FEDERAL RESERVE BANK of ST. LOUIS
CENTRAL TO AMERICA'S ECONOMY®

ON THE ECONOMY | OCTOBER 2018
https://www.stlouisfed.org/on-the-economy/2018/october/us-major-metro-areas-offer-best-housing-values

Which U.S. Major Metro Areas Now Offer the Best Housing Values?

By William R. Emmons

KEY TAKEAWAYS

- Changes in ratios of average house prices and rents to personal income reveal large differences in relative housing values across U.S. major metro areas.
- Housing markets in some Upper Midwestern major metro areas now offer the best values, on average, nationwide.

Housing markets in some Upper Midwestern major metro areas—Detroit, Cleveland, Cincinnati, Indianapolis and Chicago—now offer the best relative values, on average, nationwide. Head to some major coastal areas—San Diego, Los Angeles, San Francisco, Portland, Seattle or Miami—and you'll find some of the country's most expensive housing. Somewhere in between lie the metro areas of Atlanta, St. Louis, Charlotte, Minneapolis and Houston.

So, what makes a metro area's housing market cheap or steep?

Contrary to popular belief, it's not simply whether average local house prices fall below or sit above the national average. Low-priced housing is not cheap in areas where average personal income is also modest. Similarly, markets with high average house prices aren't necessarily ultraexpensive, or out of reach, if average incomes are also high. Another factor that could make lofty house prices feel like relative bargains is a sought-after local amenity. Examples include a desirable climate, low taxes or access to plentiful employment, cultural, educational or recreational opportunities. In short, one shouldn't measure a housing market's value simply by average local house prices.

A Different House-Price Measure

In this article, I use long-term changes in the ratio of average house prices or rents to personal incomes to gauge a housing market's relative attractiveness.[1] Focusing on the change in these ratios since 2000 allows for:

1. Meaningful comparisons across metro areas using house-price and rental indexes rather than levels (i.e., dollar amounts), which aren't readily available or reliable.[2]

2. Local amenities to differ across metro areas without deeming amenity-rich locales expensive and their residents as irrationally overpaying for housing. (As long as the amenities themselves haven't changed much since 2000—for example, the San Diego climate remains superb—we can expect these benefits to be priced into local housing at all times.)

Housing Markets with Best to Worst Relative Values

Table 1 displays 41 metro areas ranked from best to worst relative values in housing as of early 2018, as measured by changes since 2000 in the ratio of home prices in each metro area to average incomes in the state.[3] The ratio of Detroit's house prices to (Michigan's) personal income decreased by nearly 39 percent between early 2000 and early 2018, while the equivalent ratio for Cleveland declined by 29 percent.[4] Thus, when compared with local average incomes, housing in those metro areas became significantly cheaper.

This drop over the past 18 years wouldn't be due to low income growth or cold winters; those factors were taken into account or held constant in calculating changes in the home-price measure. Why, then, have Detroit, Cleveland and other Midwestern housing markets gotten so much cheaper relative to local incomes?

- Local homebuyers may have changed how much they're willing to pay for the bundle of amenities available in a given metro area, or the amenities themselves may have changed significantly. But this seems an inadequate explanation for the wide range of changes across metro areas on the list.
- Another possibility is that unusual changes in housing supply or demand occurred, such as a speculative homebuilding boom or an unexpected decrease in the local population. However, vacancy rates haven't differed much across metro areas, suggesting supply-demand imbalances are not likely to be a major cause. Also, there is a very weak relationship between metro-area population growth and changes in housing values as defined here (0.12, insignificantly different from zero).
- A psychological or sociological explanation would suggest that many coastal markets are now caught up in fads or bubbles—with some cities simply being "hot" and others, like those in the Upper Midwest, not. Many economists agree with Nobel Prize-winning economist Robert Shiller that this type of noneconomic explanation may best explain the wide deviations in relative housing values.[5]

Rental data provide another way to gauge whether housing in a metro area is cheap or expensive. High-quality publicly available rental indexes are available only for 20 metro areas plus urban Alaska and urban Hawaii.[6] (See Table 2.) Rent-to-income changes since 2000 are not as large as the house-price-to-income changes.[7] Basic patterns are similar, as illustrated by declines in the ratios for Detroit and Chicago; no data are available for Cleveland, Cincinnati or Indianapolis. At the other extreme, San Diego, Los Angeles, Seattle and Miami all show movements toward more expensive rental accommodations.

Bargain Shopping between Coasts

These measures are imperfect, but changes in ratios of average house prices and rents to personal income reveal large differences in relative housing values in metro areas across the country, even after taking average local incomes and amenities into account. Many Upper Midwestern housing markets currently look relatively cheap, while many coastal markets appear expensive. As such, anyone seeking the most economical housing values today might take a closer look at metro areas between the two coasts.

Table 1

Metro Areas Ranked from Best to Worst in Relative Value: Owned Housing

(Percent changes in house-price-to-income ratios, 2000:Q1 through 2018:Q1)

Metropolitan Statistical Area (MSA)	Percent deviation from fair value as of 2018:Q1
Detroit	–38.7
Cleveland	–29.2
Cincinnati	–16.7
Indianapolis	–15.4
Chicago	–11.0
Columbus	–8.5
Atlanta	–6.1
St. Louis	–4.5
Milwaukee	–1.7
Kansas City	–1.4
Charlotte	0.8
Pittsburgh	2.5
Minneapolis	5.0
Houston	10.6
Virginia Beach	17.6
San Antonio	17.7
Dallas	18.0
Jacksonville	18.5
New York	19.2
Phoenix	22.9
Baltimore	23.8
Orlando	25.3
Providence	25.5
Las Vegas	26.7
Nashville	26.7
Boston	27.2
Washington, D.C.	32.0
Austin	33.0
Sacramento	34.4
Tampa	36.8
San Jose	38.5
Denver	39.3
Riverside	42.8
San Diego	44.2
Seattle	45.6

Philadelphia	46.9
Portland	49.7
Anaheim	52.4
San Francisco	61.9
Miami	64.6
Los Angeles	68.6

SOURCES: Federal Housing Finance Agency and Bureau of Economic Analysis.

[back to text]

Table 2

Metro Areas Ranked from Best to Worst in Relative Value: Rental Housing

(Percent changes in rent-to-income ratios, 2000:Q1 through 2018:Q1)

Metropolitan Statistical Area (MSA)	Percent deviation from fair value as of 2018:Q1
Urban Alaska	–13.8
Philadelphia	–11.2
Atlanta	–8.2
Minneapolis	–7.3
St. Louis	–6.7
Urban Hawaii	–5.3
Detroit	–4.9
Dallas	–4.2
Boston	–3.9
Chicago	–2.5
Phoenix	0.6
Houston	1.0
San Francisco	6.4
Washington, D.C.	7.0
Denver	8.3
Tampa	9.0
San Diego	10.1
Seattle	10.3
Los Angeles	12.7
Baltimore	13.1
New York	13.8
Miami	21.2

SOURCES: Bureau of Labor Statistics and Bureau of Economic Analysis.

[back to text]

Endnotes

1. The author uses 2000-18 as the sample period for this analysis in order to capture the entire boom-bust cycle in housing. The ratio of nationwide house prices to per capita personal incomes began to increase sharply after 2000, the last year before clear signs of a nationwide housing bubble appeared. The period 2000-18 is also a short enough span for local amenities not to have changed materially.
2. Well-constructed house-price and rental indexes are more reliable than estimates of house-price and rental levels because they can be adjusted to account for the changing quality of housing units in a local market, including factors like average home size and features offered (e.g., air conditioning). Because indexes begin with an arbitrary number in each metro area in the base year (1991 for our house-price index and the 1982-84 average for rents), the ratio of an index number to average income also is an arbitrary number, which cannot be used for comparison purposes across metro areas. Percent changes in the indexes and ratios derived from indexes, however, do allow for meaningful comparisons.
3. Data on metro-area per capita incomes are available on an annual basis only, with the most recent data being for 2016. State-level per capita income data are available quarterly, however, with the most recent data

as of the first quarter of 2018. Since state-level income growth rates generally are very similar to metropolitan statistical area (MSA) growth rates, they can serve as a good proxy here. For example, the correlation between annual percent changes in the Detroit MSA's per capita personal income and Michigan's per capita personal income between 2000 and 2016 was 0.95; for the Los Angeles MSA and the state of California, the same correlation was 0.91. (Perfect correlation is 1.00.)

4. Figures cited are percent changes between the first quarter of 2000 and the first quarter of 2018. House-price changes are from the Federal Housing Finance Agency's equal-weighted Quarterly Expanded-Data House Price Index.
5. For a discussion of this hypothesis, see: Shiller, Robert J. "Speculative Asset Prices." American Economic Review, June 2014, Vol. 104, No. 6, pp. 1486-1517.
6. The increase in rental costs is from the Bureau of Labor Statistics, Consumer Price Index for All Urban Consumers, Rent of Primary Residence.
7. This is another clue that housing supply-and-demand factors are not likely to be the main reason for the significant drop in housing values discussed here. We would expect changes in owned- and rental-housing ratios to be similar as supply-and-demand pressures spill over from one housing type to another in the same metro area.

This article originally appeared in our Housing Market Perspectives publication.