DFW Economy: Outperforming the State

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DFW: Economic Engine of North Texas

- Home to over 6.9 million people, DFW is the largest MSA in TX and fourth largest in U.S.
- DFW is bigger than RI and CT combined
- Ranks sixth in output among U.S. metros
- In 2013, GDP exceeded that of several countries, such as Austria, Denmark and South Africa
- 15 Fortune 500 companies are headquartered in the metroplex

DFW has Larger Booms and Busts

- DFW matches Texas performance over long term
  - Avg. job growth (1990-2014):DFW 2.1% vs. TX 2.1%

- But, DFW booms are slightly bigger…
  - Avg. job growth (2010-2014): DFW 3.2% vs. TX 3.0%
  - Avg. job growth (1993-2000): DFW 4.2% vs. TX 3.3%

- … and busts are much more severe
  - Total job declines (housing bust): DFW 5.2% vs. TX 4.1%
  - Total job declines (high-tech bust): DFW 5.3% vs. TX 2.2%
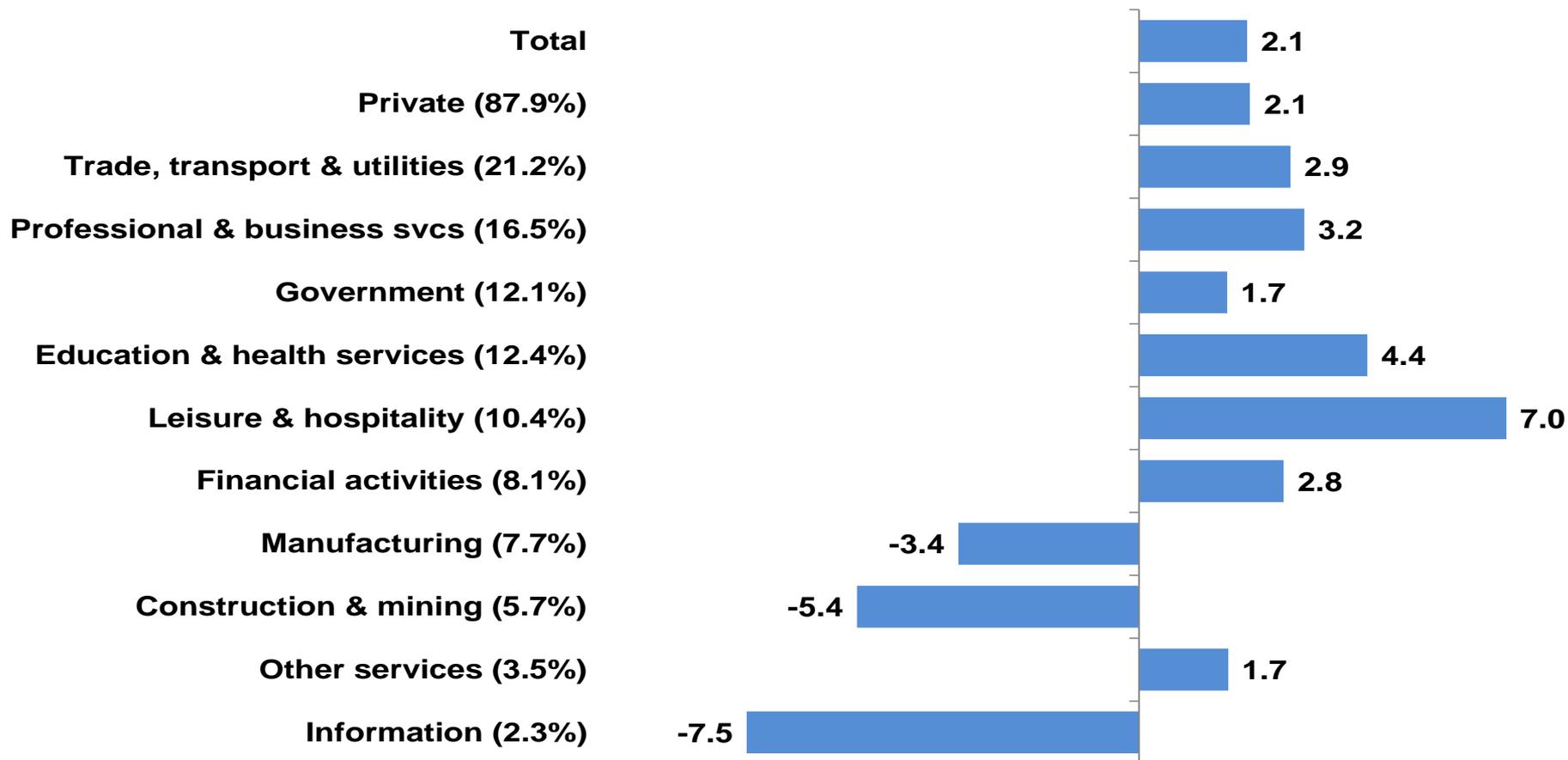
DFW Job Growth Outdoes Texas 2013-2015
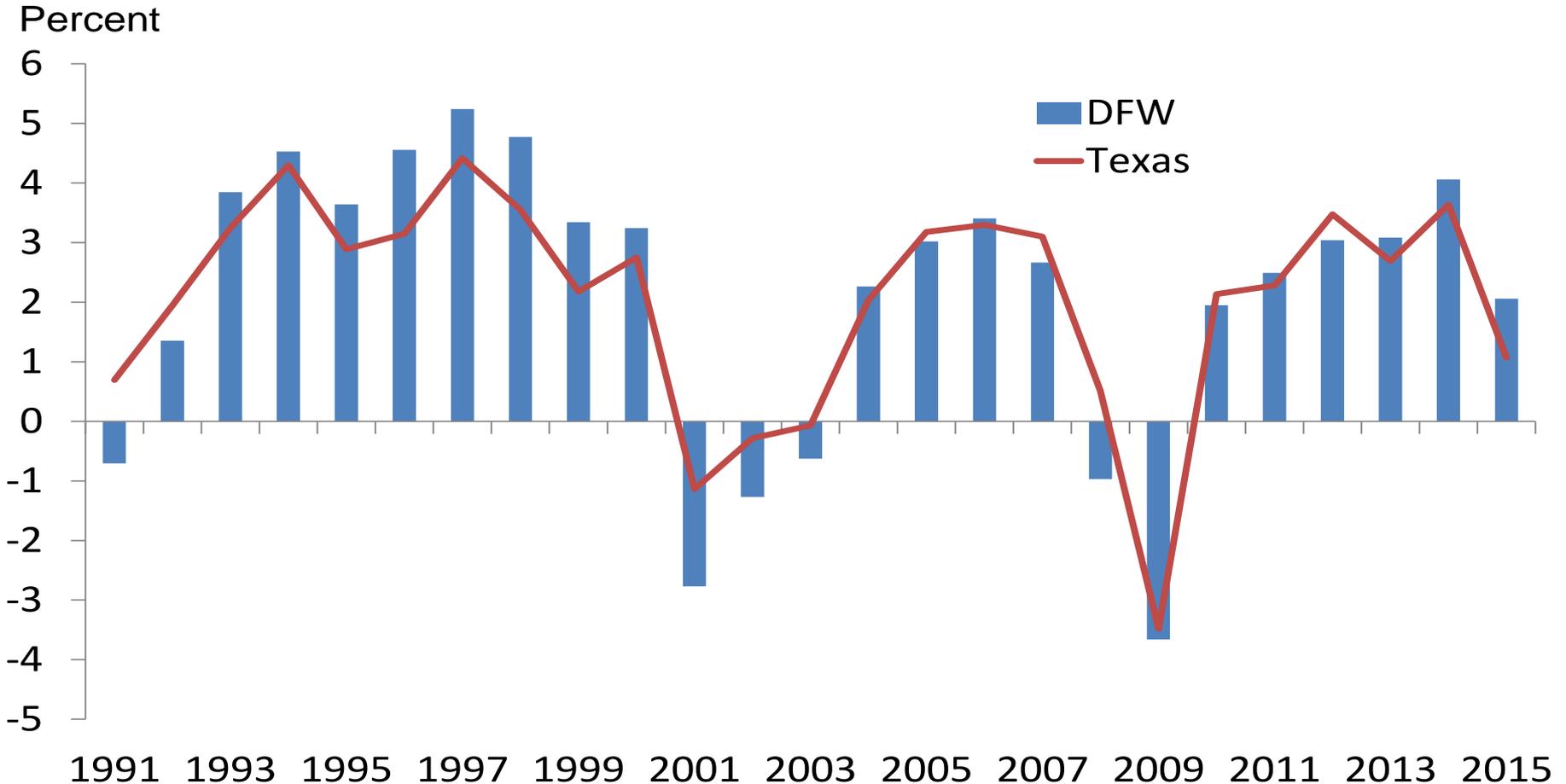
NOTE: Annual employment is Dec/Dec. 2015 figures are June/Dec annualized growth.
SOURCES: Bureau of Labor Statistics; Texas Workforce Commission; seasonal adjustments by Federal Reserve Bank of Dallas.

2015 Job Growth by Sector

Sector	Value
Total	2.1
Private (87.9%)	2.1
Trade, transport & utilities (21.2%)	2.9
Professional & business svcs (16.5%)	3.2
Government (12.1%)	1.7
Education & health services (12.4%)	4.4
Leisure & hospitality (10.4%)	7.0
Financial activities (8.1%)	2.8
Manufacturing (7.7%)	-3.4
Construction & mining (5.7%)	-5.4
Other services (3.5%)	1.7
Information (2.3%)	-7.5

NOTES: Annualized percent change, December 2014–June 2015. Numbers in parentheses are shares of total Dallas–Fort Worth nonfarm employment and may not sum to 100 due to rounding.
SOURCES: Bureau of Labor Statistics; Texas Workforce Commission; seasonal and other adjustments by the Federal Reserve Bank of Dallas.
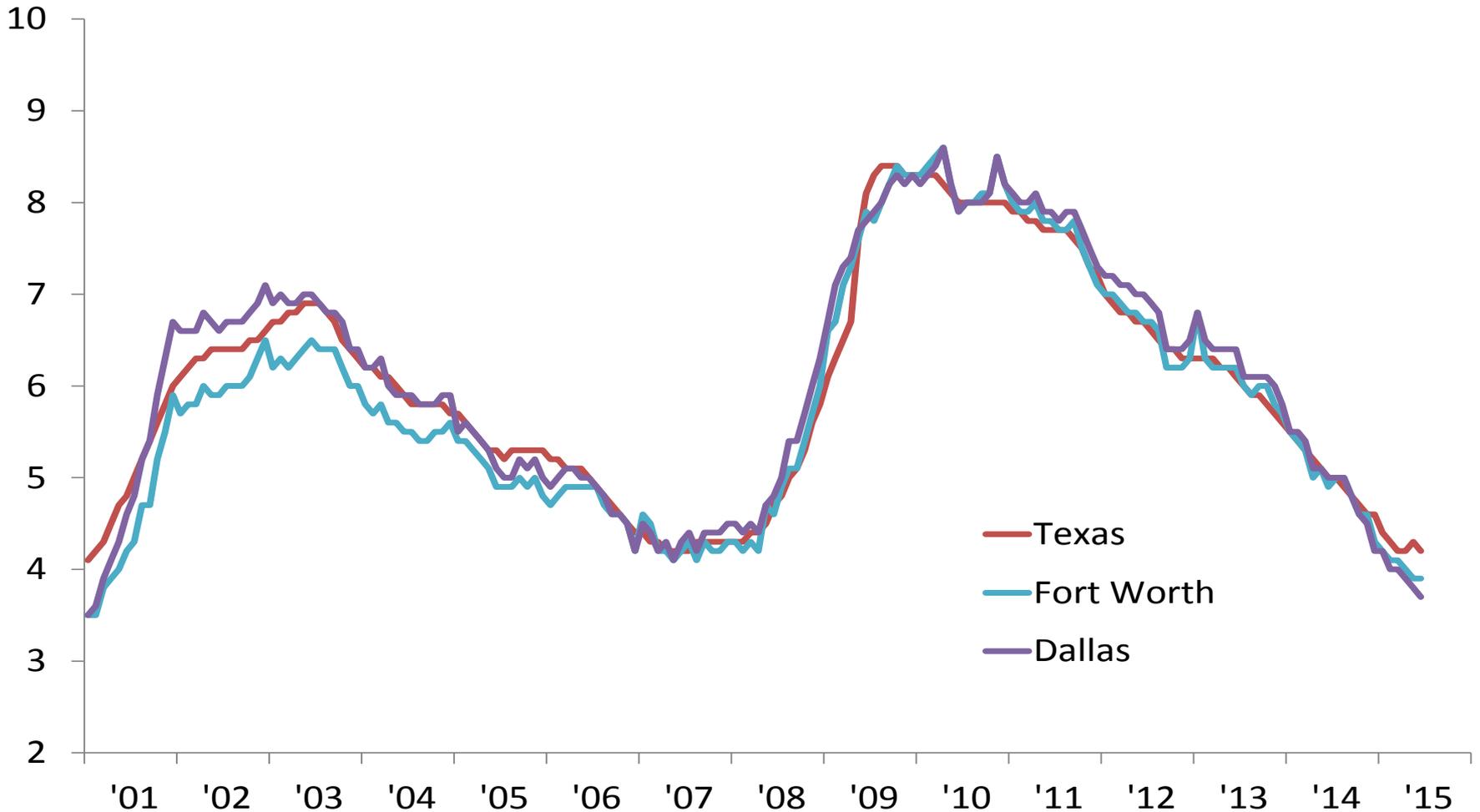
DFW Popular Migrant Destination

Thousands

Legend:
- Domestic Migration
- International Migration
- Natural Increase
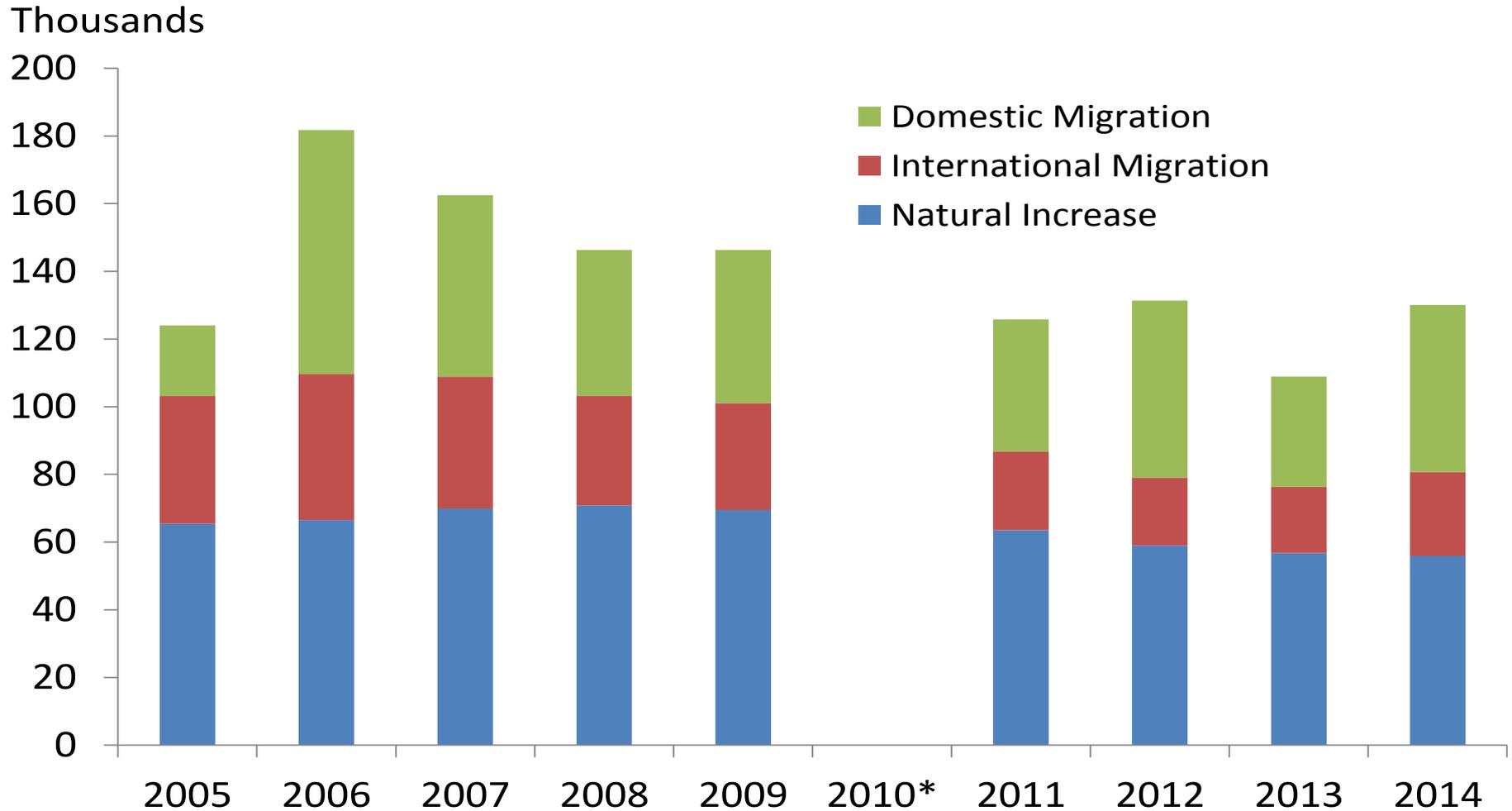
NOTE: Estimates not available for Census years.
SOURCE: U.S. Census Bureau.

Unemployment at a 14-Year Low

SOURCES: Census Bureau; seasonal adjustments by Federal Reserve Bank of Dallas.
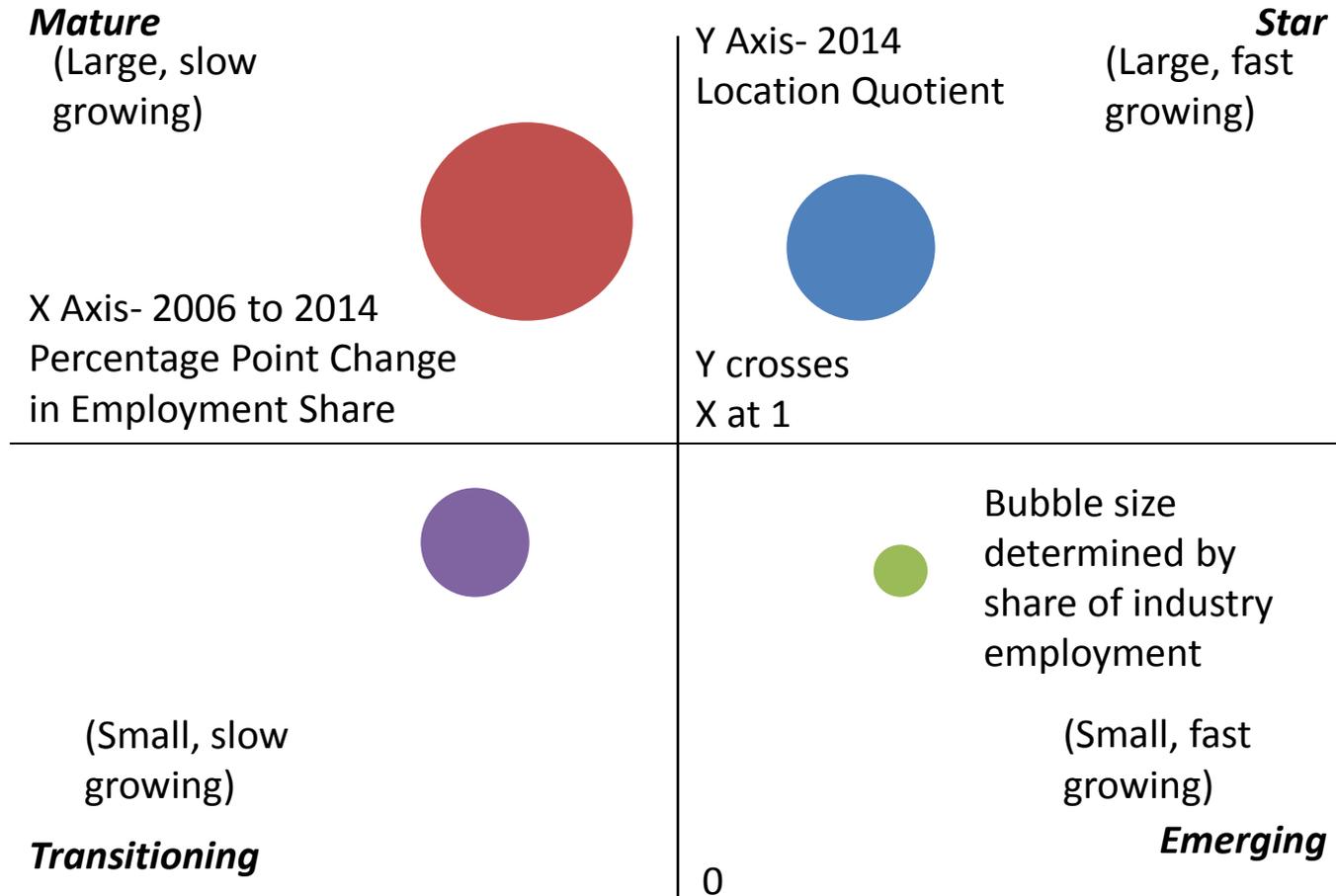
What Drives the DFW Economy?

Industry Clusters

- A cluster is a geographically concentrated group of industries related by technology they use, the markets they serve, the goods and services they produce, and the labor skills they require.

- Location Quotient (LQ):

$$\frac{Share\ of\ area's\ employment\ in\ industry\ i}{Share\ of\ U.S.employment\ in\ industry\ i}$$

- LQ >1 => Base industry/specialization

- LQ <1 => Non-base industry

Mature
(Large, slow growing)

Y Axis- 2014 Location Quotient

Star
(Large, fast growing)

X Axis- 2006 to 2014 Percentage Point Change in Employment Share

Y crosses X at 1

Bubble size determined by share of industry employment

(Small, slow growing)

Transitioning

(Small, fast growing)

Emerging

0

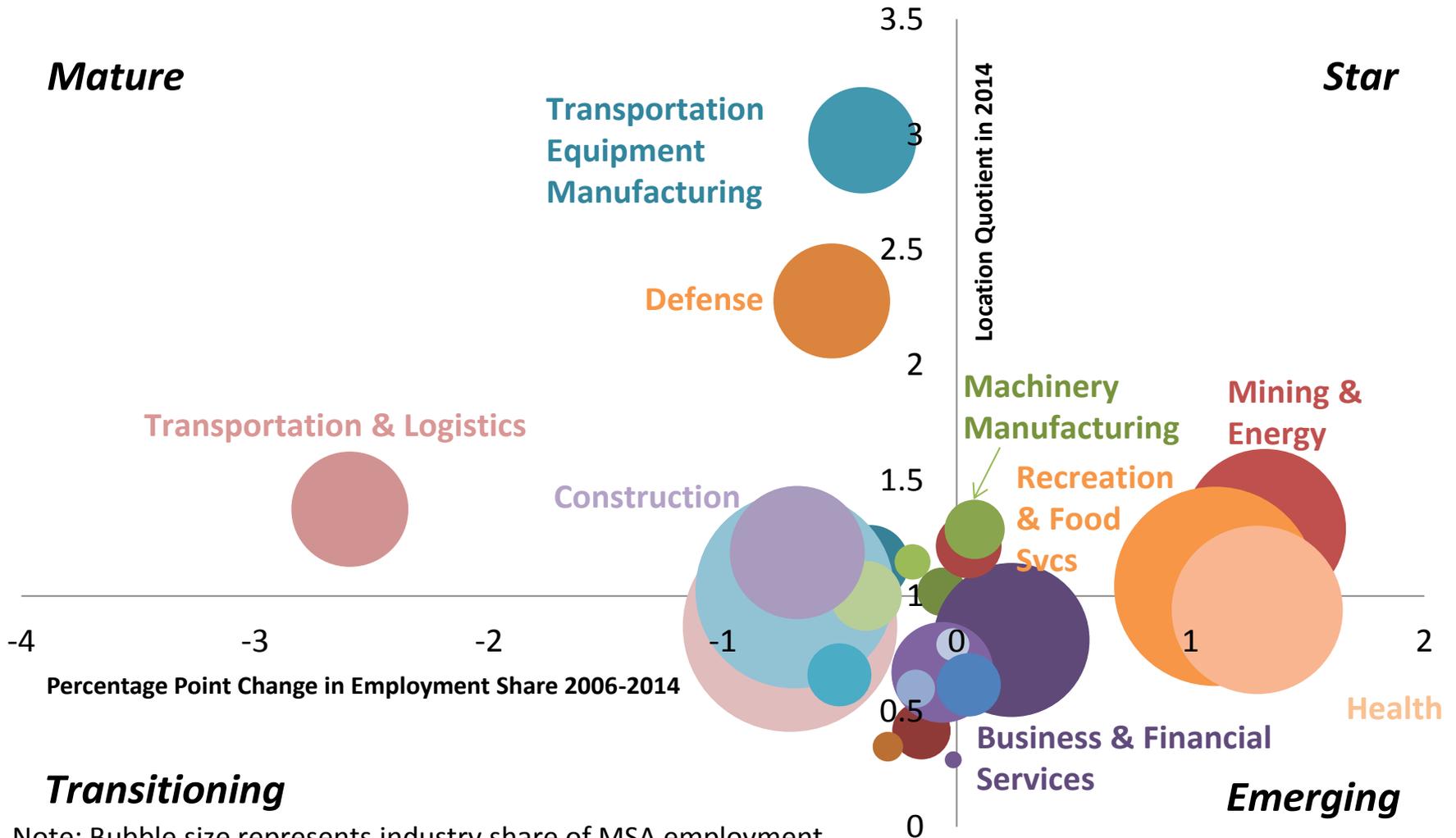# Dallas: Texas' Business and Financial Services Center
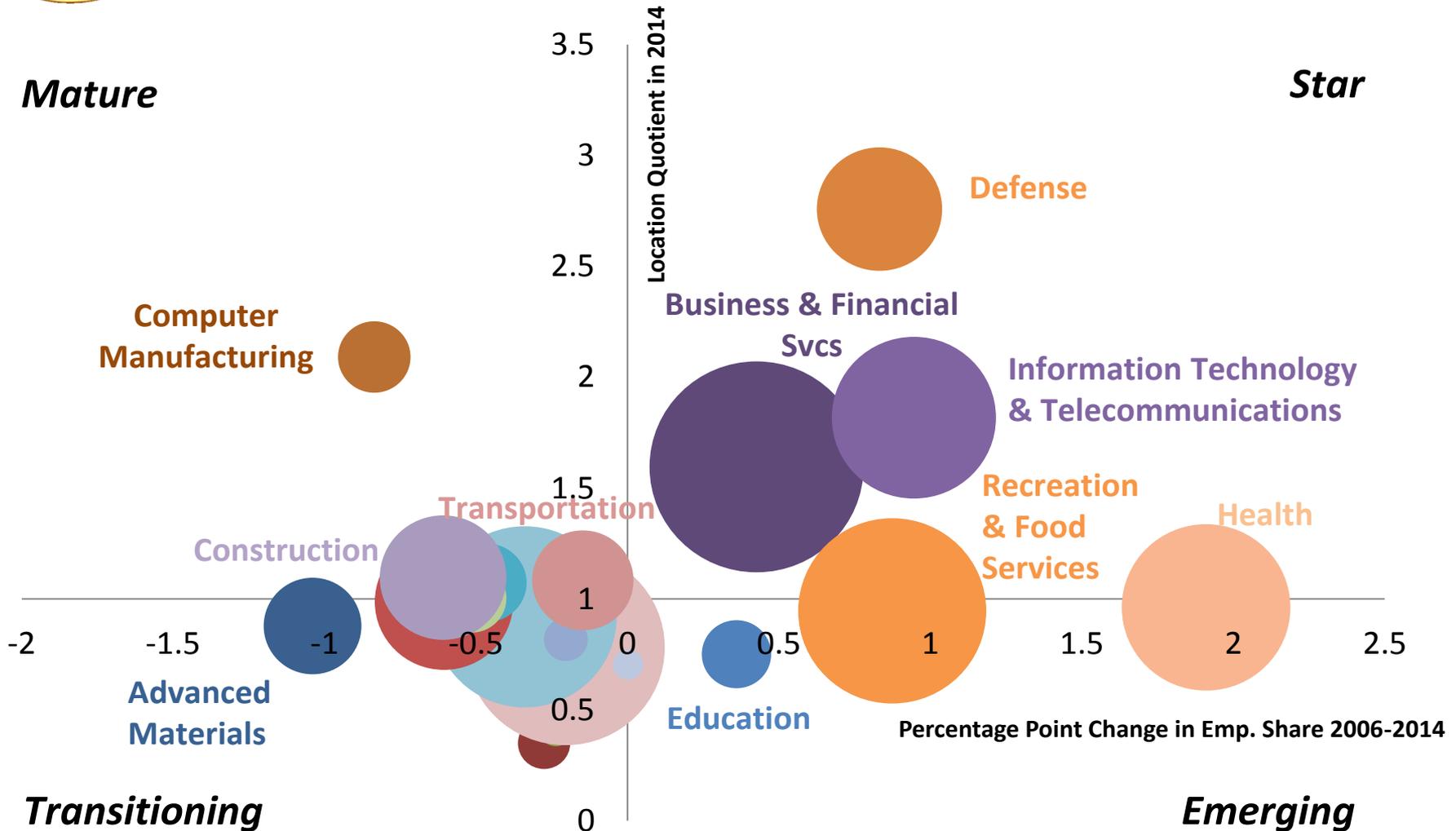
Note: Bubble size represents industry share of MSA employment.
Source: Texas Workforce Commission; Bureau of Labor Statistics.

Transportation and Manufacturing Drive Fort Worth's Economy

Mature

Star

Location Quotient in 2014

Transportation Equipment Manufacturing

Defense

Machinery Manufacturing

Mining & Energy

Transportation & Logistics

Construction

Recreation & Food Svcs

3.5

3

2.5

2

1.5

1

0.5

0

Percentage Point Change in Employment Share 2006-2014

-4   -3   -2   -1   0   1   2

Business & Financial Services
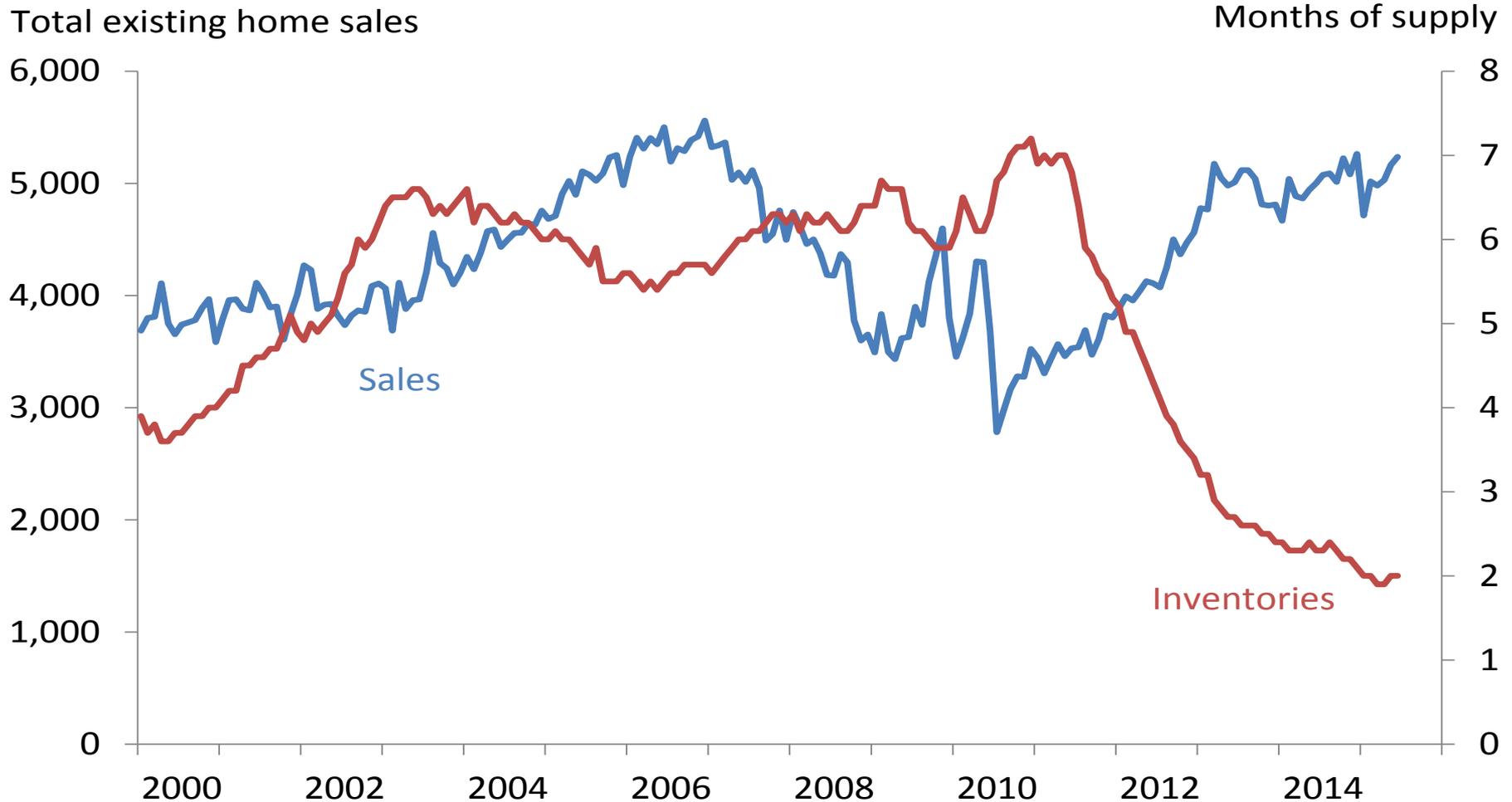
Health

Transitioning

Emerging

Note: Bubble size represents industry share of MSA employment.
Source: Texas Workforce Commission; Bureau of Labor Statistics.

Construction and Real Estate

Dallas Home Sales Rising, Inventories at Record Lows

Total existing home sales

Months of supply

Sales

Inventories

NOTE: Last data point is June 2015.
SOURCE: Multiple Listing Service.

Rapid Home Price Appreciation Continues

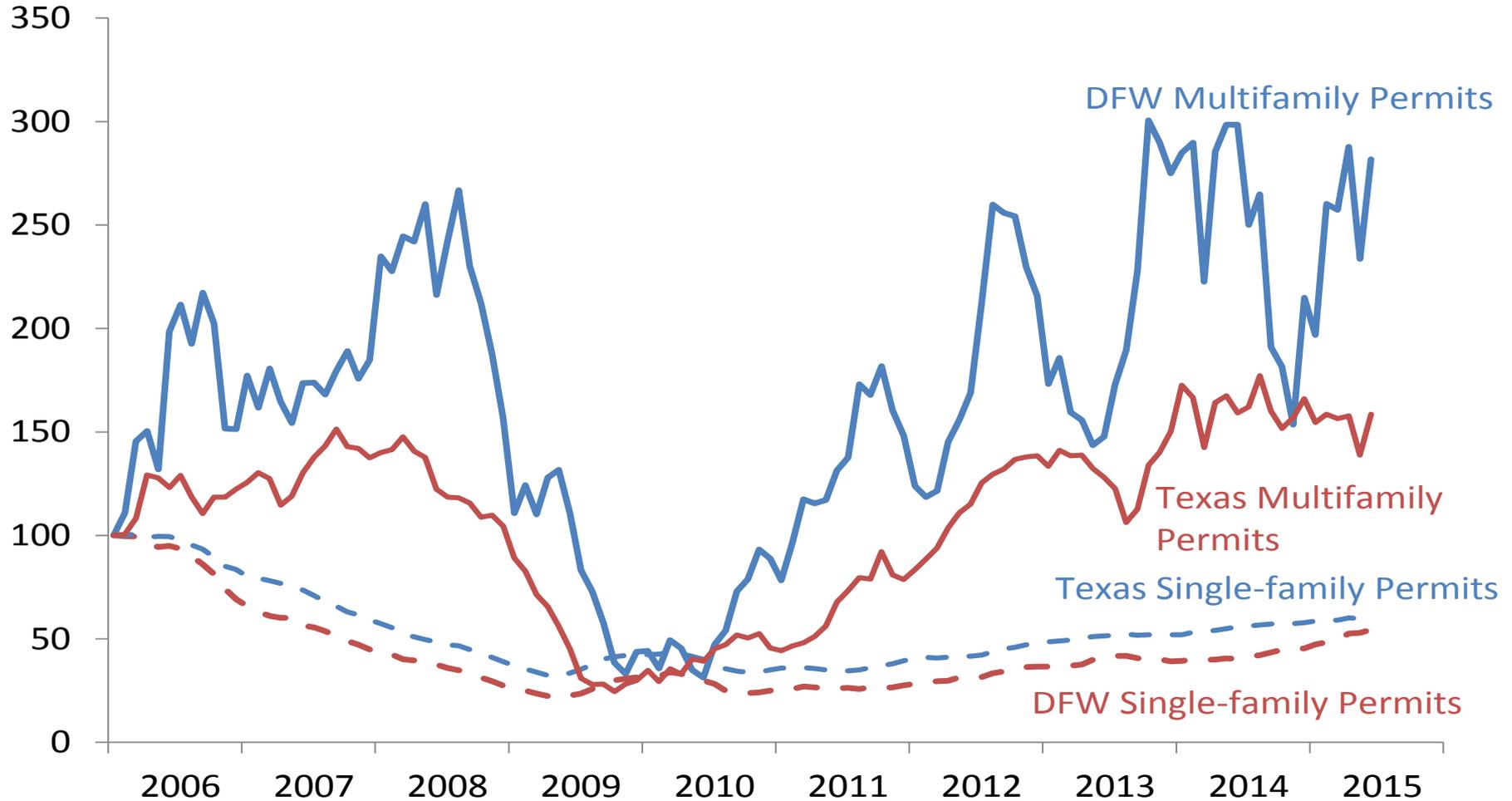|	Real Median Sales Price (June 2015)	2014 Change	2015 YTD Annualized
Austin	**$255,625**	**7.8%**	**4.8%**
Dallas	**$228,136**	**10.8%**	**8.4%**
Fort Worth	**$154,646**	**10.7%**	**2.0%**
Houston	**$208,619**	**11.0%**	**2.0%**
San Antonio	**$187,846**	**5.2%**	**2.4%**
Texas	**$197,495**	**8.4%**	**5.1%**
U.S.	**$220,035**	**5.1%**	**4.8%**

SOURCE: Multiple Listing Service.

Multifamily Construction Elevated in DFW

Index, Jan. 2006=100, 5MMA

SOURCES: Census Bureau; Bank of Tokyo-Mitsubishi UFJ

DFW Apartment Market Leads Other Major Metros

Metro Area	Occupancy (Q2 2015)	Change in Occupancy (Q2 2014-Q2 2015)	Rent Growth (Q2 2015/ Q2 2014)	Net Absorption (units)	Completions (units)	Under Construction (units)
Dallas-Fort Worth	95.4%	90 basis points	5.5%	8,100	4,700	35,100
Houston	94.7%	30 basis points	5.3%	6,000	2,900	32,000
Austin	95.4%	0 basis points	4.8%	1,600	1,000	13,800
San Antonio	94.0%	80 basis points	3.9%	2,000	600	8,900

SOURCE: MPF Research

DFW Office Market Strong; Houston Sees Weakness
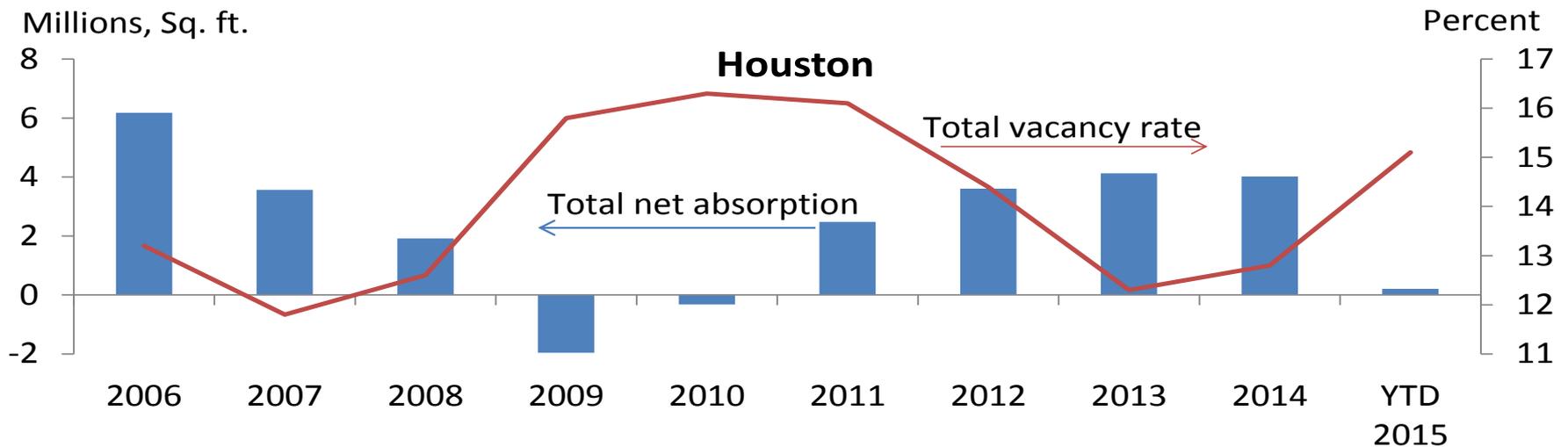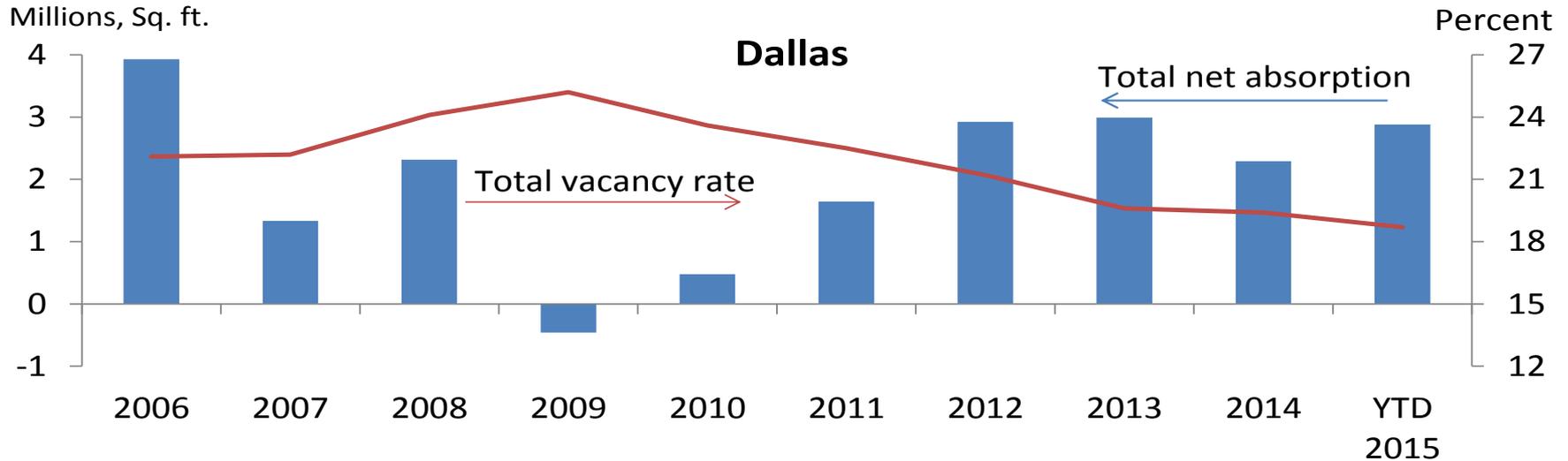
SOURCE: JLL Research, "*Office Insight.*"

Outlook Positive

- Unemployment is at a 14-year low
- Housing market is tight and commercial real estate activity strong
- Energy and mining cluster makes up a small share of the DFW economy
- Business and financial services cluster to see continued growth in part due to several large corporate relocations/consolidations
- Expect DFW to outperform the statewide job growth of 0.5 to 1.5 percent
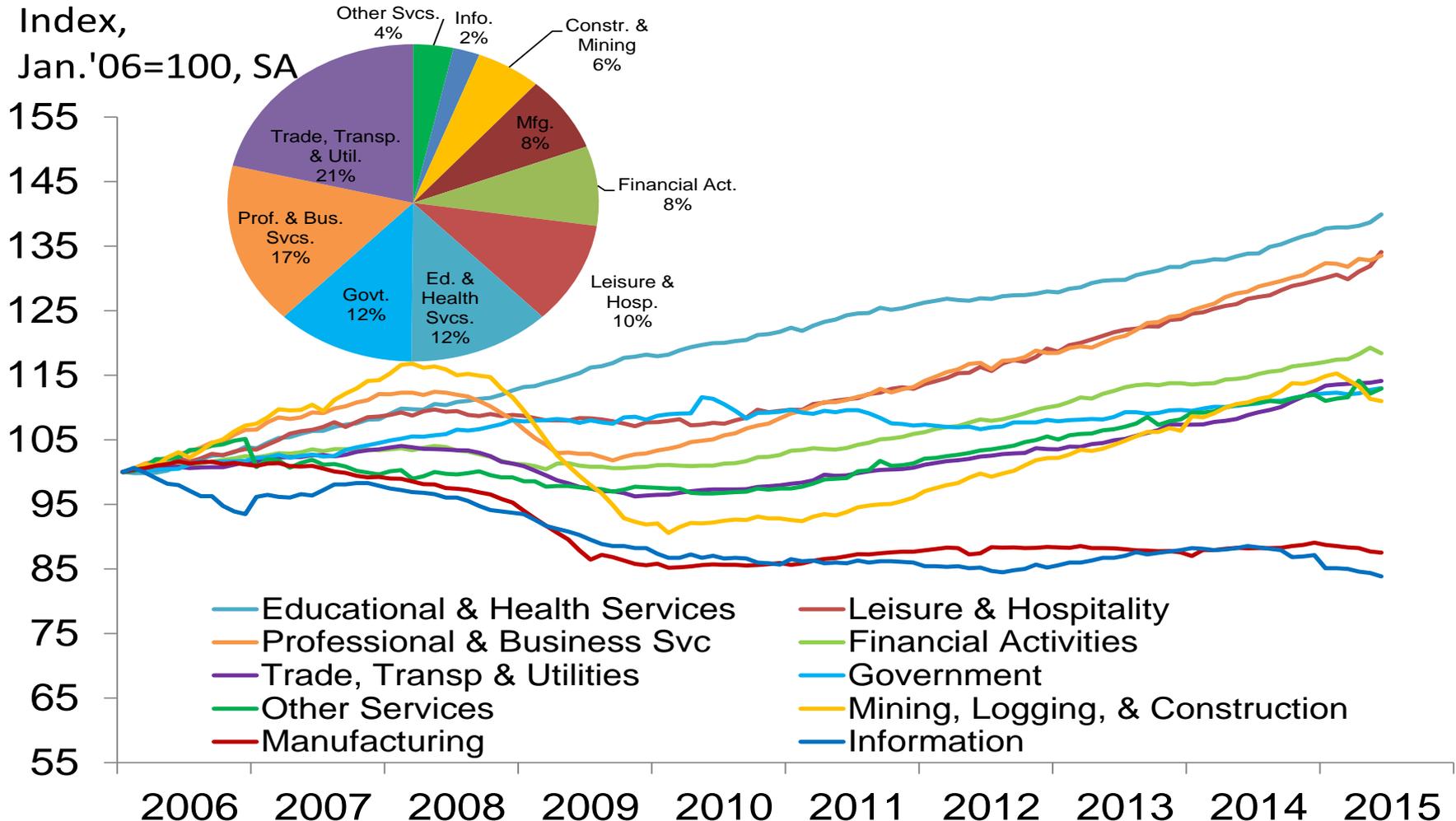- DFW job gains to be close to its long-term average of 2.1 percent

Questions?

Backup Slides

Drivers of DFW Job Gains

Index,
Jan.'06=100, SA

SOURCES: Bureau of Labor Statistics; Texas Workforce Commission; seasonal adjustments by Federal Reserve Bank of Dallas.

Dallas Job Growth Surpasses Austin in 2014

Metro Area	2013 Job Growth	2014 Job Growth	2015 YTD Job Growth
DFW	3.1%	4.0%	2.1%
Houston	3.2%	4.1%	-0.5%
Austin	4.4%	3.9%	4.5%
San Antonio	2.9%	3.6%	1.9%

Summary

- Employment growth has moderated, but is still growing at twice the state's pace
  - DFW jobs grew 2.1% vs. TX 1.1 in the first half of 2015
  - Growth was concentrated in the service sectors
- Unemployment is at a 14 year low

Industry Clusters

- A cluster is a geographically concentrated group of industries related by technology they use, the markets they serve, the goods and services they produce, and the labor skills they require.

- Clusters
  - increase productivity and operational efficiency
  - stimulate and enable innovation
  - facilitate new business formation

Importance of Industry Clusters

- Several studies focus on the role and importance of regional clusters:
    - "The Economic Performance of Regions," Michael E. Porter, *Regional Studies*, vol. 37, August/October 2003, pp. 549–78.
    - "Clusters, Convergence, and Economic Performance," M. Delgado, M. Porter and S. Stern, NBER Working Paper No. 18250, July 2012.
    - "Industry Location, Economic Development Incentives, and Clusters," Douglas P. Woodward, *The Review of Regional Studies, vol. 42, 2012,* pp. 5–23.
    - *"*Industry Cluster Analysis for the Southeast Missouri Region," D. Primont and B. Domazlicky, Center for Economic & Business Research, Sept. 2008

Data and Methodology

- Data: Bureau of Labor Statistics QCEW annual employment and wage data
- Clusters Methodology:
  - 17 clusters defined by 3- to 6-digit NAICS, adopted from the report by Center for Regional Development at Purdue University, Indiana Business Research Center and Strategic Development Group, Inc. published in Jan. 2007
  - Combine the Energy and Mining clusters
  - Split the Manufacturing Super Cluster into its 3-digit level NAICS sub sectors
  - Add Retail, Construction, Government and Utilities 2-digit level NAICS sectors
  - Add Food Services to the Recreation Cluster
  - Some double counting at the 4-digit or 5-digit level NAICS across clusters.