

## Determining the Number of Households Priced Out of a Market

Changes in house prices can significantly impact affordability, especially when policies introduce additional costs to new construction. One common approach NAHB uses to assess this impact is based on mortgage underwriting standards. This method allows us to calculate the number of households that qualify for a mortgage before and after a home price increase. The difference represents the number of households that are 'priced out' of the market for a typical home.

Affordability for most prospective buyers is tied tightly to ability to qualify for a mortgage, according to the American Housing Survey, as only about 20% of home buyers purchase their homes with cash. Given today's conservative lending environment, mortgage underwriting standards provide a reasonable basis for estimating affordability.

One common mortgage underwriting standard is determined by a "front-end ratio", which measures the percentage of income that would be consumed by paying principal and in interest on the mortgage, as well as property taxes and property insurance. This ratio can be calculated based on assumptions about mortgage and household income.

In NAHB's priced-out analysis, we assume:

- A 10% down payment on the home's purchase price, requiring private mortgage insurance.
- A 30-year fixed-rate mortgage.
- An annual private mortgage insurance (PMI) premium<sup>1</sup> is 73 basis points, based on a national median credit score of 738<sup>2</sup>.
- Property tax and insurance costs per dollar of home value, estimated using data from the Census Bureau's American Community Survey (ACS) data.

For income distribution data, NAHB relies on the 2023 ACS, which provides detailed income distributions for all states and metropolitan areas. To get an up-to-date estimate, we adjust the ACS income distribution to reflect income and population changes between 2023 and 2024. These adjustments are based on annual median family income estimates from HUD, which is used to scale income brackets and household growth trends from the ACS (2022-2023), assuming an even distribution of growth across all income brackets after 2023.

While a priced-out analysis is useful, it doesn't answer all questions about impacts on housing markets, such as what the differences in home sales or housing starts would be. Addressing these questions would require estimates of key economic factors, such as the willingness of households to accept homes that are somewhat smaller or have fewer amenities to achieve affordability, the relationships among different segments of the housing market in question, and the adjustments builders make in the products they offer

<sup>&</sup>lt;sup>1</sup> Private mortgage insurance premium (PMI) is obtained from the PMI Cost Calculator(https://www.hsh.com/calc-pmionly.html)

<sup>&</sup>lt;sup>2</sup> Median credit score information is shown in the article "Four ways today's high home prices affect the larger economy" October 2018 Urban Institute https://www.urban.org/urban-wire/four-ways-todays-high-home-prices-affect-larger-economy

in response to changed affordability conditions on the rise. Good estimates of these parameters are seldom available. In comparison, a priced-out analysis is straightforward. It simply measures how many households in a given area can no longer afford a home due to rising prices. This approach is easy to understand and can be applied using widely available housing market data.