RESEARCH BRIEF

Income Growth and the Distributional Effects Of Urban Spatial Sorting

Based on BFI Working Paper No. 2019-98, "Income Growth and the Distributional Effects of Urban Spatial Sorting," Victor Couture, assistant professor, Berkeley Haas; Cecile Gaubert, assistant professor, Berkeley; Jessie Handbury, assistant professor, Wharton; and Erik Hurst, professor, UChicago's Booth School of Business

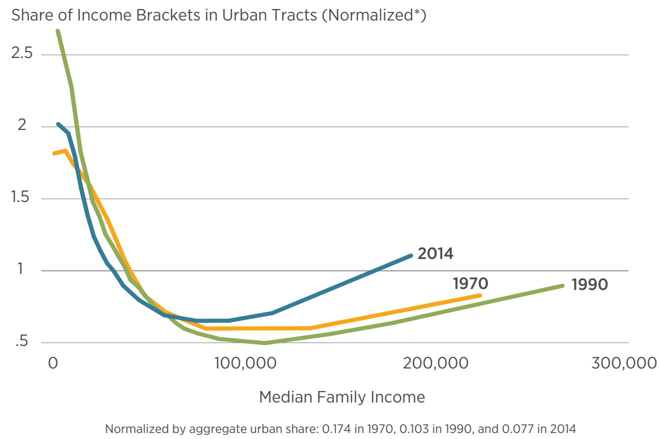
KEY TAKEAWAYS

- ✓ Many downtown neighborhoods in US cities have undergone gentrification over the last 30 years
- ✓ Housing prices have increased in many downtowns, and amenities have improved
- ✓ The increase in downtown housing prices has driven poorer households out of downtowns
- ✓ This phenomenon is reflective not only of rising income inequality, but also well-being inequality

The rebirth of downtown American cities in recent decades has turned neighborhoods that formally housed lower-income families—and that may have also harbored manufacturing, warehousing, and other bygone industries—into thriving high-end residential spaces, where people enjoy new coffee shops, restaurants, bars, and entertainment venues.

Downtowns have always been the center of commercial and cultural life for cities, but relatively few—and often less wealthy—people would actually reside downtown. Many of those who traveled downtown to visit shops, restaurants, clubs, or theaters would head home to the suburbs when the night ended. However, for some households, that cultural commute is now much shorter. Increasingly, people are walking or taking short rides to these venues and then going home to their amenity-rich apartment or condo buildings—often just a few blocks away.

Figure 1 · Downtown Residential Income Propensity



Note: Table uses Census data on family income

And this is not a static phenomenon. As more people move downtown to newly developed neighborhoods, more amenity-based businesses appear to serve them, which attract more people, which induces more businesses to open, and so on. This cycle—virtuous for some and vicious for others—is driven by one key factor: the presence of more wealthy households. That's a key finding from "Income Growth and the Distributional Effects of Urban Spatial Sorting," by Victor Couture, assistant professor at Berkeley Hass; Cecile Gaubert, assistant professor at Berkeley; Jessie Handbury, assistant professor at Wharton; and Erik Hurst, professor at UChicago's Booth School of Business. One important implication of this research is that income inequality, which has been rising over the past three decades, understates its effects on economic well-being. The gap between rich and poor, in other words, is wider than income data suggest.

Movin' on up ... and out

Generally speaking, since 1970 lower-income households have tended to live downtown more than middle-income households, which typically live in the suburbs. Also, on average, as households gain more income, they are more inclined to live downtown. This has long been the case and is illustrated by the U-shaped curve in Figure 1. However, as the blue line in Figure 1 reveals, something new has occurred over time that has made that U shape more pronounced: There are more wealthy households, and they are moving downtown.

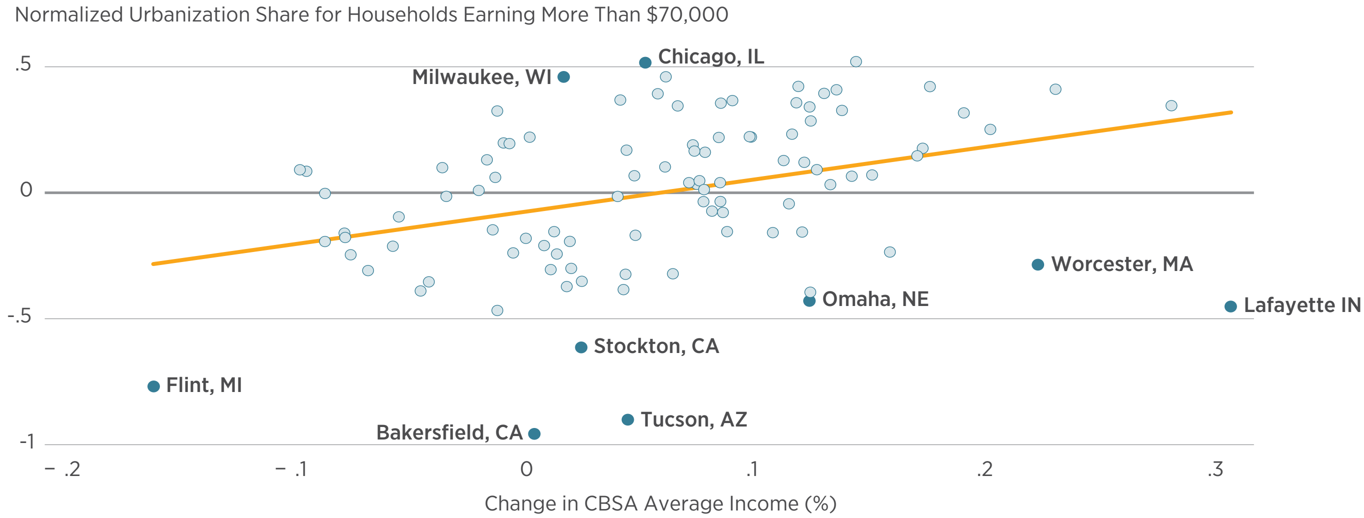
Specifically, as household income increases above $100,000 (in 1999 dollars), the propensity to live downtown increases. This fact holds across metro areas and definitions of downtowns, as well as across household type, race, and age. For example, between 1990 and 2014, wealthy households were choosing to live downtown at a greater rate than before, and this was particularly evident in metro areas with greater income growth. This dynamic is driven by the presence of amenities that, in this case, are considered relative luxury goods. As individuals get richer, they allocate more of their consumption bundle to restaurants, bars, theaters, and other entertainment options. Downtowns, in large part, are better placed to provide such luxury goods in a concentrated space than suburbs, and so that is where wealthy households are gathering.

What are the effects of this phenomenon? To answer that question, the authors built a model that explains spatial sorting (or where people choose to live) within a city. This model has two key features: households make residential choices based on their income, and neighborhoods change as those households rearrange themselves. For example, wealthier households not only make choices based on public amenities (like parks and schools), but also proximity to private amenities (like restaurants and entertainment venues). If wealthier people move to a particular neighborhood in growing numbers, the quality of both types of amenities are likely to improve—public amenities because of increased property tax revenue, and private amenities because households have more to spend.

Regarding private amenities, developers in the authors' model build neighborhoods based on household demands, which results in differentiated neighborhoods from which households can choose to live. Households weigh the cost of living (housing, taxes, commuting, for example), with the benefits, including public and private amenities. If they value high-end restaurants and proximity to the opera hall, and they can afford the relatively higher cost of living, then households in this model will choose to live in those neighborhoods. Likewise, households that value such amenities differently will choose to live in other neighborhoods.

When it comes to the question of whether and how rising incomes of the rich can explain neighborhood change in downtowns between 1990 and 2014, the model offers a clear answer:

Figure 2 · Richer Household Propensity to Live Downtown in Response to a Core-Based Statistical Area (CBSA) Level Change in Income 1990-2014



Note: Each observation in the figure is one of the 100 largest CBSAs. On the x-axis is the average CBSA real household income growth between 1990 and 2014. On the y-axis is change in the share of individuals earning $70,000 or more residing downtown relative to the average individual between 1990 and 2014. A simple weighted regression through the scatter plot (where the weigths are the CBSA 1990 population) yields a slope coefficient of 1.29 with a standard error of 0.34.

The rising rich are primarily responsible for the changing sorting patterns by income. An influx of high-income households increases the relative demand for high-quality neighborhoods, which puts upward pressure on housing prices. This upward pressure on housing prices affects other downtown neighborhoods, presenting poorer households (who are mostly renters) with a choice: Stay in their neighborhoods and pay higher rent for amenities that they don't necessarily value, or move to the suburbs. This phenomenon is not as pronounced in the suburbs, which typically grow through sprawl rather than density. Finally, as downtowns get richer, public amenities also increase and improve, which also benefits lower-income households—if they can afford to stay. In downtown areas, though, while the wealthy are moving up, the poor are moving out.

> This research offers insights into the rise in gentrification since 1990 by investigating the link between the increase in the number of very wealthy households, and the changes that they have spurred in US downtowns.

This spatial sorting, which is driven by income, offers new insight into the gap between rich and poor households. Economists use the term "welfare effect" to describe the broader, or aggregate, impact on an economy, and the authors use their model to compute the welfare effect of this income-driven sorting. In other words, is the rise in income inequality also impacting the gap in well-being equality? The answer is yes. The authors find that an income inequality shock (like the one US cities have experienced since 1990), and the concomitant change in neighborhoods, has triggered an even larger increase in well-being inequality.

Conclusion

Gentrification is a complex phenomenon with costs and benefits that leave a lasting mark on communities and their residents. On the one hand, improvements to neighborhoods that include better housing stock and more amenities are welcome to some; on the other hand, such improvements often raise the cost of housing beyond existing residents' ability to pay.

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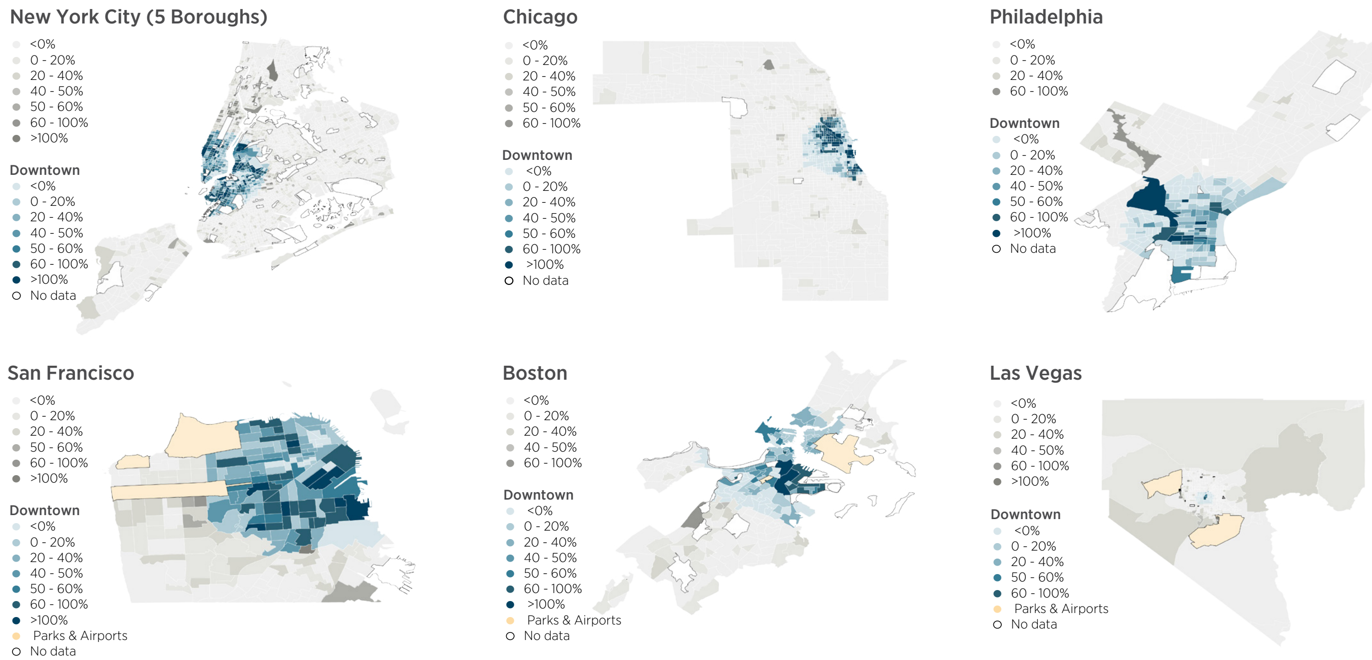
Figure 3 · Gentrifying Areas in Central County of Selected CBSA



Note: Each map shows the central county of a given CBSA, except for New York which shows the five counties (boroughs) of New York City. Downtown tracts in blue consist of all tracts closest to the city center and accounting for 10% of total CBSA population in 2000. The shading of each tract shows its percent growth in median household income between 1990 and 2014.

have spurred in US downtowns. As illustrated by the authors' model, wealthier households increased their demand for urban amenities, which increased housing prices, and which squeezed out poorer households or forced them to pay higher rents. The rich not only got richer, but there were more of them and they enjoyed a better lifestyle, while the poor, who found their income stretched by rising housing costs or who were forced to move, experienced a drop in well-being.

CLOSING TAKEAWAY

One important implication of this research is that income inequality, which has been rising over the past three decades, understates its effects on economic well-being. The gap between rich and poor, in other words, is wider than income data suggest.

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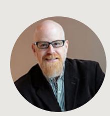
ABOUT THE SCHOLARS



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