Ohio’s Economy 55 Years of Falling Behind

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Presented at Ohio Economic Forum, University of Akron
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Swank Chair in Rural-Urban Policy
Falling Behind
How Ohio Continues to Lose its Place in the U.S. Economy

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Associate Professor, Department of Economics, University of Akron

Dr. Michael Hicks
Director, Center for Business and Economic Research, Ball State University

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December 2020

The University of Akron
College of Business Administration
Falling Behind’s Motivation is Ohio’s fall from the 3rd most populous state in 1870 to likely 9th in 2030s.

But Why?? Ohio/MI were the “Silicon Valley” of the late 19th to early 20th century.

Figure 1: Once the 3rd most populous state in the nation, Ohio will likely fall to 20 years

Source: Census, BFA
Figure 24: Ohio’s Declining Share of Its GDP Spent on Higher Education
How did the perception of Ohio go from World’s Innovator to Economic Decline?

1969 Cuyahoga River Fire
Smithsonian Magazine

Abandoned NE Ohio Factory
Pinterest.com
Table E. Numeric and Percent Change in Resident Population of the 50 States, the District of Columbia, and Puerto Rico: 2020 Census and 2010 Census

Top 10 2010-20 growth rates and middle 2 states.

<table>
<thead>
<tr>
<th>Area</th>
<th>2020 Census Resident Population</th>
<th>2010 Census Resident Population</th>
<th>Numeric Change</th>
<th>Percent Change</th>
<th>State Rank Based on 2020 Census Resident Population</th>
<th>State Rank Based on Percent Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Utah</td>
<td>3,271,616</td>
<td>2,763,885</td>
<td>507,731</td>
<td>18.4</td>
<td>30</td>
<td>1</td>
</tr>
<tr>
<td>Idaho</td>
<td>1,839,106</td>
<td>1,567,582</td>
<td>271,524</td>
<td>17.3</td>
<td>38</td>
<td>2</td>
</tr>
<tr>
<td>Texas</td>
<td>29,145,505</td>
<td>25,145,561</td>
<td>3,999,944</td>
<td>15.9</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>North Dakota</td>
<td>779,094</td>
<td>672,591</td>
<td>106,503</td>
<td>15.8</td>
<td>47</td>
<td>4</td>
</tr>
<tr>
<td>Nevada</td>
<td>3,104,614</td>
<td>2,700,551</td>
<td>404,063</td>
<td>15.0</td>
<td>32</td>
<td>5</td>
</tr>
<tr>
<td>Colorado</td>
<td>5,773,714</td>
<td>5,029,196</td>
<td>744,518</td>
<td>14.8</td>
<td>21</td>
<td>6</td>
</tr>
<tr>
<td>Washington</td>
<td>7,705,281</td>
<td>6,724,540</td>
<td>980,741</td>
<td>14.6</td>
<td>13</td>
<td>7</td>
</tr>
<tr>
<td>Florida</td>
<td>21,538,187</td>
<td>18,801,310</td>
<td>2,736,877</td>
<td>14.6</td>
<td>3</td>
<td>8</td>
</tr>
<tr>
<td>Arizona</td>
<td>7,151,502</td>
<td>6,392,017</td>
<td>759,485</td>
<td>11.9</td>
<td>14</td>
<td>9</td>
</tr>
<tr>
<td>South Carolina</td>
<td>5,118,425</td>
<td>4,625,364</td>
<td>493,061</td>
<td>10.7</td>
<td>23</td>
<td>10</td>
</tr>
<tr>
<td>New Jersey</td>
<td>9,288,994</td>
<td>8,791,894</td>
<td>497,100</td>
<td>5.7</td>
<td>11</td>
<td>25</td>
</tr>
<tr>
<td>Oklahoma</td>
<td>3,959,353</td>
<td>3,751,351</td>
<td>208,002</td>
<td>5.5</td>
<td>28</td>
<td>26</td>
</tr>
</tbody>
</table>
## Table E. Numeric and Percent Change in Resident Population of the 50 States, the District of Columbia, and Puerto Rico: 2020 Census and 2010 Census

<table>
<thead>
<tr>
<th>Area</th>
<th>2020 Census Resident Population</th>
<th>2010 Census Resident Population</th>
<th>Numeric Change</th>
<th>Percent Change</th>
<th>State Rank Based on 2020 Census Resident Population</th>
<th>State Rank Based on Percent Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Louisiana</td>
<td>4,657,757</td>
<td>4,533,372</td>
<td>124,385</td>
<td>2.7</td>
<td>25</td>
<td>41</td>
</tr>
<tr>
<td>Maine</td>
<td>1,362,359</td>
<td>1,328,361</td>
<td>33,998</td>
<td>2.6</td>
<td>42</td>
<td>42</td>
</tr>
<tr>
<td>Pennsylvania</td>
<td>13,002,700</td>
<td>12,702,379</td>
<td>300,321</td>
<td>2.4</td>
<td>5</td>
<td>43</td>
</tr>
<tr>
<td>Wyoming</td>
<td>576,851</td>
<td>563,626</td>
<td>13,225</td>
<td>2.3</td>
<td>50</td>
<td>44</td>
</tr>
<tr>
<td>Ohio</td>
<td>11,799,448</td>
<td>11,536,504</td>
<td>262,944</td>
<td>2.3</td>
<td>7</td>
<td>45</td>
</tr>
<tr>
<td>Michigan</td>
<td>10,077,331</td>
<td>9,883,640</td>
<td>193,691</td>
<td>2.0</td>
<td>10</td>
<td>46</td>
</tr>
<tr>
<td>Connecticut</td>
<td>3,605,944</td>
<td>3,574,097</td>
<td>31,847</td>
<td>0.9</td>
<td>29</td>
<td>47</td>
</tr>
<tr>
<td>Illinois</td>
<td>12,812,508</td>
<td>12,830,632</td>
<td>-18,124</td>
<td>-0.1</td>
<td>6</td>
<td>48</td>
</tr>
<tr>
<td>Mississippi</td>
<td>2,961,279</td>
<td>2,967,297</td>
<td>-6,018</td>
<td>-0.2</td>
<td>34</td>
<td>49</td>
</tr>
<tr>
<td>West Virginia</td>
<td>1,793,716</td>
<td>1,852,994</td>
<td>-59,278</td>
<td>-3.2</td>
<td>39</td>
<td>50</td>
</tr>
</tbody>
</table>

Indiana ranked 29<sup>th</sup> with 2010-20 growth of 4.7%
Wisconsin ranked 33<sup>rd</sup> with 2010-20 growth of 3.6%
2010-2019 Wage & Salary Job Growth Rate in Percent
Falling Behind Notes Several Reasons

• 1. Ohio’s reliance on manufacturing—manufacturing’s share of the economy peaked in the early 1950s.

• 2. Ohio’s lower level of educational attainment.

• 3. Ohio’s taxes can no longer be pointed to as a reason for this decline as they have gone from among the highest state to average.
US Manufacturing Share of Nonfarm Employment: 1939-2021

1/3rd in 1953 and 1/12th today

1966 Vietnam War Era Peak

Source: U.S. Bureau of Labor Statistics
US State Adult Population Share with 4-year+ College Degree: OH ranks 35th at about 29%

Source Business Insider and U.S. Census Bureau
How High are State and Local Tax Collections in Your State?

State and Local Tax Collections per Capita, Fiscal Year 2018

Note: D.C.'s rank does not affect states' ranks, but the figure in parentheses indicates where it would rank if included.

Sources: U.S. Census Bureau, "Annual Survey of State and Local Government Finances"; Tax Foundation calculations.
How High Are Individual Income Tax Rates in Your State?

Top State Marginal Individual Income Tax Rates, 2021

Note: Map shows top marginal rates: the maximum statutory rate in each state. This map does not show effective marginal tax rates, which would include the effects of phase-outs of various tax preferences. Local income taxes are not included. (*) State has a flat income tax. (**) State only taxes interest and dividends income.

Sources: Tax Foundation; state tax statutes, forms, and instructions; Bloomberg BNA.
How High are Corporate Income Tax Rates in Your State?

Top Marginal Corporate Income Tax Rates as of January 1, 2021

Note: (*) Nevada, Ohio, Texas, and Washington do not have a corporate income tax but do have a gross receipts tax with rates not strictly comparable to corporate income tax rates. Delaware, Tennessee, and Oregon have gross receipts taxes in addition to corporate income taxes, as do several states like Pennsylvania, Virginia, and West Virginia, which permit gross receipts taxes at the local (but not state) level.

Illinois' rate includes two separate corporate income taxes, one at a 7% rate and one at a 2.5% rate. Indiana's rate will change to 4.9% on July 1, 2021. In New Jersey, the rates indicated apply to a corporation's entire net income rather than just income over the threshold. A temporary and retroactive surcharge is in effect from 2020 to 2023, bringing the rate to 11.5% for businesses with income over $1 million. In addition to regular income taxes, many states impose other taxes on corporations such as gross receipts taxes and capital stock taxes. Some states also impose an alternative minimum tax and special rates on financial institutions.

Sources: Tax Foundation; state tax statutes, forms, and instructions; Bloomberg Tax.
How Much Does Your State Rely on Sales Taxes?

Sales Tax Collections as a Percent of Total State and Local Tax Collections, FY 2018

Sources: U.S. Census Bureau, "Annual Survey of State and Local Government Finances"; Tax Foundation calculations.
Falling Behind Notes Several Reasons, continued

• 4a. Relatively low natural amenities such as climate. However, Stephans and Partridge (2015) and *Falling Behind* note Ohio underutilizes its natural assets, especially Lake Erie.

• 4b. Quality-of-Life is more important than business-climate measures.

• 5. Ohio’s post 2005 policy of reduced taxes and shifting burden from income/corporate taxes has failed to pay off.

• For example, the $250K/3% write-off and max tax rate for pass-through business income has apparently failed
Monthly Total Business Applications With Planned Wages (WBA) as of March 2021 (Seasonally Adjusted)

Select NAICS Industry
- Total

- Other High-Propensity Applications
- Business Applications with Planned Wages
Monthly Business Formations Within 4 Quarters (Spliced) by State
(Seasonally Adjusted)

Ohio

Note: This graph uses the spliced business formation series (SBF4Q) as its source.

Source: Business Formation Statistics
Share of nonfarm employment created by firms less than one-year old: 2010-2019 (does not include firm closures)
What’s going on?

• Growth of an area depends on both households and firms being happy.
• Ohio policymakers have mainly focused on firms or “job creators.”
4a. Relatively low natural amenities such as climate. However, Stephans and Partridge (2015) and *Falling Behind* note Ohio underutilizes its natural assets, especially Lake Erie.

4b. Quality-of-Life is more important than business-climate measures.

5. Ohio’s post 2005-policy of reduced taxes and shifting burden from income/corporate taxes has failed to pay off.

For example, the $250K/3% write-off and max tax rate for pass-through business income has apparently failed.

- GDP Per Capita
- Personal Income Per Capita
- Employment
- Population

Percent Change from 2010 to 2019

- Ohio
- Washington
- Idaho
Scatter Plot of 2010-2019 Wage & Salary Job Growth on 2010 Manufacturing Share U.S. Counties

y = 8.396399 - 9.34588 x
Observations = 2680
R-squared = .0031
Source: BEA
Scatter Plot of 2010-2019 Wage & Salary Job Growth on 1990 Manufacturing Share U.S. Counties

Employment Growth Rate 2010-2019

Manufacture Employment Share 1990

- All Other USA Counties
- Ohio

Fitted values

$y = 7.560213 - 3.270466x$
Observations = 2907
R-squared=.0009
Source: BEA
Scatter Plot of Pop Growth on Wage and Salary Growth: 2010-19
U.S. States

\[ y = 6.215022 + 1.092418 \times \]

Observations = 51
R-squared = .6418
Source: BEA & Census
2019 Ratio of GDP per-capita divided by Personal Income Per-capita
2019 Ratio of GDP per-capita divided by Personal Income Per-capita: Ohio Counties
Scatter Plot of ratio of 2010 GDP Person/2010 Per-capita PI on 2010-19 Wage & Salary Job Growth

U.S. Counties

y = 7.69044 - .7561081 x
Observations = 2988
R-squared=.0007
Source: BEA
Conclusion.

- *Falling Behind* is an excellent summary of what’s happened in Ohio.
- Ohio policymakers pay too much attention to firm profits and not enough on household well-being.
- Tax cuts including the one for pass-through business profits have not paid off in new jobs and new businesses. Need to be reevaluated.
Table 1. Economic projections of Federal Reserve Board members and Federal Reserve Bank presidents, Oct. 2020

https://www.federalreserve.gov/monetarypolicy/fomcminutes20200916ep.htm
National Monthly Percent Change in Employment by Recession

Values for Feb 20, Apr 20, Oct 20
Emp/Pop: 61.1%, 51.3%, 57.4% (highest on record, 64.7% in 2000)
UR: 3.5%, 14.7%, 6.9%
UI claims: Feb 15, 208,000; Mar. 28 6.9million; Oct 31, 756,000; Nov 7, 709,000
Pre-Pandemic record, 695,000 in 1982
Ohio Monthly Percent Change in Employment by Recession

Slower Recovery in Ohio???

Source: BLS
Feb 2020-Sep 2020 Percent Change in Employment

Source: BLS
Feb 2020-Sep 2020 Percent Change in Unemployment

Source: BLS
% Change Region High Propensity Business Applications 2021

Source: U.S. Census Bureau
Introduction—Economy today and ‘21

• Why the Uncertainty?
• Election/Biden policies which I get to.
• The initial response to Covid was an unprecedented (approx.) $3 trillion stimulus.
  • While perhaps not well designed, it kicked in and saved us from initial economic disaster.
• But despite pleading from the Fed plus economists, future stimulus is uncertain.
• What is for sure, the election suggests that it will be less than thought before the election.
Introduction—Economy today and ‘21

• But the elephant in the room is Covid.
  • Until Covid is controlled, economic problems will remain.
  • Even under rosy scenarios, Pfizer’s vaccine faces implementation challenges including the need for storage at extreme low temps.
  • E.g., Minks in Denmark; will ppl take vaccine; 2 doses adds hurdles; is it really 90% effective; safety?; etc…….
  • Perhaps expecting a tangible impact before ‘22 is unrealistic.
Election—Way to Go Joe (???)

As of 7:30am EST, Nov. 12, 2020

**Presidental Results**

- Biden up 3.4% or 5.3 million votes
- Biden’s margin is 1.3% better than Clinton in ’16 (2.4m)
- Biden’s exp. electoral vote = 306 = Trump in ’16
- Just like ‘16, switch of ~85,000 votes in PA, GA, AZ Trump wins!
U.S. Election: Who has the mandate?

- Republicans did amazing in my view (or reverse).
- Conditions of pandemic, recession, civic unrest!
- High turnout election that should favor Dems
  - Up to 16% more votes cast than 16.
- Reps (likely) held the Senate and gained House seats despite forecasts of the opposite.
- Trump is a master politician (Joe???)!
- Trump has about ~10 mill. more votes than 16.
  - With roughly 5.8 million more total votes to be counted.
- McConnell risked a lot in 16, 18, & 20 and won the bets!
U.S. Election: Who has the mandate?

• McConnell has the bargaining power and splitting off individual Republican Senators will be extremely difficult as in the past—e.g., he won’t bring bills for a vote.
  • McConnell will likely remain “brutal” and will only bargain when receiving major concessions.
  • Biden and Pelosi are not particularly good negotiators.

• The results present real challenges for Biden if he is going to bargain on (say) healthcare, taxes, energy/climate, stimulus, min. wage, etc.
• How did Biden win: Rich high-educated suburbs.
How Suburban Counties Shifted to Biden

MARGIN IN 2020 AS OF NOV. 7

- In a battleground state
- Counties above this line shifted to Biden

Denton County, Tex.
Paulding County, Ga.

Note: The battleground states shown here are Arizona, Florida, Georgia, Michigan, Nevada, North Carolina, Pennsylvania, Texas and Wisconsin
Discussion:

Department of Agricultural, Environmental, and Development Economics (AEDE) further confirms that the economic gap between “Trump regions” and Dem regions continues to grow.

Fundamental economic and status measures

<table>
<thead>
<tr>
<th>Measure</th>
<th>Correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Higher percent college degree</td>
<td>0.49</td>
</tr>
<tr>
<td>Higher median household income</td>
<td>0.36</td>
</tr>
<tr>
<td>Higher projected job growth</td>
<td>0.20</td>
</tr>
<tr>
<td>Higher percent routine jobs</td>
<td>-0.39</td>
</tr>
</tbody>
</table>

**Economic outcomes under Trump during pandemic ...**

<table>
<thead>
<tr>
<th>Measure</th>
<th>Correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Change in employment, Feb.-Sept. 2020</td>
<td>0.27</td>
</tr>
<tr>
<td>Increase in unemployment rate, Feb.-Sept. 2020</td>
<td>-0.24</td>
</tr>
</tbody>
</table>

.. and before pandemic

<table>
<thead>
<tr>
<th>Measure</th>
<th>Correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Change in employment, 2016 Q4 to 2019 Q4</td>
<td>0.23</td>
</tr>
<tr>
<td>VARIABLES</td>
<td>Change in Margin of Democrats-Republican</td>
</tr>
<tr>
<td>---------------------------------</td>
<td>------------------------------------------</td>
</tr>
<tr>
<td>Turnout growth rate</td>
<td>0.205***</td>
</tr>
<tr>
<td></td>
<td>(0.0335)</td>
</tr>
<tr>
<td>Trump votes share in 2016</td>
<td>0.0607</td>
</tr>
<tr>
<td></td>
<td>(0.0581)</td>
</tr>
<tr>
<td>College graduates share</td>
<td>0.357***</td>
</tr>
<tr>
<td></td>
<td>(0.0958)</td>
</tr>
<tr>
<td>White share</td>
<td>0.157***</td>
</tr>
<tr>
<td></td>
<td>(0.0422)</td>
</tr>
<tr>
<td>African Americans share</td>
<td>0.102**</td>
</tr>
<tr>
<td></td>
<td>(0.0473)</td>
</tr>
<tr>
<td>Hispanics share</td>
<td>-0.0182</td>
</tr>
<tr>
<td></td>
<td>(0.0417)</td>
</tr>
<tr>
<td>Constant</td>
<td>-0.267***</td>
</tr>
<tr>
<td></td>
<td>(0.0560)</td>
</tr>
</tbody>
</table>

Observations: 54
R-squared: 0.619
F: 12.72
rss: 0.0326

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1
U.S. Election: Who has the mandate?

- Where did Biden gain and lose relative Clinton (Clinton-Trump followed by Biden-Trump). White share fell from 74% to 67% of electorate).*

- 18-29: +30 +24
- 65+: -9 -5
- 50-64, -6 -5
- White men: -30 -23
- White women: -2 -11 (I’m skeptical)
- Black men: +67 +60
- Black women: +98 +81
- Latino men: +37 +23
- Latino women: +39 +39
- Other races: Clinton NA Biden +20 for 8% of electorate in 2020 vs. 6% in 2016
Discussion:

• Biden lost ground with traditional Democratic voting groups but gained with conservatives.
• The question is whether Biden will focus his agenda on well educated in the suburbs at the expense of other groups. (that was his campaign)
• If he does, it will likely lead to further alienation as winners continue to do well, but not the losers. But then, Biden will exacerbate inequality in urban America, not just rural America, and ….
• It is clear that regardless of his agenda, he won’t get much unless he cuts “tough” deals with Mitch.
Thank you

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Swank Program Website for policy brief.

http://aede.osu.edu/programs/swank/
APPENDIX