

## Highlights

### Manufactured House Price Indexes

As recognized by Fannie Mae and Freddie Mac's Duty to Serve initiatives, manufactured homes play an important role in providing affordable housing.<sup>1</sup> However, the absence of information about the relative price trends for manufactured housing hinders public understanding of relative credit risks for such loans and, more generally, may be hindering market development.

FHFA is unaware of any publicly available repeat-transactions house price indexes for manufactured homes.<sup>2</sup> FHFA does not supply such indexes and, indeed, price information for manufactured homes is generally not incorporated into the construction of FHFA's standard house price index series.

To provide data that may be of value to Duty to Serve initiatives and the housing market more broadly, FHFA has constructed basic repeat-transactions house price indexes for manufactured homes. With this HPI report, FHFA is making information about these indexes available for the first time. The indexes are largely experimental at this stage. The manufactured homes data used in forming these series include information for homes titled as real estate and not chattel.

Using special loan-level data productions from Fannie Mae and Freddie Mac, FHFA has constructed two national house price indexes. A purchase-only series has been created using only sales prices, while an all-transactions series employs both sales prices and appraisal values. In general, these indexes are formed using the identical repeat-transactions indexing methodology as is used to create FHFA's standard purchase-only and all-transactions indexes.

The one methodological difference between the respective manufactured home series and the traditional indexes is that the manufactured home series has been formed directly by pooling all U.S. transactions data together. With FHFA's standard U.S. indexes, by contrast, the national index is formed by weighting index data from individual states. Sample size limitations for manufactured homes generally prohibited the formation of state-specific price indexes, thus requiring that the U.S. manufactured home price indexes be formed by simply pooling transactions together.<sup>3</sup>

Figures 1 and 2 compares the new manufactured home series to FHFA's standard house price index series. Figure 1 compares the respective purchase-only series, while Figure 2 compares the all-transactions series for the two property types. None of the series have

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<sup>1</sup> More information about the Duty to Serve program can be found at <https://www.fhfa.gov/DTS>.

<sup>2</sup> Some sources release simple statistics on prices for manufactured homes. For instance, the Census Bureau provides monthly average sales prices for new manufactured properties.

<sup>3</sup> Pooling introduces statistical noise arising from sample fluctuations. To the extent that transactions volumes vary across geographic areas over time, price trends from a pooled national series will reflect the fundamental market trend (desirable) as well as fluctuations (noise) arising from period-to-period changes in the geographic mix in the sample.

been seasonally adjusted. The base period for each series—i.e., the period in which the index is arbitrarily set equal to 100—is the first quarter of 1995.<sup>4</sup>

In general, the figures suggest that manufactured homes have seen price trends broadly similar to those of other homes. According to the purchase-only series, since 1995, prices have risen by roughly 120 percent for manufactured homes vs. 140 percent for other homes. However, Figures 1 and 2 reveal that the amplitude of the most recent housing bust was larger for manufactured homes. The purchase-only series reflects a roughly 22 percent price decline in the traditional purchase-only series, while manufactured homes evidenced a roughly 37 percent decline. Although the manufactured homes index had a lower trough, it has been steadily converging on the traditional site-built series, as evidenced by its larger gains over the past four years.<sup>5</sup>

Manufactured homes tend to be less represented in metropolitan areas relative to other properties. For example, in FHFA's traditional purchase-only data sample, roughly 90 percent of transactions are for homes in metropolitan areas. This compares to roughly 67 percent for manufactured home transactions. The upshot of this is that the gaps between the indexes in both Figure 1 and Figure 2 reflect both property-type differences as well as geographic differences.

To provide more of an apples-to-apples comparison of price trends, a new index for manufactured homes is calculated with a dataset that up-weights transactions in metropolitan areas. The new sample reflects roughly the same proportion of transactions in metropolitan areas relative to FHFA's traditional (purchase-only) sample. Comparing Figure 1 to Figure 3, one can see that the gap between the non-manufactured and manufactured property indexes actually grows slightly when the geographic mix is harmonized in this way. Although this is a simplistic way of controlling for geographic differences in the various samples, the data generally suggest that there may be fundamental differences in price trends across the different property types.

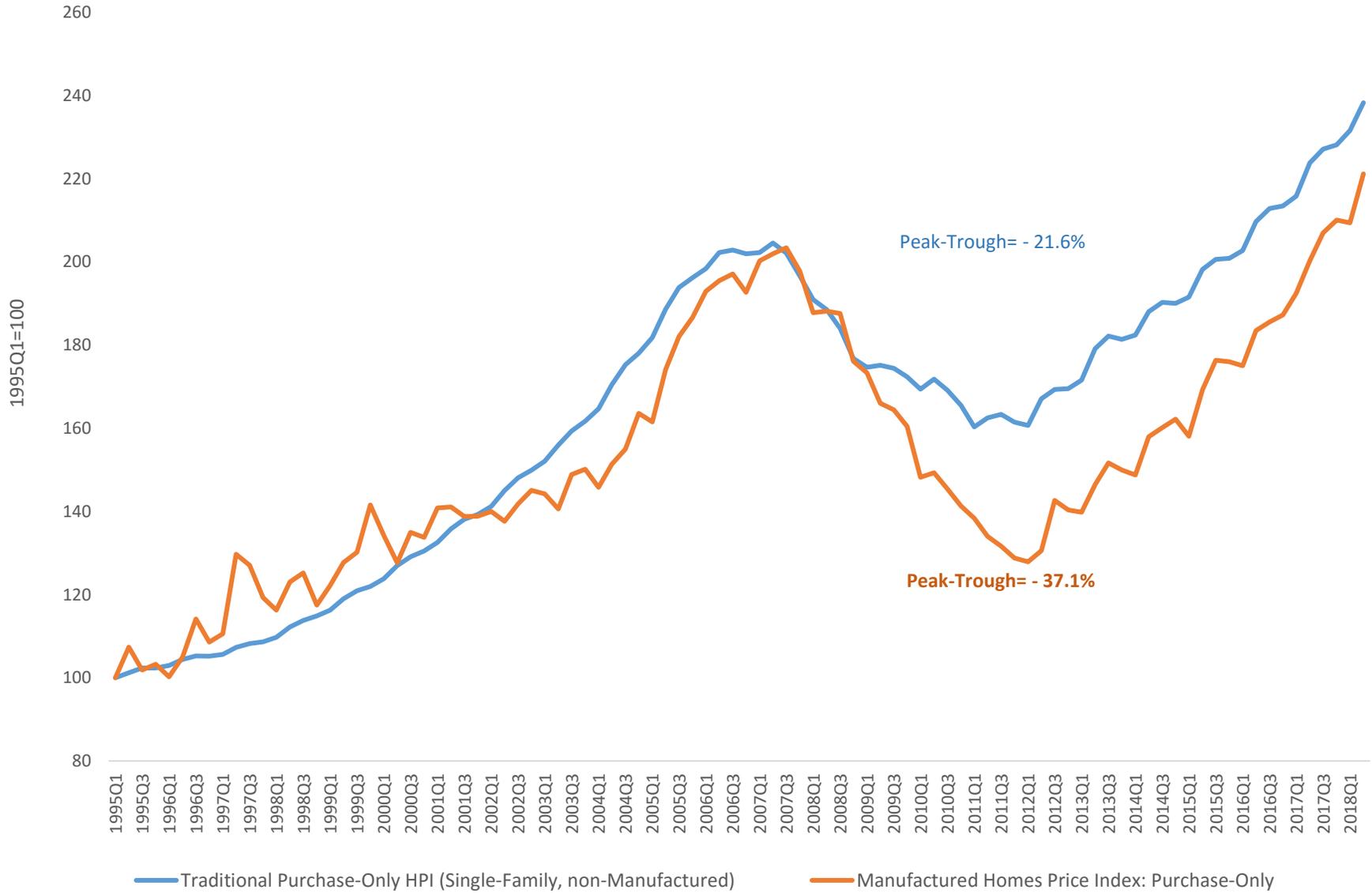
The index data shown in Figures 1-3 can be downloaded at <https://www.fhfa.gov/hpi>. Users should be aware that the manufactured home price indexes should be considered *experimental* and that FHFA is considering whether to update the measures in the future. If the experimental series are revised, the updates may not be published with the same regularity as FHFA's standard monthly and quarterly house price indexes. We invite public input on whether the repeat transactions house price indexes for manufactured housing add value to the market. Comments, questions, and suggestions should be addressed to [hpihelpdesk@fhfa.gov](mailto:hpihelpdesk@fhfa.gov).

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<sup>4</sup> This is not the base period for FHFA's traditional purchase-only and all-transactions series. The "rebasings" of the respective series does not affect the reported price trends.

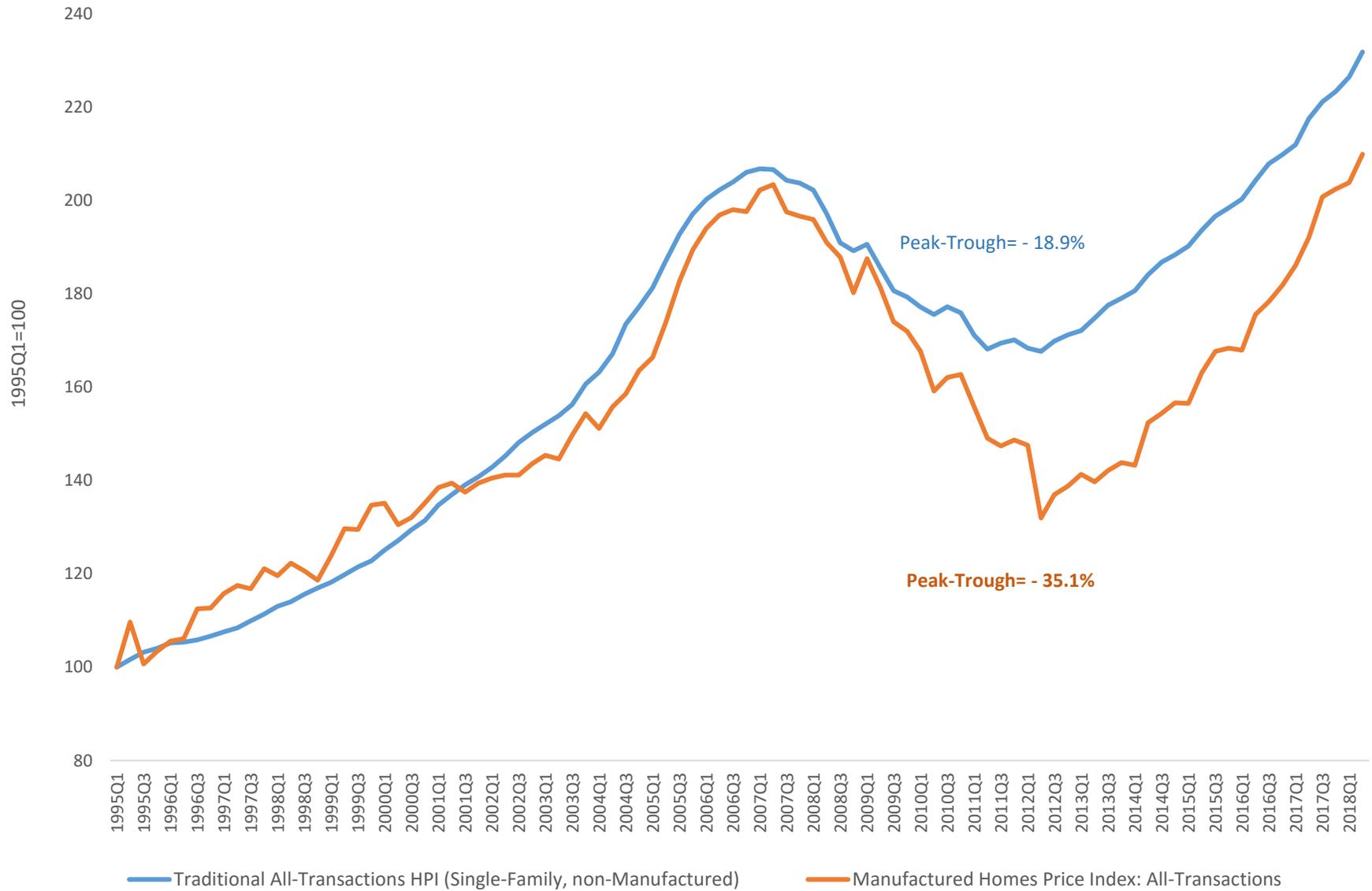
<sup>5</sup> The exception is 2016Q3 when the four-quarter gain was five percent for manufactured homes but six percent for the traditional index. Manufactured homes have averaged a four-quarter gain of nine percent since 2014Q2.

Figure 1: Traditional Purchase-Only HPI vs. Price Index for Manufactured Homes  
1995Q1-2018Q2



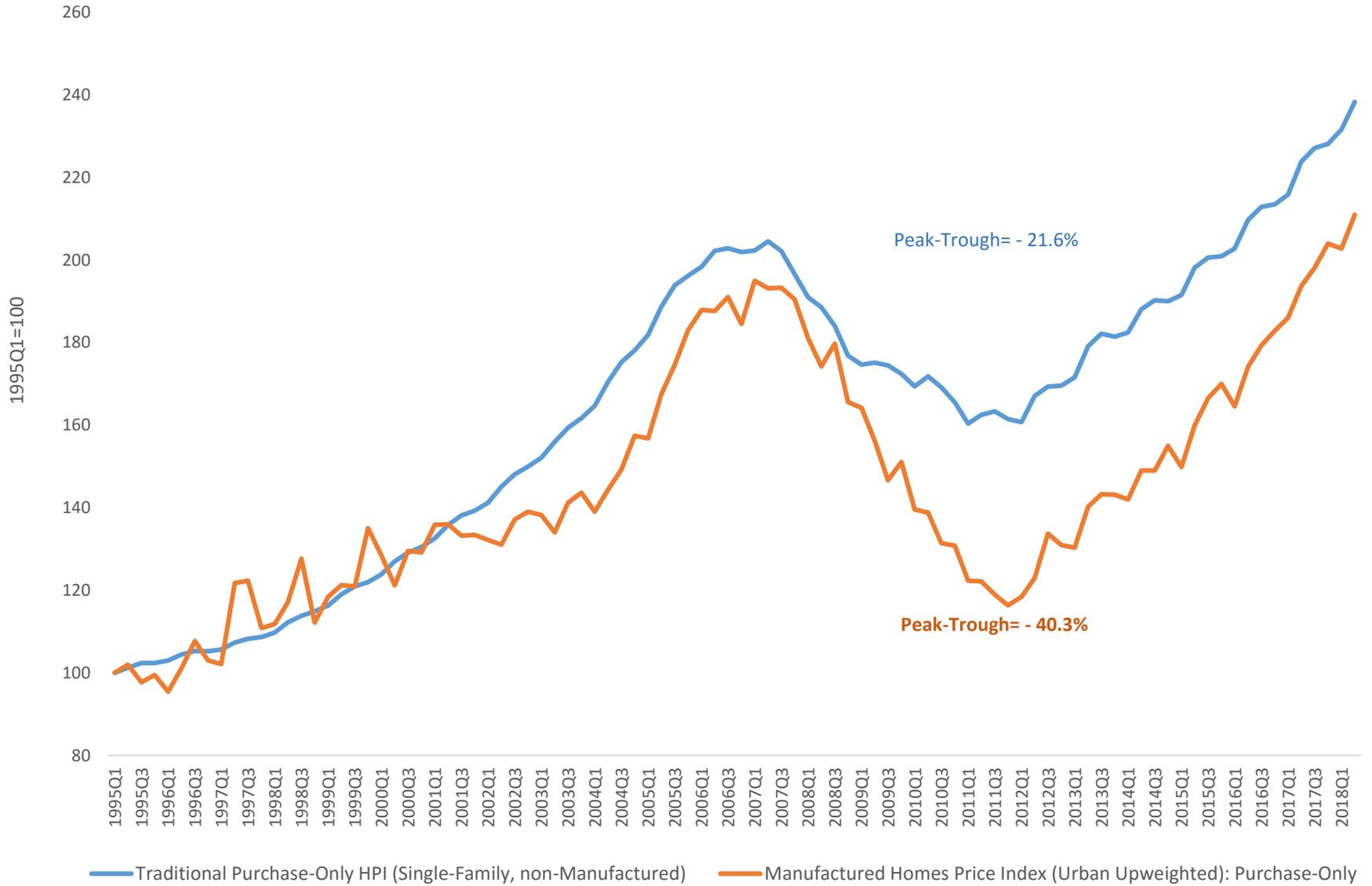
Source: FHFA

Figure 2: Traditional All-Transactions HPI vs. Price Index for Manufactured Homes  
1995Q1-2018Q2



Source: FHFA

Figure 3: Relative Price Trends for Manufactured Homes (Upweighted Metro-Area Share)  
1995Q1-2018Q2



Source: FHFA