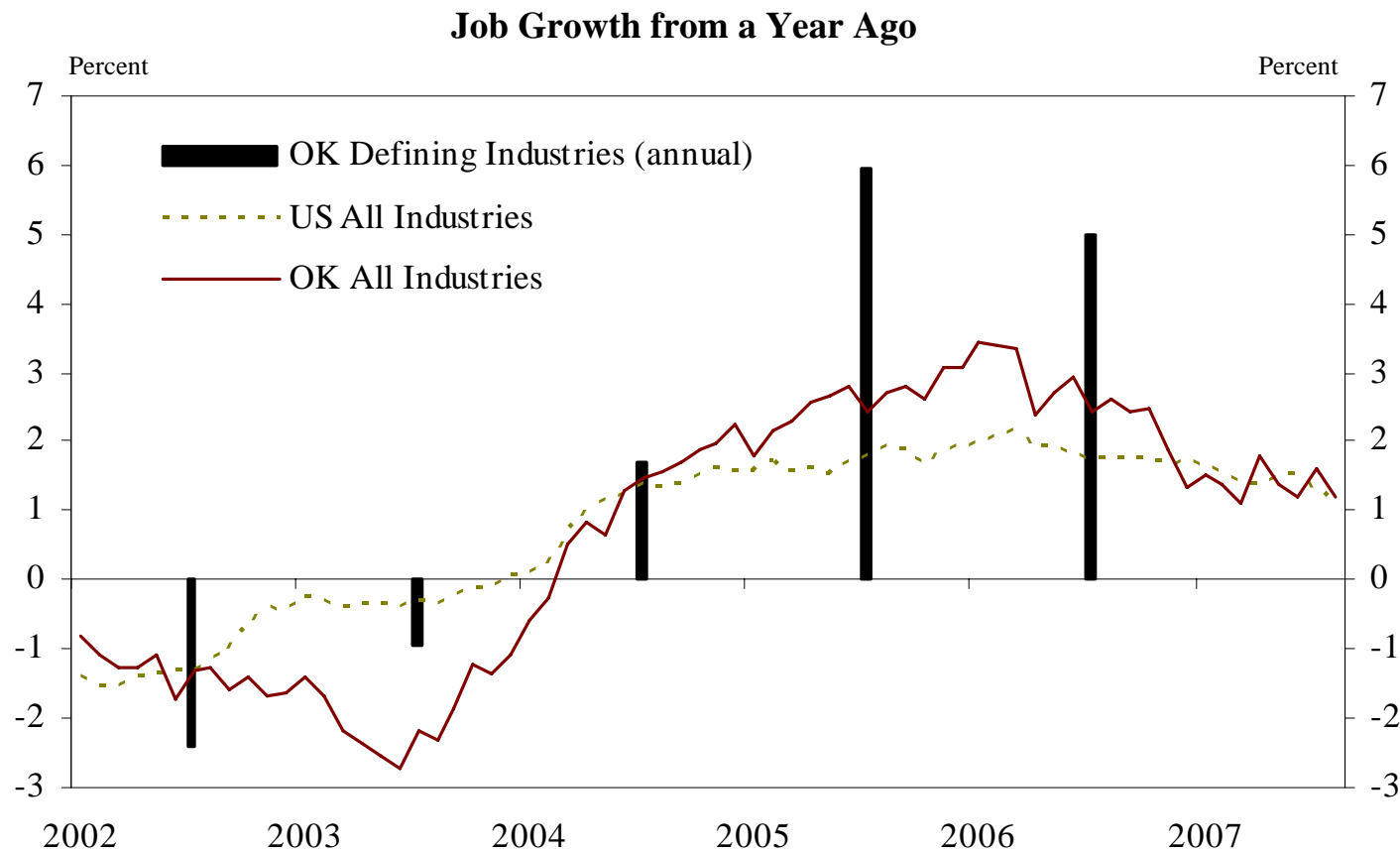
Growth in the state's defining industries has varied widely since 1990

Oklahoma Defining Industries
Average ANNUAL Job Growth, 1990-2005



Sources: Bureau of Labor Statistics, Bureau of Economic Analysis

But together, they help explain Oklahoma's recent differing performance



Source: U.S. Bureau of Economic Analysis, U.S. Bureau of Labor Statistics



The near-term outlook for most of the state's defining industries is good

- Oil prices are high and futures prices for both oil and gas remain elevated
- Manufacturers report solid capital spending plans despite recent market turmoil, and farm incomes are generally solid despite crop damage
- Casinos and call centers continue to open, travelers and businesses continue to rent cars, and military operations continue worldwide



The longer-term outlook is more mixed

- Growth in agriculture and manufacturing jobs is expected to be restrained by technology and trade
- The longer-term outlook for trade schools and auto rental companies is generally more positive, while jobs in oil and gas and the military will depend on energy prices and U.S. defense activity
- Future prospects for the state's new and rapidly-growing defining industries—gambling, call centers, and meat packing—are somewhat mixed

New defining industries have emerged in other nearby states in recent decades

Industry	State(s)	Average Pay
Software publishers	CO	\$91,973
Computer design	CO	\$80,491
Data processing	MO	\$59,772
Machinery rental	WY	\$54,392
Office services	KS	\$48,123
Biotech laboratories	KS, NM	\$47,822 (KS)
Wireless telecom	NM	\$36,491
Freight trucking	NE	\$35,496
Gambling	MO, NM	\$27,829 (MO)
Internet shopping	NE	\$24,270

Note: These industries each have location quotients of at least 1.7 and an annual growth rate of 4 percent or higher from 1990-2005

Sources: Bureau of Labor Statistics, Bureau of Economic Analysis, Railroad Retirement Board



Some of these may offer opportunities for both metro and nonmetro Oklahoma

- Several well-paying, high-growth industries could locate in Oklahoma metros—and some are starting to
 - Examples include biotech laboratories (OUHSC), wireless telecoms (Vyvx), data processing, computer design
- Likewise, several emerging industries could locate in less densely-populated areas—such as Pryor, OK
 - Examples include data processing (Google), office services, biotech laboratories, internet shopping houses
- Constraints include: availability of trained workers and the amenities often desired by skilled workers



Summary of Oklahoma's Defining Industries

- ❑ Oklahoma's defining industries have driven the state's growth in recent years—generally in a good direction
- ❑ While long-term outlooks for these industries are mixed, short-term outlooks are good and new opportunities exist in emerging industries
- ❑ Could a NON-defining industry derail everything?

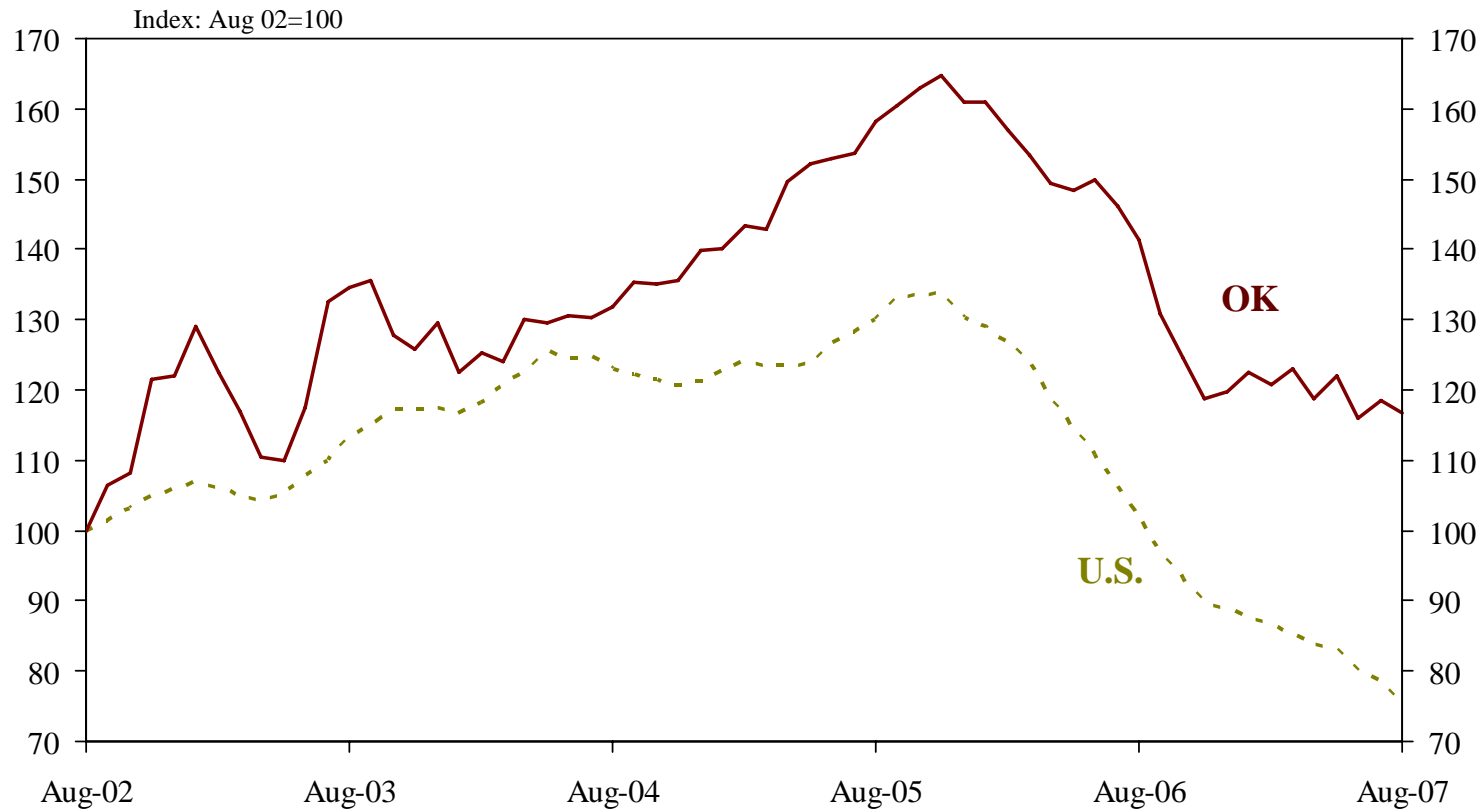


The State of Housing and Housing Finance in Oklahoma

- The U.S. housing sector is in a slump
- The subprime mortgage sector is blamed
- How does Oklahoma compare?

New home construction is down from recent peaks but has stabilized in 2007

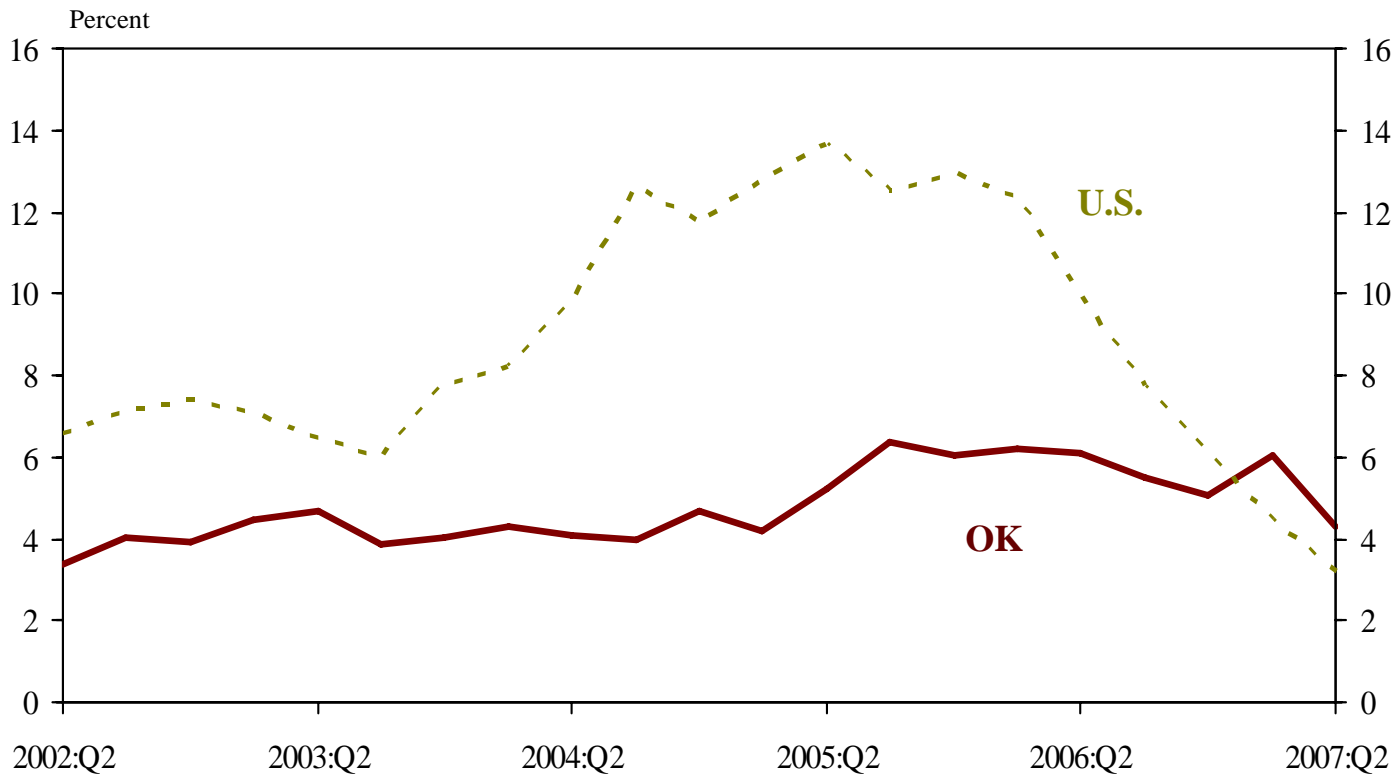
Single-Family Housing Permits
Seasonally Adjusted



Source: Census Bureau

Home price growth in the state has also slowed, but less than in the nation

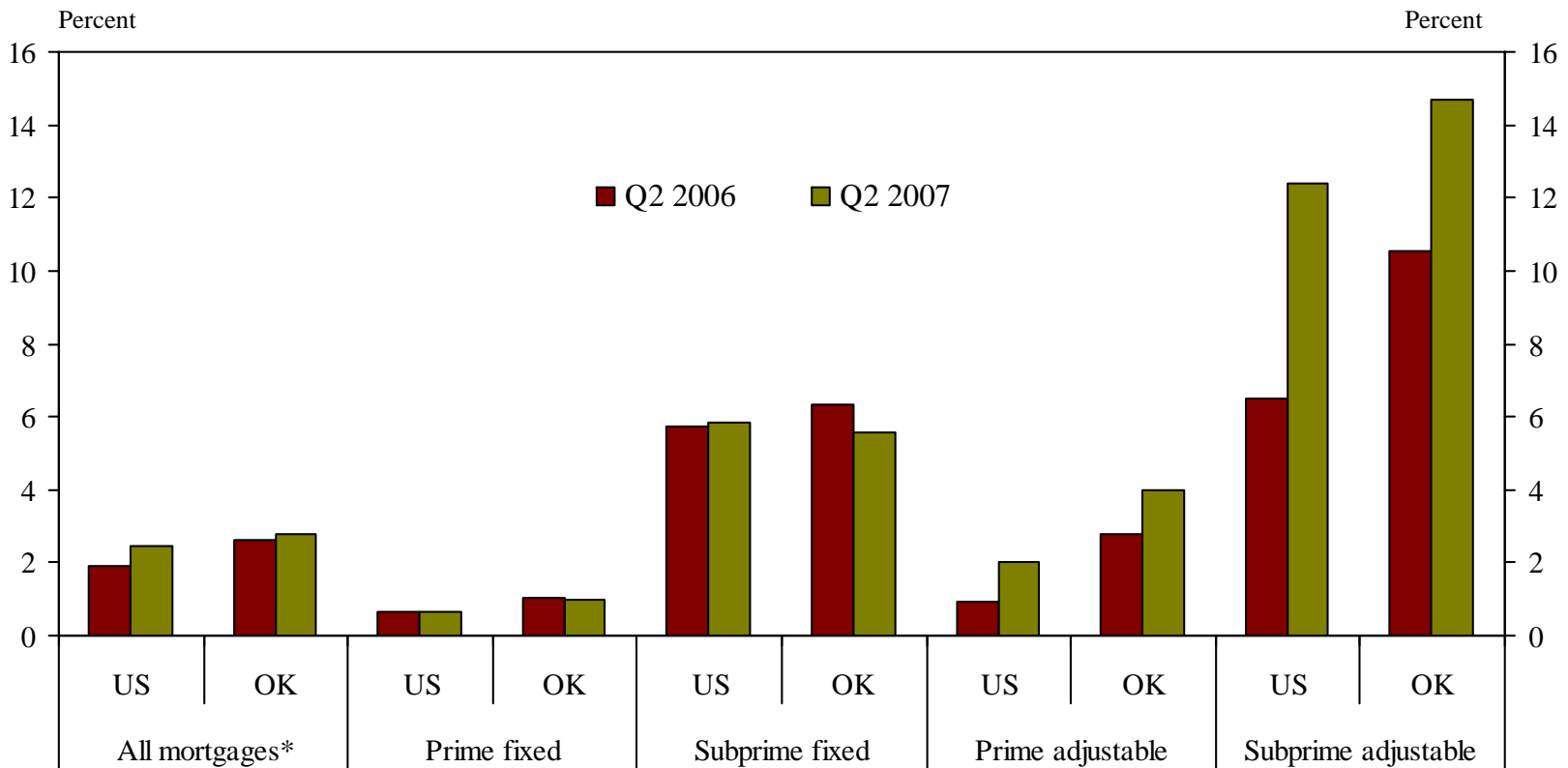
Repeat Sales Home Price Index
Year-over-year growth



Source: OFHEO

Delinquencies have risen for adjustable-rate mortgages, both prime and subprime

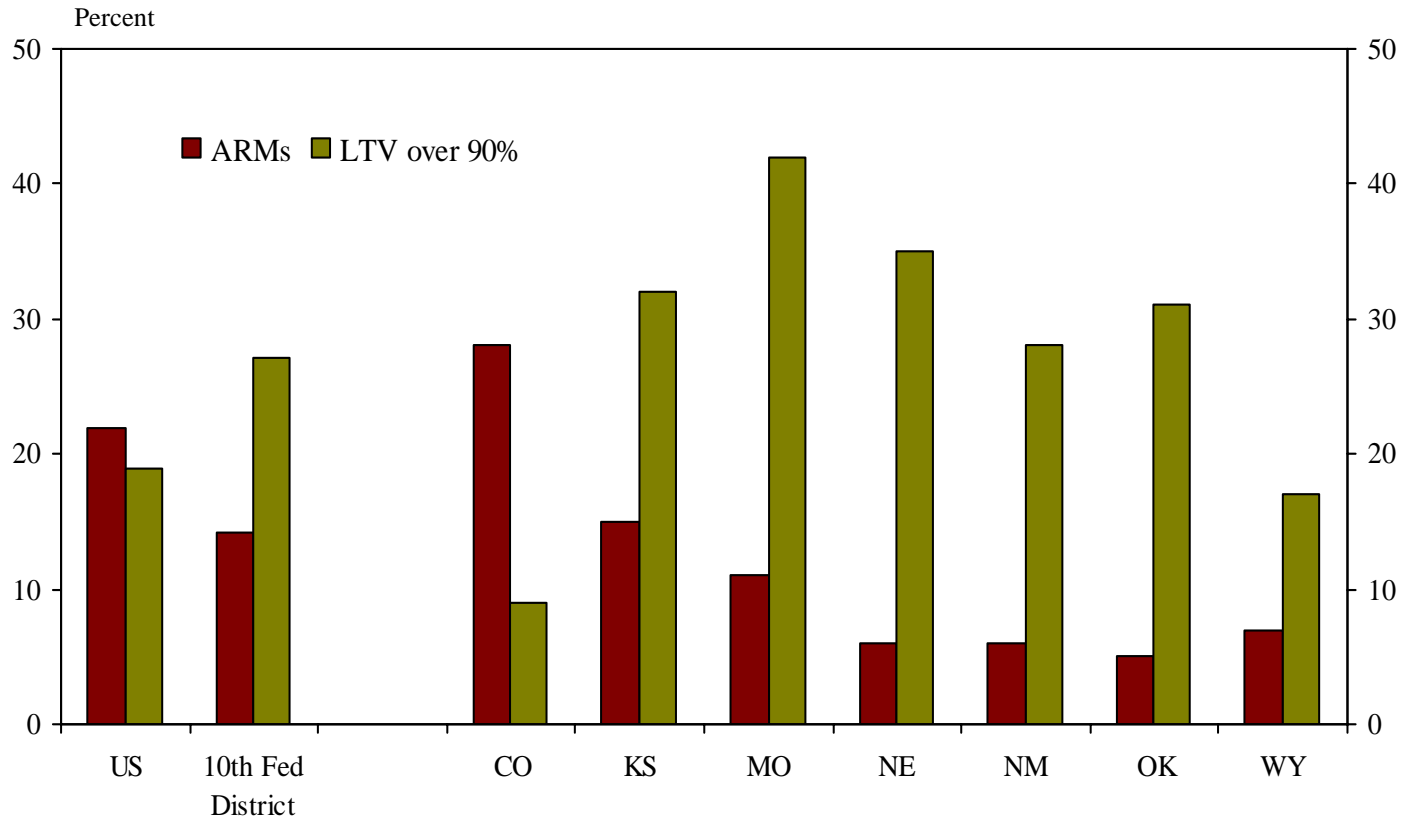
Share of Mortgages Seriously Delinquent
90 days or more past due or in foreclosure



* Includes FHA, VA, and uncategorized loans
Source: Mortgage Bankers Association

But Oklahoma's future foreclosure risk appears lower than in the U.S.

ARM and High Loan-To-Value Shares of Mortgages
First lien conventional mortgages originated in 2006



Source: Federal Housing Finance Board



Questions?