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How Startups Help Cities Measure Their Economic Development Frontier

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HOW STARTUPS HELP CITIES MEASURE THEIR ECONOMIC DEVELOPMENT FRONTIER

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PURPOSE:

This Fact Sheet provides data on the ability of Metropolitan Statistical Areas (MSAs) in the Mountain West to foster innovative and technology-driven industries, utilizing information presented by the Brookings Institution report, “How startups help cities measure their economic development frontier.”¹

THE ECONOMIC DEVELOPMENT FRONTIER AND ITS STARTUPS:

The ability to foster young, technology-based companies that have the potential to innovate and create outsized economic benefits, including job growth and the development of new markets, is an essential component of prosperous American cities. The “economic development frontier” is used to describe the strategy of large metropolitan areas that advance technology-based startups to foster new innovation, growth, and prosperity in the city and state. The report uses data found by Crunchbase to identify startups in a region and, more importantly, the diversity and ubiquity of those startups. Although Crunchbase is a useful platform, it is important to note that due to its crowdsourced data, not all of the relevant information may be captured.

WHY IS COMPLEXITY IMPORTANT?

Not all specializations have equal value. While theoretical discussions in economics stress the need for a city’s economy to be centered on a specialization, cities are not always prosperous, particularly in specializations unable to withstand economic downturns. The Startup Complexity Index (SCI) combines startup diversity and startup ubiquity. The diversity of startups refers to the number to technology categories that start-ups in a metro area possess or demonstrate the potential to innovate within that category². Startup ubiquity refers to the total number of metro areas that have an advantage or high potential in a technology category. For example, the most ubiquitous categories include software development, health care, and information technology while the most specialized categories can include podcasts and fleet management. The SCI is able to capture the complexity of a startup economy and its potential stability. The development of SCI is highly uneven across the United States but does correlate strongly to local prosperity – regions with higher SCI also have more productivity, higher wages, and higher household incomes.³ The highest SCI are located in metro areas like San Francisco and New York – regions that have the most technology categories and dominate the most of those categories. The least complex metro areas have an advantage in software development, the most ubiquitous technology category.

KEY FINDINGS:

1. Denver-Aurora-Lakewood and Phoenix-Mesa-Scottsdale metro areas have the greatest amount of startups and highest complexity ranking in the Mountain West; Tuscon and Heber have the lowest SCI scores.
2. The amount of young firms per 1,000 residents does not necessarily correlate with a high SCI score, these firms may enter an already established market rather than develop a more specialized one.
3. Larger metropolitan areas also have higher start-up complexity and size.

¹ Liu, S. & Parilla, J. (2019, October 24). How startups help cities measure their economic development frontier. <https://www.brookings.edu/research/how-startups-help-cities-measure-their-economic-development-frontier/>

² Ibid.

³ Ibid.

Table 1 shows the SCI score (0 to 100) of each metro area in the Mountain West, along with their associating SCI Rank (out of 99 MSA's). Denver-Aurora-Lakewood has the highest SCI score and rank, followed by the Phoenix-Mesa-Scottsdale metro area. The ratio of “Young firms” per 1,000 residents of the MSA is also shown. These firms represent private companies founded in the last decade and received at least one investment in the last five years. Even though Boulder has a lower SCI score, the metro has the highest amount of young firms in the Mountain West.

TABLE 1: SCI INDEX, RANK, AND YOUNG FIRMS PER 1000 RESIDENTS IN METRO AREAS OF THE MOUNTAIN WEST

Metropolitan Statistical Areas	SCI (0-100)	Young firms per 1000 residents	SCI Rank
Denver-Aurora-Lakewood, CO	50.7	0.39	12
Phoenix-Mesa-Scottsdale, AZ	41.6	0.10	16
Boulder, CO	40.3	0.66	18
Las Vegas-Henderson-Paradise, NV	37.0	0.10	21
Salt Lake City, UT	31.6	0.20	27
Provo-Orem, UT	31.5	0.35	28
Fort Collins, CO	21	0.02	58
Albuquerque, NM	19.7	0.02	63
Reno, NV	20.0	0.03	61
Colorado Springs, CO	13.7	0.01	85
Tucson, AZ	12.2	0.00	87
Heber, UT	12.0	0.06	93/99

Focusing more specifically on young firms, Figure 1 shows a graph of the number of young firms in metro areas, with their respective SCI score. It is important to note that high rates of young firms do not necessarily indicate greater complexity of start-ups within the metro area. These young firms may start in already established and more ubiquitous categories such as software development.

FIGURE 1: YOUNG FIRMS VS. SCI OF MOUNTAIN WEST MSA'S

