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A New Business Incentives Database

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Based on: "A New Panel Database on Business Incentives for Economic Development Offered by State and Local Governments in the United States"

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What is “new” about this new incentives database?

- More industry detail (45 industries, over 90% of wages)
- More years (26 years, 1990-2015)
- 33 states (over 90% of US output)
- Detail on 5 incentive types: job creation tax credits, property tax abatements, investment tax credits, R&D credits, customized training
- Detail on incentive time pattern: how it varies from Year One to Year 20 for new facility
- Free, open-access database

Database helps address key questions

- Is magnitude of incentives enough to significantly affect business location decisions?
- Do high-unemployment states offer more incentives?
- Do states target high-wage industries?
- Do states emphasize more “efficient” incentives?
  - e.g., frontloaded incentives, customized services
- How much do incentives affect state growth?

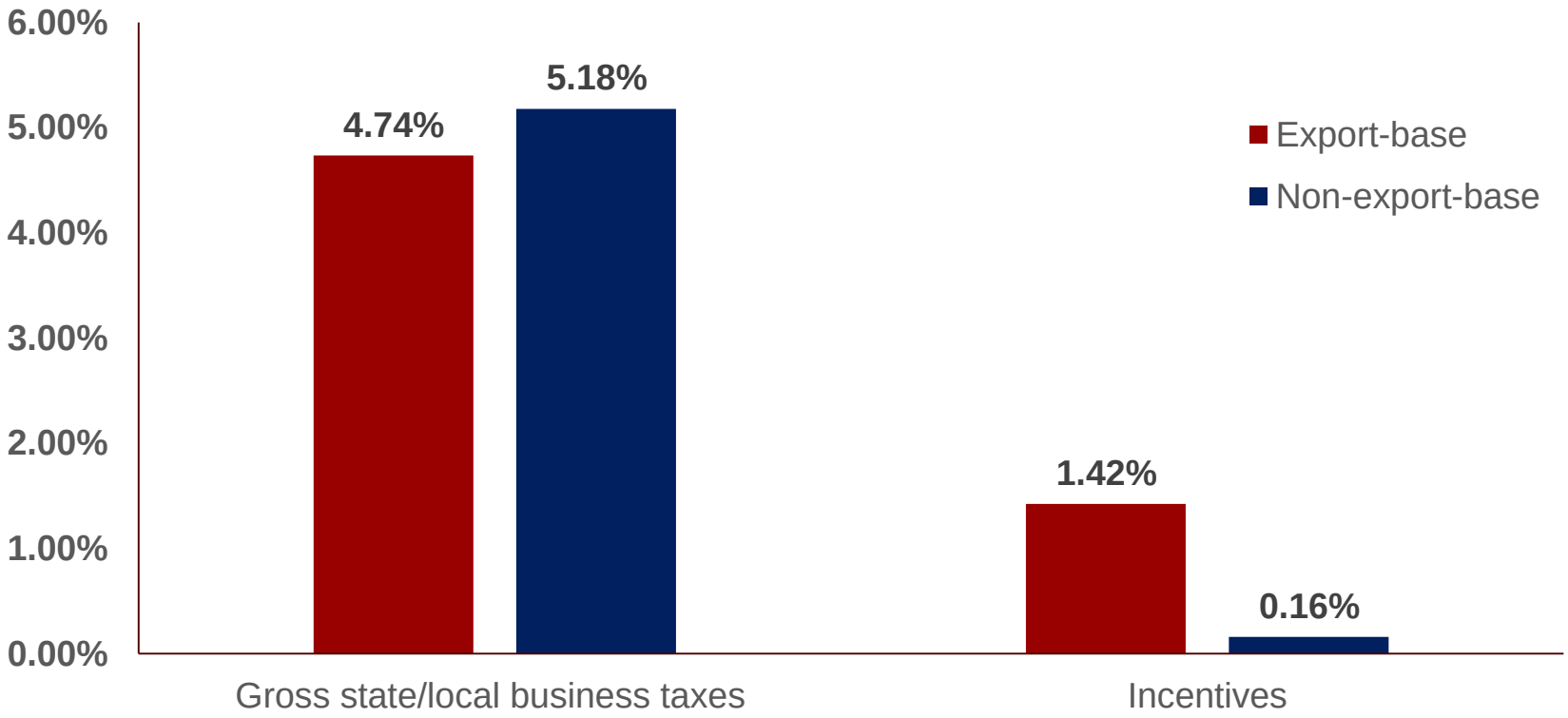
Methodology of database

- Hypothetical firm model
- New facility opens up in base year, stays at same scale for 20 years. Taxes & incentives of base year projected forward
- Tax & incentive calculations based on BEA/IRS data on industry differences in proportions of jobs, wages, real property, machinery/equipment, R&D, input purchases, and profits
- Taxes included are property taxes, sales tax on business inputs, and corporate income tax.
- Incentives included are job creation tax credits, property tax abatements, investment tax credits, R&D credits, and customized job training.
- Incentives only included if they are part of “usual deal”

Database's outputs

- Taxes and incentives of each type for each of 20 years of facility operation, for 45 industries, 33 states, and 26 starting years
- Taxes/incentives calculated as % of "value-added" = measure of firm's production = value of firm's sales minus its inputs from other businesses
- Also calculate weighted average for 31 "export-base" industries: industries that sell goods/services outside state, bringing new $ into state
- Report/database focus on "present value" of taxes/incentives as % of present value of value-added over those 20 years
- Present value calculated using 12% real discount rate. Why? Research evidence that corporate executives use this in making investment decisions.
- Implications of 12%: future heavily discounted; $ in year 10 worth only $0.36 in Year One

2015 national average for incentives: 1.42% of value-added for export-base industries



NOTE: 2015 U.S. average, as percentage of value-added. Figures are for state/local business taxes, and state/local incentives.
SOURCE: Bartik (2017).

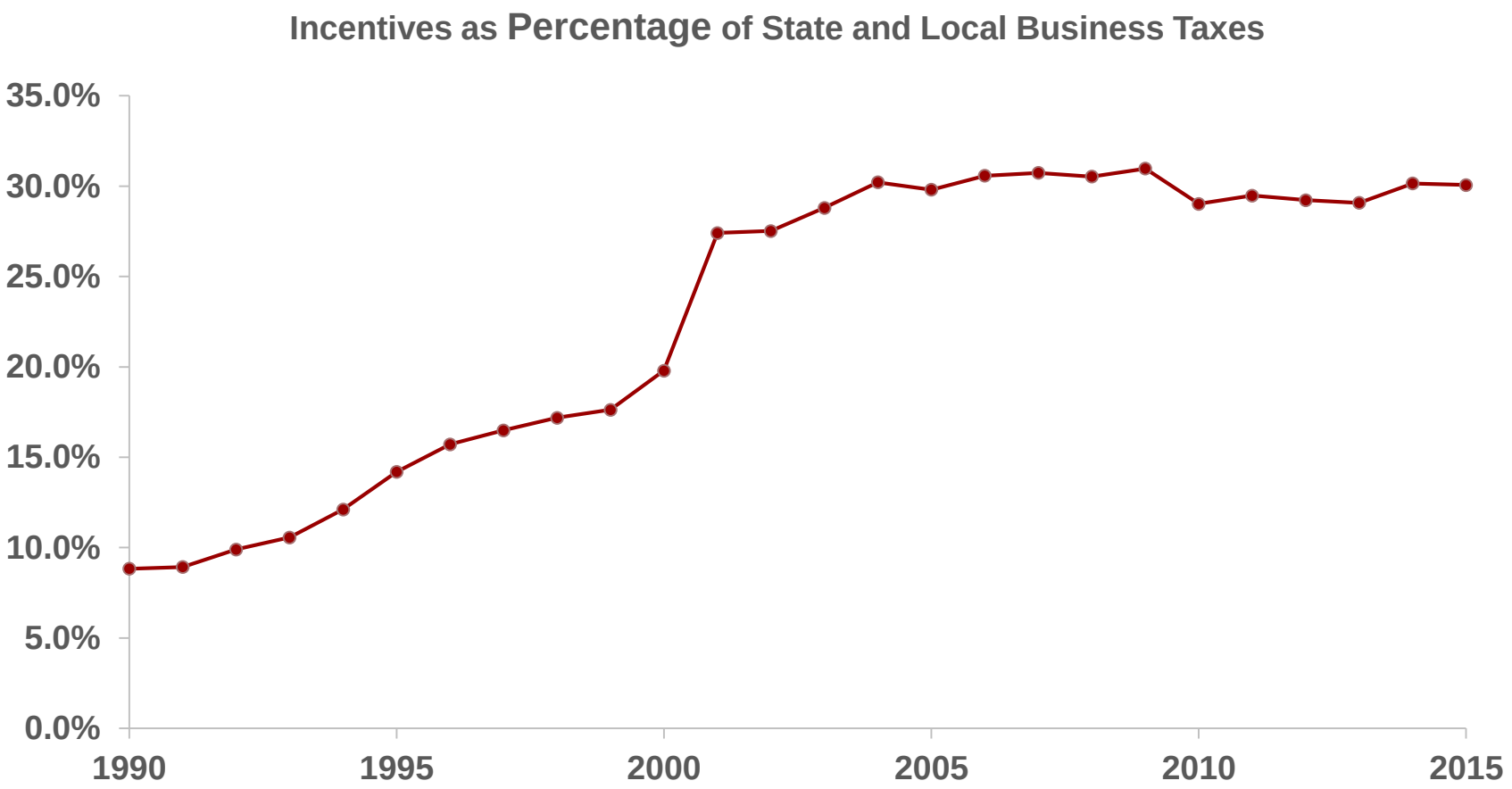
Is 1.42% of value-added large?

- Large? 5.83% of business profits, 30.1% of state/local business taxes, annual national cost of $45 billion, about same as state corporate income tax revenue
- Small? 0.63% of sales, 3.07% of regular wages, $2,326 per worker "job-year"
- Based on literature on how taxes affect location decisions, reduced costs of 1% of value-added increases location decisions by 3 to 17 times as much
- Therefore, 1.42% cost reduction as % of value-added should tip between 4% and 24% of location decisions.

Incentives vary a lot across states, even nearby states

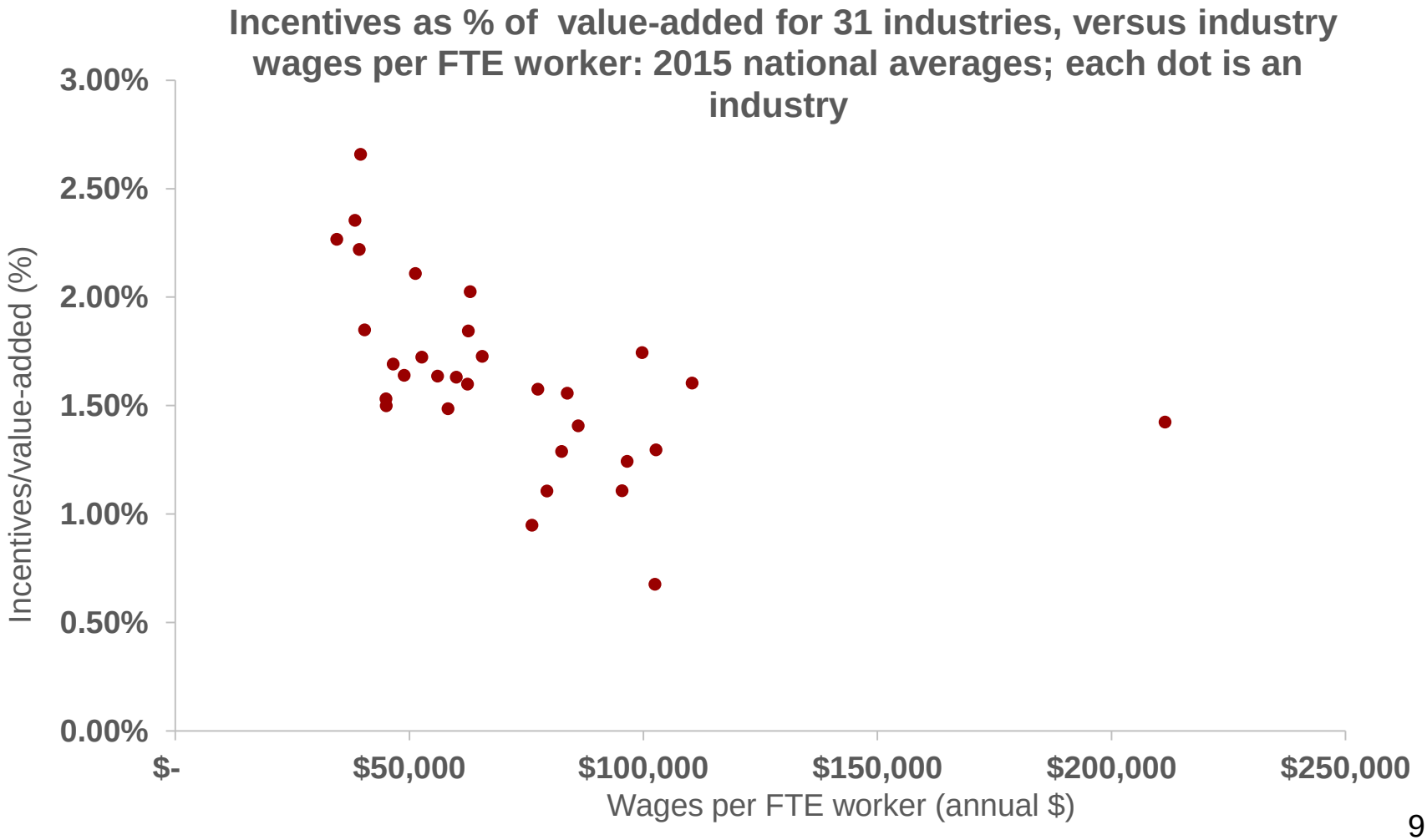
- New Mexico: 4.23% of value-added; Arizona: 1.06%
- New York: 3.53%; Connecticut: 0.65%
- Louisiana: 3.33%; Texas: 1.24%
- Indiana: 2.68%; Illinois: 1.35%
- S. Carolina: 2.39%; N. Carolina: 0.93%
- Wisconsin: 1.52%; Minnesota: 1.14%
- Oregon: 0.70%; Washington: 0.09%

Incentives have tripled since 1990

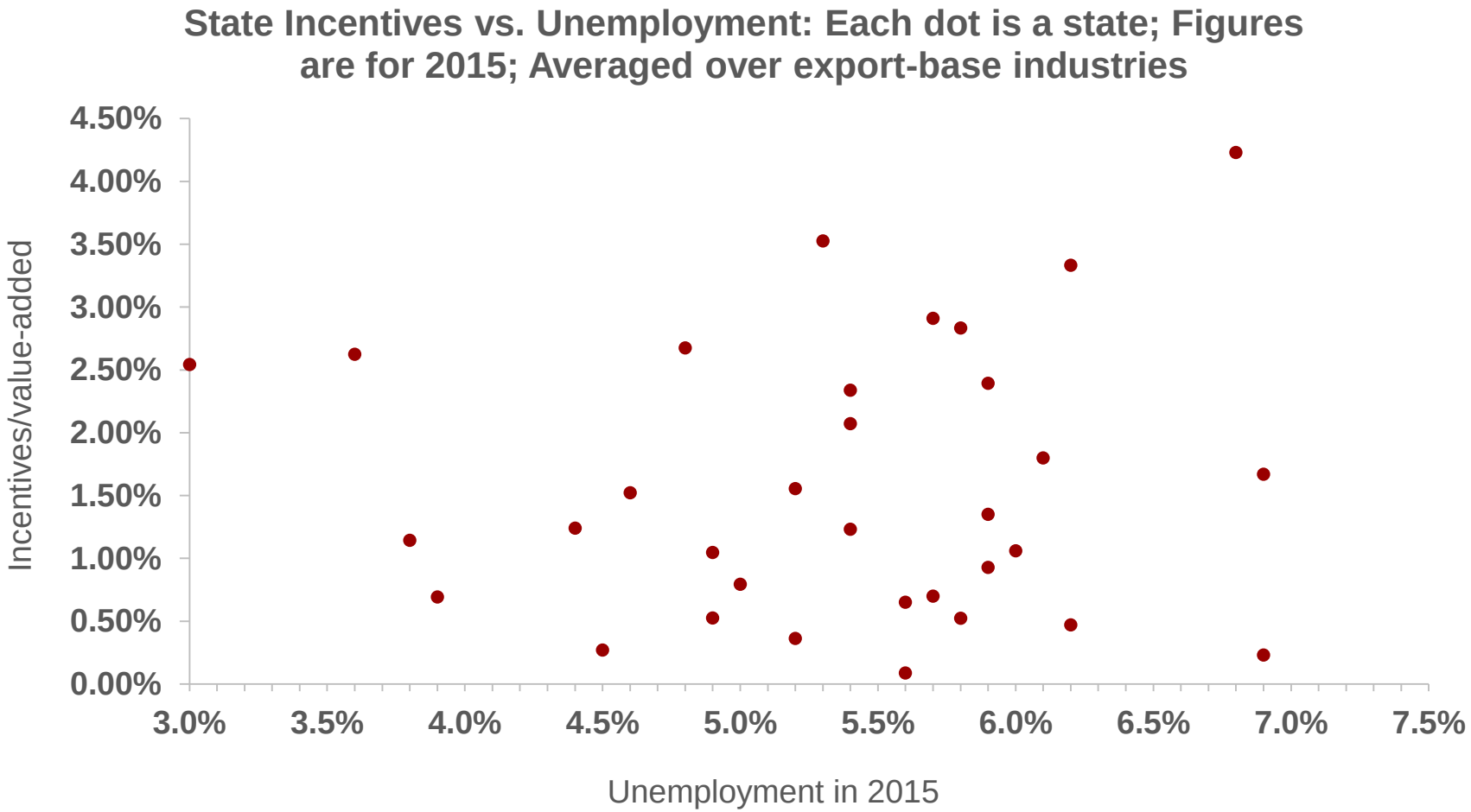


SOURCE: Author's calculations.

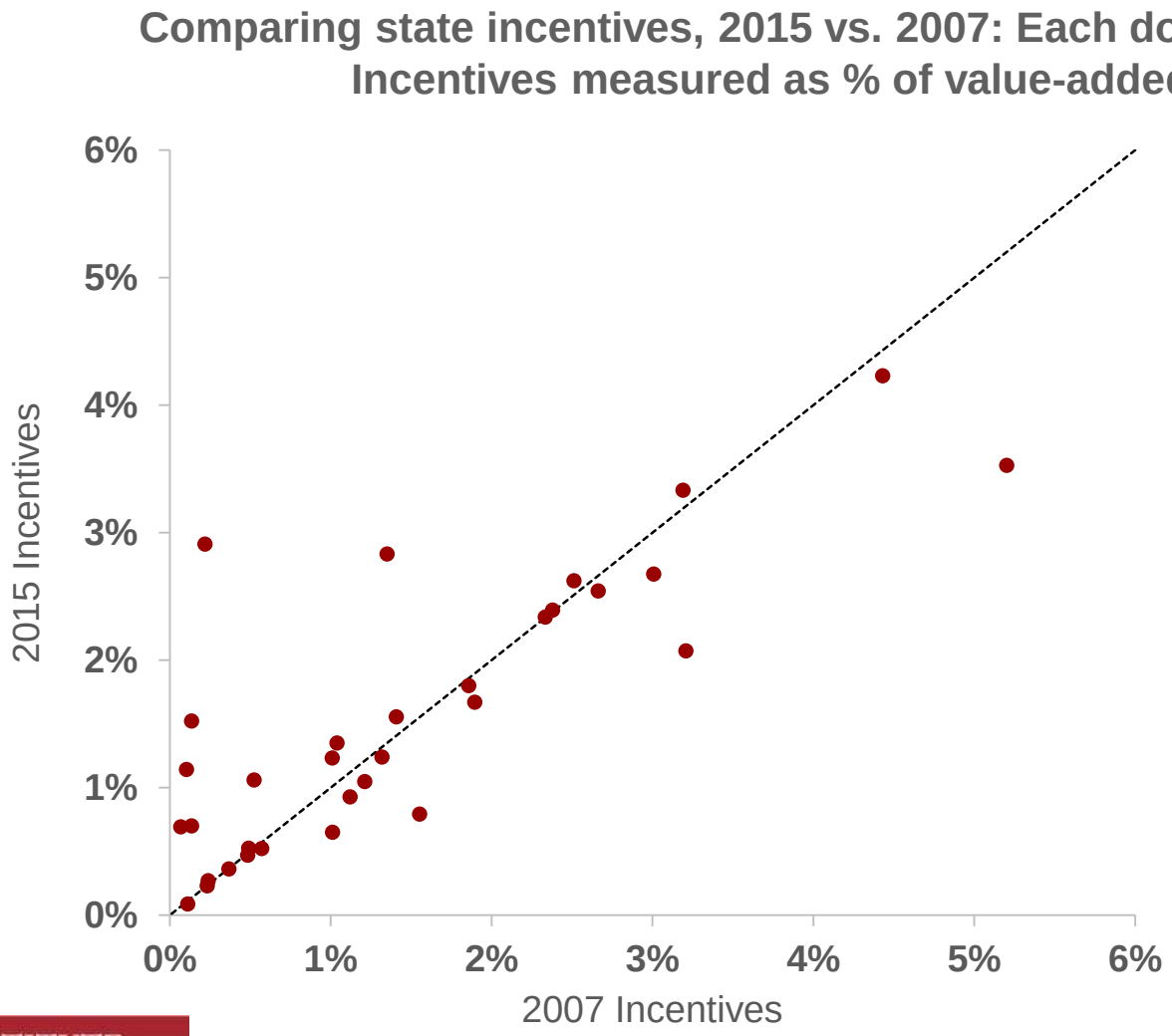
Incentives not sufficiently higher for industries that offer greater benefits for state residents. For example, incentives do not go up much with wages:



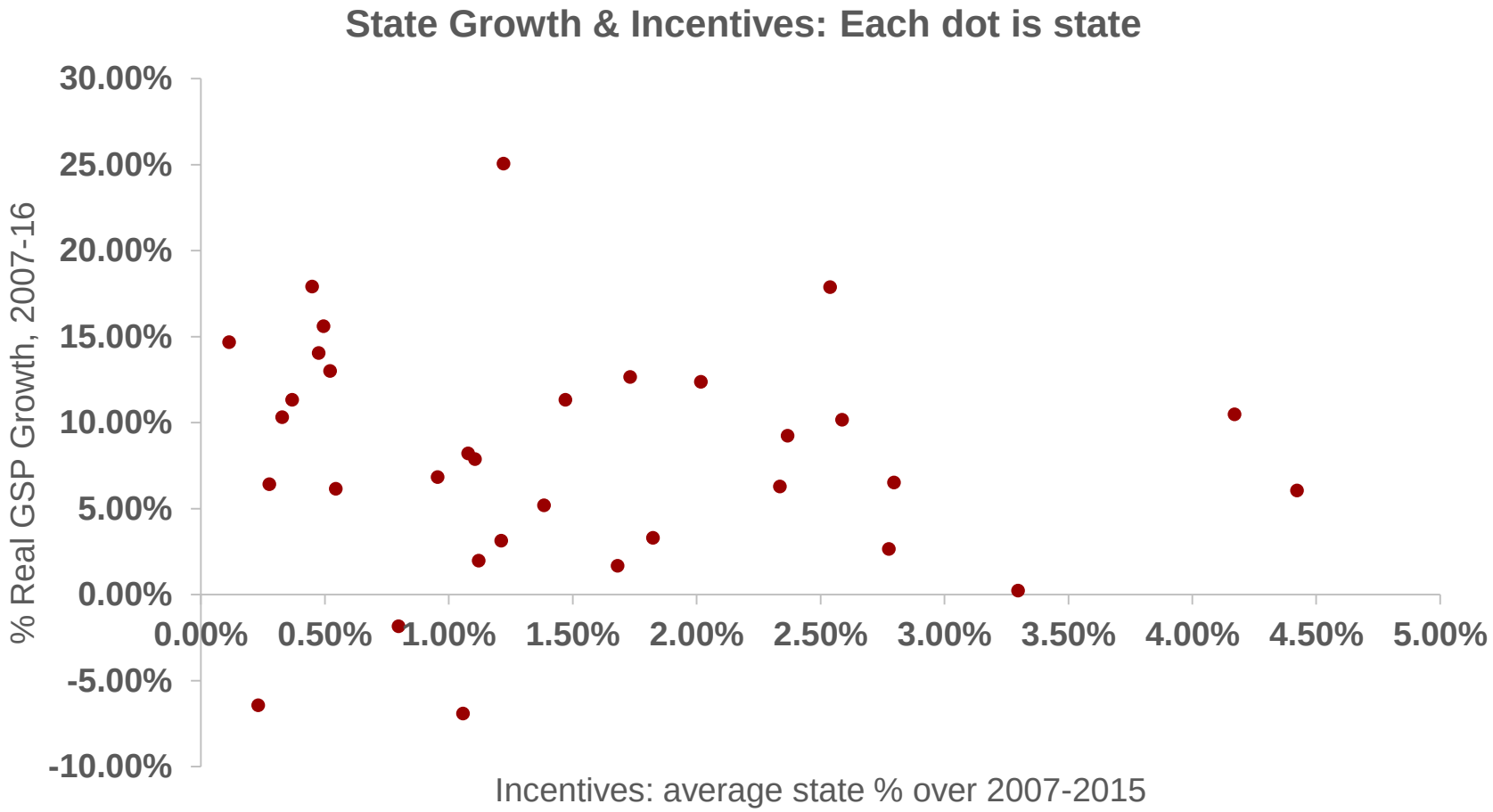
What determines incentives? Doesn't have much to do with a state's unemployment rate



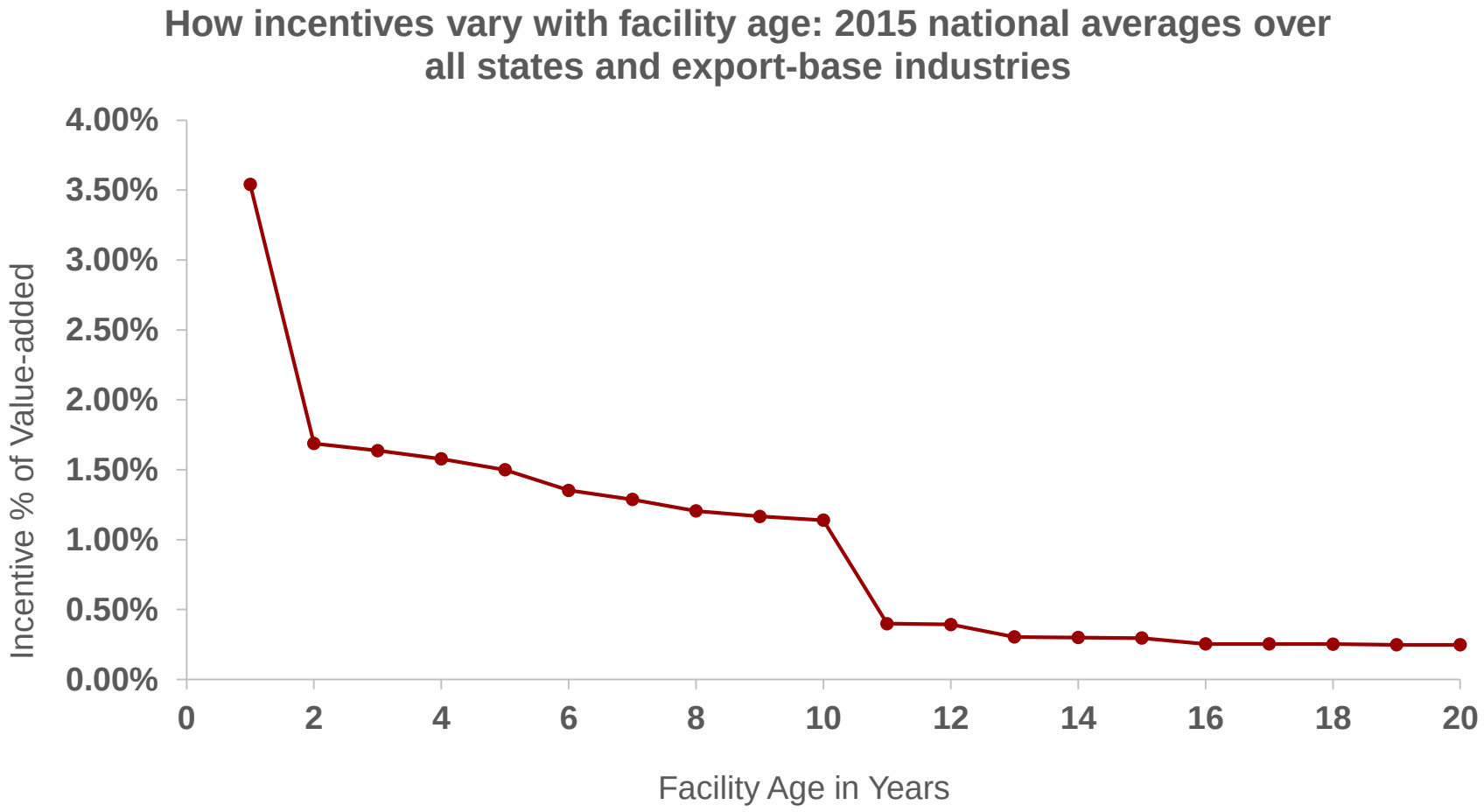
Biggest determinant of a state's incentives is its past incentives



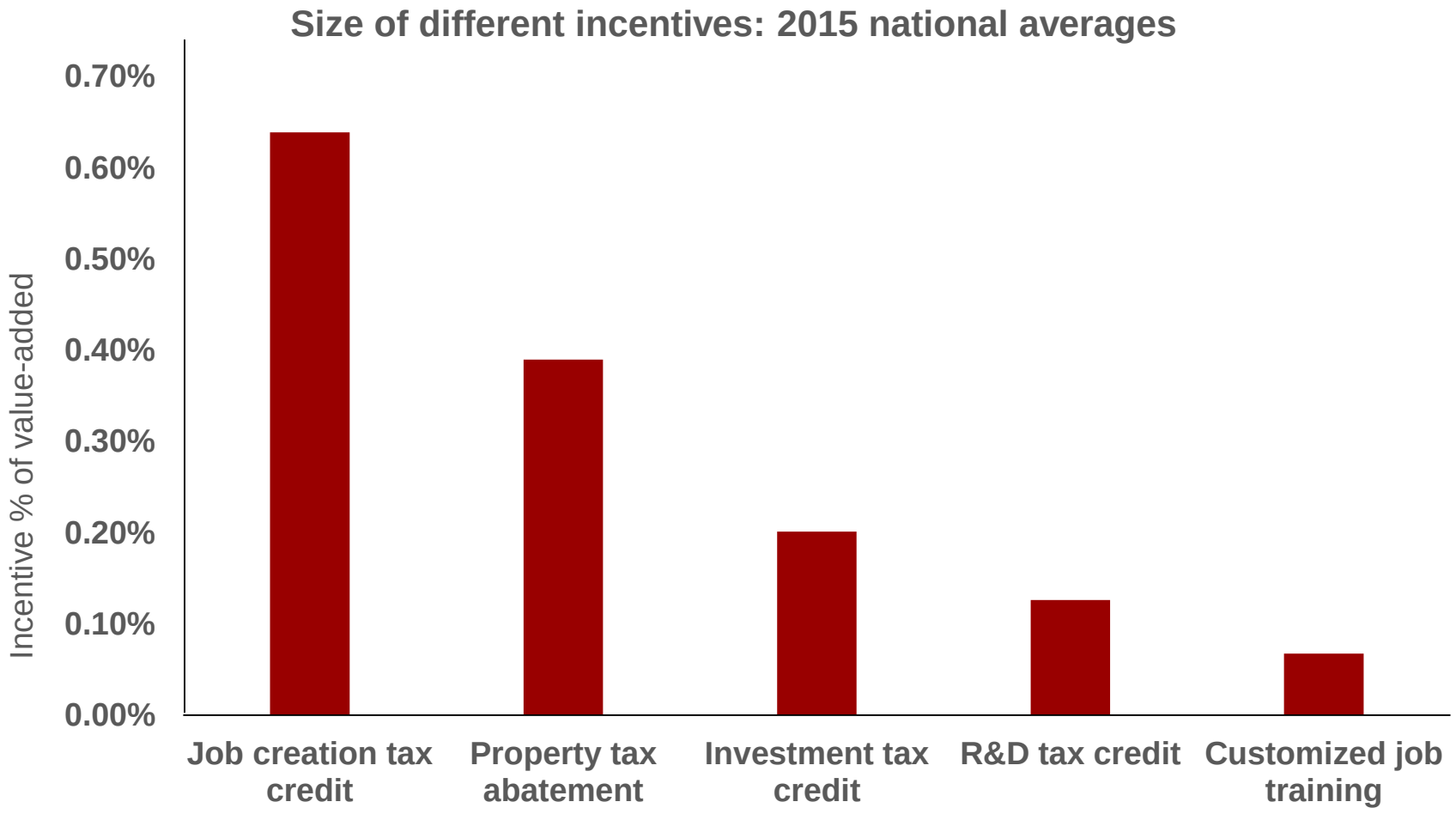
What are effects of incentives? No obvious boost to state growth from incentives



What is time pattern of incentives? Front-loaded, but full incentive payout still delayed, which is economically inefficient and politically problematic



What types of incentives are most important? JCTCs & abatements



Research on customized services

- Some research on customized job training find effects per dollar on job creation decisions of perhaps 10 times tax incentives: Hollenbeck (2008), Holzer et al. (1993), and Hoyt, Jepsen, and Troske (2008).

- Some research on manufacturing extension services find similarly high cost-effectiveness ratios: Jarmin (1998; 1999), Ehlen (2001).

- Why? (1) Targeted at small/medium-sized businesses, which are easier to affect; (2) Upfront, so more salient; (3) Overcoming market failures in information & education markets, so can have value greater than cost.

- Why don't states use more? (1) Harder to deliver; (2) Less politically visible; (3) Doesn't help larger businesses as much.

Conclusions

- Incentives are large relative to state budgets, not necessarily large relative to private economy. But, probably some incentives large enough to have significant, yet moderate effect on specific location decisions.
- Vary a lot across states (based more on political inertia than economic need?)
- Don’t vary enough across industries (the “reverse potato chip” rule?)
- Too long-term, not front-loaded enough
- Over-emphasis on tax incentives, under-emphasis on services to smaller businesses