Multifamily Research Perspectives

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Steve Guggenmos | 571-382-3520
Xiaoli Liang | 571-382-3250
Harut Hovsepyan | 571-382-3143
Sara Hoffmann | 571-382-5916
Tom Shaffner | 571-382-4156
Jun Li | 571-382-5047
Yu Guan | 571-382-4730
Dohee Kwon | 571-382-4156

Multifamily Affordability
Market Conditions and Policy Perspectives

- There is a shortage of affordable housing available to low income households, so many are forced to spend high proportions of their income on housing
- Standard measures established to measure rental affordability issues from the Housing and Urban Development and Harvard’s Joint Center for Housing Studies, capture the growing affordability problems for renters and reveal the prevalence of the problem across all market segments
- Housing goals for Freddie Mac and Fannie Mae multifamily businesses, established to direct debt capital to areas of need, utilize assumptions written into law and need to be better understood
- The goals are applied utilizing metro-level Area Median Income using assumptions applied nationally and make it harder for multifamily properties in some markets with high rent relative to income to be considered affordable, despite acute needs in those markets
- Policy goals based on Small Area Fair Market Rents, proposed as an alternative measure in this paper, might provide incentives aligned with an equitable allocation of debt capital to needed areas

Rental affordability is an issue impacting a growing number of households. As incomes have been stagnant since the Great Recession and new supply of rental housing has not kept pace with demand for rental units, the affordability issue has been exacerbated.

Affordability is commonly measured as rent payments relative to household income. Households spending disproportionately high amounts of income on rents are overly burdened by housing costs. Over the course of several decades, this burden has been increasing for rental households.
In this paper we take an in depth look at the affordability concerns in the rental market and find that in addition to becoming a bigger issue nationally it is also present in all segments of the rental market, across markets and submarkets.

We also discuss Freddie Mac’s and Fannie Mae’s (GSEs) affordable goals. These goals, written into law in 2007, are established to direct GSE’s affordable business to areas with the greatest need, but sometimes do not result in an equitable allocation of capital matched to need. We explore the assumptions in the current Area Median Income (AMI) based approach and suggest improvements to those assumptions that could potentially enhance the outcome.

In addition, we suggest an alternative measure based on Small Area Fair Market Rents (SAFMR) that we think can improve the allocation of debt capital to rental markets in a way that better benefits low income renters.

Section 1 – The Growing Affordability Issue

Rental housing becomes less affordable as growth rates in rent exceed household income growth rates, which has certainly been the case in recent years. Not only has the stress been acute since the Great Recession, conditions have been worsening for renters for decades. Since 1980 renter income has increased 170% (in nominal terms), or 3.2% a year. During the same period rents increased 270%, about 4.3% per year. This suggests that a larger number of renters are paying a higher percentage of their income on rent.

We use two authoritative sources that measure market conditions related to affordable housing, the Worst Case Needs report from the Housing and Urban Development (HUD) and the “supply gap” developed by the Joint Center for Housing Studies of Harvard University (JCHS). Both indicate that there is a growing affordability problem in the rental housing market.

A first step in the standard affordability measures is to categorize households based on their income relative to their metro area. Lower income households are categorized as Low Income (LI), Very Low Income (VLI), and Extremely Low Income (ELI) if they make less than or equal to 80%, 50%, or 30% of AMI, respectively, with adjustments for smaller and larger families. These categories define the affordable housing policy and will be referenced to throughout the paper.

Housing affordability can be measured for each of these income cohorts defined above by looking at housing costs as a percent of income. In HUD’s most recent Worst Case Housing Needs report to the Congress, the number of VLI households paying more
than half of their income to rent or living in severely inadequate conditions increased from 5.9 million in 2007 to 8.5 million in 2011.¹

In Exhibit 1, we present the Worst Case Needs, adopting HUD’s methodology. The exhibit reveals that the total number of stressed households has increased by about 1.4 million, or 20%, since 2009. We then estimate the need specific to the multifamily sector. The results across the multifamily sector and total rental market are similar: the large shortage of affordable housing left more than 40% of VLI renters (8.5 million in overall rental sector and 3.4 million in multifamily sector) in stressed condition, as they either pay more than 50% of their income on housing or live in inadequate conditions.

**Exhibit 1: The Worst Case Needs and the Affordable Housing Supply Gaps for Very Low Income Renters (thousands)**

<table>
<thead>
<tr>
<th>Survey Year</th>
<th>Renters with Very Low Income</th>
<th>Worst Case Needs¹</th>
<th>Affordable Units</th>
<th>Affordable and Available Units</th>
<th>Affordable, Available and Adequate Units</th>
<th>Supply Gap</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Rental Market</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2011</td>
<td>19,610</td>
<td>8,475</td>
<td>17,720</td>
<td>12,326</td>
<td>11,810</td>
<td>7,800</td>
</tr>
<tr>
<td>2009</td>
<td>17,427</td>
<td>7,095</td>
<td>17,121</td>
<td>11,597</td>
<td>11,185</td>
<td>6,243</td>
</tr>
<tr>
<td>2007</td>
<td>16,311</td>
<td>5,902</td>
<td>18,295</td>
<td>11,873</td>
<td>11,417</td>
<td>4,894</td>
</tr>
<tr>
<td><strong>Multifamily Market</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2011</td>
<td>8,664</td>
<td>3,428</td>
<td>6,313</td>
<td>4,827</td>
<td>4,633</td>
<td>4,031</td>
</tr>
<tr>
<td>2009</td>
<td>8,082</td>
<td>2,913</td>
<td>6,542</td>
<td>4,708</td>
<td>4,558</td>
<td>3,525</td>
</tr>
<tr>
<td>2007</td>
<td>7,608</td>
<td>2,516</td>
<td>6,716</td>
<td>4,637</td>
<td>4,450</td>
<td>3,158</td>
</tr>
</tbody>
</table>

¹The Worst Case Needs in 2007 shown here is slightly different from the number of 5,905 in HUD’s Worst Case Needs 2011 report to congress.

Similarly, the JCHS of Harvard University established the supply gap, which we also present in Exhibit 1. It measures the difference between the number of VLI renters and the number of affordable, available, and adequate units.² Rental units are considered affordable if rent and utilities cost no more than 30% of household income. The 30% is commonly used, which will be evaluated later. Using the methodology developed by the JCHS, we estimated the supply gap for the total rental market and multifamily sector in 2007, 2009, and 2011. From 2007 to 2011, as shown in Exhibit 1, there was a growing dispersion between the number of VLI renters and the number of affordable, available and adequate units as the growth of the former outpaced that of

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¹Households are considered for Worst Case Needs if they spend at least half of their income for rent or live in severely inadequate conditions, or both, and if they do not receive any housing assistance.
²Available units are vacant or rented by households with incomes no more than the threshold for the category. Affordable, available, and adequate units exclude occupied units considered severely inadequate in the American Housing Survey and vacant units that lack full plumbing.
The number of VLI renters increased continuously with a cumulative growth of 20.2%, while the number of affordable, available, and adequate units only rose modestly with a cumulative growth of 3.4% over the same period. As a consequence, the supply gap increased from 4.9 million in 2007 to 7.8 million in 2011. Furthermore, the supply gap in the multifamily sector, estimated at 47% in 2011, is higher than the total market gap of 40%.

We first studied the supply gap in the Freddie Mac white paper submitted in compliance with the Federal Housing Finance Agencies (FHFA) 2012 scorecard which examined the rental market impacts of the GSEs. Looking forward, we found that returning to historical household income growth levels on its own will not completely eliminate the supply gap. For this reason, it is important that we continue to have a well-functioning multifamily debt market, which benefits affordability in all rental markets.

**VLI Households’ Rent Expenses**

Consistent with the growing supply gap, many low income households are paying higher proportions of their income on rent. Exhibit 2 shows the distribution of VLI renters living in rental units across affordability levels. In 2011, of the 19.6 million VLI renters, only about 11 million, or 56%, lived in units affordable to them. The remaining 44% lived in higher cost units, among which about 36% lived in units affordable at 50-80% of AMI, and 8% lived in units affordable to households earning 80% of AMI and above.

#### Exhibit 2: Renter Households across Affordable Rental Units (thousands), 2011

<table>
<thead>
<tr>
<th>Renter Households</th>
<th>Units with Rent &lt;= 50% AMI</th>
<th>Units with Rent between 50% - 80% AMI</th>
<th>Units with Rent &gt; 80% AMI</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>VLI Renters</td>
<td>11,026</td>
<td>7,004</td>
<td>1,580</td>
<td>19,610</td>
</tr>
<tr>
<td>Non-VLI Renters</td>
<td>5,348</td>
<td>9,022</td>
<td>4,887</td>
<td>19,257</td>
</tr>
<tr>
<td>Total</td>
<td>16,374</td>
<td>16,027</td>
<td>6,467</td>
<td>38,867</td>
</tr>
</tbody>
</table>

Source: American Housing Survey and Housing Affordability Data System, 2011.
Note: Includes all rentals.

Simply delivering the necessary number of affordable units to meet the supply gap does not solve the problem. There are higher-income households that choose to live in units categorized as affordable to lower-income households. In 2011 there were 5.3 million non-VLI renters living in units considered affordable to VLI renters. Besides the “crowd-out” of higher income renters, mismatches between the demand and supply across geographic areas often left local VLI renters little choice but to live in high cost units. Also possibilities cannot be excluded that some VLI renters lived in high cost units out of their own preferences.

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4 Besides the “crowd-out” of higher income renters, mismatches between the demand and supply across geographic areas often left local VLI renters little choice but to live in high cost units. Also possibilities cannot be excluded that some VLI renters lived in high cost units out of their own preferences.
the 8.6 million VLI renters who live in higher cost units, especially those without
government housing assistances, remains a challenge.

In addition to the supply gap, a concerning trend resulting from the robust rent growth
is that a growing number of renter households are spending an increasing share of their
income on rent. As presented in Exhibit 3, in 1980 the share of renter households
spending 30% of their income on rents was 38%. In 2011, that share grew to 53%.

Exhibit 3 further breaks down the rental population by rental household income
percentiles to distinguish how much of the burden is felt across different income
groups. In 2011, 89% of households in the lowest quartile were spending more than
30% of their household income on rent, up from 83% in 1980. Furthermore, the share
of below-median income households (combining the two bottom groups) has increased
from 68% in 1980 to 83% in 2011. In absolute terms the middle two cohorts
experienced the biggest increase. In 2011, the share of renter households increased by
more than 20 percentage points in the second and third income cohorts. This indicates
that the rent burden has become a challenge for households earning less than median
income, as well as for many households above the median income.

Moreover, Exhibit 4 illustrates how much these income cohorts are spending on rent as
a percentage of their income. For the bottom income cohort, the median share of
income households are spending on rent has increased from 59% to 78% over the past
30 years. The bottom two cohorts combined saw an increase from 39% of income to
52%. Clearly, the rent burden for many low-income households is well above the

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Renters</th>
<th>Renters Below 25 percentile income</th>
<th>Renters Between 25 and 50 percentile income</th>
<th>Renters Between 50 and 75 percentile income</th>
<th>Renters Above 75 percentile income</th>
</tr>
</thead>
<tbody>
<tr>
<td>1980</td>
<td>38%</td>
<td>83%</td>
<td>53%</td>
<td>14%</td>
<td>1.8%</td>
</tr>
<tr>
<td>1990</td>
<td>39%</td>
<td>83%</td>
<td>54%</td>
<td>16%</td>
<td>3.2%</td>
</tr>
<tr>
<td>2000</td>
<td>43%</td>
<td>87%</td>
<td>62%</td>
<td>20%</td>
<td>4.4%</td>
</tr>
<tr>
<td>2001</td>
<td>44%</td>
<td>87%</td>
<td>64%</td>
<td>22%</td>
<td>4.6%</td>
</tr>
<tr>
<td>2002</td>
<td>46%</td>
<td>86%</td>
<td>66%</td>
<td>25%</td>
<td>5.5%</td>
</tr>
<tr>
<td>2003</td>
<td>47%</td>
<td>87%</td>
<td>69%</td>
<td>27%</td>
<td>6.2%</td>
</tr>
<tr>
<td>2004</td>
<td>49%</td>
<td>87%</td>
<td>71%</td>
<td>30%</td>
<td>7.3%</td>
</tr>
<tr>
<td>2005</td>
<td>50%</td>
<td>87%</td>
<td>70%</td>
<td>30%</td>
<td>7.3%</td>
</tr>
<tr>
<td>2006</td>
<td>52%</td>
<td>89%</td>
<td>75%</td>
<td>36%</td>
<td>8.8%</td>
</tr>
<tr>
<td>2007</td>
<td>53%</td>
<td>89%</td>
<td>77%</td>
<td>36%</td>
<td>8.9%</td>
</tr>
<tr>
<td>2008</td>
<td>54%</td>
<td>89%</td>
<td>79%</td>
<td>36%</td>
<td>8.9%</td>
</tr>
<tr>
<td>2009</td>
<td>51%</td>
<td>89%</td>
<td>73%</td>
<td>33%</td>
<td>8.1%</td>
</tr>
<tr>
<td>2010</td>
<td>52%</td>
<td>89%</td>
<td>75%</td>
<td>36%</td>
<td>8.8%</td>
</tr>
<tr>
<td>2011</td>
<td>53%</td>
<td>89%</td>
<td>77%</td>
<td>36%</td>
<td>8.9%</td>
</tr>
</tbody>
</table>

Source: American Community Survey; Decennial Census; usa.ipums.org
Note: Data excludes zero, negative, or missing income and no-cash rent categories.
affordable limits, leaving these families with very low disposable income after paying rents and utilities to spend on other necessary goods and services.

The proportion of renter households who spend 30% or more of their household income on rent varies across states and metro areas. In all states the share of renter households paying more than 30% of income is higher in 2011 than it was in 1980. Nearly 60% of all renters in California, Florida and Hawaii spend more than 30% of their income on rent, while less populated areas like Wyoming and South Dakota are among the lowest – less than 40% of renters have a high rent burden (see Exhibit A.1 and A.2 in the Appendix). In the majority of states, the share of renters has increased by ten percentage points or more, while in the District of Columbia and Maryland the share has increased by 20 percentage points.

The implication of the growing share of households spending more than 30% on rent and the increase in the share of income spent on rent is that the challenges facing the current market are no longer the same as in the early 1980s. The 30% of income spent on rents appears too low compared to the reality of the current market, where more than half of the renter households spend a higher share of their income on rent. While the assumption that households spend 30% of their income on rent began in the early 1980s, it was put into law in 2007 by the Housing and Economic Recovery Act (HERA). With the changes documented above, renters are paying an increasing proportion of their incomes on rents, while the law is serving a smaller population than it has in the past, even though there is an increasing need.

Section 2 – Measuring Affordability across Market Segments

We now look at affordability issues in different market segments. We extend our analysis into a more granular level and estimate the extent of the affordability gap by market type and property type. Generally, all market segments are impacted by affordability issues.

Property Size

Small properties with 5-50 units dominate the multifamily market, constituting about 79% of the total occupied multifamily market in 2011. Not surprising, affordable multifamily units are also heavily concentrated in small properties. Exhibits 5 and 6 show the breakdown of occupied multifamily affordable units by property size. For VLI renters, about 78% of the occupied affordable units were in buildings with 5-50 units in 2011. Among the occupied rental units affordable to LI renters, about 82% of them are in buildings with 5-50 units in 2011.

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5 Here property is approximated by building, as the survey question in AHS asks about the number of units in the building. The number of small properties may be overestimated.
Unfortunately, Freddie Mac does not have a product to serve this market. To date, FHFA has encouraged contraction of the GSEs multifamily business and has explicitly limited small multifamily lending.

Exhibit 5: Number of Multifamily VLI Affordable Units by Property Size (thousands), 2011

Exhibit 6: Share of Affordable Multifamily Housing by Property Size, 2011

Market Size

In order to understand if the size of the market is related to the severity of the affordability issue, we look at conditions in primary, secondary, and tertiary markets. In short, renters are strained in all types of markets, but there are some differences; the supply gap is widest in primary markets and secondary markets. As shown in Exhibit 7, more than half of all VLI affordable and available units are found in tertiary markets while primary and secondary markets each make up roughly a quarter of the total. For renters who qualify for VLI units in primary and secondary markets, there are only enough affordable units available for roughly 50% of those renters, while tertiary markets have enough units for 60% of the VLI renters. While the supply gap percentage in tertiary markets is lower than in primary and secondary ones, tertiary markets have the largest absolute number of VLI renters that live in units not affordable to them.

Source: American Housing Survey and Housing Affordability Data System, 2011.

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6 Federal Housing Finance Agency, 12 CFR Part 1282 RIN 2590-AA49
7 The following metro areas are considered as primary markets, i.e., the top-tier markets with the most attractive rental housing stock and strong fundamentals: Atlanta, Boston, Chicago, Dallas, Houston, Los Angeles, New York, San Francisco, and Washington DC. Note: Tertiary markets include non-MSAs.
Exhibit 7: Demand and Shortage of Multifamily VLI Affordable Units by Market Type (thousands), 2011

<table>
<thead>
<tr>
<th>Market Type</th>
<th>Occupied VLI Affordable Units* (Units / Percentage)</th>
<th>VLI Renters</th>
<th>VLI Affordable Units Supply Gap</th>
<th>Supply Gap as a Percentage of VLI Renters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary</td>
<td>1,127 / 24%</td>
<td>2,381</td>
<td>1,255</td>
<td>53%</td>
</tr>
<tr>
<td>Secondary</td>
<td>1,063 / 23%</td>
<td>2,109</td>
<td>1,046</td>
<td>50%</td>
</tr>
<tr>
<td>Tertiary</td>
<td>2,443 / 53%</td>
<td>4,173</td>
<td>1,730</td>
<td>41%</td>
</tr>
<tr>
<td>Total</td>
<td>4,633</td>
<td>8,664</td>
<td>4,031</td>
<td>47%</td>
</tr>
</tbody>
</table>

Source: American Housing Survey and Housing Affordability Data System, 2011.
* Only includes Affordable, Available and Adequate units
Note: Tertiary market includes non-MSAs. Numbers may not sum due to rounding

VLI households are likely to face bigger difficulty finding affordable units in primary and secondary markets than in tertiary.

Location in Market

Looking inside markets, and classifying areas into central cities, suburbs, or non-MSA\(^8\), as shown in Exhibit 8, the majority of VLI renters are found in central cities compared to the suburbs and Non-MSAs. Central cities and suburbs have a higher percentage of VLI renters not able to find affordable units compared to Non-MSA areas.

Exhibit 8: Demand and Shortage of Multifamily VLI Affordable Units by Metro Status (thousands), 2011

<table>
<thead>
<tr>
<th>Metro Status</th>
<th>Occupied VLI Affordable Units* (Units / Percentage)</th>
<th>VLI Renters</th>
<th>VLI Affordable Units Supply Gap</th>
<th>Supply Gap as a Percentage of VLI Renters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central Cities</td>
<td>2,545 / 55%</td>
<td>4,662</td>
<td>2,117</td>
<td>45%</td>
</tr>
<tr>
<td>Suburbs</td>
<td>1,467 / 32%</td>
<td>3,066</td>
<td>1,599</td>
<td>52%</td>
</tr>
<tr>
<td>Non-MSA</td>
<td>621 / 13%</td>
<td>936</td>
<td>316</td>
<td>34%</td>
</tr>
<tr>
<td>Total</td>
<td>4,633</td>
<td>8,664</td>
<td>4,031</td>
<td>47%</td>
</tr>
</tbody>
</table>

Source: American Housing Survey and Housing Affordability Data System, 2011.
* Only includes Affordable, Available and Adequate units
Note: Numbers may not sum due to rounding

The findings in this section indicate that the affordability problem is present in all segments of the rental market. Low income households find it challenging to find affordable rental units across markets and submarkets. While there is not likely to be one solution, extension of the affordable policies can help reduce the rent burden for families in need.

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\(^8\) Standard definition: Central cities are the largest cities within a metropolitan statistical area (MSA). In some MSAs, one or more cities are classified as central cities. If a place extends beyond an MSA, only the portion within the MSA is a central city. A few primary metropolitan statistical areas do not have a central city.
Section 3 – Policies and Incentives

In previous sections we’ve discussed the current problems facing affordable housing in the rental market and the growing trends over the past several years. There are various federally supported programs that are aimed at mitigating the rent burden for low-income households; including the GSEs’ mission to provide funding for affordable units. In particular, the multifamily sectors of the GSEs finance multifamily rental units with affordable rents through special programs. Our affordable programs provide significant support to low-income households and we strive to direct the funds as efficiently as possible. GSEs have funded more than 1.2 million rental units affordable to low income households and more than 288 thousand rental units affordable to very-low income households in 2011-2012\(^9\) alone. However, we believe there are several assumptions in the current policy rules guiding GSEs affordable business that can be addressed to benefit more affordable housing. In this section we describe these rules and indicate the areas that can be improved. We also propose an alternative approach for measuring the affordability within GSEs affordable program that could provide more incentives for GSEs to reach high rent areas and potentially provide more affordable housing.

Current Policy and Improvements

We begin by reiterating in more detail the current rule that influences GSE’s allocation of debt capital. Properties funded by GSEs qualify for the affordable program when the gross rent (rent plus utilities) of units within the property does not exceed the threshold value. These thresholds are determined using the Area Median Income, generally based on Metropolitan Statistical Areas (MSA). An income threshold is determined by taking 50% of AMI for VLI goals and 80% of AMI for LI goals. Income thresholds are then converted into rent thresholds by multiplying by 30% (from the 30% rent-to-income law) and dividing by 12 to get the base monthly rent thresholds. Further adjustments are made to determine thresholds for different bedroom size. For example, to determine the rent threshold for a studio, the base monthly rent threshold is adjusted by a factor of 0.70, while for a 2-bedroom unit the adjustment factor is 0.90, and for a 4-bedroom unit it is 1.16.\(^{10}\)

There are assumptions in this rule that disproportionately benefit some areas at the expense of others. Based on the findings in our research, we believe incentives from the current rule allocate debt capital unequally across and within some markets.

\(^{10}\)Bedroom adjustment factors are set by HUD, see at http://www.huduser.org/portal/datasets/hads/hads.html.
Unfortunately, the rule is not easily fixed, because the methodology and some key assumptions are set by law.

First, because the methodology utilizes income data as a proxy for rents, an assumption is necessary to convert income data to a rent threshold. We’ve illustrated above that households are paying higher levels of income than they were when the 30% threshold was set in the early 1980s. Additionally, as discussed in the first section, income spent on rent varies meaningfully across the country. Changing this assumption into a share of income that better reflects the current market condition may help increase funding to the areas with a high rent-to-income ratio.

Another assumption underlying the rule is the use of income data that is metro-specific, but is not granular enough for all areas. One standard across a metro favors some segments of the market over others, often those with lower population density and further away from jobs. Exhibit 9 illustrates this point with a map of metropolitan Washington DC, where metro-wide AMI in 2012 was set at $107,500. However, with its diverse economic landscape, the county level median income ranges from $71,290 (or 34% below AMI) in Warren County, VA to $137,216 (or 28% higher than AMI) in Arlington County, VA. Given the current AMI-based rule, the VLI income threshold is established at $53,750 (50% of AMI) for all the counties included in the Washington DC metro area. As such, a household with an income much higher than 50% of the county level median income in Warren County might still qualify as VLI. While a household earning below 50% of the county level income in Arlington might not qualify as VLI. The dispersion in income across counties in MSAs indicates that the policy assumption should include more granular information rather than defining income thresholds using MSAs as proxies. While sampling issues become trickier the more granular the data, to the extent that data is reasonably robust and consistent with intuition, it makes sense to use it, especially if it will lead to more equitable allocation of capital. Use of granular level data, such as county level income data or adjustments for the high-income areas, might help reduce the gap associated with income dispersion in large metro areas.
The importance of the granularity becomes more imperative as the rent-to-income relationship varies across the regions. Despite the strong dependence of rents on income, rents are a function of other key variables, too. As such, a threshold based on a more granular level of income might still be biased towards areas with a low rent-to-income ratio. For example, the county level median income in Johnson County (KS, Kansas City metro), Lake County (IL, Chicago metro), and Contra Costa County (CA, San Francisco metro) was around $90,000 in 2012. As such, affordable policy thresholds are nearly the same for these counties. However, the gross median rents in these counties were $880, $990, and $1310\(^\text{11}\), respectively. Clearly, the policy makes it relatively easier for low market rent areas (e.g. Johnson County) to qualify for GSE funds, and much more difficult for the properties in the higher market rent areas (e.g. Contra Costa County). Therefore, adjustments to reflect the market condition in high rent-to-income areas might help direct more funds to these areas.

Finally, we find that the bedroom adjustment assumptions underlying the current policy rule are not equally applied. The policy uses flat multipliers across the nation to adjust for bedroom-size. However, similar to the relationship between income and rent, the relationship between the rents for different bedroom-size units varies based on location. As such, in some areas smaller units (0 or 1 bedrooms) would qualify as affordable whereas larger units (2 bedrooms and larger) would not. The use of different multipliers for these areas might help direct funding toward units with higher bedroom-size. As it is

\(^{11}\) Moody’s Analytics Economy.com; FHFA provided AMI for GSEs.
likely that these units are rented by larger households, the effectiveness of the policy might increase as a result of such adjustment.

**Small Area Fair Market Details**

It is clear that further improvements to the policy rules can be made by establishing thresholds based on more granular geographical areas. In addition, moving from income-based threshold directly to rent-based may help to overcome the issue related to the use of parameters transforming income into rent. The importance of the granularity and the use of rent data have also been recognized by HUD in Section 8 Housing Choice Voucher program that uses Fair Market Rent (FMR) as the threshold. FMRs are generally set at the 40th percentile of the metropolitan gross rent distribution; as such these are more general metrics. However, to make a broader range of neighborhoods accessible to Public Housing Agencies, HUD has implemented a methodology in recent years that would use small areas. The small areas are defined by U.S. Postal Service ZIP codes, and generally are estimates for 40th percentile of the area’s rent distribution. As small area FMR is at ZIP code level, they provide much more granular information about the rents.

In this section, we will measure the effects of using HUD-established Small Area Fair Market Rents (SAFMR) instead of AMI as the basis for the rules on affordable housing. In this analysis, rents at funded units would be evaluated based on the SAFMR instead of the threshold established based on AMI. Establishing threshold based on granular level fair market rent, rather than income, will allow direct comparison of rents in funded properties to the 40th percentile of local rents. This will assure qualifying properties will have rents that are relatively low in their location.

The difference in SAFMR and AMI-based rent thresholds is illustrated in Exhibit 10, contrasting the thresholds for one-bedroom units based on these two metrics in the St. Louis and New York Metro areas. The exhibit makes clear that current rules favor St. Louis generally relative to New York. Those areas shaded in green have fair market rents below the AMI threshold for VLI households, those in gray are between the VLI and LI thresholds, and those in purple are above the LI (and hence VLI) thresholds. Notice that in a vast majority of St. Louis, where rents are relatively low compared to income, fair market rents are below the AMI-based threshold for VLI households and the entire metro is below the threshold for LI households. While in New York, only areas on the outskirts have rents that are below the AMI-based threshold for VLI households, and the majority of the area experiences fair market rents above the thresholds for LI households. The implication is that proportionally more properties would qualify for affordable funds in St. Louis than in New York under the AMI policy.

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12 See the Small Area FMR Methodology document at http://www.huduser.org/portal/datasets/fmr.html.
However, a policy based on SAFMR criteria could allow equal distribution of funds to all areas within a specific city or region.

**Exhibit 10: SAFMR for Single-Unit Housing Relative to AMI-Based Threshold for VLI and LI Households: St. Louis Metro (left) and New-York Metro (right)**

Source: Housing and Urban Department Small Area Fair Market Rent; FHFA provided AMI for GSEs; Moody’s Analytics Economy.com

Exhibit 11 further contrasts SAFMR and AMI-based thresholds showing the benefit associated with using granular data. Fair market rents by zip codes are compared to the AMI thresholds in Los Angeles (on the left) and Minneapolis (on the right) for one-bedroom units. The AMI-based threshold for VLI is below the fair market rent in all zip code areas in the Los Angeles metro, meaning the effective threshold in LA is now below the 40th percentile of local rents. Furthermore, it is evident that in many zip codes the current AMI-based threshold is far below the 40th percentile of the rent. While we do not have a detailed rent distribution to determine the percentile at which rent corresponds to the AMI-based threshold, in many zip codes (toward the left) the 40th percentile of the rent is still 2-3 times higher than the AMI-based VLI threshold. In other words, only properties with extremely low rent would qualify under AMI-based criteria in these zip codes.

The story is much different in Minneapolis: the AMI-based VLI threshold is more than 20% above the 40th percentile of the rent in many zip code areas in Minneapolis (toward the right). As such, even high end rental units in these areas are likely to qualify as affordable units under the current rule, i.e. properties with rents higher than the neighborhood average. Like for the St. Louis metro, SAFMR is below the threshold for LI households throughout the metro.
Exhibit 11: SAFMR for Single-Unit Housing Relative to AMI-Based Thresholds for VLI and LI Households: Los Angeles Metro (left) and Minneapolis Metro (right)

Source: Housing and Urban Department Small Area Fair Market Rent; FHFA provided AMI for GSEs; Moody’s Analytics Economy.com

We are not evaluating all of the strengths and weaknesses of SAFMR here, but it is clear that using this data from HUD is more precise in targeting markets across the country and locally.

Another advantage of SAFMR is its better representation of rents for unit types within the area, as fair market rents are available for units with 0 to 4 bedrooms. The AMI based standard applies constant factors to the threshold to determine the rent threshold for unit types. However, similar to the relationship between the rent and income, the constant factors are average metrics and many markets fail to reflect the actual differences between the rents for various unit types. For example, rents for two-bedroom units in Birmingham, AL are 25% higher than for studios; while in Philadelphia, PA; Sacramento, CA; and Chicago, IL rents are 40%, 50% and 70% higher, respectively. Exhibit 13 compares the implication of AMI and SAFMR-based standards Fort Worth, TX and Columbus, OH, which have similar AMI. Because of the universal method for establishing thresholds in the AMI-based policy, the thresholds for various unit types are almost the same for both areas. However, two-bedroom rents are much higher in Fort Worth than in Columbus. As such, two-bedroom units in Columbus are more likely to meet the policy criteria than those in Fort Worth under the AMI-based rule. The SAFMR-based standards accounts for the rent differentiation across unit types and provides more accurate standards for all unit types to qualify for GSE’s funds.
Exhibit 13: Comparison of AMI and SAFMR-Based Criteria across Studio and 2-Bedroom Units, in Fort Worth, TX and Columbus, OH.

<table>
<thead>
<tr>
<th>City</th>
<th>AMI</th>
<th>0-bedroom VLI threshold based on AMI</th>
<th>2-bedroom VLI threshold based on AMI</th>
<th>SAFMR for 0-bedroom</th>
<th>SAFMR for 2-bedroom</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fort Worth, TX</td>
<td>$67,500</td>
<td>$591</td>
<td>$759</td>
<td>$570</td>
<td>$860</td>
</tr>
<tr>
<td>Columbus, OH</td>
<td>$67,900</td>
<td>$594</td>
<td>$764</td>
<td>$400</td>
<td>$650</td>
</tr>
</tbody>
</table>

Source: Housing and Urban Department Small Area Fair Market Rent; FHFA provided AMI for GSEs; Moody’s Analytics Economy.com; Freddie Mac data. Bedroom adjustment factors are 70% and 90% for 0-BR and 2-BR, respectively, in the AMI approach as discussed above.

Section 4 – Conclusion

The affordable problem continues to grow and has been exacerbated during the Great Recession. The issue needs to be continuously monitored and updated to reflect changes in the economy and multifamily sector. Current policies extend support to low income households lowering the rent burden. However, there are some assumptions underlying the policy that could be improved to better support affordable markets and renters. With a fresh look at affordable policy rules, we can better serve the rental housing community within our means of debt capital funding. Establishing assumptions at a more granular level could ensure that capital is allocated more equitably and will enable the GSEs to better support the nation’s renters. Using a small area fair market rent-based standard can be a viable alternative for income-based policy rule, as it provides the needed granularity and overcomes the challenges in income to rent conversion.

The examples discussed above supported the assertion that granularity in the assumptions can help achieve more affordable housing. Furthermore, rent-based rules might help avoid the difficulties in the income to rent conversion process. Using SAFMR thresholds might direct more funding towards the high rent areas and provide more support to low and very low income households, especially those with large families needing larger units to rent.
Appendix:

Exhibit A1: Share of Renter Households Spending 30% or More on Rent: by State, and 1980 vs. 2011

Source: American Community Survey; Decennial Census; usa.ipums.org
Note: Data excludes zero, negative, or missing income and no-cash rent categories.

Exhibit A2: Share of Income Spent on Gross Rent: by State, and 1980 vs. 2011

Source: American Community Survey; Decennial Census; usa.ipums.org
Note: Data excludes zero, negative, or missing income and no-cash rent categories.
References:

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