MARTIN
Prosperity Insights

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Is your Region … Creative, Innovative, Productive, … or Just Populated?

Previous Martin Prosperity Institute Insights have looked at the relationship between the population and GDP share for U.S. metropolitan areas. This Insight will look deeper into these findings, by looking at metros in relation to two additional variables-awarded patents and Creative Class occupations. While previous Insights have looked at metro population and GDP shares in relation to U.S. totals, this Insight will examine the percentage shares of each of these four variables relation to the U.S. metro total.

The top 5 metros that contribute the most to the U.S Metro Creative Class are New York, Los Angeles, Chicago, Washington and Boston. These 5 metros contribute to 23.33% of the total U.S. metro Creative Class occupation total. The top 10 largest Creative Class metros contribute to 35.04% of the total share and the top 25 contribute to 53.09%. These metros contribute a higher percentage to the total Creative Class metro total than the top 25 most populated metros contribute to total population (49.19%), but less of a percentage than the top 25 GDP metros contribute to total GDP (57.09%).

The top 5 metros with the most awarded patents are San Jose, San Francisco, New York, Los Angeles and Seattle. These top 5 metros contribute to 31.83% of the total awarded patents in U.S. metros (top 10: 47.03%, top 25: 68.39%!). This percentage is much higher than the percentages that the top Creative, populated and GDP metros account for. Established tech centers like Seattle, San Jose and San Francisco have much higher shares of awarded patents than they do GDP, population or Creative Class. Found on this list was also that metros such as Detroit, and Austin contribute more to the total patents, than much higher populated and GDP generating metros such as Houston and Dallas.

When looking at Creative Class share and awarded patents, it is once again apparent that the larger metros generally punch above their weight. This is especially true when looking at patents, as a small number of metros account for an astonishingly large percentage of the total U.S. metropolitan share.

Knowing that some metros outperform on certain variables, we at the Martin Prosperity Institute decided to analyze the four measures (GDP, population, Creative Class and patents) across the individual U.S. metros in relation to the metro totals. We sorted every metro according to their individual shares and determined where each metro makes its greatest contribution to the overall totals.

Top 5 contribute most to total US …

Exhibit 1

Rank	MSA	Contributes most to **Patents**
1	San Jose	10.2%
2	San Francisco	6.1%
3	Seattle	4.5%
4	Boston	4.2%
5	San Diego	2.8%

Rank	MSA	Contributes most to **Creative Class**
1	Washington	3.7%
2	Atlanta	2.2%
3	Baltimore	1.3%
4	St. Louis	1.2%
5	Pittsburgh	1.0%

Rank	MSA	Contributes most to **GDP**
1	New York	9.7%
2	Los Angeles	5.7%
3	Chicago	4.0%
4	Houston	3.0%
5	Dallas	2.9%

Rank	MSA	Contributes most to **Population**
1	Miami	2.2%
2	Riverside	1.6%
3	Phoenix	1.6%
4	Tampa	1.1%
5	Sacramento	0.8%

The figure above displays which measure (GDP, population, Creative Class or patents) that each U.S. metro contributes the most individually to the overall total. The five metros within each list that make the greatest contribution to the overall totals are listed. When looking at the metros that contribute their highest percentage to Creative Class, we can see that there is a mix of large to medium populated metros from Washington and Atlanta, to Fargo and Huntsville. It is surprising to not see Durham on this list as it was identified in Rise of the Creative Class Revisited as having the highest percentage of creative class workers within its economy in the country.

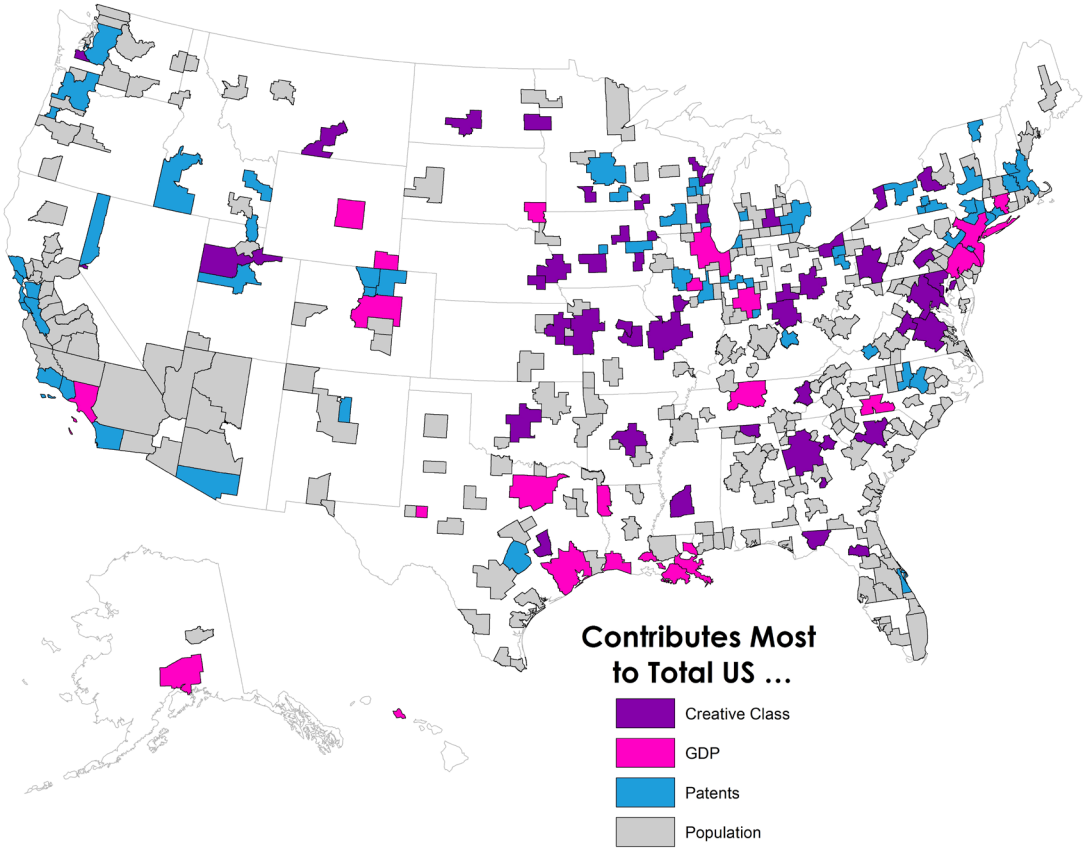
There are a fewer number of metros that contribute the most individually to GDP, than Creative Class. Metros on this list include Nashville, New York, Chicago and Los Angeles as they are some of the most profitable metros in relation to their population. Most of the largest populated metros in the country fall on this list as many of them are very large, diverse and successful international economic centers.

There are more metros that contribute their greatest percent share to total patents, than metros that contribute their greatest share to total GDP. Once again there is a mix between large and medium sized metros on this list, such as San Diego, Boulder and Raleigh. While there are some surprises found within this list, the usual suspects stand out. Well-known Technology and educational hubs such as Seattle, San Jose, Boston and San Francisco all contribute the most individually to the total number of patents.

Lastly, when looking at population, most of the medium and small metros contribute more to population than they do to the other measures. This list was found to be the largest number of metros by far. Most of these metros do not contribute to a higher percentage of total U.S. metro GDP and patents than 0.30%. Many of these small metros contribute the most to population because their local economies are heavily based upon low wage, un-innovative service occupations. There were a few exceptions though, as larger metros such as Miami, Tampa Bay and Memphis all contribute more to population than they contribute to the other three measures.

Contribute most to total US …

Exhibit 2



Map by Zara Matheson, Martin Prosperity Institute

The map above displays these findings geographically. The metros are labeled as follows: contributes the most to Creative Class (purple), GDP (pink), Patents (blue) and Population (grey). Like the figure above, the map displays the same trends in which the largest metros contribute the most to patents or GDP, and the small metros generally contribute their greatest share to population. The north-east contributes the most, geographically, to total patents, along with parts of coastal California. The north-west states such as Wyoming, Montana, and the Dakota's unfortu-

nately do not have a single metro which contributes their greatest share to patents. Many of the southern states also have no metros in which they contribute their greatest shares to patents or GDP. What the map also displays is clustering in certain geographical locations. There are some clusters of metros that contribute the most to population, patents and Creative Class. There is another type of clustering displayed, which is peripheral clustering. As mentioned before, the metros that contribute their highest share to GDP are generally the most populated metros and those that contribute the most to population are generally the lowest populated metros. The map shows that these small populated metros (grey) in many cases are clustered around the peripheries of the patent metros (blue). There is also the peripheral clustering of metros that contribute their greatest share to patents surrounding those with the highest GDP's. This is seen in parts of California, Colorado, Illinois and New York in which tech centers have been created outside of largely populated, large GDP generating metros.

With the addition of two variables for this Insight, Creative Class and Patents, similar conclusions can be reached from previous Insights. In regards to Creative Class, GDP and patents, most of the larger metros still "punch" above their weight, while the smallest metros do not.