
IOGCC Annual Business Meeting

Changing Role of U.S. Oil and Gas Hubs

May 9, 2017

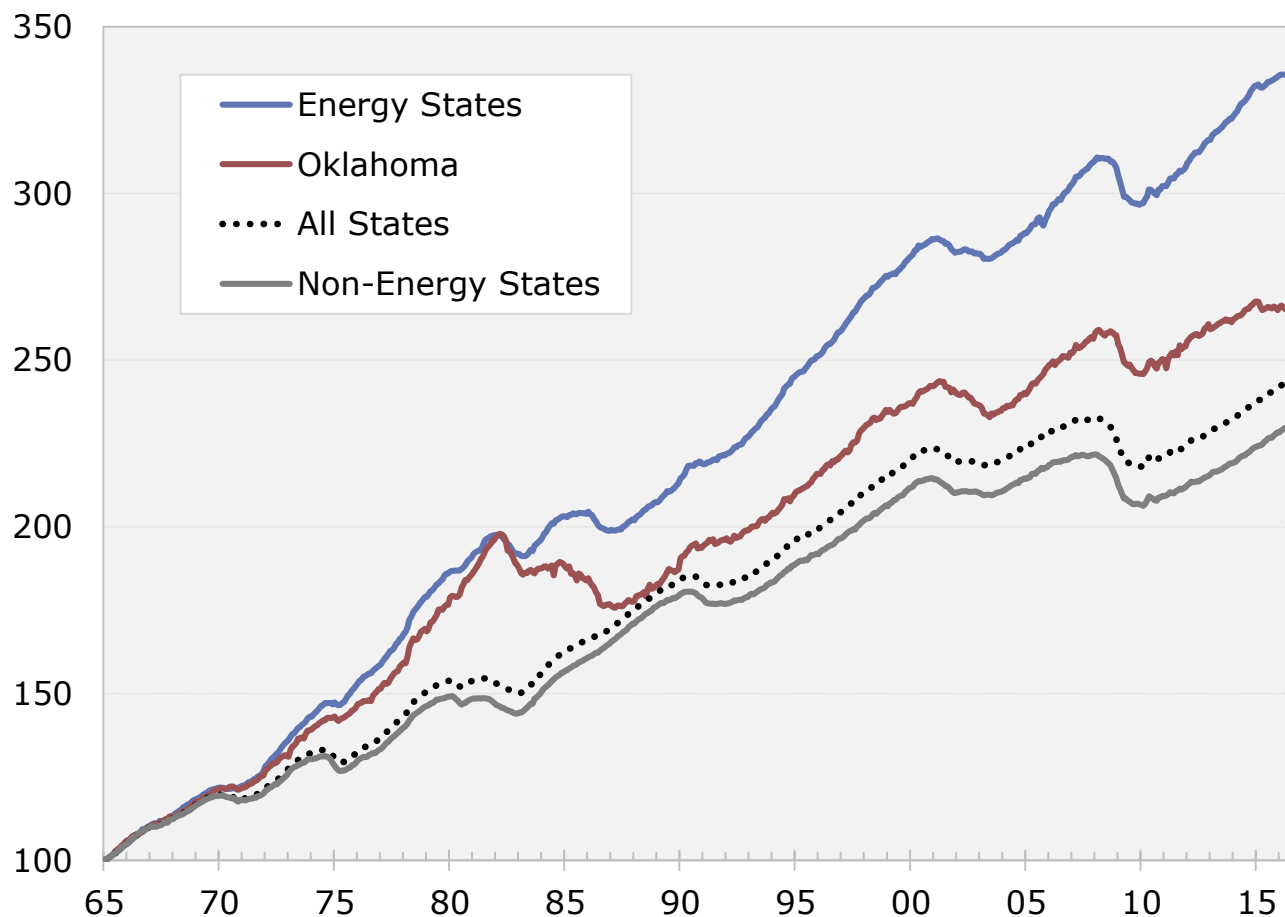
Mark C. Snead

President and Economist



Is it good to be a mining state in the long-run?

Total Wage & Salary Jobs – Energy vs. Non-energy states
Index: Jan-1965=100.0



Utah	522.4
Alaska	500.5
Texas	453.2
Colorado	445.0
New Mexico	341.0
Energy	335.6
North Dakota	328.6
Wyoming	327.0
Oklahoma	286.2
Montana	275.3
Mississippi	253.6
Kansas	240.0
Louisiana	233.1
Non-Energy	229.4
West Virginia	180.4

Oil and gas hubs

Changing economic channels (with an OK flavor)

Leaders, movers, and waning hubs

Changing definition of an 'energy hub'

Corporate presence

Capital spending

Employment

Household income

Tax contribution

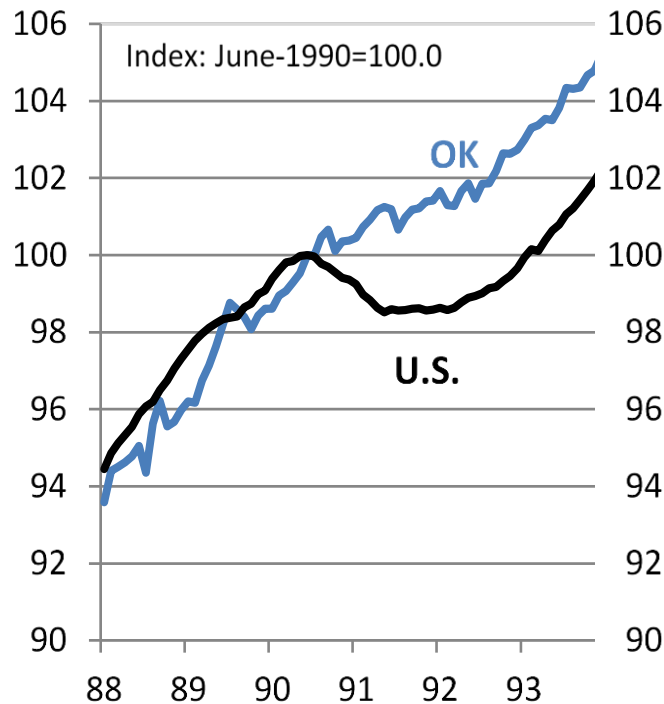


Cyclical sensitivity
of each

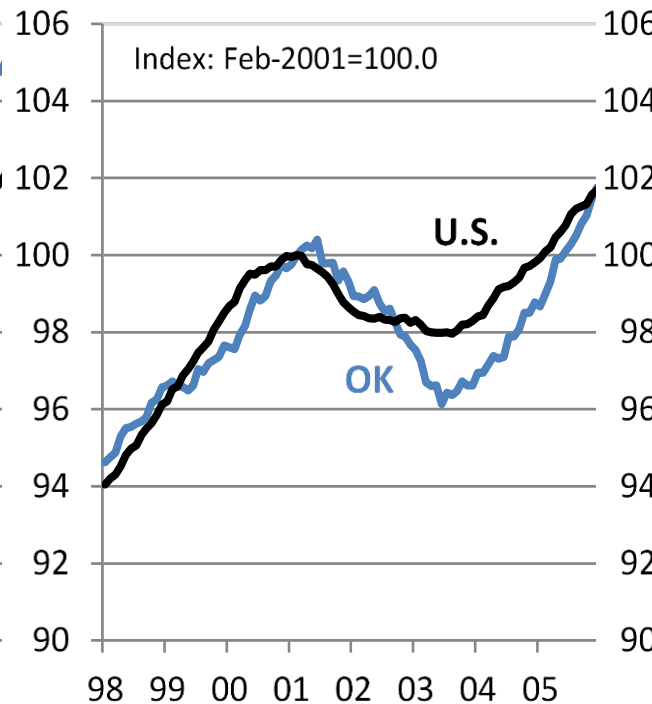
Oil & gas determines the overall economic cycle in energy hubs

Indexed Wage & Salary Employment – Oklahoma vs. U.S.

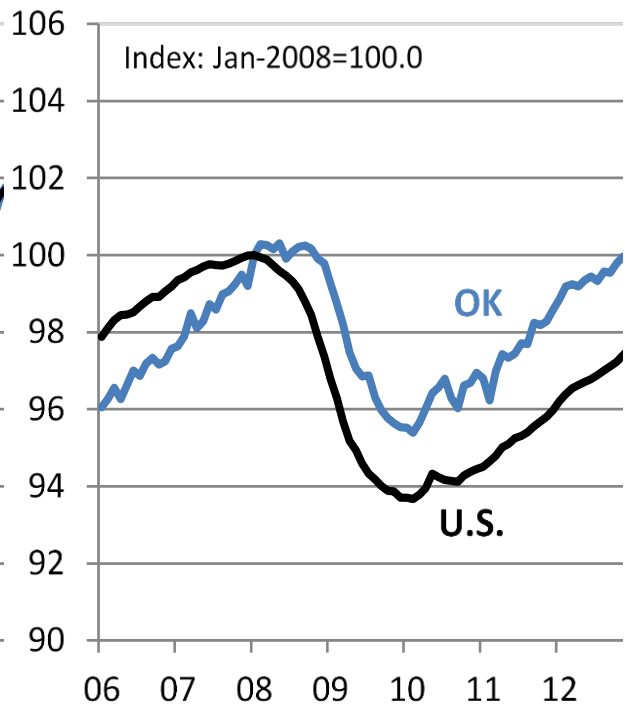
(a) 1990-91 Recession



(b) 2001 Recession



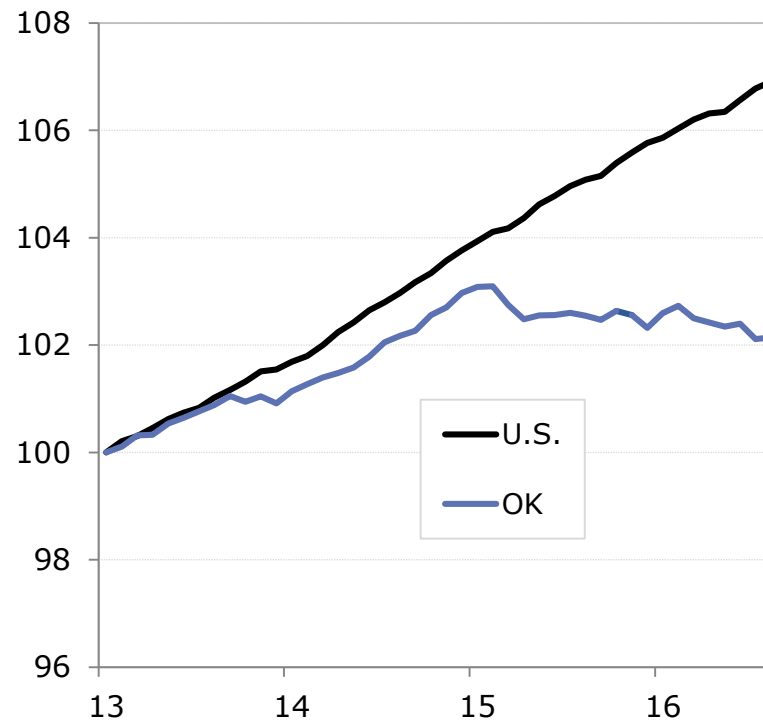
(c) 2007-09 Recession



Oil & gas determines the overall economic cycle (cont.)

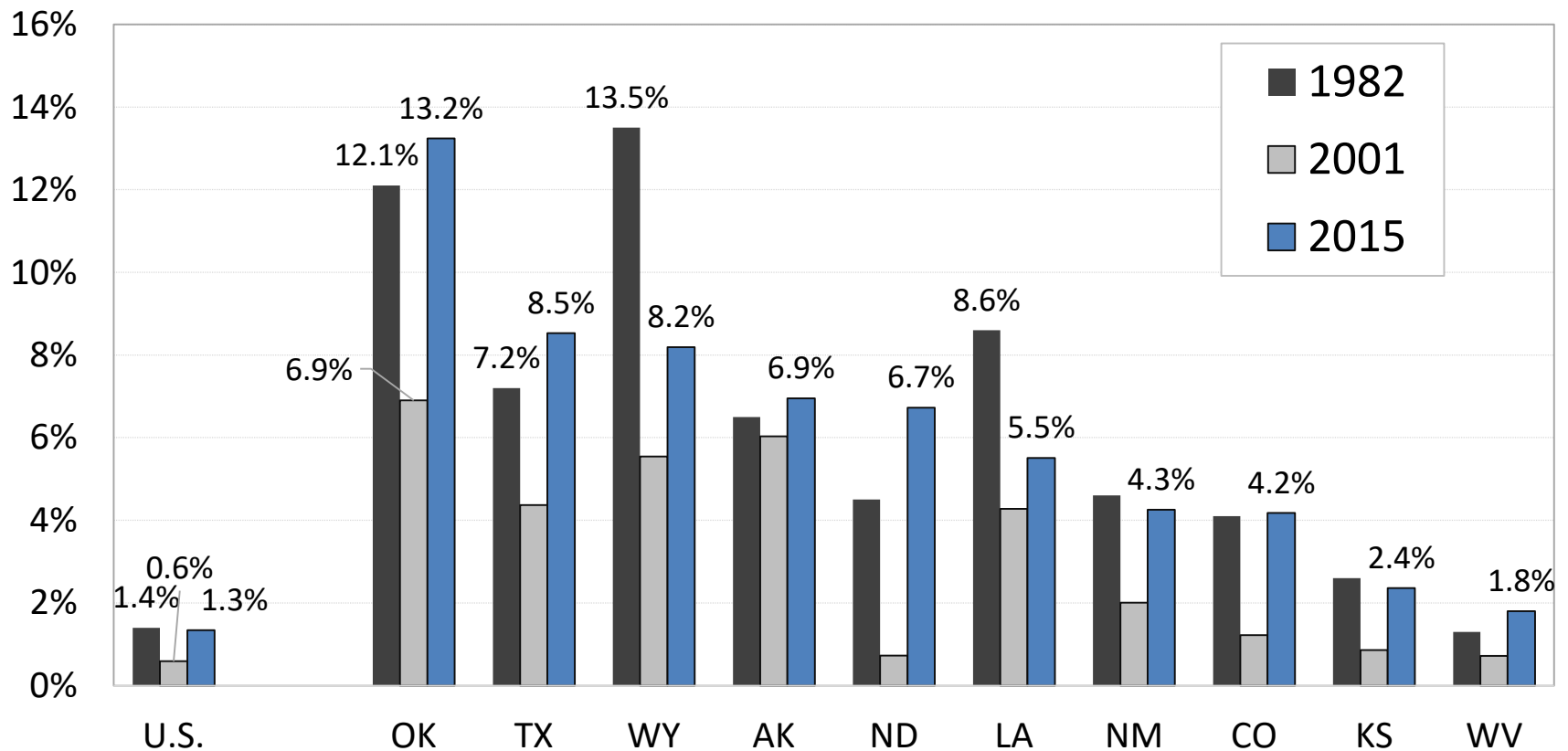
Indexed Wage & Salary Employment – Oklahoma vs. U.S.

(d) 2015-16 OK Recession



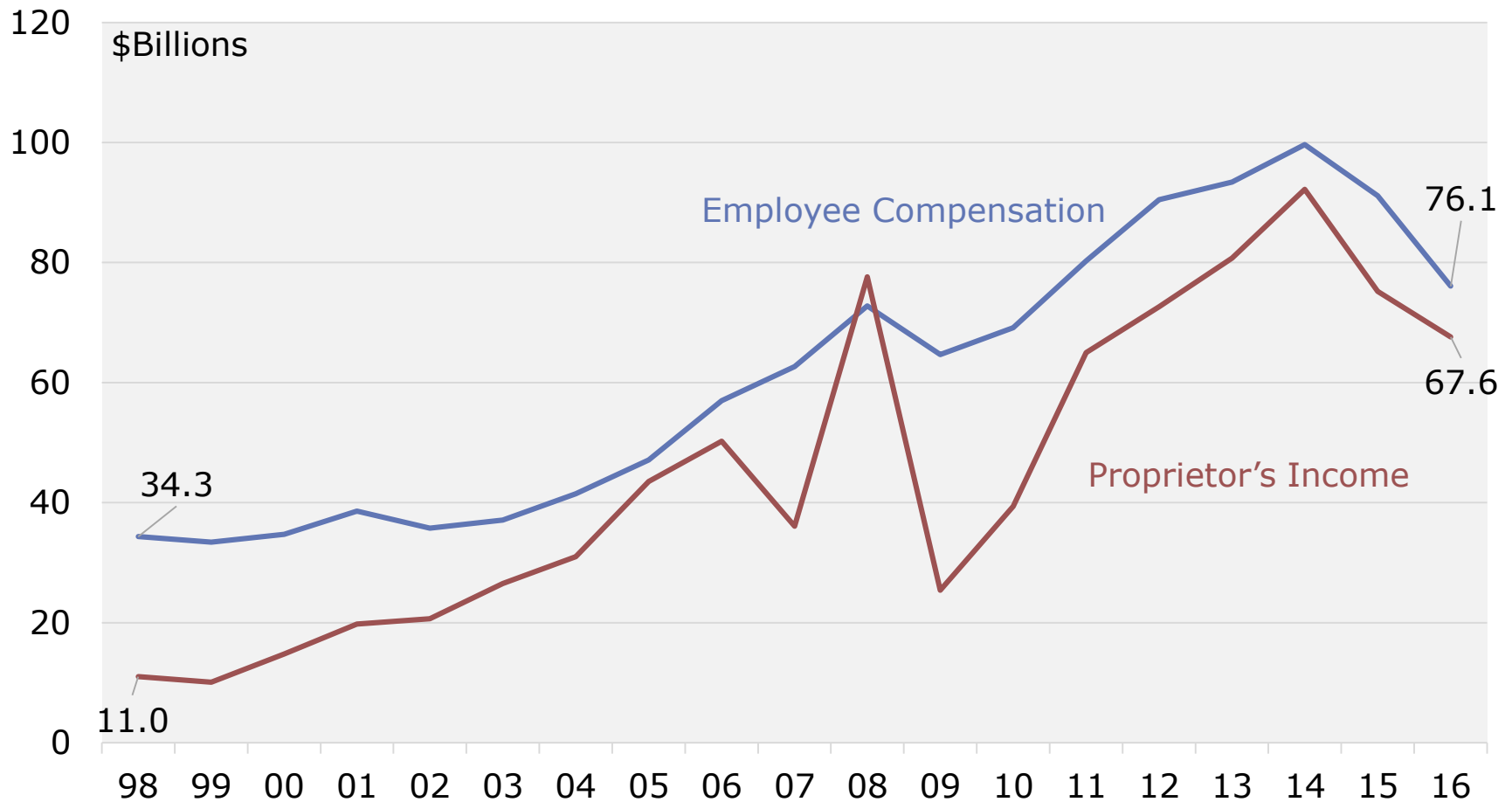
For households, its more about earnings and less about jobs

Share of Total State Household Earnings from Oil and Gas Industry
ranked by 2015 share, recent peaks and troughs in industry activity



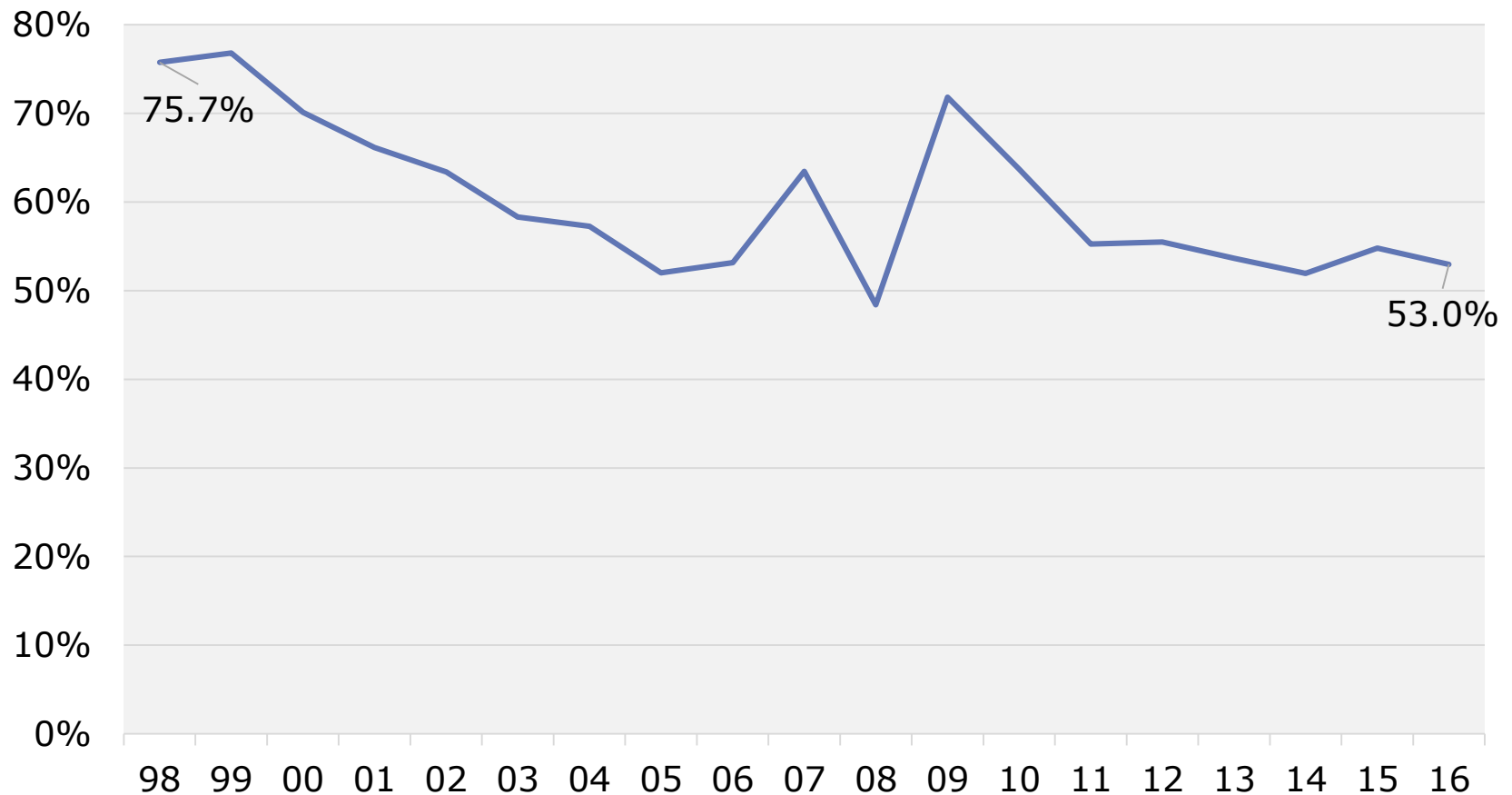
Proprietor's income approaching w/s compensation

U.S. Wage & Salary and Proprietor's Earnings – Mining



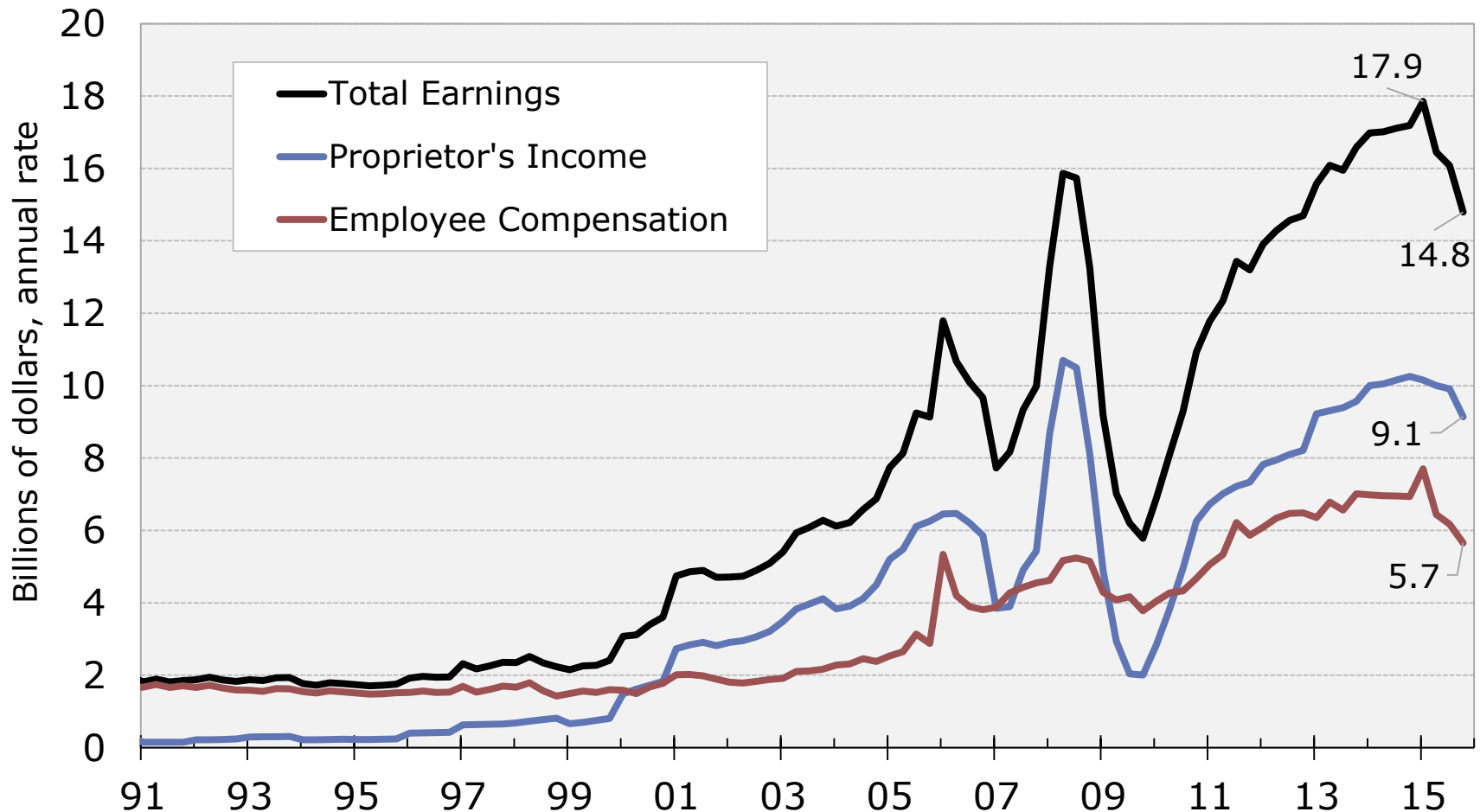
Proprietor income share to near 50%

U.S. Proprietor's Income Share of Total Earnings – Mining



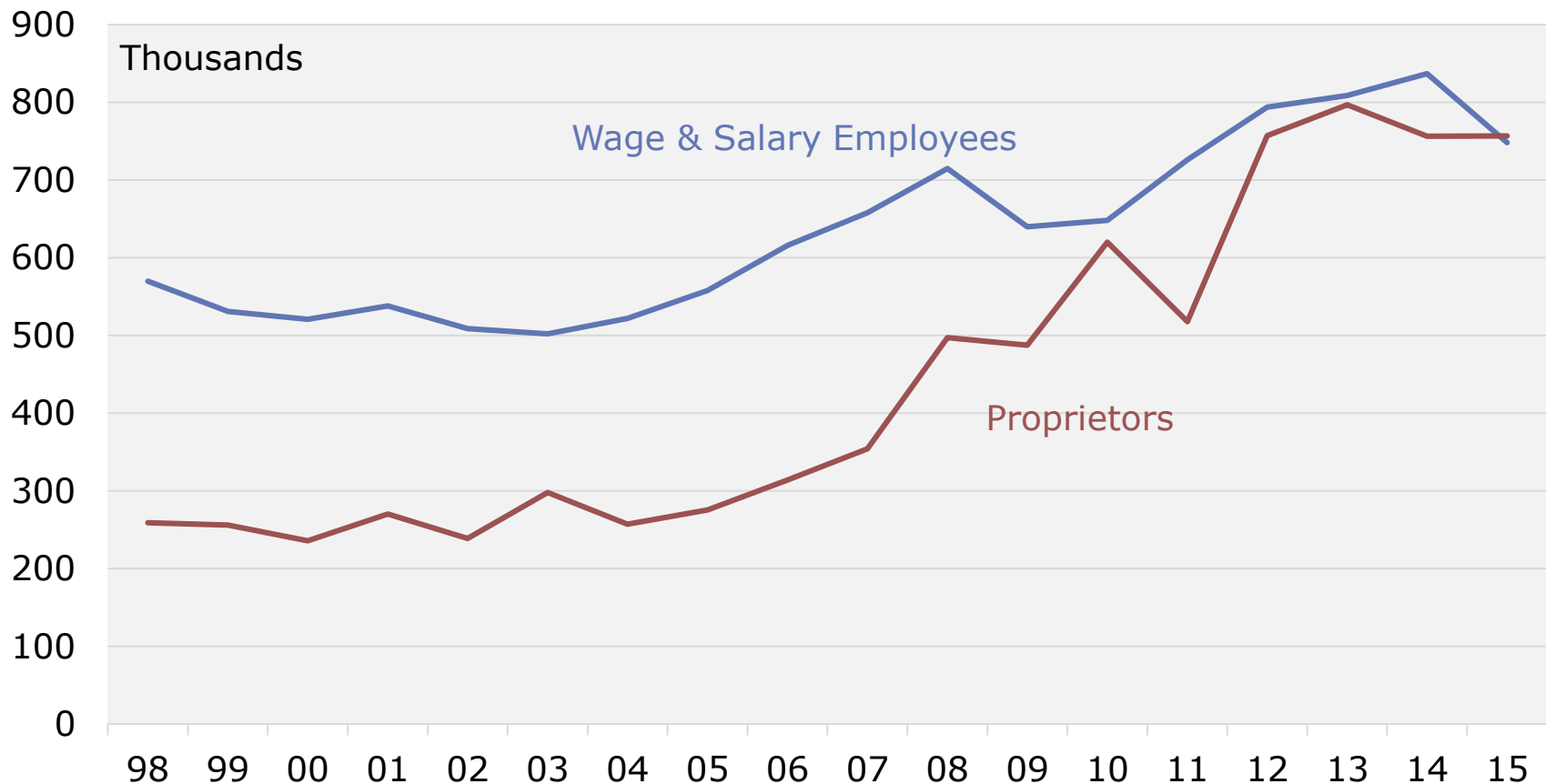
Proprietor's income is now the key component of oil and gas earnings in OK

Oklahoma Mining Sector Earnings by Major Type
billions of dollars



Proprietors now equal wage & salary workers

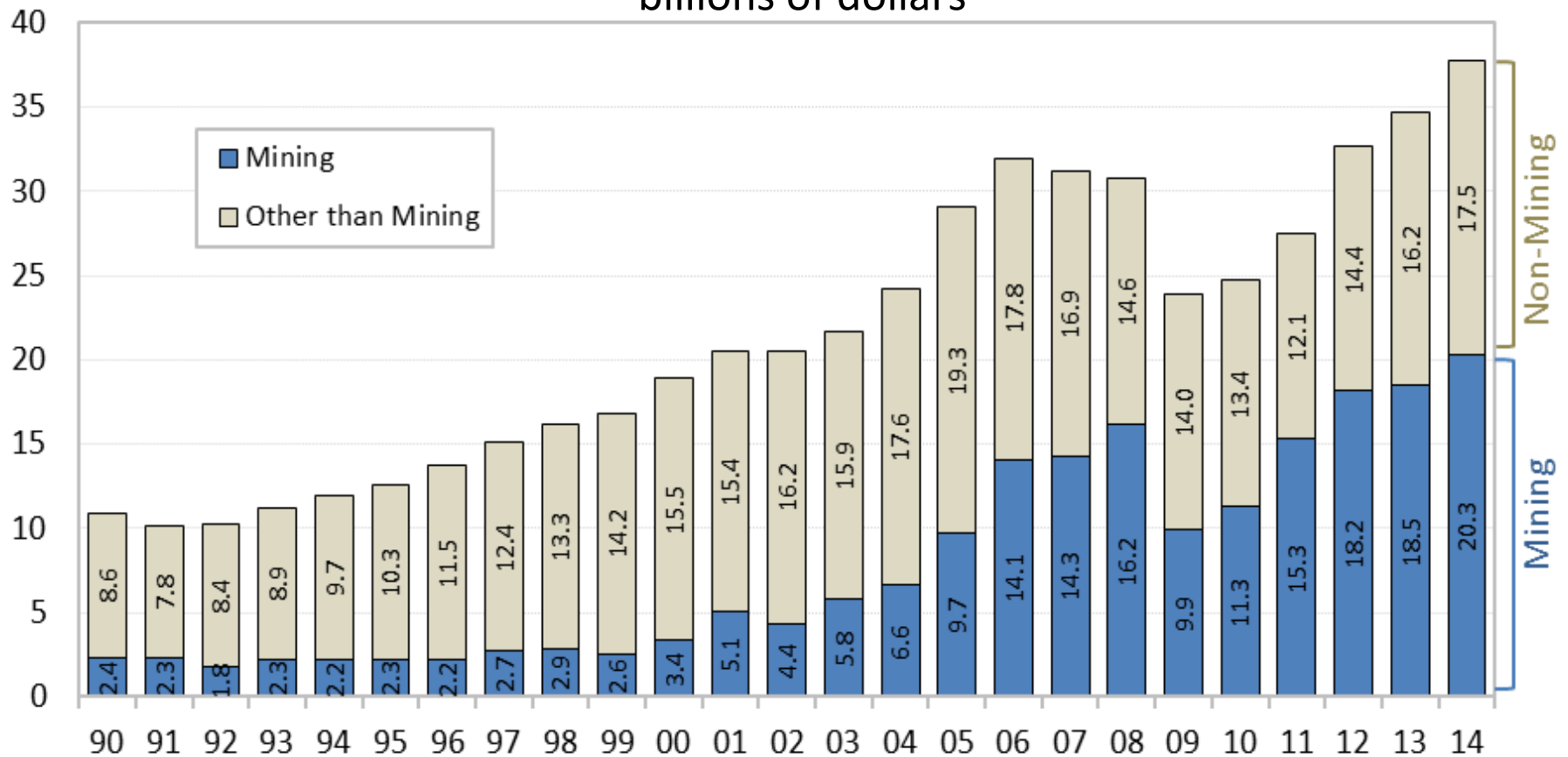
U.S. Wage & Salary vs. Proprietor Employment - Mining



Capital spending drives active drilling regions

Private Fixed Investment – Oklahoma

billions of dollars

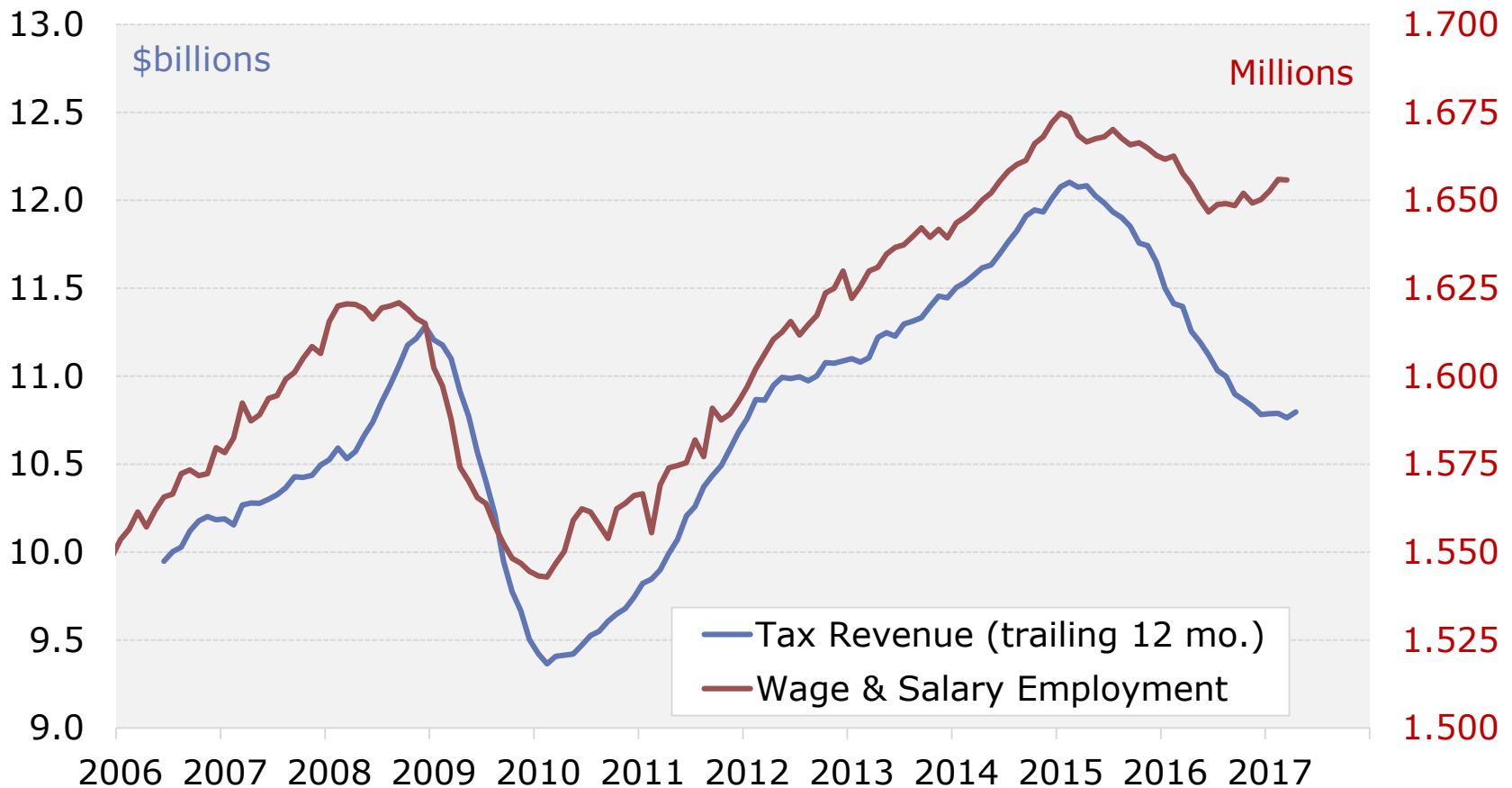


Notes: Fixed investment includes structures, equipment, and intellectual property.

Energy hubs bring added volatility

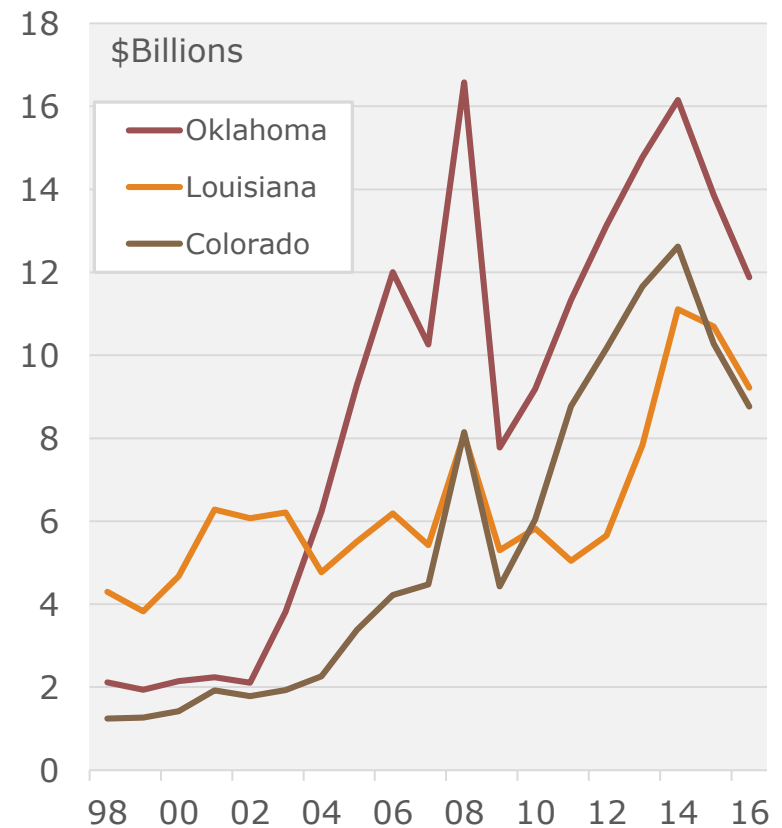
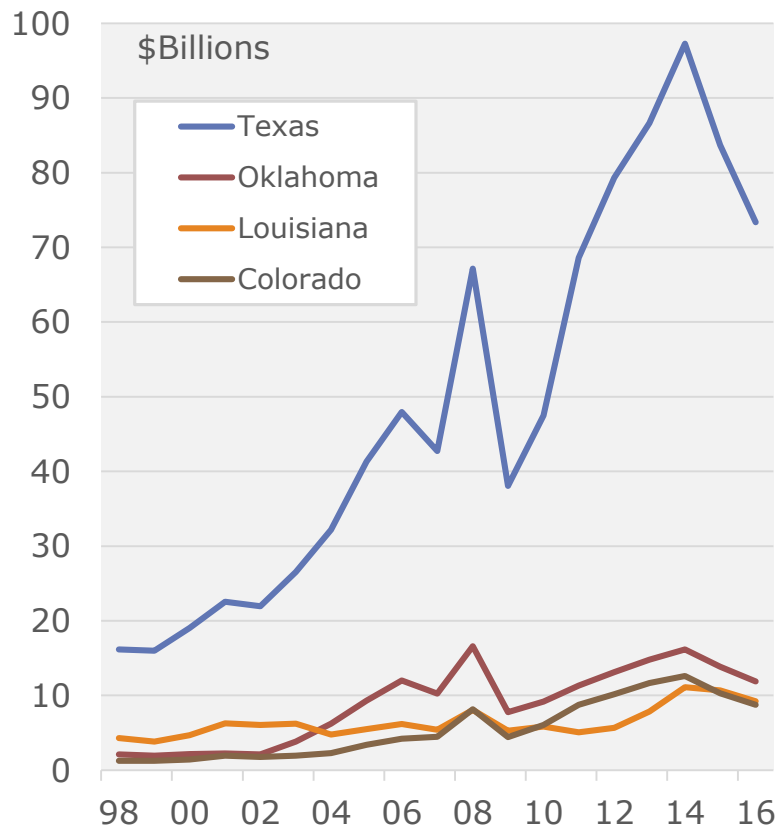
both the good and bad variety

Oklahoma Tax Revenue and Employment



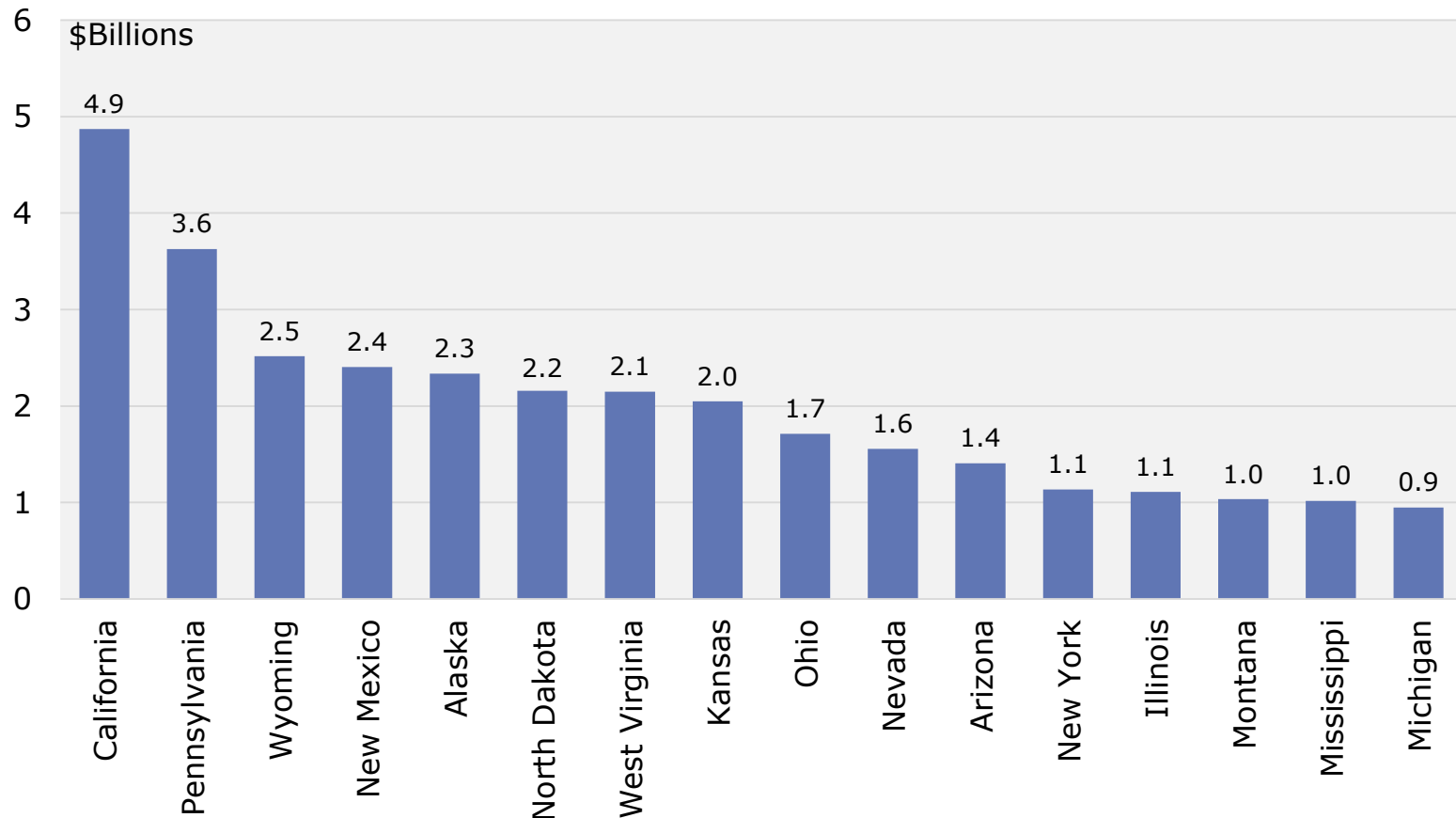
The current Big-4 by total mining earnings

Total Household Earnings - Mining



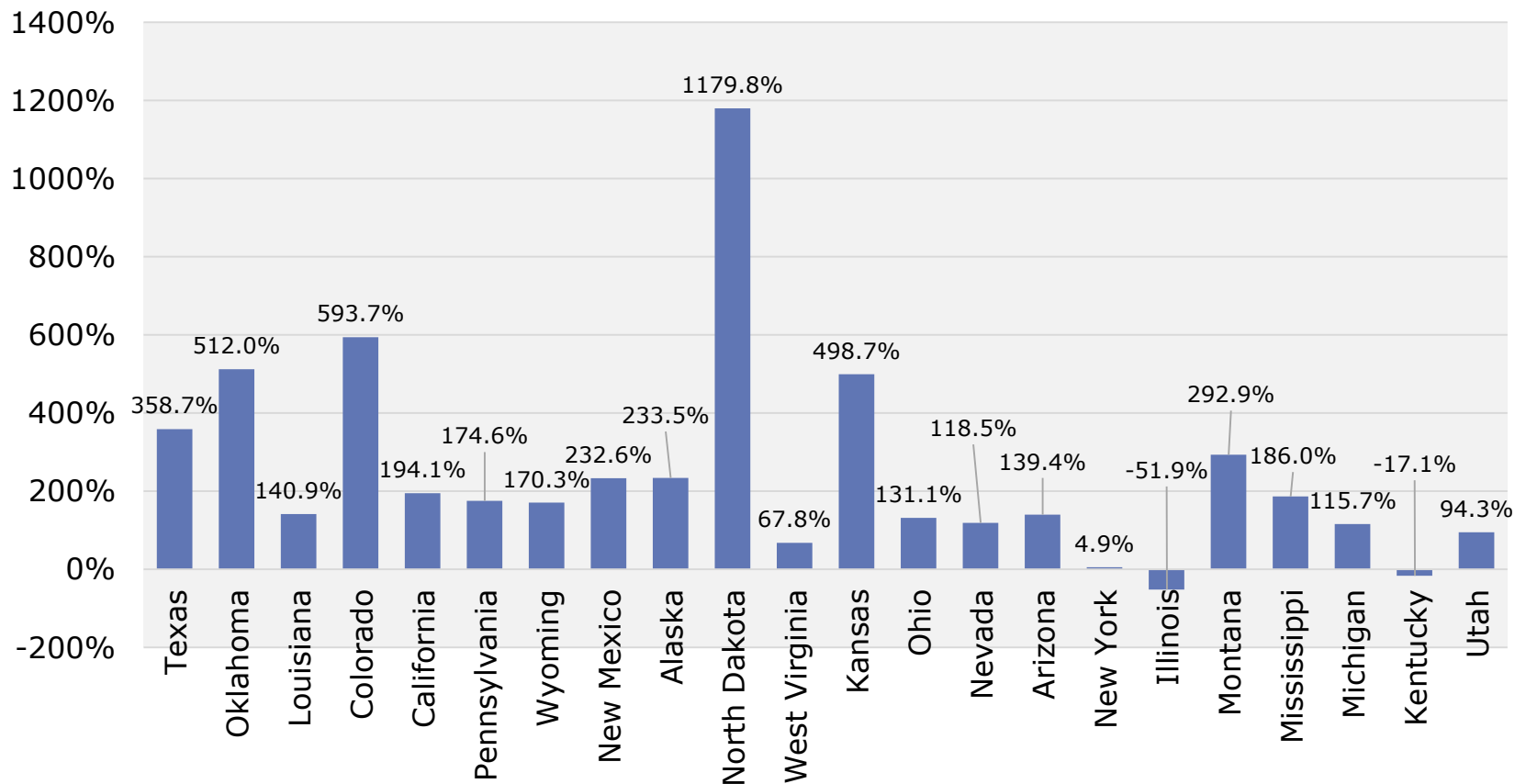
The contenders by total mining earnings

Total Household Earnings - Mining



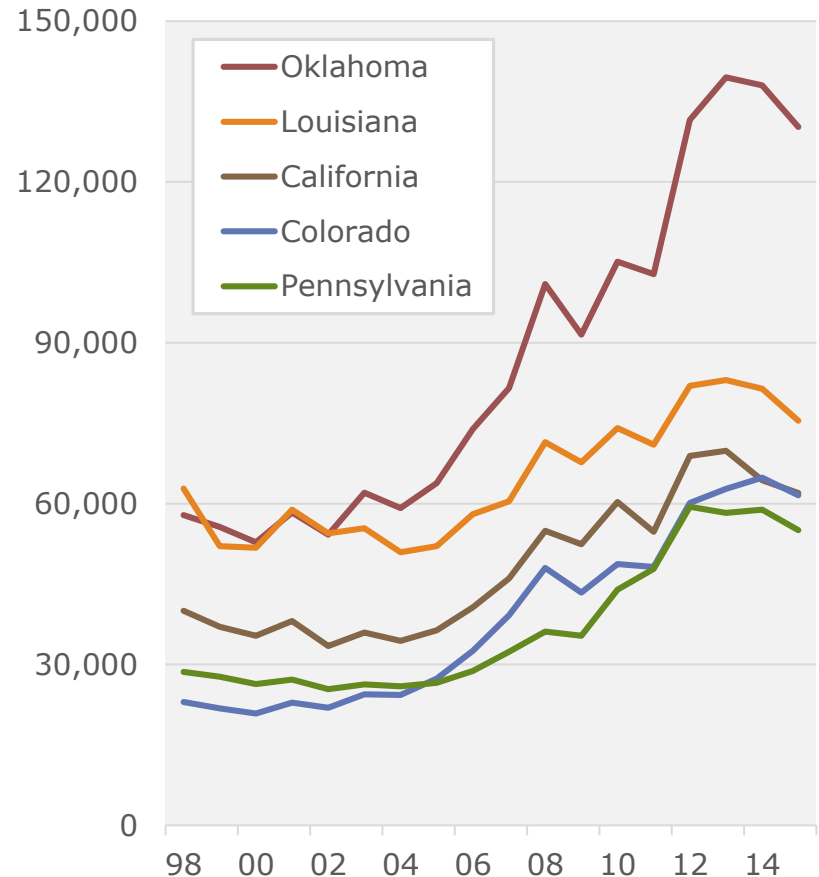
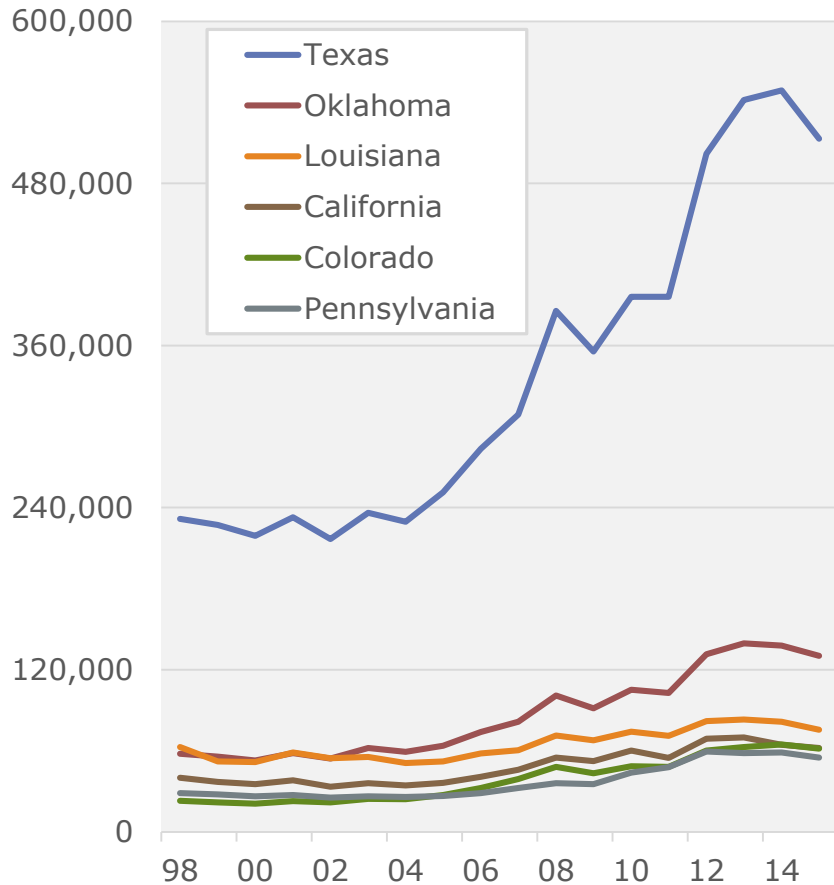
Many big movers, including the largest

Growth in Household Earnings - Mining
1999-2016, ranked by total earnings



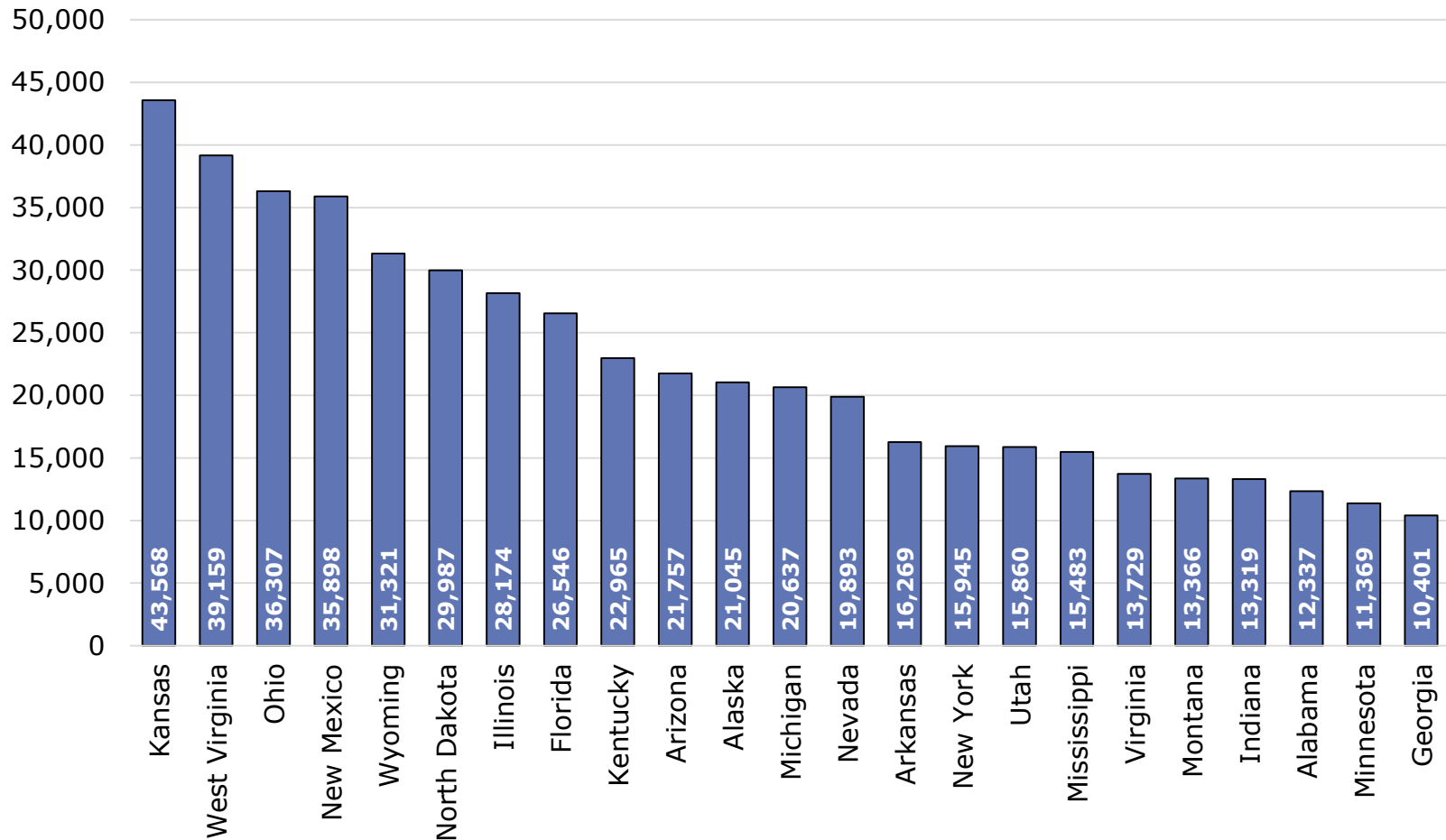
The current Big-6 by total mining employment

Total Employment - Mining



The contenders by employment

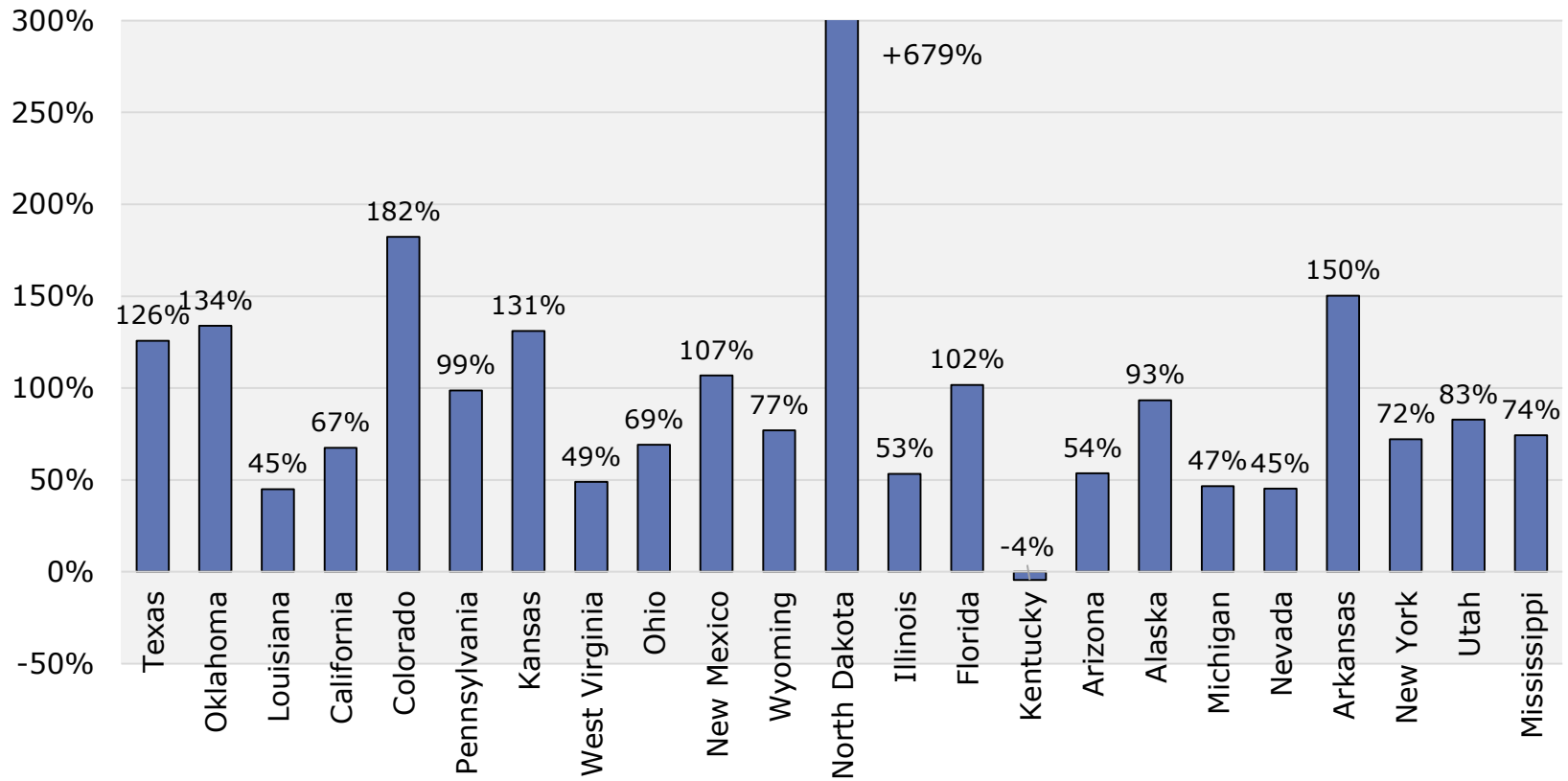
Total Employment - Mining



Extreme job growth rates highly concentrated too

less volatile overall than earnings

Growth in Total Employment - Mining 1999-2016, ranked by total mining employment



Research going forward

Estimating mining capital spending at the state level

Moving the data analysis to the metro and county levels

Forming estimates of cyclical sensitivity

IOGCC Annual Business Meeting

Changing Role of U.S. Oil and Gas Hubs

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