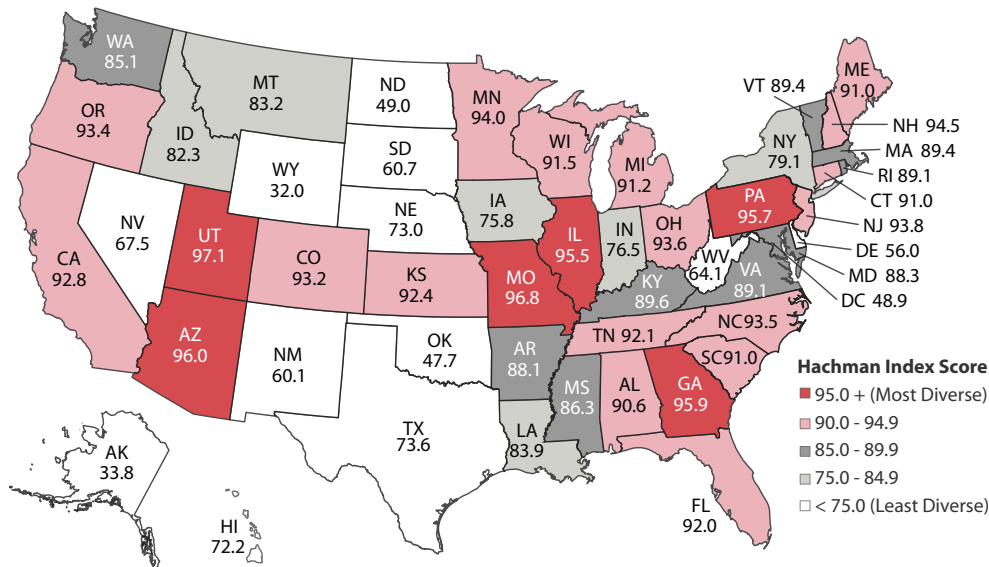# Measuring Economic Diversity: The Hachman Index, 2018

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Figure 1: Hachman Index for States, 2018

Hachman Index Score
- ■ 95.0 + (Most Diverse)
- ■ 90.0 - 94.9
- ■ 85.0 - 89.9
- ■ 75.0 - 84.9
- □ < 75.0 (Least Diverse)

Source: Gardner Policy Institute analysis of U.S. Bureau of Economic Analysis GDP data

The Hachman Index measures economic diversity using indicators such as gross domestic product (GDP) or employment. The index measures the mix of industries present in a particular region relative to a well-diversified reference region. Hachman Index scores range from 0 to 100, where a higher score indicates more economic diversity, and a lower score indicates less. The Hachman Index is often applied at the national level, allowing for comparison between individual states. With reliable data, the index may also measure industrial distribution across counties.

Utah's Midsized Economy Is the Most Diverse

Utah is a leader among U.S. states for industrial diversity. A Hachman Index analysis using 2018 GDP data from the Bureau of Economic Analysis and aggregated to the two-digit NAICS code, reveals that Utah's industrial distribution is very similar to that of the United States. Utah scores highest in the nation, slightly above Missouri (Figure 1). Overall, six states (Utah, Missouri, Arizona, Georgia, Pennsylvania, and Illinois) have index scores higher than 95 (Table 1). As the Hachman Index is a relative measure, it is not definitive that any one of these states is significantly more diverse than another.[1]

Utah leads the West for industrial diversity. Arizona, Colorado, and California all have larger economies than Utah but have lower index scores.[2] States with similar-sized economies include Iowa, Nevada, Kansas, and Oklahoma.[3] Of these, only Kansas has an index score above 90, indicating a very diverse economy. Kansas scores 92.4, Iowa 75.8, Nevada 67.5, and Oklahoma, the lowest at 47.8. Despite Utah's midsized economy (31st largest), its industrial composition is more diverse than even the largest states.

Urban Counties More Diverse, Rural Counties More Specialized

Salt Lake, Weber, Davis, and Washington counties are the most economically diverse within Utah. A Hachman Index analysis of Utah Department of Workforce Services and Bureau of Labor Statistics 2018 employment data at the two-digit NAICS code level, shows the economic disparity of Utah's counties. With a few exceptions, Utah's metropolitan counties have the most diverse economies in the state, followed by the adjacent ring counties (Figure 2). While economic diversification is not a measure of economic prosperity, it is an indicator of greater economic choice and opportunity.

Duchesne, Emery, and Uintah are the least economically diverse counties (Table 2). In Uintah and Duchesne, the low index scores are a result of a heavy concentration in mining, quarrying, and oil and gas extraction employment.[4] These counties have a competitive advantage in the extractive industries due to their natural resources. Emery's highest concentration is in utilities, a direct result of the two power plants located within the county. In counties with small populations, just a few large employers

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Table 1: Hachman Index Scores for the States, 2018

State	Hachman Index	State	Hachman Index	State	Hachman Index
Utah	97.1	Wisconsin	91.0	Idaho	82.3
Missouri	96.8	Michigan	90.7	New York	79.1
Arizona	96.0	Maine	90.3	Indiana	76.5
Georgia	95.9	Connecticut	90.0	Iowa	75.8
Pennsylvania	95.7	South Carolina	89.6	Texas	73.6
Illinois	95.5	Alabama	89.5	Nebraska	73.0
New Hampshire	94.5	Kentucky	89.3	Hawaii	72.2
Minnesota	94.0	Massachusetts	89.2	Nevada	67.5
New Jersey	93.8	Vermont	89.2	West Virginia	64.1
Ohio	93.6	Rhode Island	88.7	South Dakota	60.7
North Carolina	93.5	Virginia	88.2	New Mexico	60.1
Oregon	93.4	Maryland	87.8	Delaware	56.0
Colorado	93.2	Arkansas	86.6	North Dakota	49.0
California	92.8	Mississippi	86.3	District of Columbia	48.9
Kansas	92.4	Washington	83.9	Oklahoma	47.7
Tennessee	92.1	Louisiana	82.8	Alaska	33.8
Florida	92.0	Montana	82.1	Wyoming	32.0

Source: Gardner Policy Institute analysis of U.S. Bureau of Economic Analysis GDP data

can have an outsized effect on the overall employment mix, resulting in a low index score.

For more information about the Hachman Index please see the *2020 Economic Report to the Governor* or *Measuring Economic Diversity: The Hachman Index 2017*. Both are available at the Gardner Institute website: https://gardner.utah.edu/.

Table 2: Hachman Index Scores for Utah Counties, 2018

County	Hachman Index	County	Hachman Index
Salt Lake	94.1	San Juan	46.9
Weber	90.7	Sevier	45.8
Davis	85.3	Rich	44.1
Washington	84.1	Kane	43.6
Utah	80.8	Summit	42.0
Iron	80.5	Garfield	38.3
Tooele	79.1	Daggett	34.1
Cache	75.0	Carbon	34.0
Wasatch	74.0	Millard	28.2
Juab	62.6	Piute	26.2
Box Elder	60.6	Beaver	21.4
Sanpete	59.2	Uintah	19.0
Morgan	56.7	Emery	19.0
Wayne	55.0	Duchesne	10.7
Grand	47.6		

Source: Gardner Policy Institute analysis of Bureau of Labor Statistics (United States) and Utah Department of Workforce Services (Utah counties) employment data

Figure 2: Hachman Index for Utah Counties, 2018
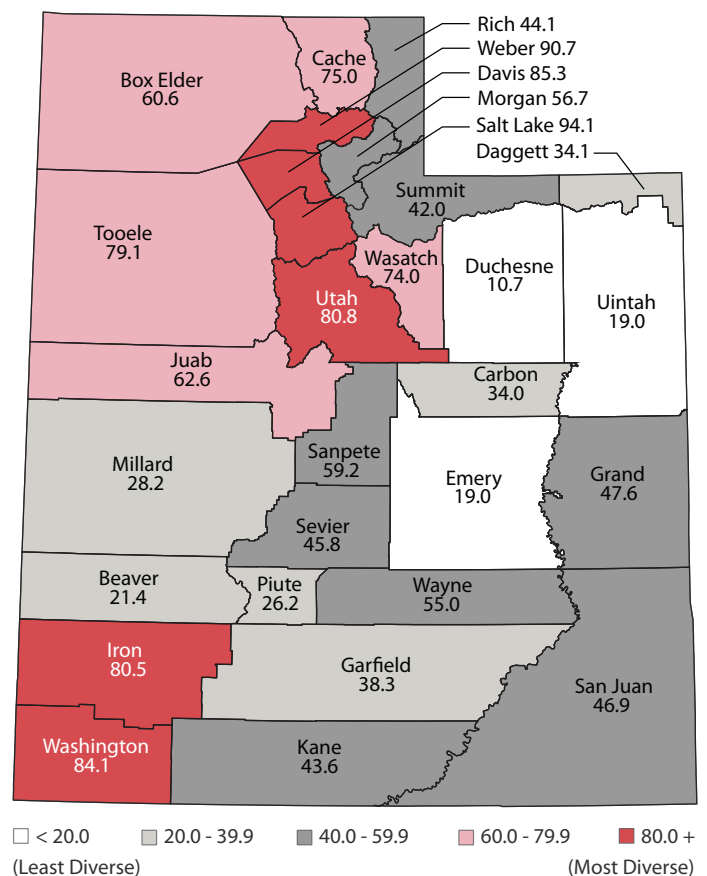
Source: Gardner Policy Institute analysis of Bureau of Labor Statistics (United States) and Utah Department of Workforce Services (Utah counties) employment data

Endnotes

1. The variation among the top five state scores is 1.6 points. The Hachman Index is not an exact measure and small differences are not definitive. When comparing state scores, the exact score is less important than the rank and size of the variation in scores relative to other states.
2. When ranking state economies by size using total GDP, California is the largest in the nation, Colorado ranks 16th, and Arizona ranks 20th. Utah ranks as the 31st largest state economy.
3. When ranking the state economies by size using total GDP, Oklahoma (29th) and Iowa (30th) rank just larger than Utah, and Nevada (32nd) and Kansas (33rd) rank just smaller.
4. Duchesne has the highest location quotient of all counties in the state at 42.8, followed by Uintah at 30. The next highest is Carbon at 20, all well above other counties in the state.