



# After the Boom:

## *Texas Economy Downshifts in Energy Bust*

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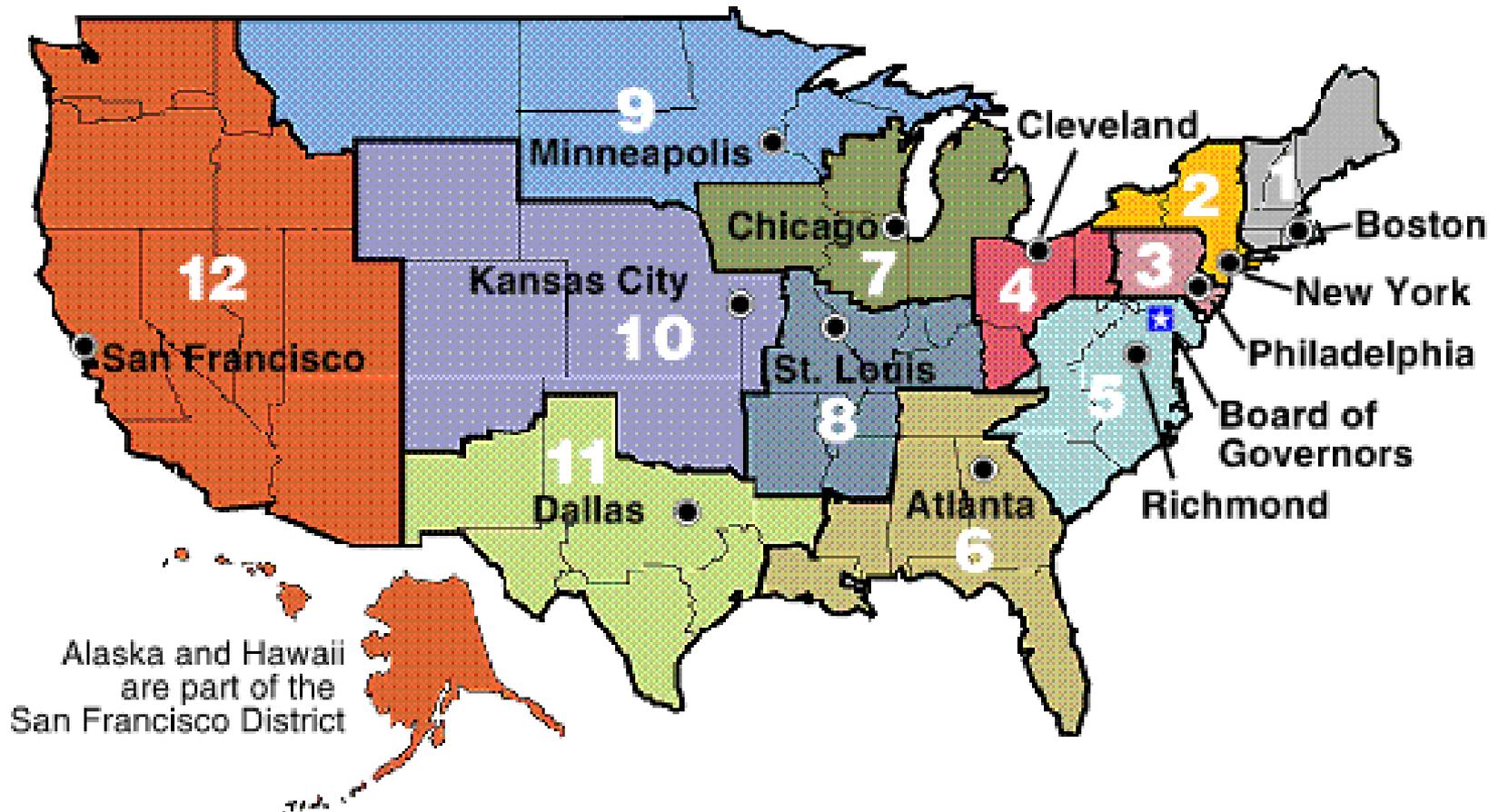
Federal Reserve Bank of Dallas

May 18, 2016

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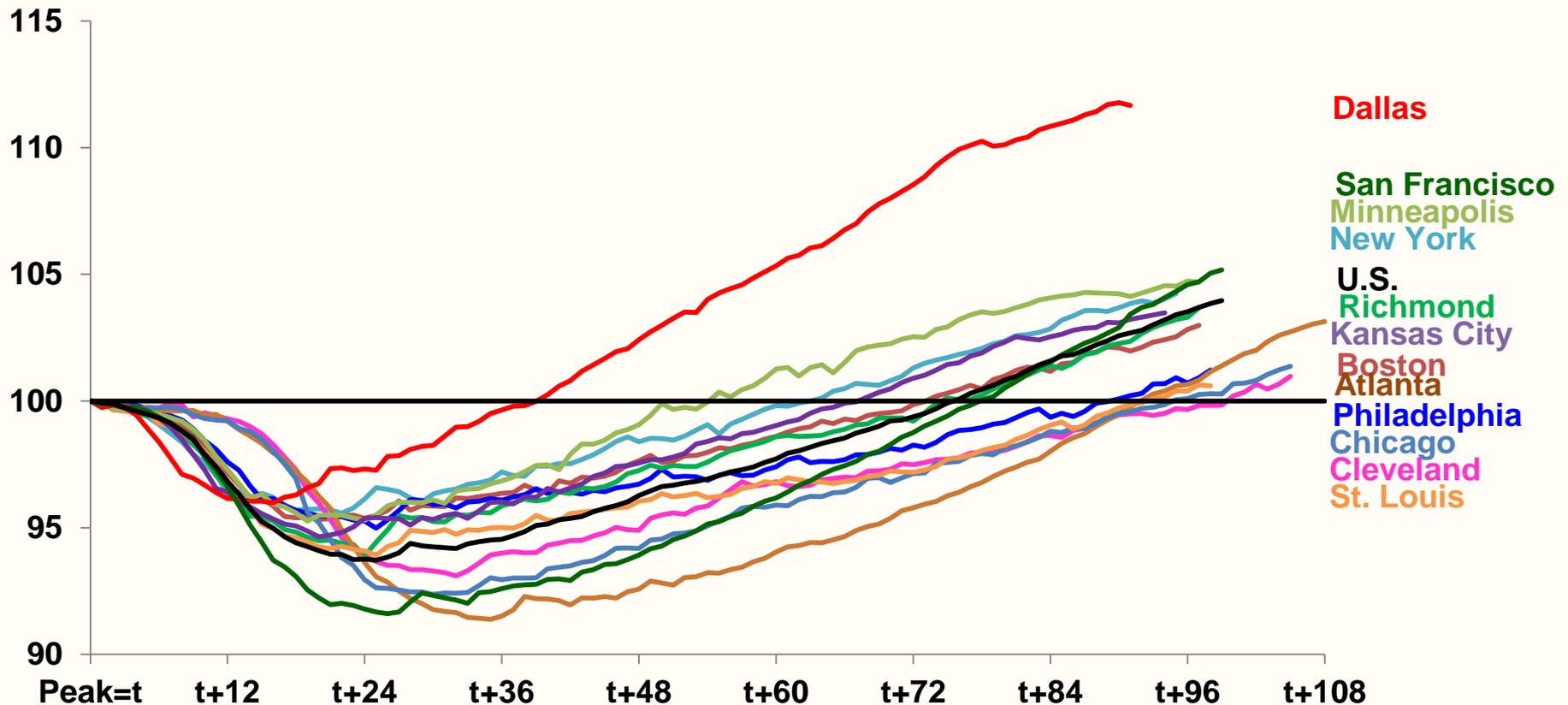
# Federal Reserve District map





# After Great Recession, 11th District was first to recover all lost jobs

Index, each District's peak employment = 100



Dallas

San Francisco  
Minneapolis  
New York

U.S.  
Richmond  
Kansas City

Boston  
Atlanta  
Philadelphia  
Chicago  
Cleveland  
St. Louis



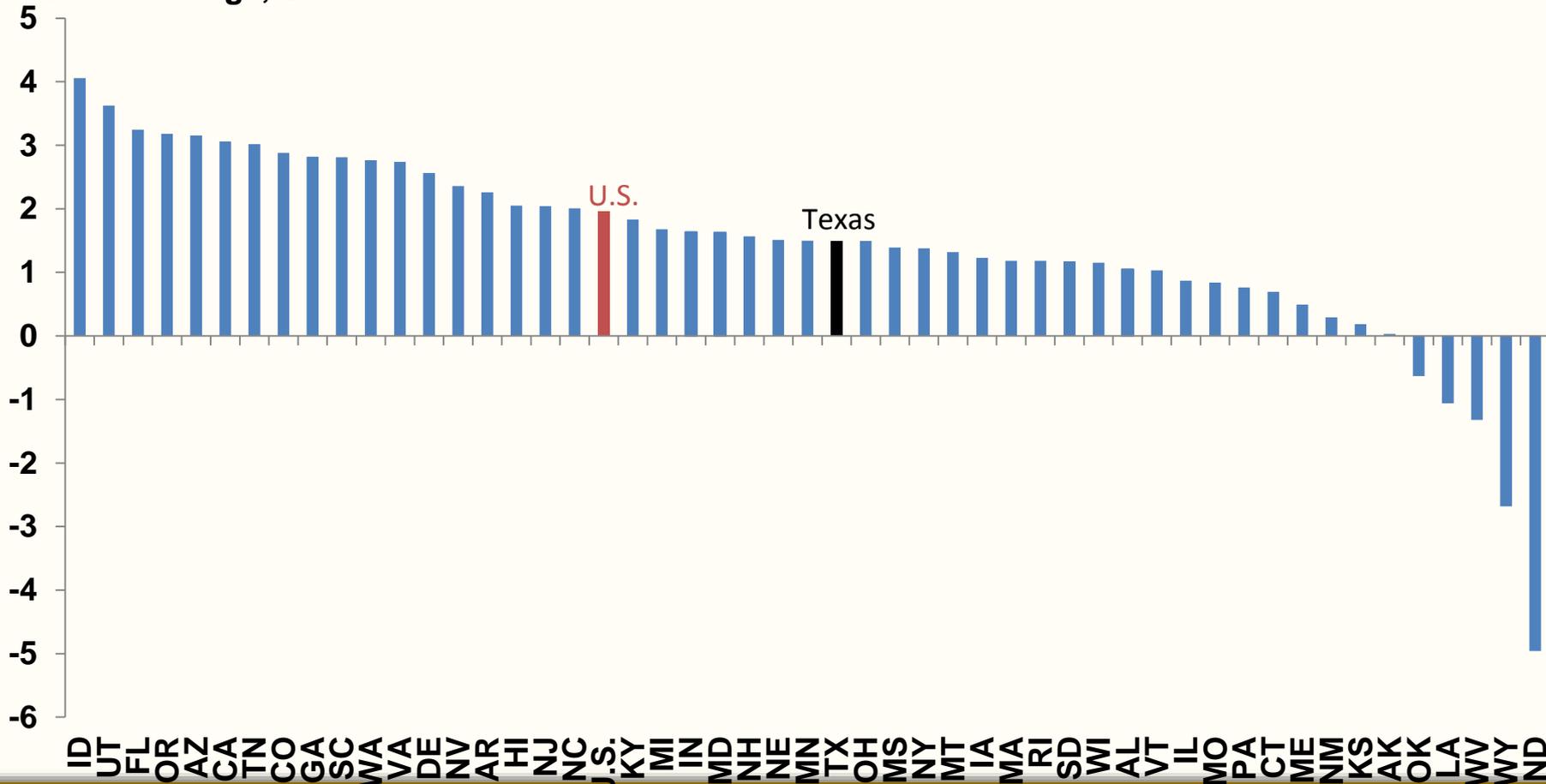
# Texas economic recap and outlook: What a difference a year makes...

- 11<sup>th</sup> District and the Great Recession
  - Last in, first out
  - In expansion since November 2011
- 2014: blistering Texas job growth at 3.6%
  - Oil prices drop by 70%
- 2015: state growth slips under nation
  - Texas job growth of 1.3%
- 2016: growth slows further



# In 2015, Texas 26<sup>th</sup> in job growth

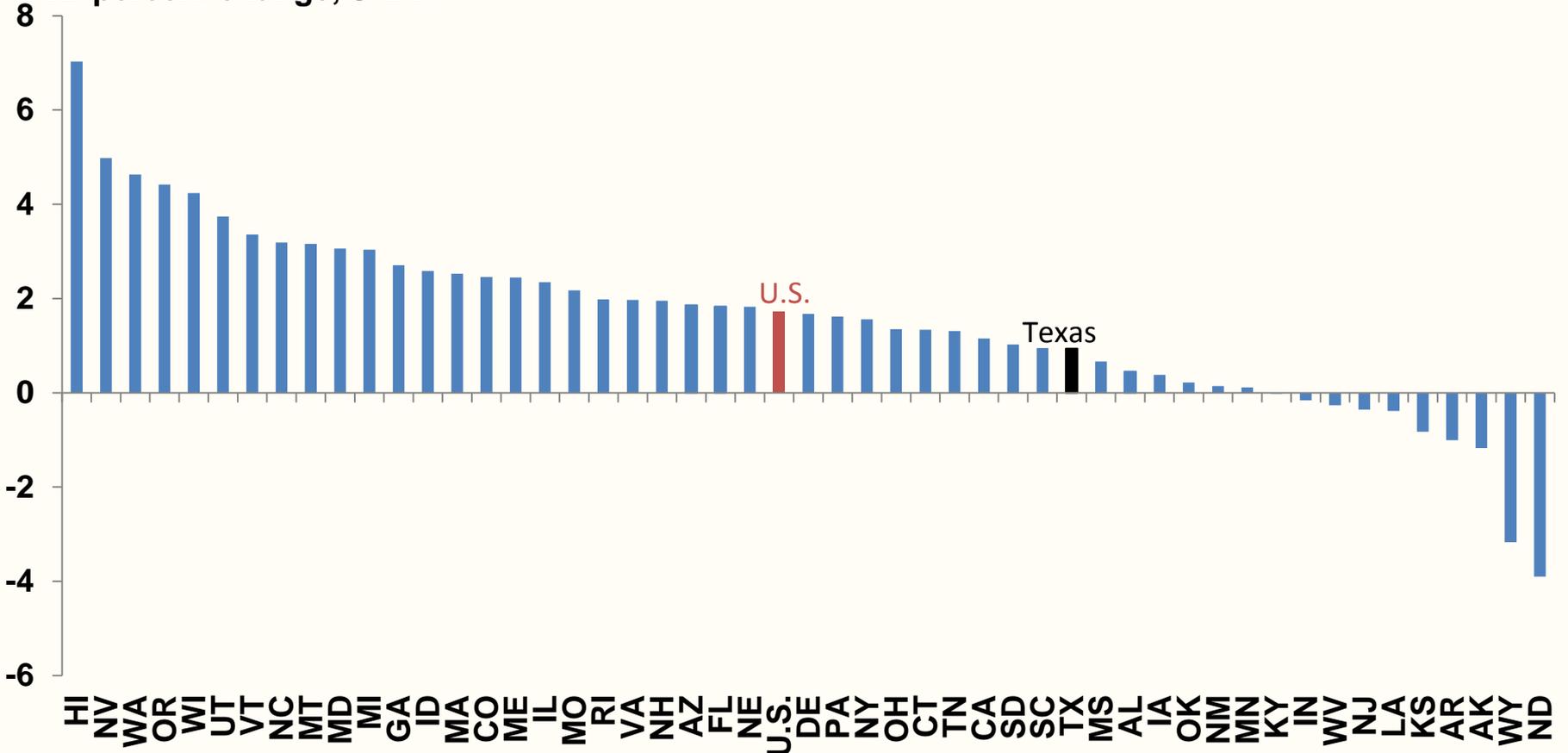
Percent change, SAAR





# In 2016, Texas ranks a distant 34<sup>th</sup>

YTD percent change, SAAR

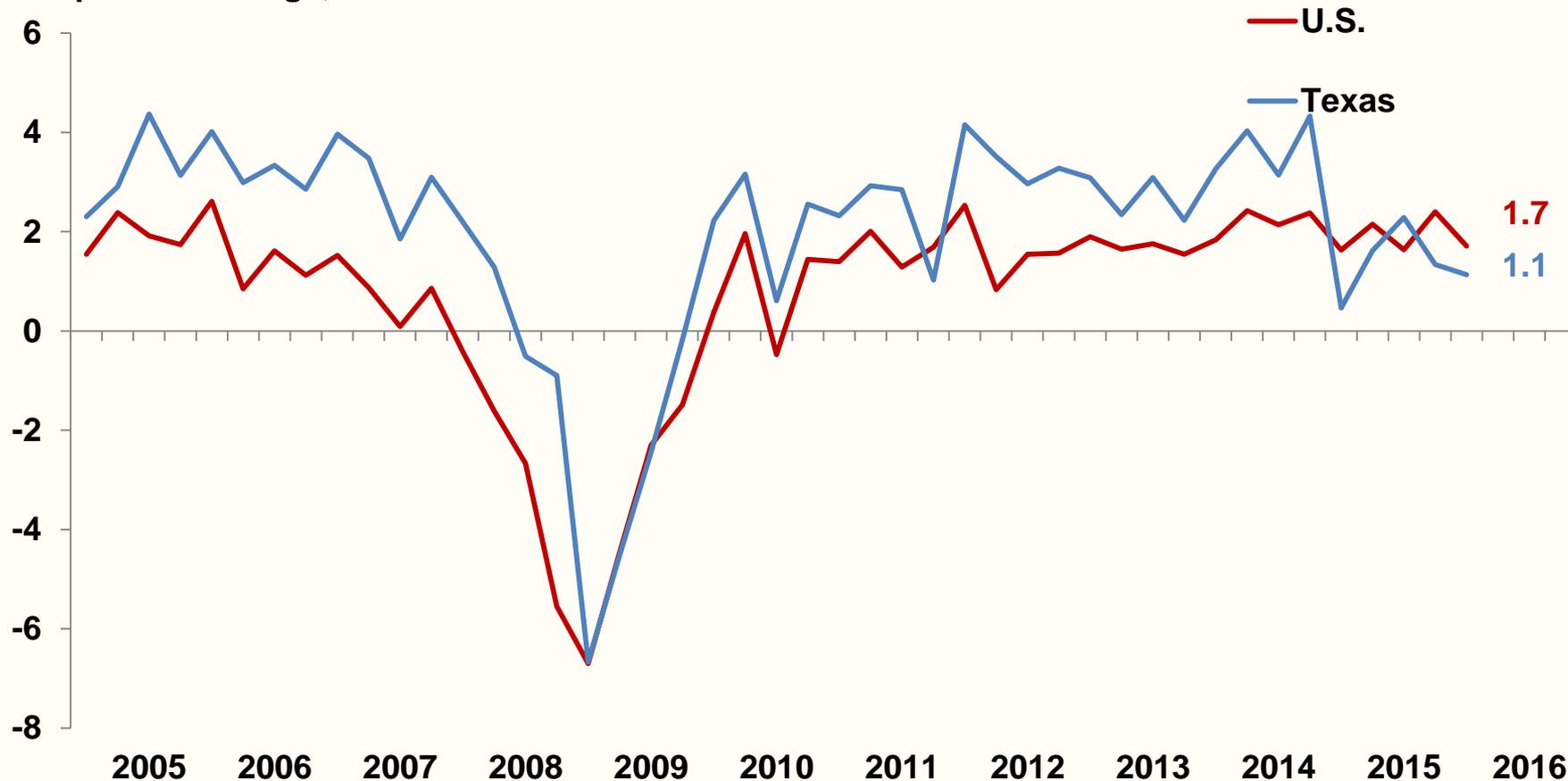


SOURCES: Bureau of Labor Statistics; FRB Dallas.



# Texas job growth dips below nation's for first time in 4 years

Q/Q percent change, SAAR

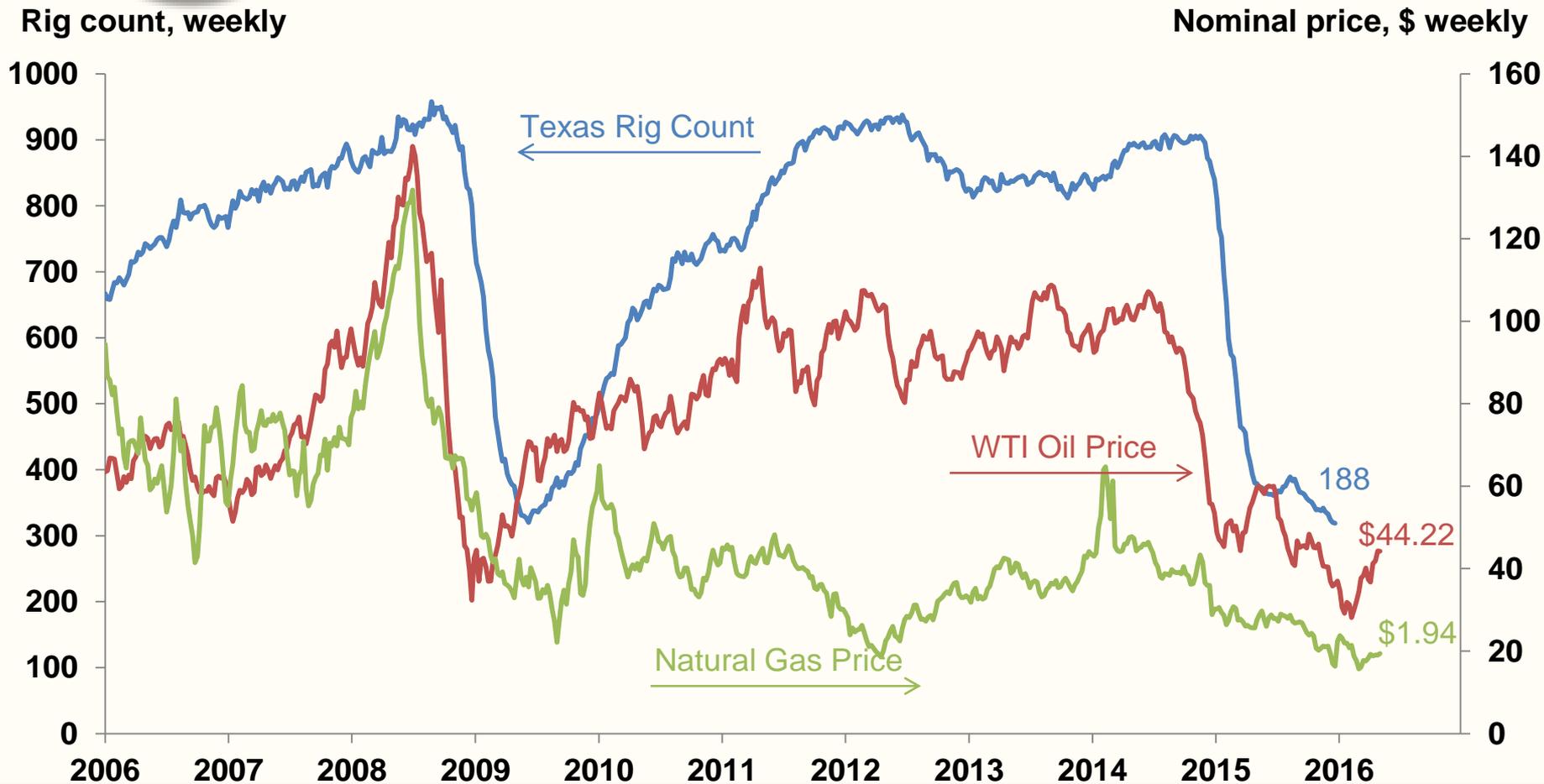


NOTES: Quarterly employment is last month of a quarter; Last quarter is Q1 2016.

SOURCES: Bureau of Labor Statistics; Texas Workforce Commission; seasonal adjustments by FRB Dallas.



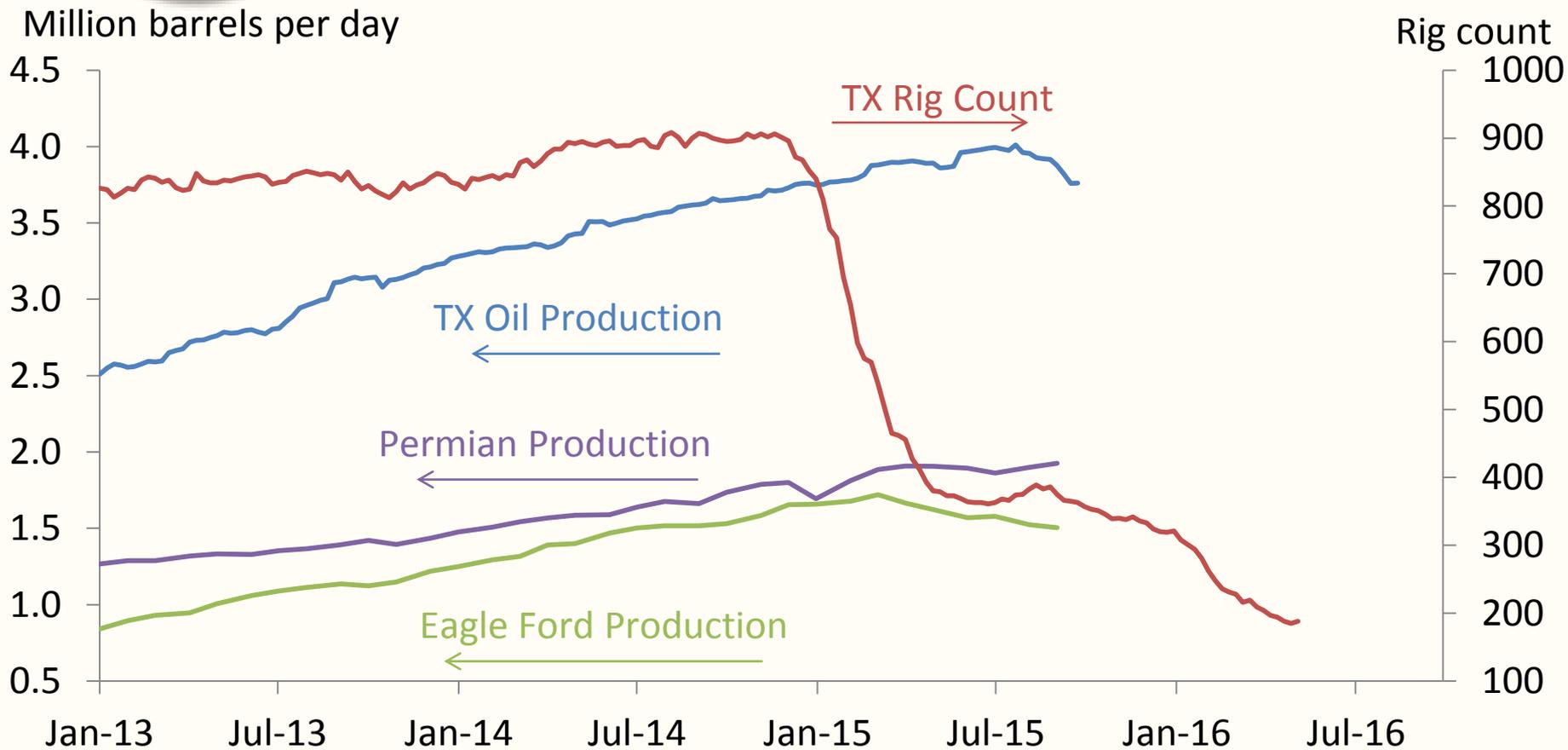
# The main problem: Falling oil prices brought down rig count



NOTE: Natural gas price is multiplied by 10.  
SOURCES: Baker Hughes; *Wall Street Journal*.



# But oil production was slow to fall in response to rig count decline...

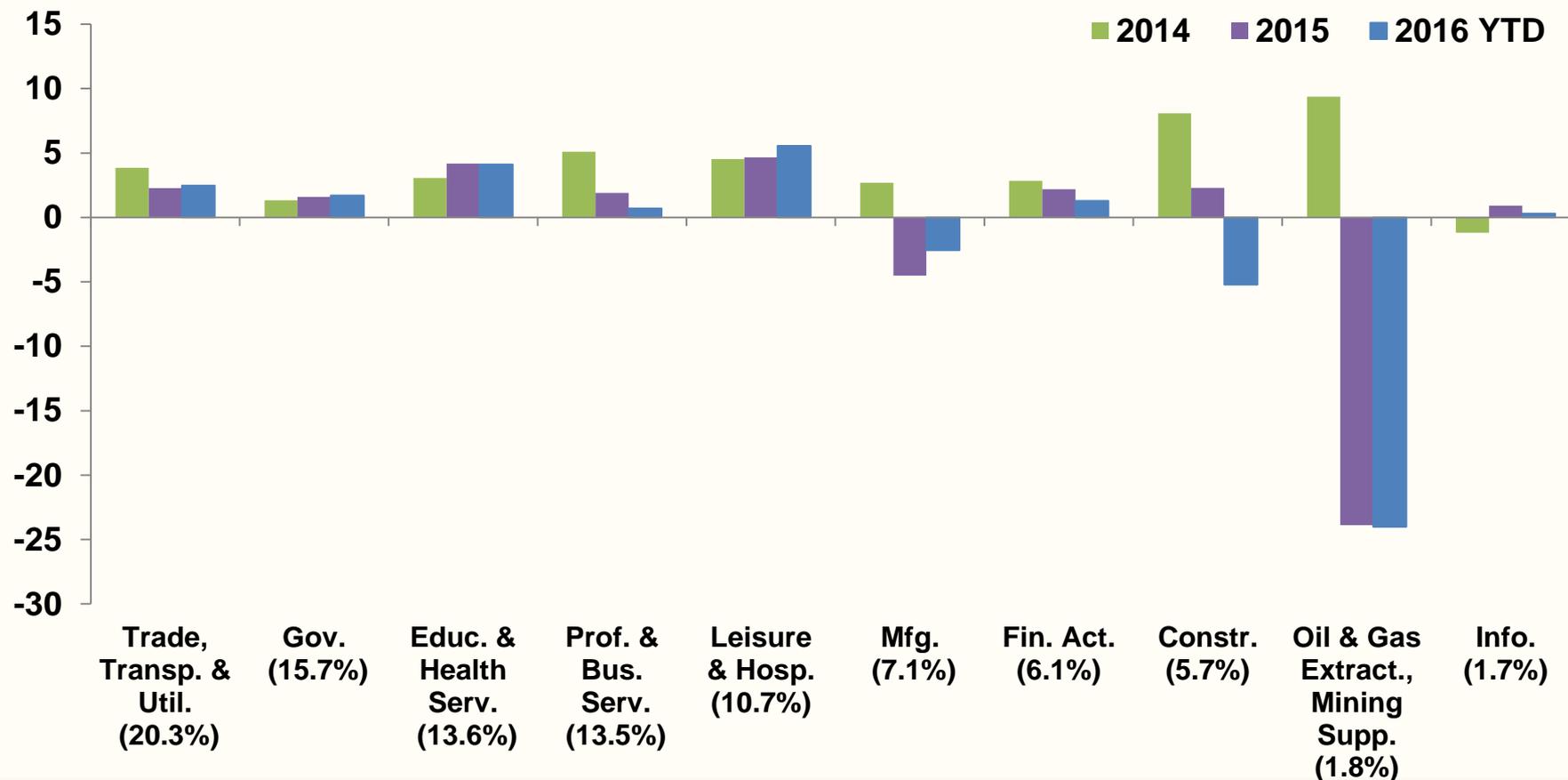


Sources: Oil and Gas Journal; Baker Hughes.



# Goods sector declines are easing, but weakness spreading to services

Percent change in employment, SAAR



NOTES: 2016 YTD is the annualized percent change through March; each sector's share of employment is in parentheses.

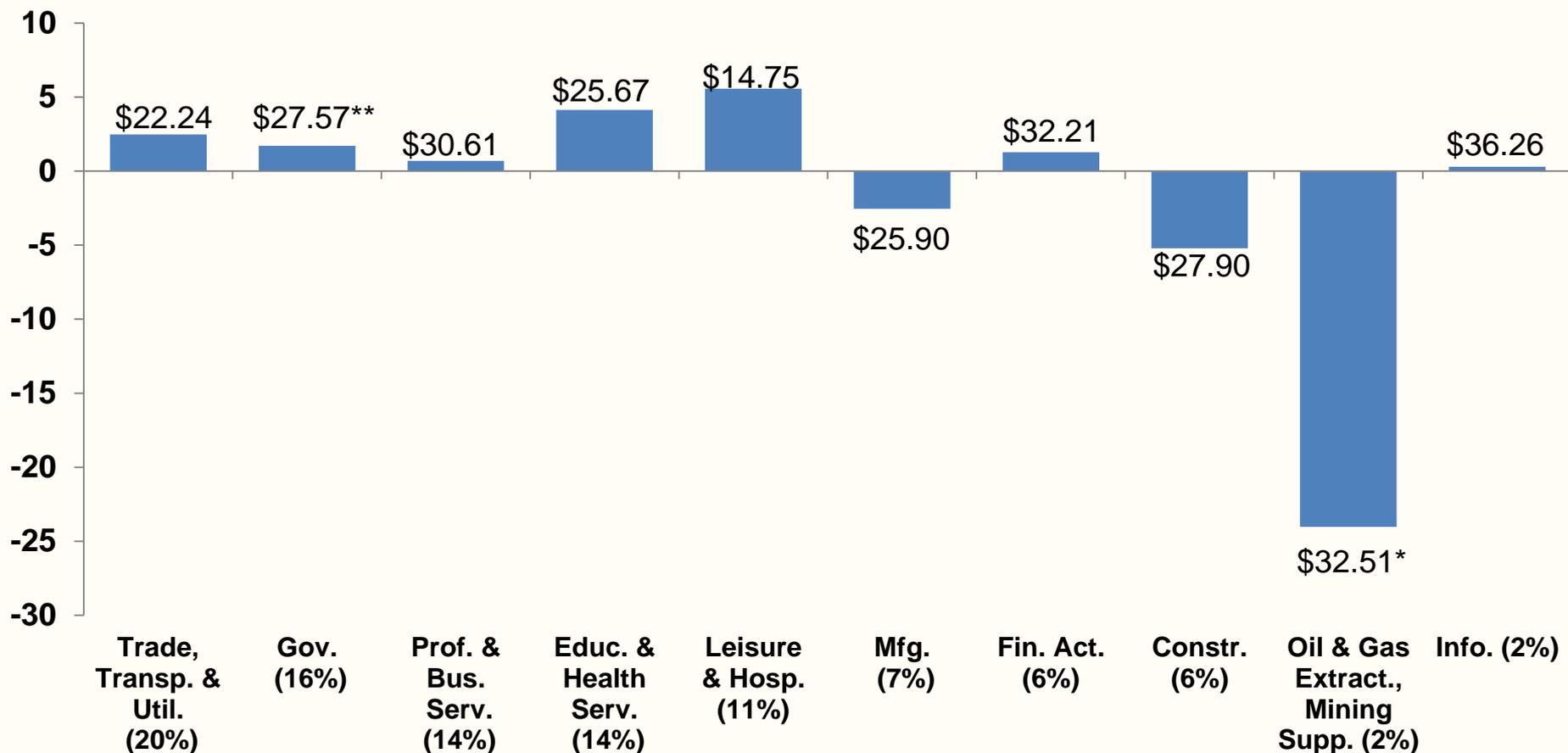
SOURCES: Bureau of Labor Statistics; TWC; seasonal and other adjustments by FRB Dallas.



# We sure will miss the energy sector jobs

## Employment growth rates and average hourly wages by sector

YTD percent change



NOTE: Numbers in chart are average hourly earnings of the respective sector.

SOURCES: Bureau of Labor Statistics; seasonal and other adjustments by FRB Dallas.

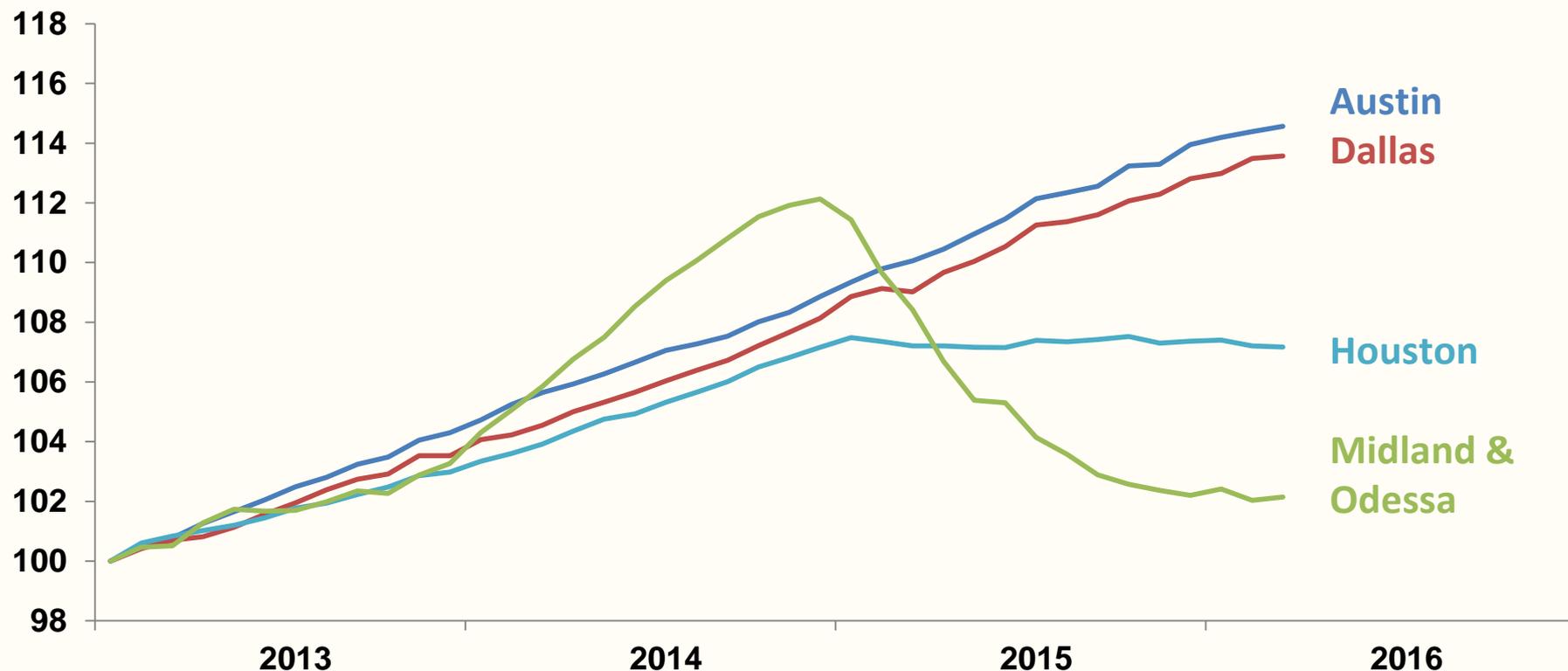
\*Avg. hourly earnings for mining only

\*\*2015 Mean hourly earnings



# Oil cities begin to lose jobs...

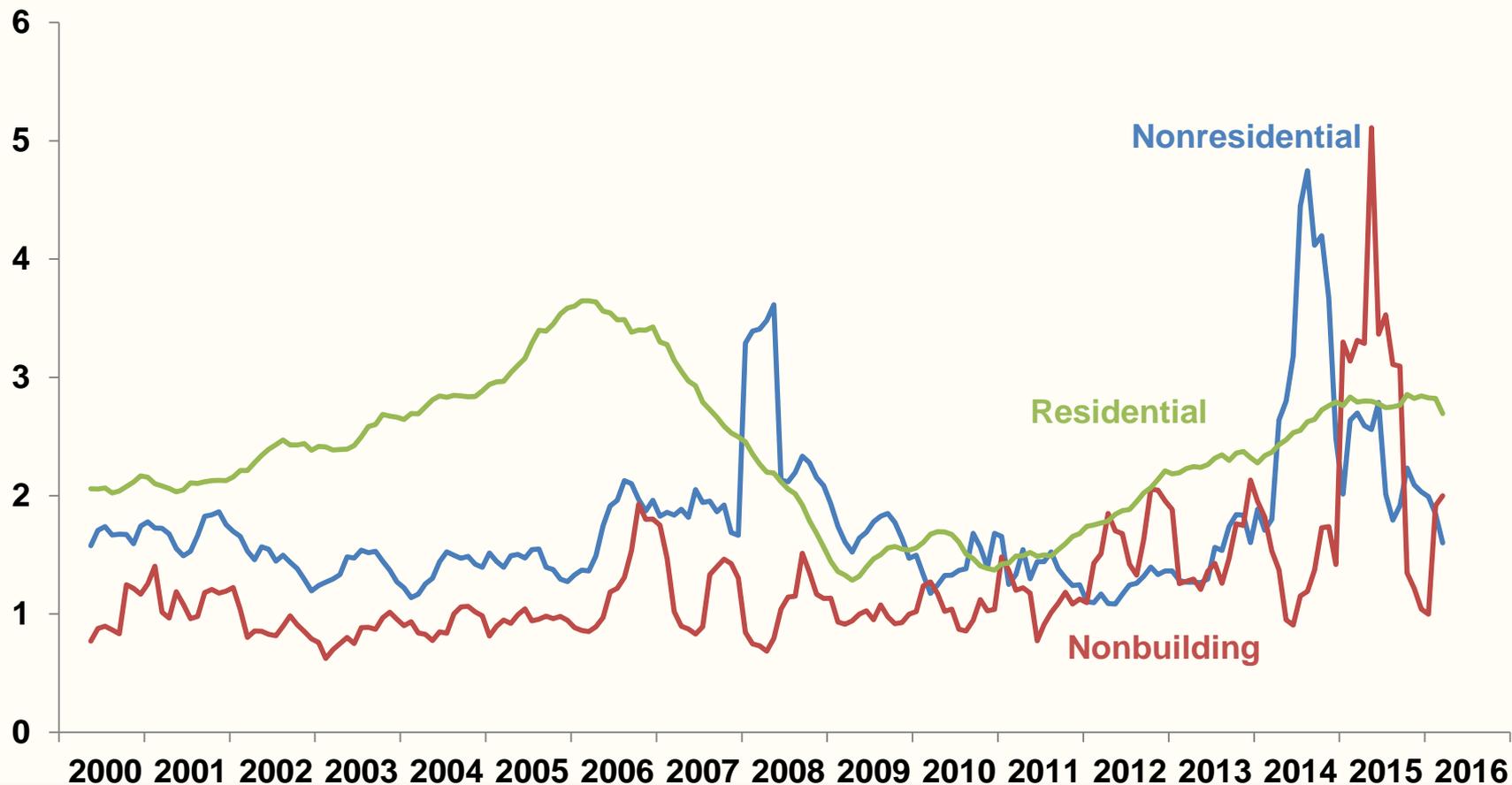
Index, Jan. '13=100, SA





# Lower oil prices begin to weigh on state construction activity

Billions real \$, 5MMA, SA

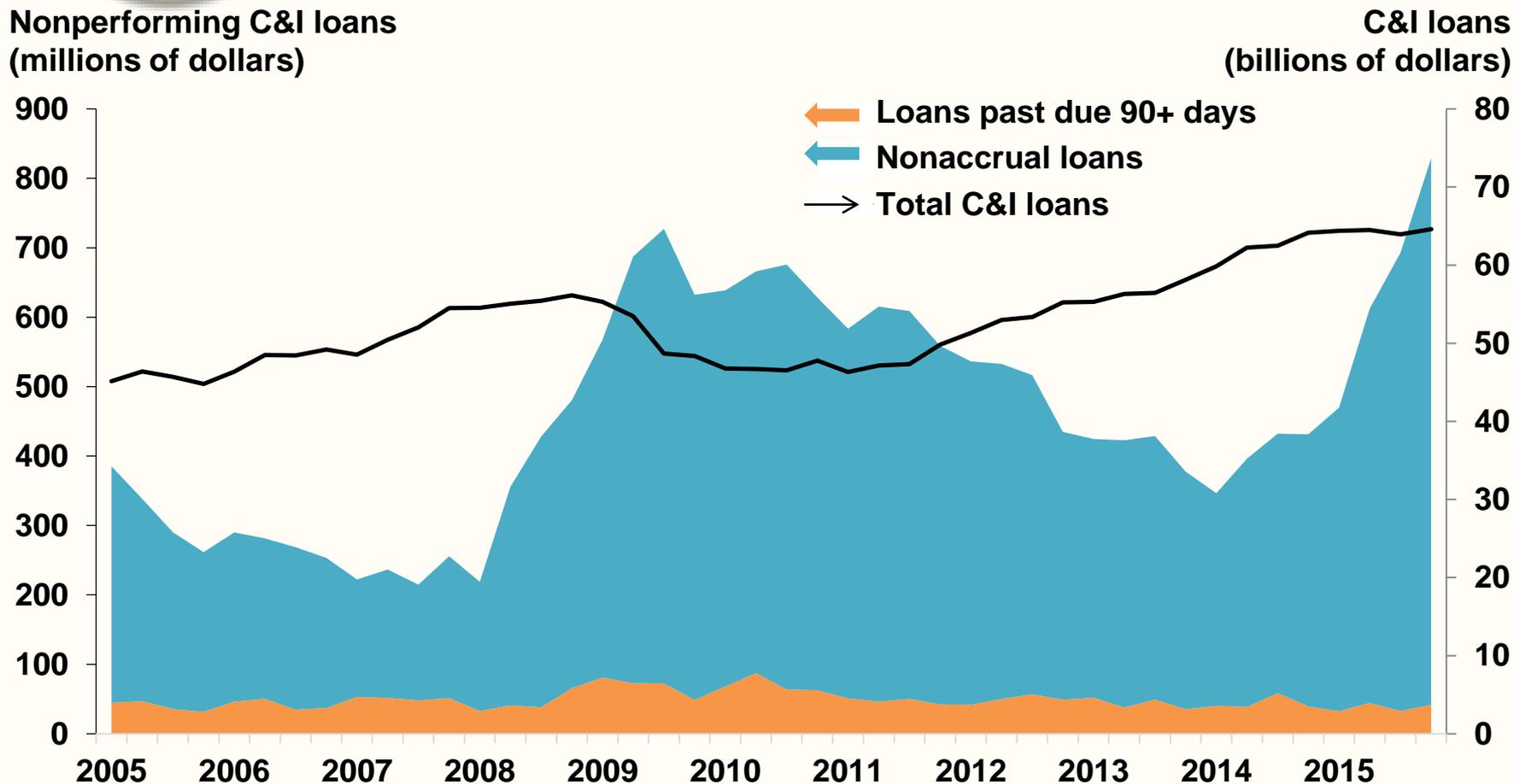


NOTE: Last data point is March.

SOURCE: Federal Reserve Bank of Dallas

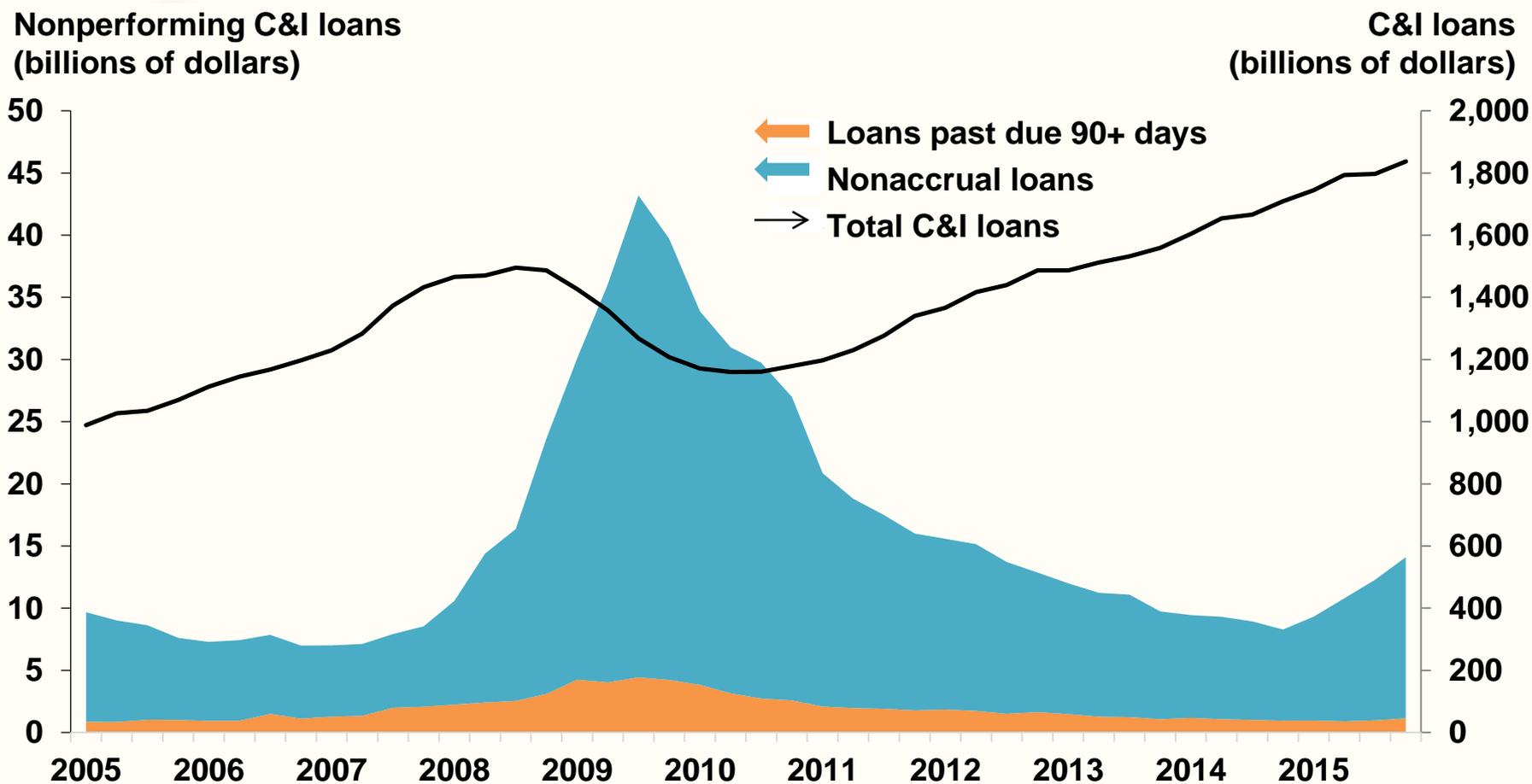


# Sign of trouble...commercial & industrial loan quality slips in Texas





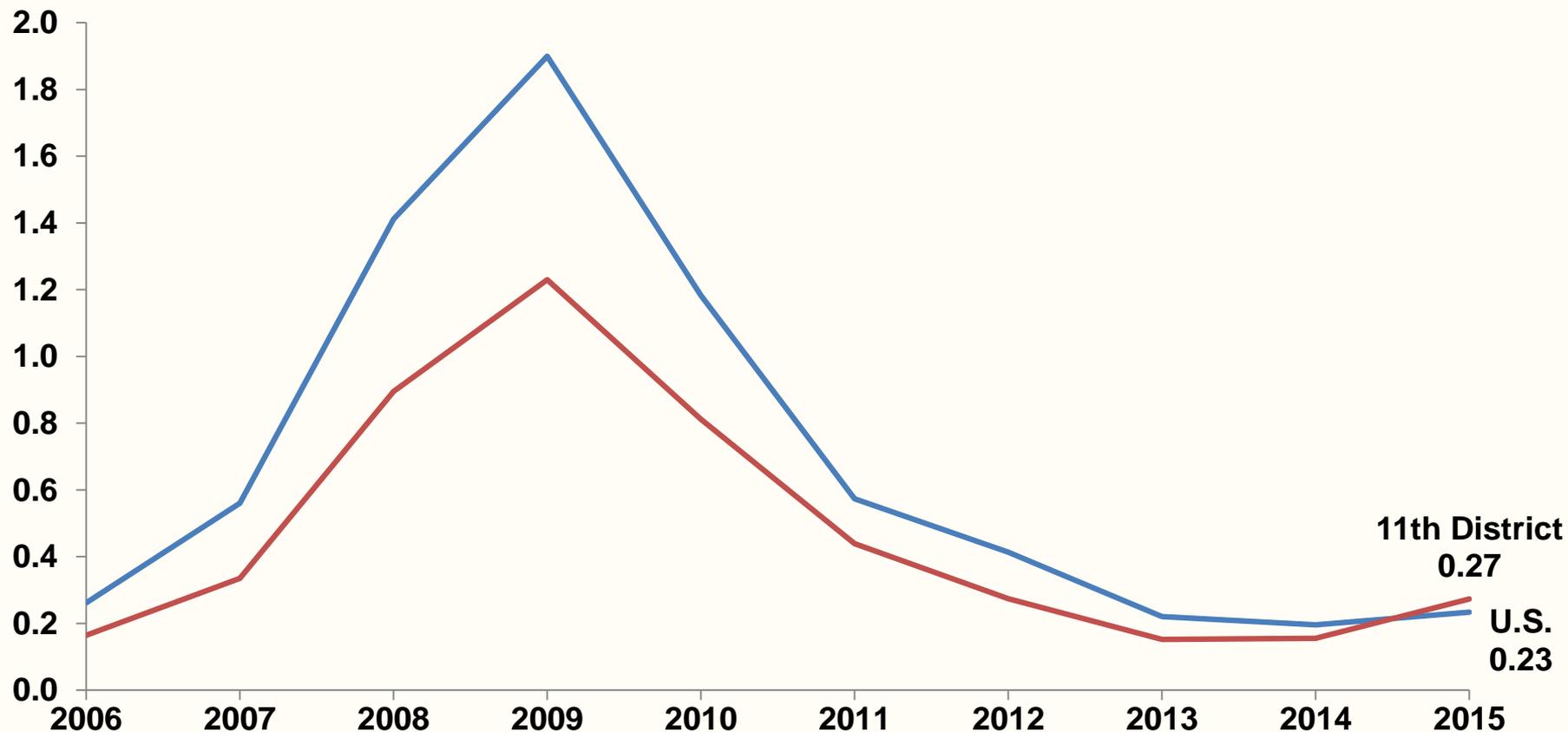
# ...while U.S. C&I loan quality remains relatively stable





# And provision expense is on the rise

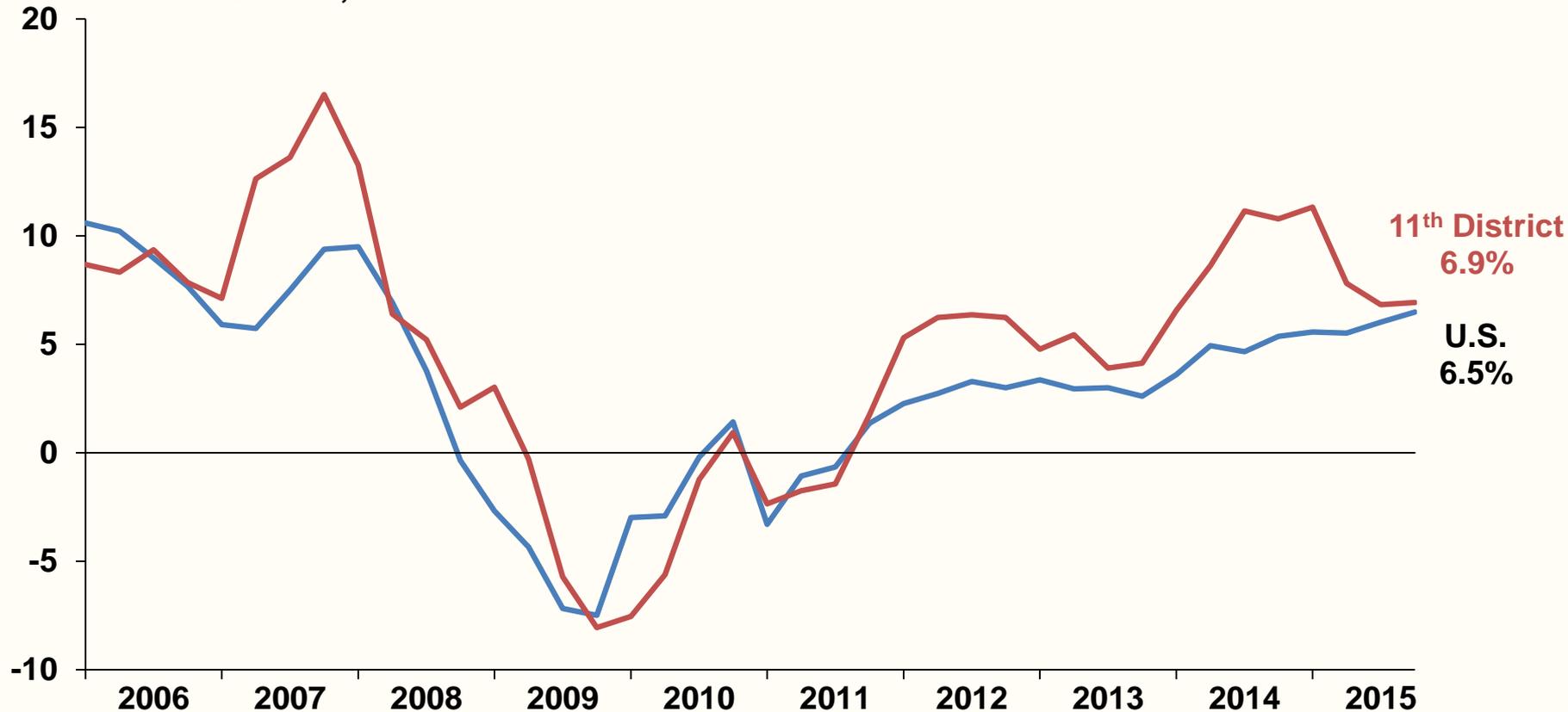
Percent of Average Assets





# While District loan growth slowed in 2015

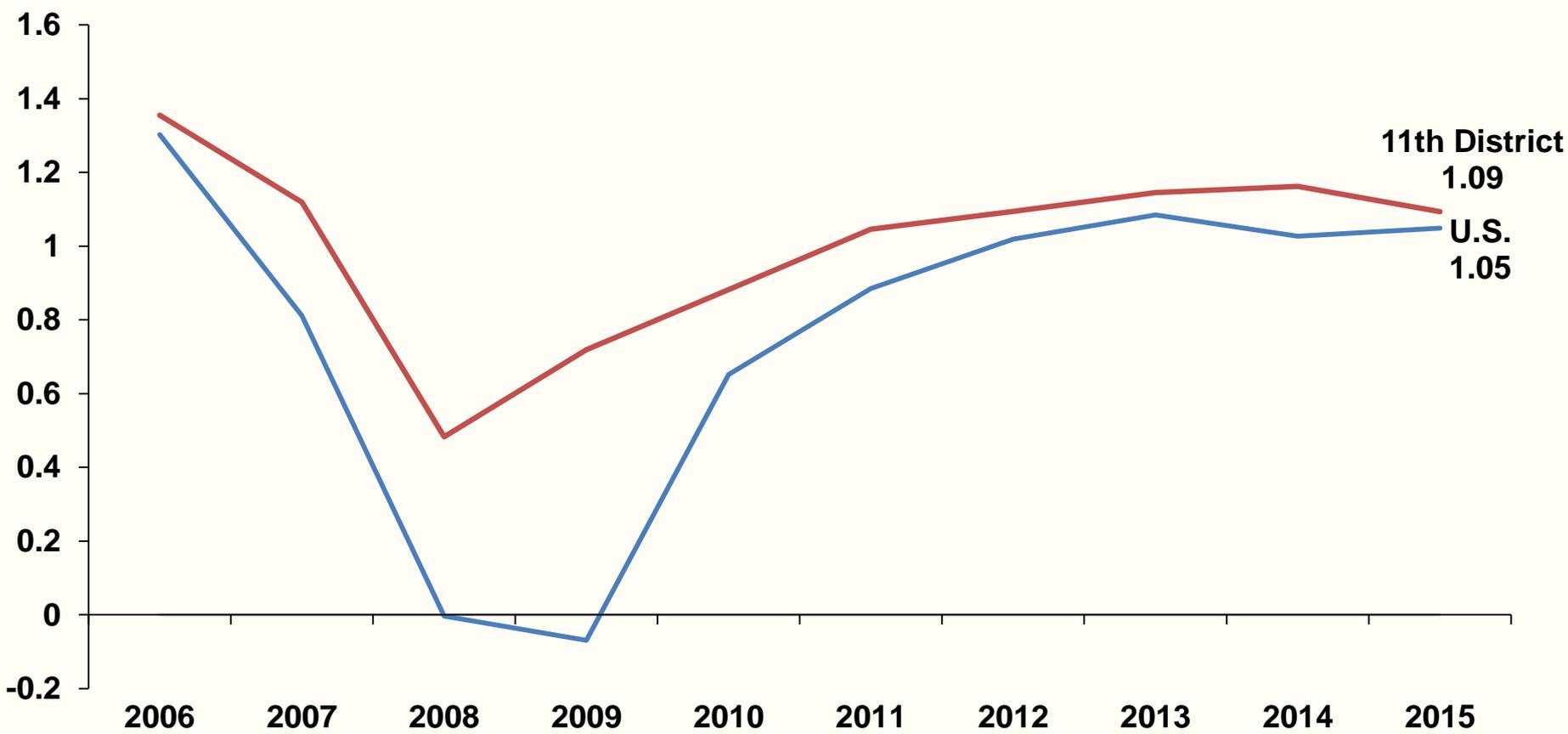
Year-over-Year Growth, Percent





# Eleventh District banks still more profitable than U.S. banks, but gap smaller

Return on Assets, Percent



11th District  
1.09  
U.S.  
1.05

SOURCE: Quarterly Reports of Condition and Income, Federal Financial Institutions Examination Council..



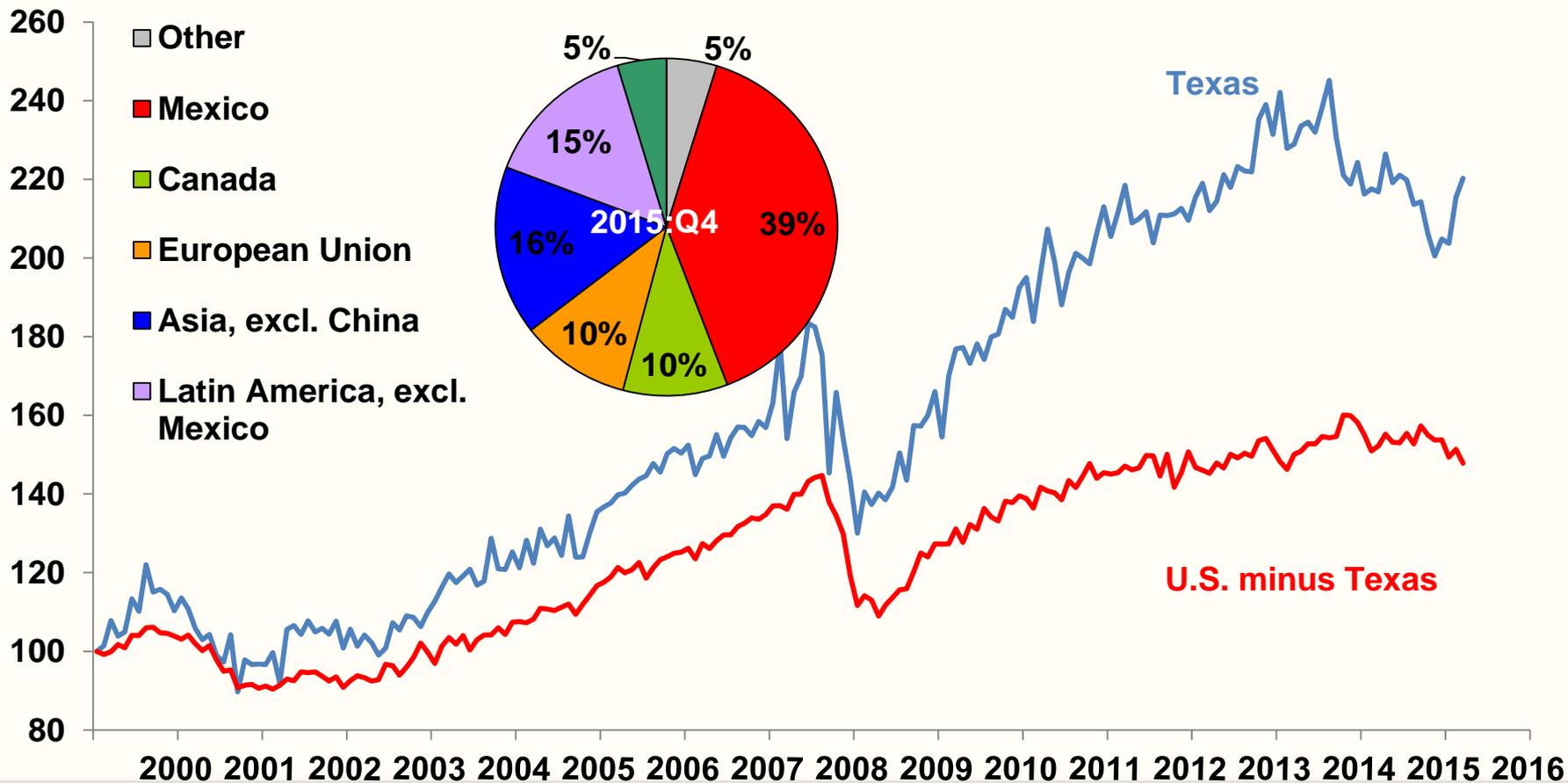
## Any bright spots?

- No repeat of 1980's bust, but it's a slow road ahead
- Diverse economy benefits from U.S. growth
  - Business climate, low cost of living attract firms, people
- Some slowing was welcome
  - Single-family housing markets tight
  - Labor markets still tight
- Recently, weaker dollar, stronger oil prices helping



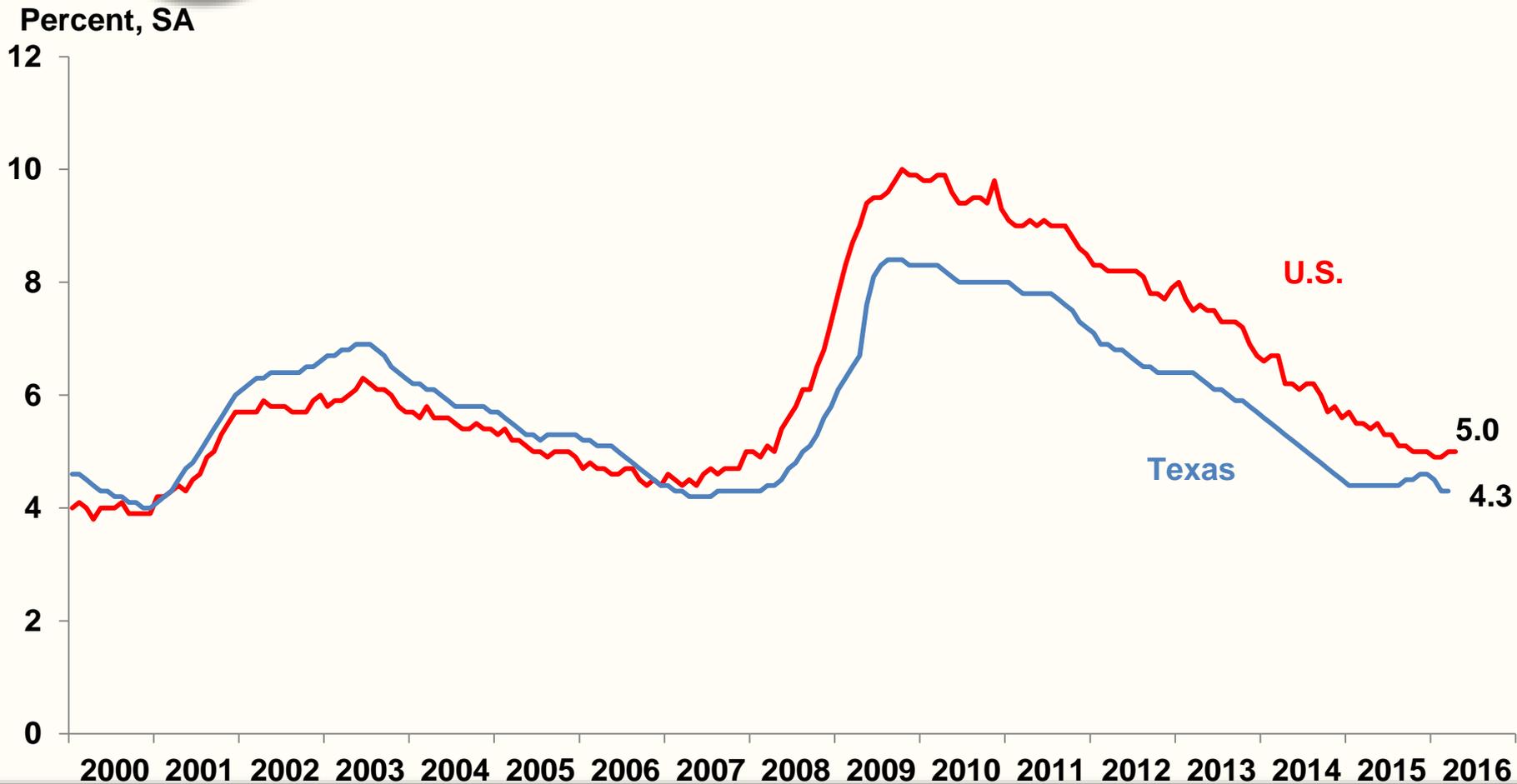
# Texas exports tick up with higher oil prices and weaker dollar

Index, real \$, Jan. '00=100, SA





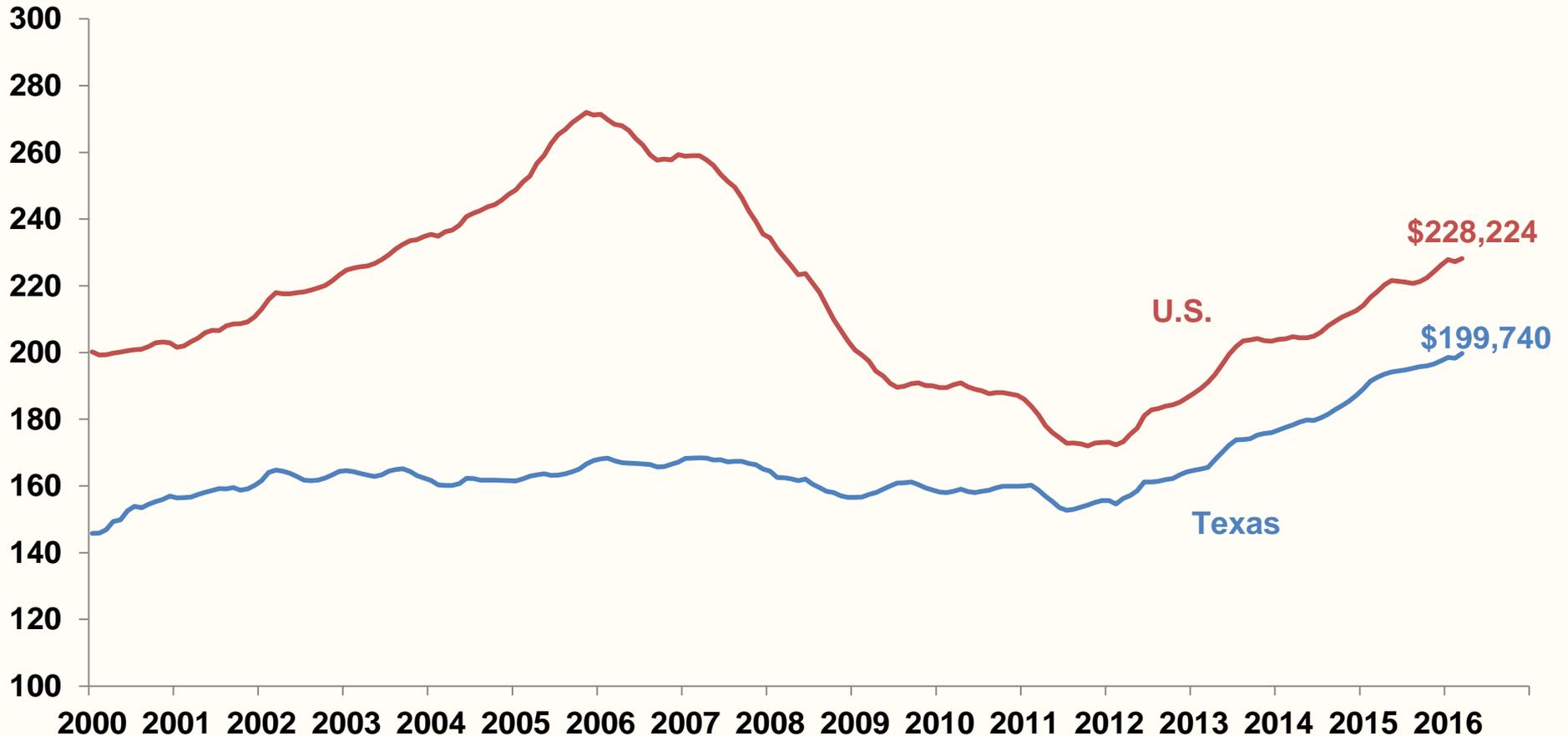
# Unemployment rate still lower in Texas





# Boom meant unprecedented rise in Texas house prices

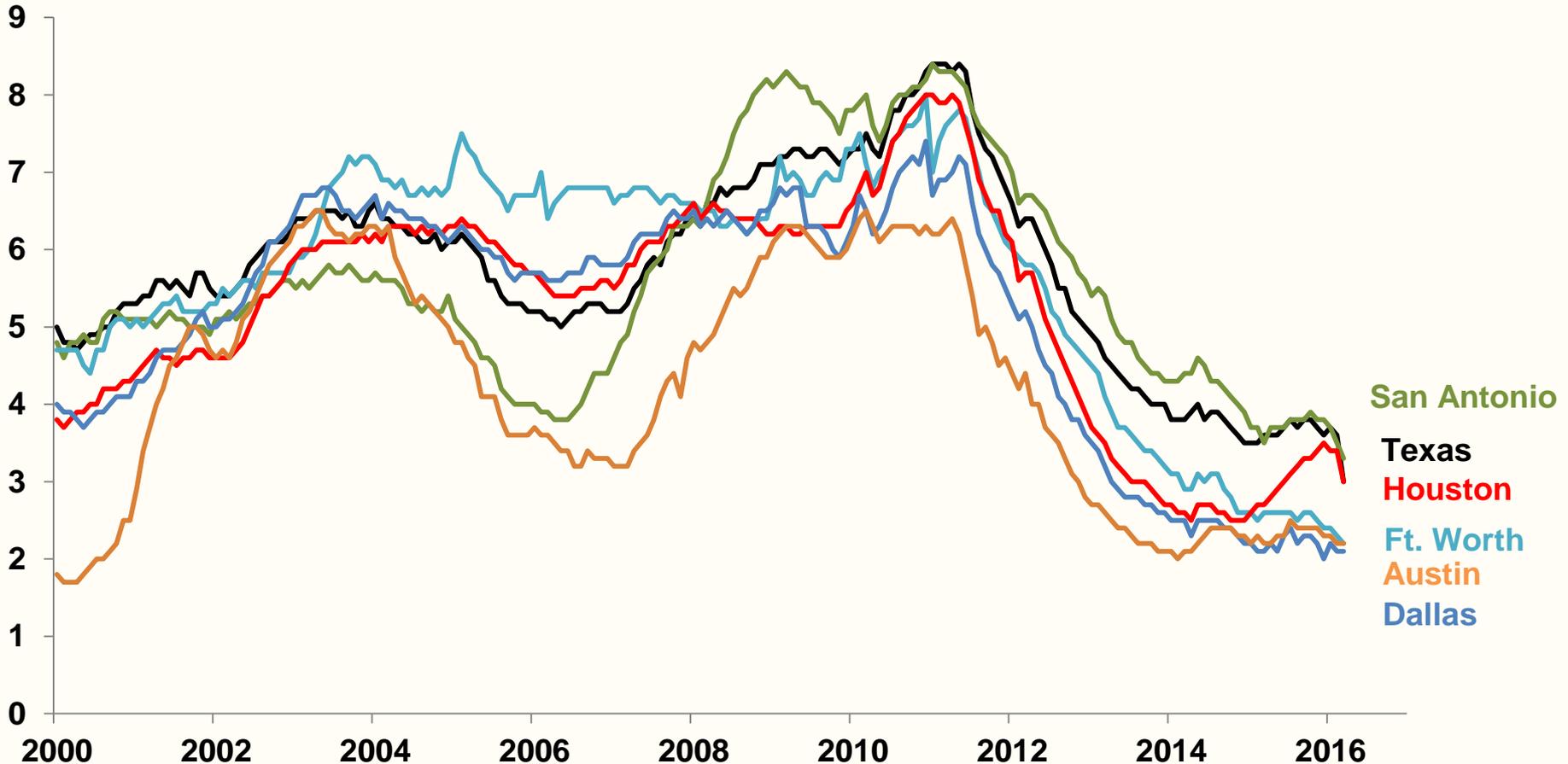
Thousands of real dollars, 4MMA, SA





# Texas home inventories at historic lows but Houston trending up

Months in Inventory, SA



San Antonio

Texas

Houston

Ft. Worth

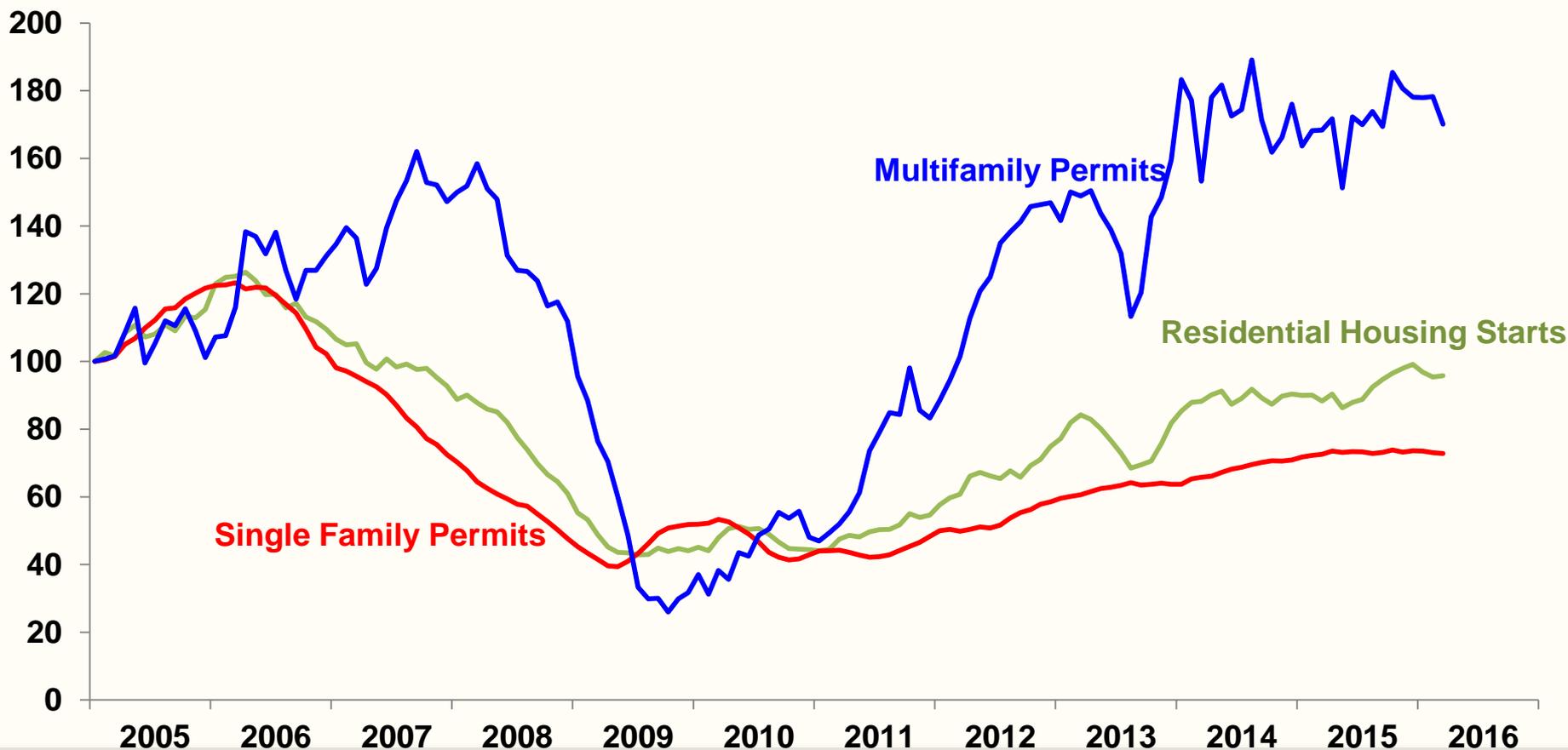
Austin

Dallas



# A housing crash and multifamily recovery has meant plenty of apartments

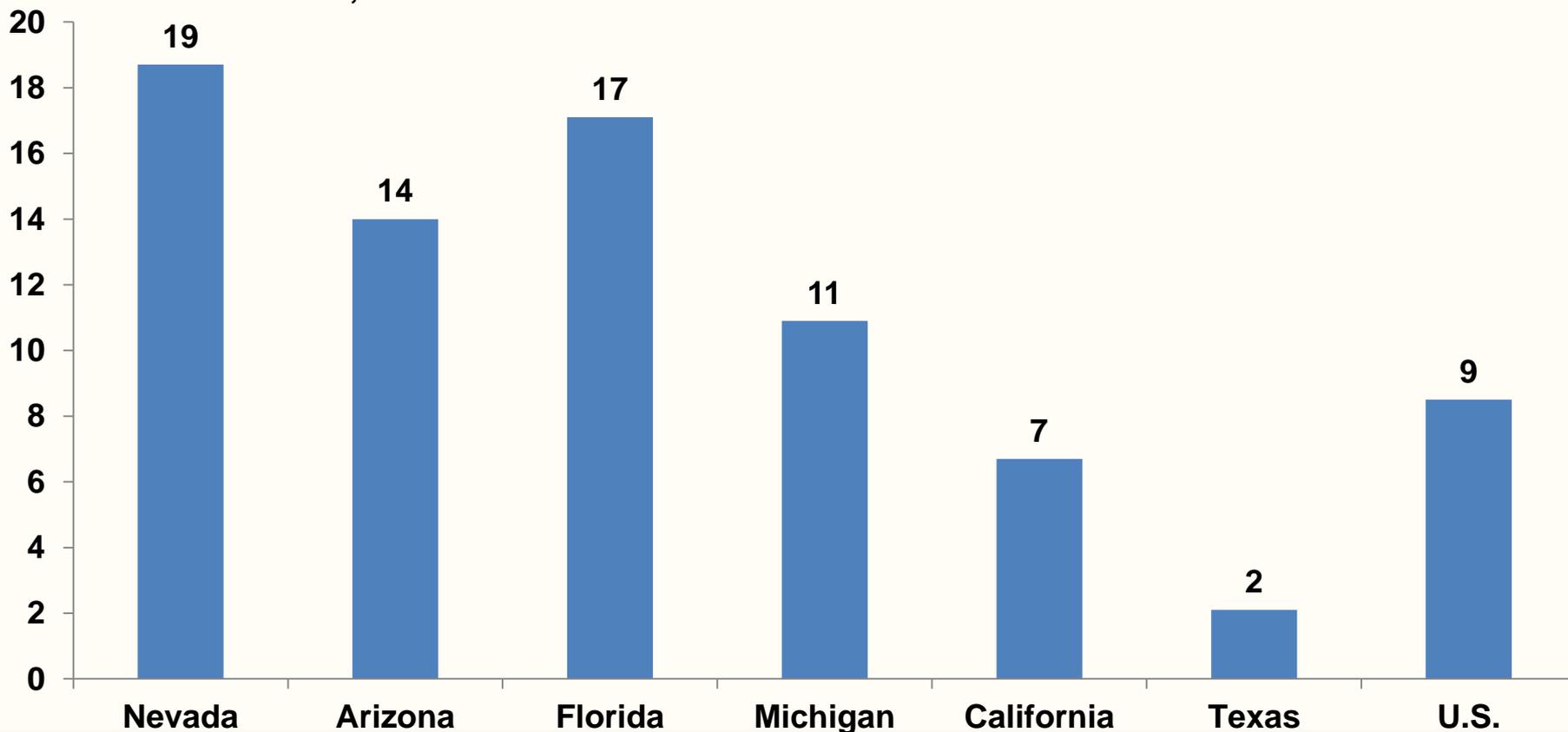
Index, 5MMA, Jan. '05=100, SA





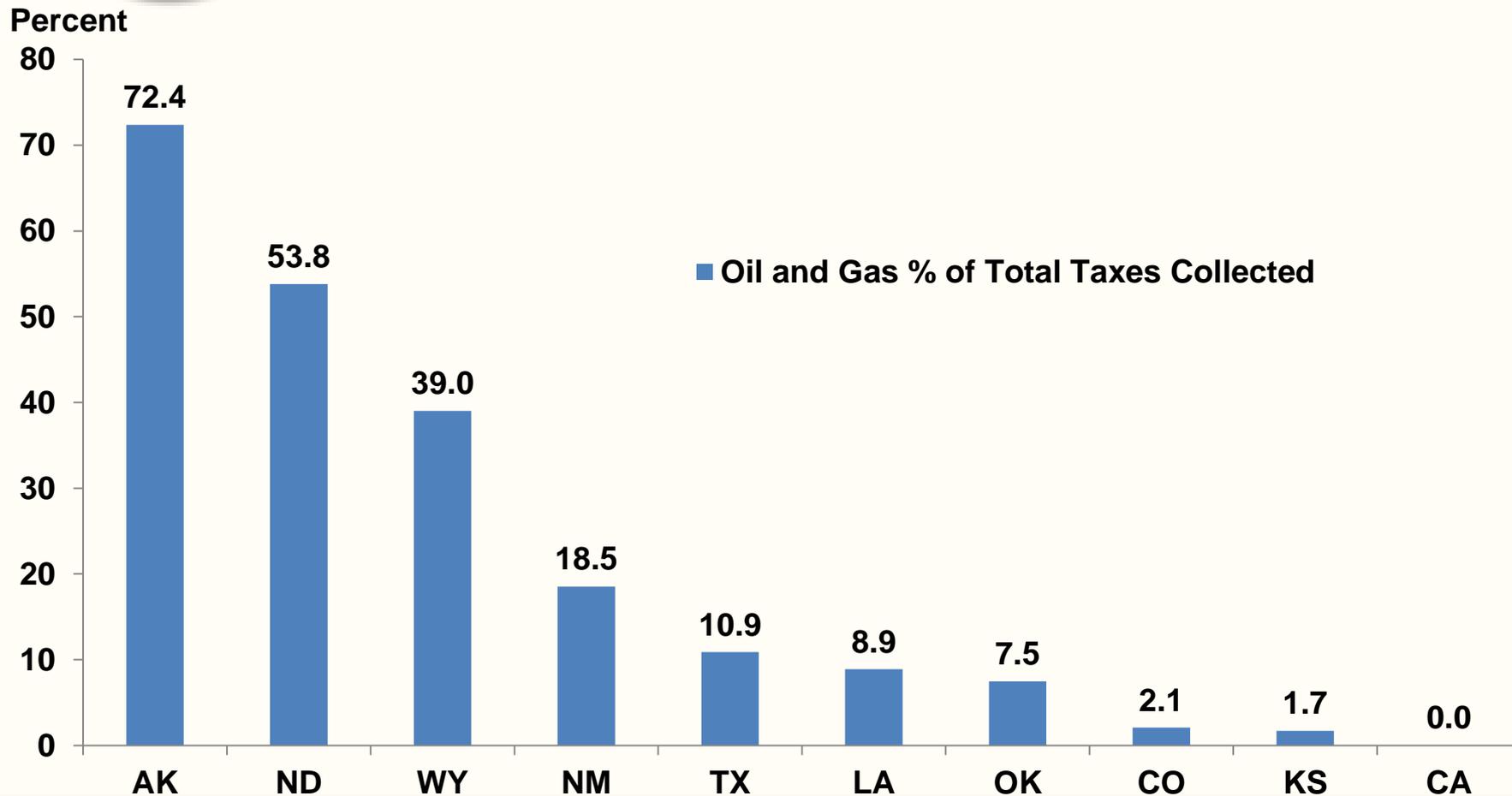
# Healthy borrowers: Underwater mortgages much less common in Texas

Percent of mortgages with balance > home value, 2015Q4





# Texas not as reliant on oil and gas severance taxes as some other states





## State in-migration has yet to turn down...

- Strong job growth

- Lower unemployment
- Stable to rising wages relative to rest of U.S.
  - Growth of middle-income jobs
- Low cost of living

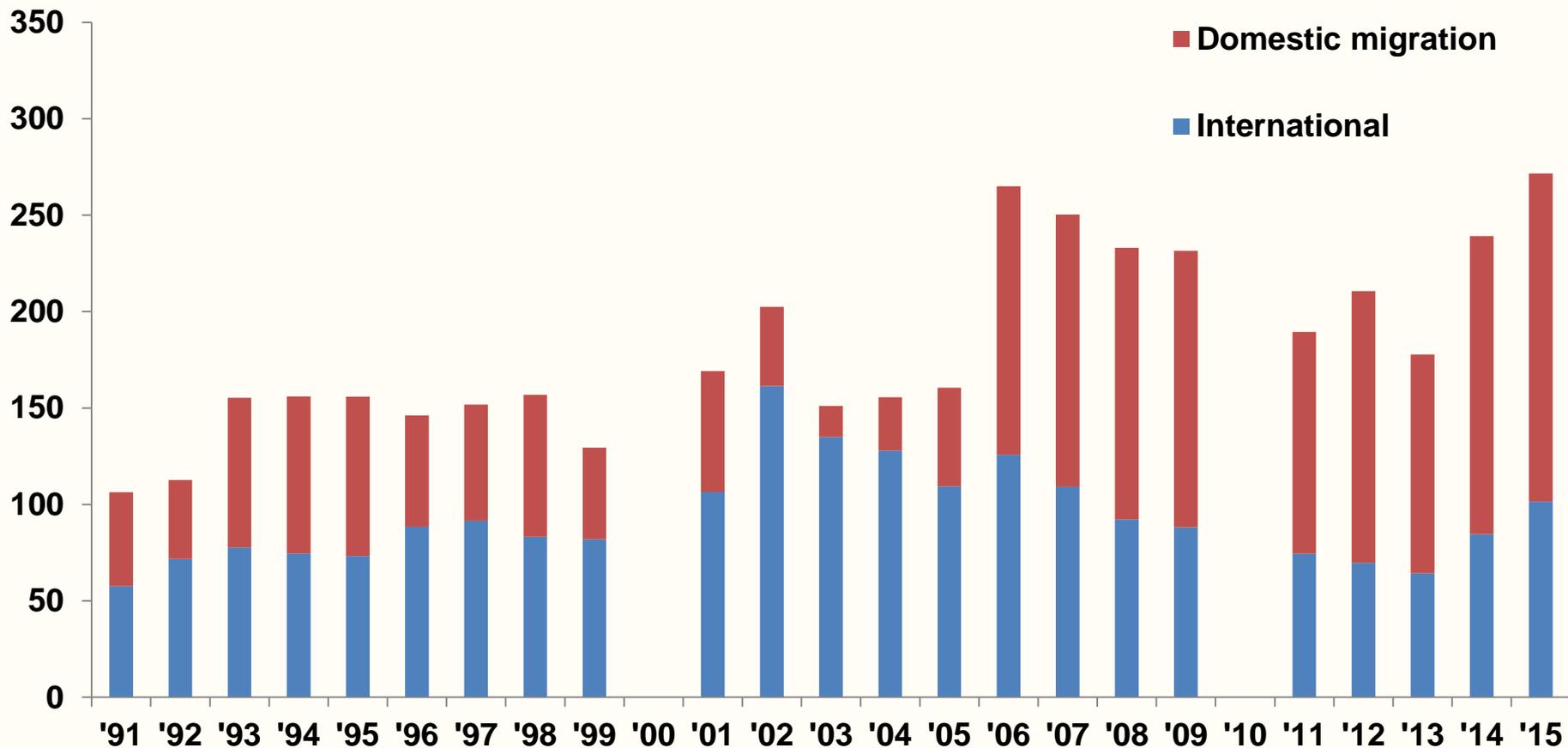


Large-scale in-migration from the rest of the country



# Texas: Top destination since 2006

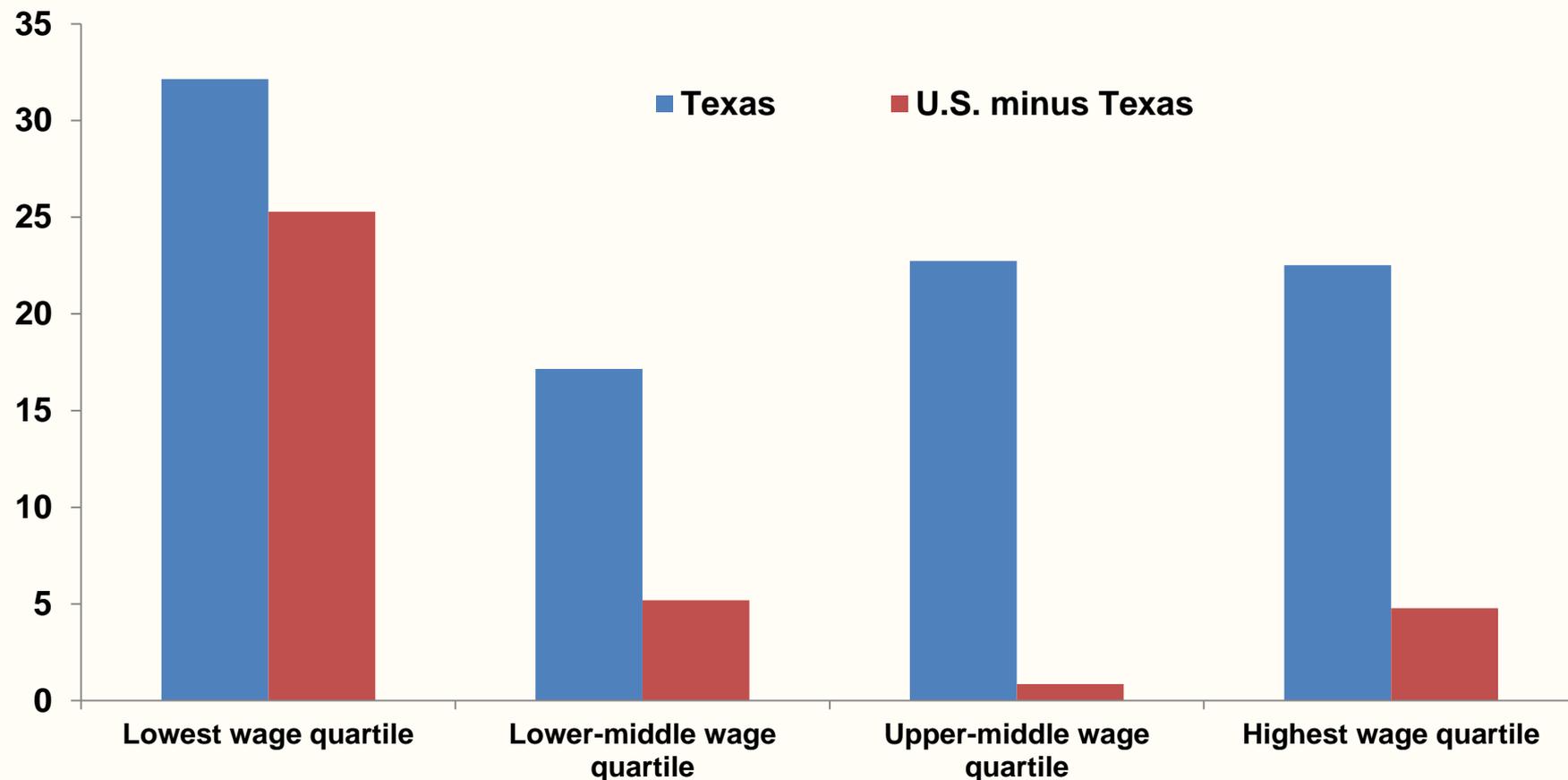
Net Migration (Thousands)





# Oil boom helped fuel job growth in Texas

Percent change 2005-2014



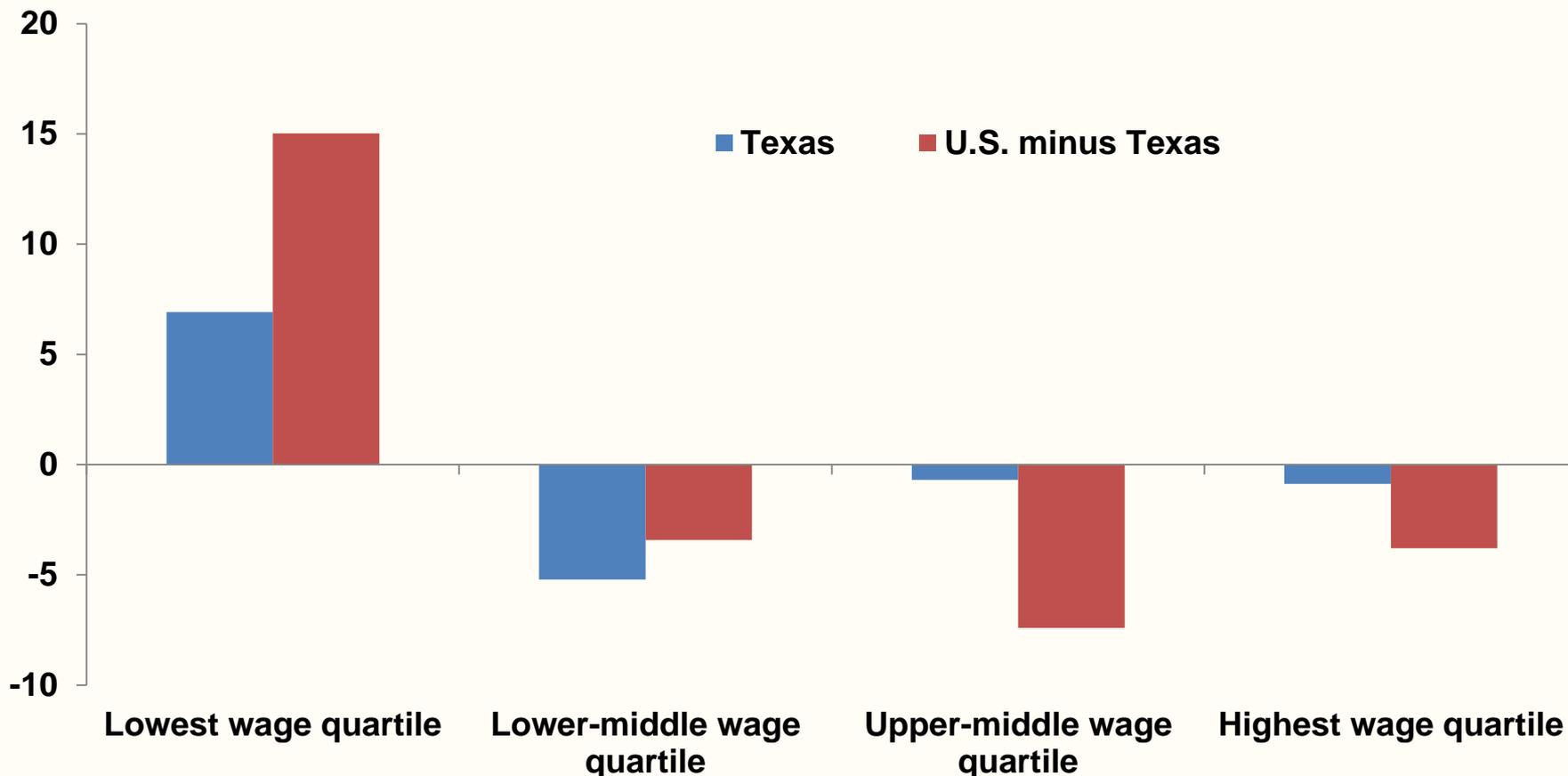
NOTES: Calculations include workers over age 15 but exclude the self-employed. Wage quartiles and employment growth based on the Texas and U.S. wage distributions from the 2005 and 2014 American Community Survey (ACS).

SOURCES: 2005 and 2014 ACS.



## With two high-paying sectors shrinking, Texas jobs outlook may look more like the nation's

Percent change in the quartile, 2005-2014



NOTES: Calculations include workers over age 15 but exclude the self-employed. Wage quartiles and employment growth based on the Texas and U.S. wage distributions from the 2005 and 2014 American Community Survey (ACS).

SOURCES: 2005 and 2014 ACS.



# Outlook

- 2016 growth forecast is for 0.5 to 1 percent job growth
  - State grows, Houston likely contracts
- Unemployment should rise, in-migration slow; housing markets loosen
- Some fiscal tightening due to revenue shortfalls
- 2017 better; oil markets closer to balance



**Thank you!**

**For more information, visit  
[www.dallasfed.org](http://www.dallasfed.org)**

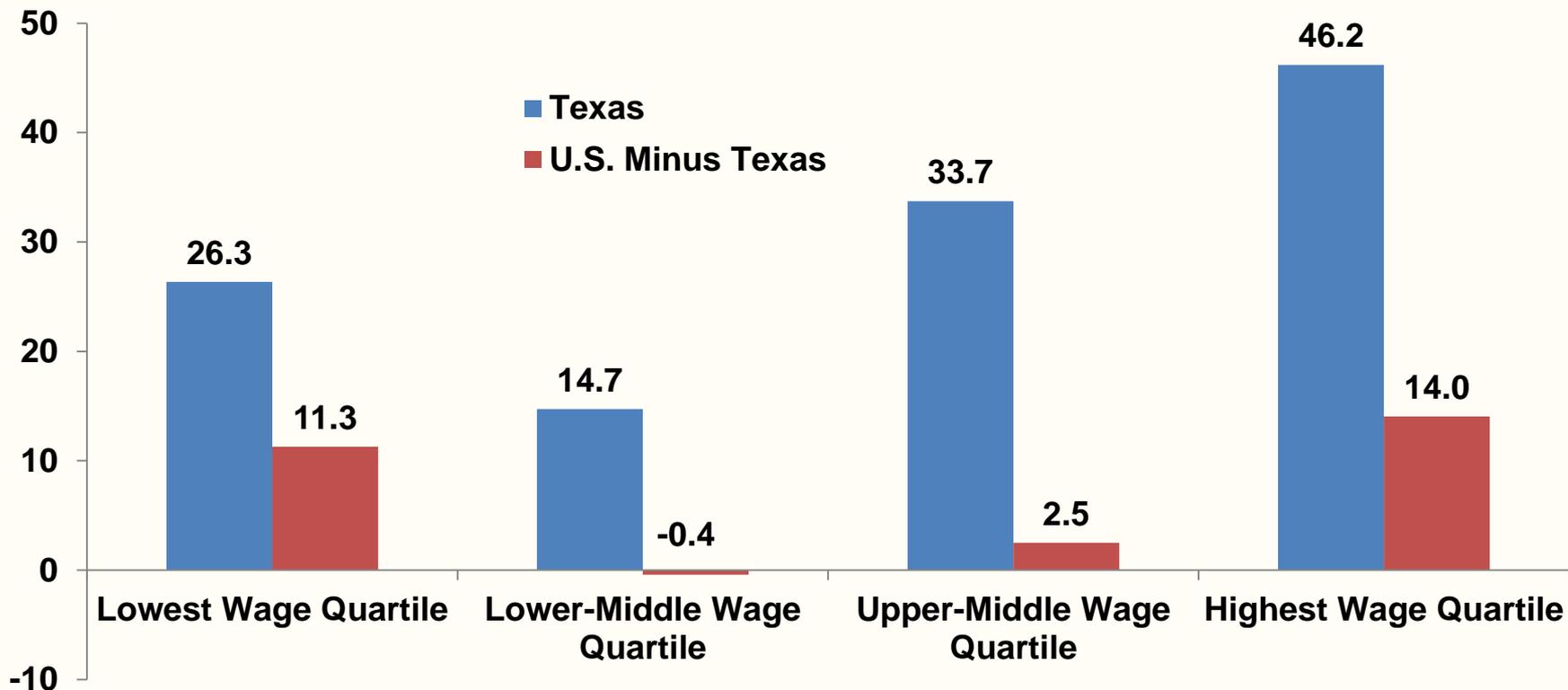




# Texas creates mid- and high-pay jobs

Job growth by wage quartile 2000-2014

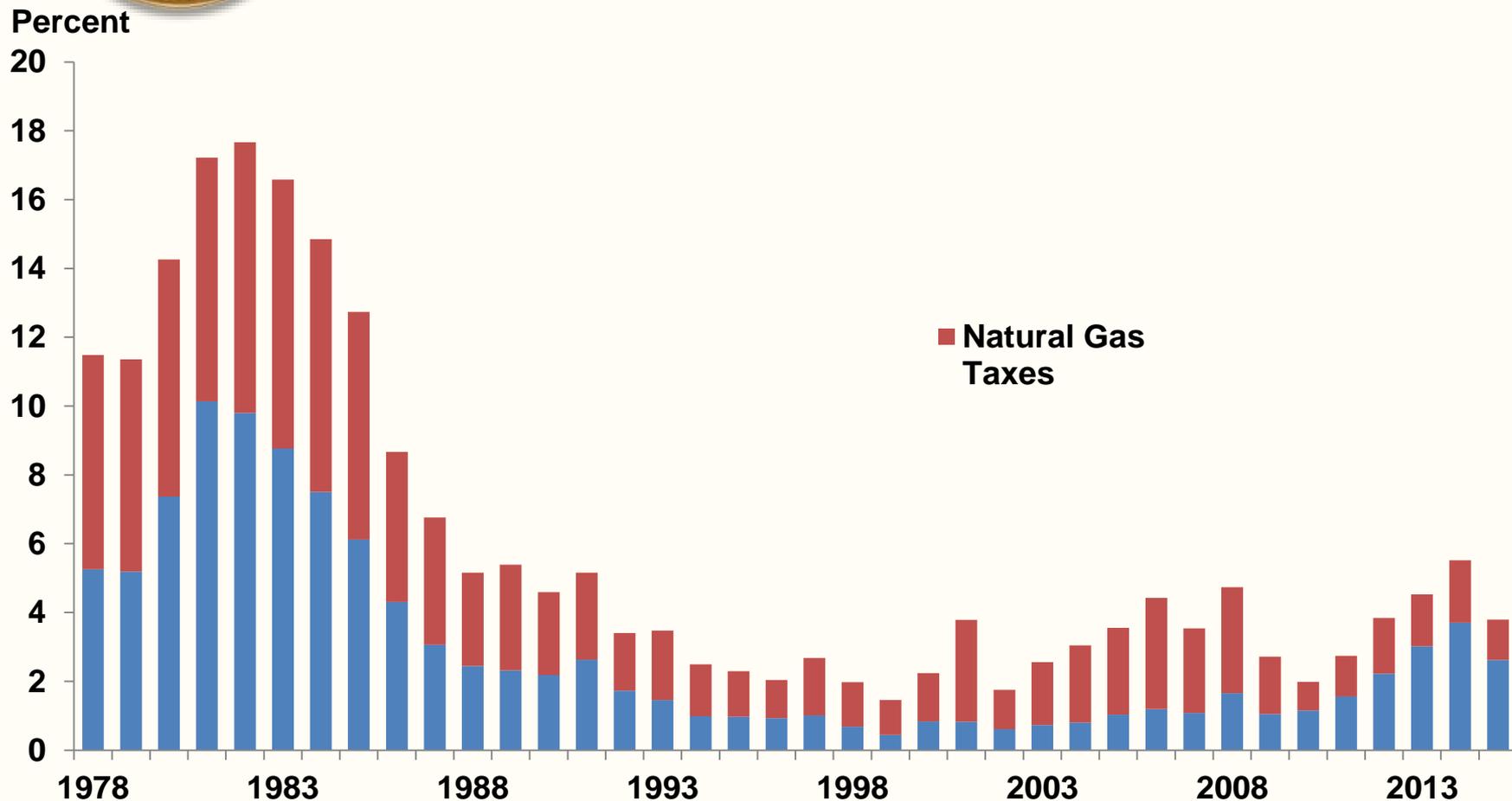
## Percent Change in Employment



NOTES: Calculations include workers over age 15 with positive wages and exclude the self-employed. Wage quartiles constructed based on U.S. 2000 wage distribution.



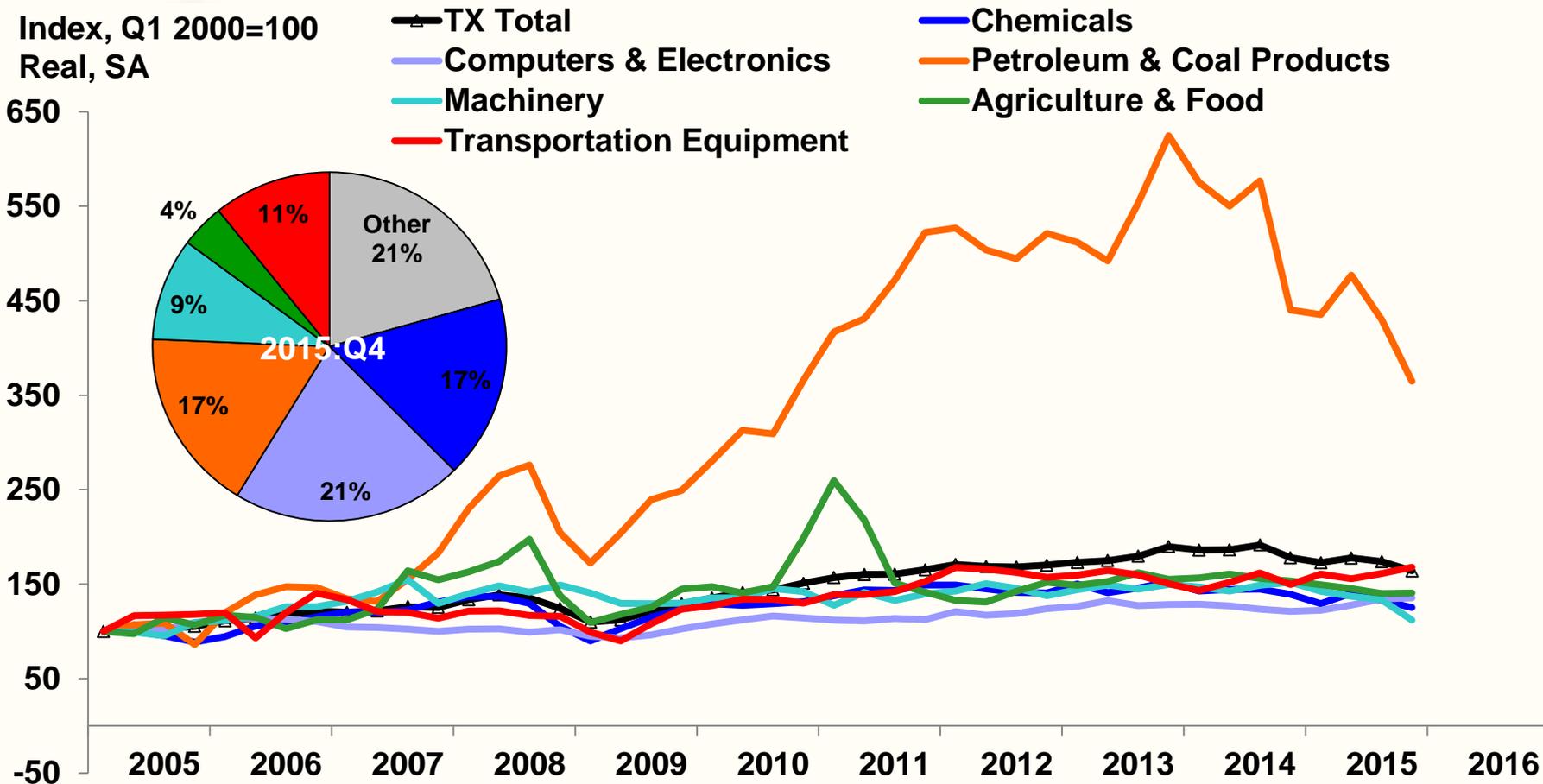
# And not as reliant on them now as it was in the past





# During export boom, Texas petroleum products exports soared

Index, Q1 2000=100  
Real, SA





## Severance tax revenue also set to fall

- 2014 oil and gas tax revenues in TX
  - \$5.8 billion
  - 11% of total state tax revenues
  - 29% increase from 2013
- Oil severance taxes: \$3.9 billion
- Natural gas severance taxes: \$1.9 billion