

June 28, 2022

## **Research Memorandum**

To: House Financial Services Committee Members and StaffFrom: Americans for Financial ReformRe: Estimate of Private Equity Ownership of Housing Units

**Summary:** Private equity firms have become some of the country's biggest corporate landlords. Americans for Financial Reform estimated that as of June 2022 at a minimum private equity firms owned real estate rented by around **1.6 million families**, including at least **1,071,056** apartment units, **275,468** manufactured home lots, and over **239,018** single-family rental homes. Because of private equity's deliberate opacity, these numbers most likely understate private equity ownership. They also certainly understate the impact of that ownership, as the level of ownership at a point in time does not capture properties that moved in and then out of private equity ownership and where tenants and residents have been impacted by their practices. It is also important to underscore that private equity is only one form of Wall Street ownership of residential real estate, so this data show only a segment of that larger—and also deliberately opaque—total.

## I. Background:

Private equity firms have poured billions into creating vast rental portfolios of single-family homes, apartments, and manufactured-home communities—including by, in the aftermath of the foreclosure crisis, purchasing properties in bulk directly from Fannie Mae and Freddie Mac and, since 2017, by using guarantees by the government-sponsored entities to access cheaper financing than they would otherwise receive. As their portfolios expand, millions of families have become tenants of private equity landlords who frequently exploit tenants to squeeze them out of every possible dollar.

Americans for Financial Reform estimated a minimum number of housing units owned by private equity firms and their affiliates in 2022. This estimate includes private equity firms, private equity-backed firms, firms that offer private equity real estate funds, or firms with other private equity co-investors or joint ventures. It does not include other non-private equity corporate or institutional investors—e.g., non-private-equity REITs, hedge funds, and other asset managers—that have traditionally participated in or are now fueling the corporatization of the housing sector.

There are a few publicly-traded private equity companies—e.g. Blackstone, Carlyle, Apollo, KKR—that are subject to SEC rules and regulations including periodic disclosure requirements. But by and large the private equity industry thrives by exploiting exemptions and loopholes in securities law and fostered by decades of deregulation in private markets. The lack of

Americans for Financial Reform 1615 L ST NW, Suite 450, Washington DC, 20036 transparency to investors, regulators, and the public about what private equity firms hold makes it difficult to get the full picture of their portfolio holdings and means that this estimate is conservative in that it likely understates actual holdings.

# II. Findings:

• **Private equity firms owned an estimated 239,018 rental single-family homes** across the country as of June 2022 (see Table 1).<sup>1</sup> Private equity buyers accounted for about two-thirds of the institutional investors that owned rental homes (which includes publicly traded firms like Invitation Homes and American Homes for Rent).<sup>2</sup> Nationwide, private equity owns about 1 out of 60 rental homes (1.6 percent).<sup>3</sup>

Private Equity Firm	Rental Company	Single-Family Homes
Pretium Partners /Ares Management	Progress Residential	80,000
Blackstone	Tricon American Homes (\$300M stake)	31,032
	Home Partners of America	23,724
Cerberus Capital	FirstKey Homes	35,899
Amherst Securities/Stone Point Capital	Amherst Residential	33,219
Access Capital	Vinebrook Homes	21,144
Brookfield Asset Management	Conrex Property Management (Connorex-Lucinda)	10,000
Lafayette Real Estate	Lafayette RE	3,000
Prager Group	Prager Property Management	1,000
Total Private Equity Single-Family Rentals		239,018

### Table 1: Private Equity-Owned and -Backed Single-Family Rental Companies, June 2022

Sources: Amherst Capital, Pitchbook, corporate websites, SEC disclosures and media coverage (see footnote 1).

This nationwide figure conceals much higher ownership levels in many places.<sup>4</sup> Institutional investors, including PE firms, have become dominant players in a number of metropolitan areas.

<sup>&</sup>lt;sup>1</sup> Progress Residential: Parker, Will. <u>Home Depot Executive Adolfo Villagomez to Be New CEO of Progress</u> <u>Residential</u>. *The Wall Street Journal*. May 17, 2022. Accessed June 26, 2022; Tricon: Tricon Residential [website]. <u>Investors</u>. Updated as of March 31, 2022. Accessed June 26, 2022; Tricon Residential. [Press release]. "<u>Tricon</u> <u>announces \$300 million investment led by Blackstone Real Estate Income Trust, Inc.</u>" August 27, 2020; Home Partners of America: Blackstone Real Estate Income Trust, Inc. (BREIT). <u>Form 10-Q for the Quarterly Period</u> <u>Ended March 31, 2022</u>. At pp. 38-39.; Amherst Residential and FirstKey: House Financial Services Committee Longitudinal Survey, see Appendix I to the Committee Memorandum for the June 28, 2022 Subcommittee on Oversight & Investigations hearing entitled, "Where Have All the Houses Gone? Private Equity, Single Family Rentals, and America's Neighborhoods;" <u>Vinebrook: VineBrook Homes Trust, Inc.</u>; Form 10-Q for the quarterly period ended March 31, 2022. At p. 10.Conrex: Clark, Patrick and Gillian Tan. "Brookfield bets on single-family rentals with \$300 million fund." *Bloomberg*. July 21, 2020; Lafayette and Prager: Amherst. "<u>U.S. Single-Family</u> <u>Rental: 2020 Institutional Activity.</u>" March 2021 at p. 3.

<sup>&</sup>lt;sup>2</sup> Amherst Capital. "U.S. Single-Family Rental: 2020 Institutional Activity." March 2021 at 2; Grant, Peter. "Blackstone bets \$6B on buying and renting homes." *Wall Street Journal*. June 22, 2021.

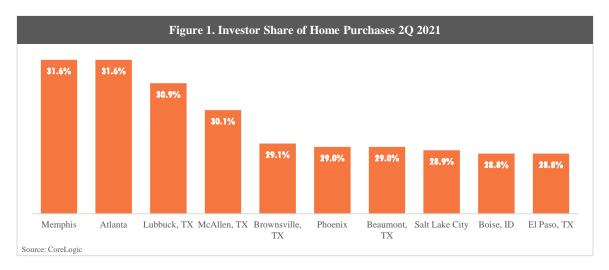
<sup>&</sup>lt;sup>3</sup> Assuming 15.3 million single-family rentals, see: Joint Center for Housing Studies of Harvard University.

<sup>&</sup>quot;<u>America's Rental Housing 2022.</u>" January 21, 2022 at p. 16.

<sup>&</sup>lt;sup>4</sup> Lopez, Sofia. Action Center on Race and the Economy. "<u>How Private Equity Landlords are Changing the Housing</u> <u>Market.</u>" Testimony before the Senate Banking, Housing, and Urban Affairs Committee. October 21, 2021 at 6.

In 2020, institutional investors owned 1 in 9 rental homes in Charlotte, 1 in 10 in Tampa, and 1 in 12 in Atlanta.<sup>5</sup> In some neighborhoods in Atlanta, institutional investors own one-fifth of all the houses.<sup>6</sup>

In some markets, investors have been buying a far greater share of homes that come up for sale. In Memphis, Atlanta, and Lubbock and McAllen, Texas, investors bought more than 30 percent of the single-family homes in the second quarter of 2021 (see Figure 1).<sup>7</sup>



Private equity and other corporate investors are now—again—targeting Black communities coming out of a (pandemic) crisis. In 2021, 1 in 3 home purchases in majority Black Zip codes went to corporate investors, compared to only 12 percent (1 in 8) in other Zip codes, according to a *Washington Post* analysis of Redfin data.<sup>8</sup> These investments in single-family homes have been making it harder for first generation homebuyers to purchase homes, especially Black and Latinx families.<sup>9</sup> In Memphis, the county assessor found that the 7,000 homes bought by Wall Street investors in 2019 and 2020 squeezed out new homebuyers and widened the racial wealth gap for the Black families who make up two-thirds of the population.<sup>10</sup>

These purchases are largely driven by resurgent private equity investments. Blackstone sold its Invitation Homes rental home company in 2019, earning \$7 billion, double what it put into the company.<sup>11</sup> In 2021, Blackstone re-entered the single-family rental space by buying up Home

<sup>7</sup> Malone, Thomas. CoreLogic. "Single-family investor activity surges in the second quarter." October 8, 2021.

<sup>&</sup>lt;sup>5</sup> Mari, Francesca. "<u>A \$60 billion housing grab by Wall Street.</u>" *New York Times Magazine*. March 4, 2020.

<sup>&</sup>lt;sup>6</sup> Semuels, Alana. "When Wall Street is your landlord." The Atlantic. February 13, 2019.

<sup>&</sup>lt;sup>8</sup> Schaul, Kevin and Jonathan O'Connell. "<u>Investors bought a record share of homes in 2021. See where</u>." *The Washington Post.* February 16, 2022. Accessed May 5, 2022.

<sup>&</sup>lt;sup>9</sup> White, Martha C. "<u>Biden is aiming to make home buying easier. But keeping Wall Street out could be a heavy</u> <u>lift.</u>" *NBC News.* October 6, 2021; Gutierrez, Gabe. "<u>Investment Companies pricing out homebuyers.</u>" *NBC Nightly News.* October 6, 2021.

<sup>&</sup>lt;sup>10</sup> Powell, Alisha. "<u>Home buying competition from investors could impact the Black-white wealth gap in Shelby</u> <u>County.</u>" *The Grio.* October 16, 2021; U.S. Census Bureau. <u>Quick Facts: Memphis city, Tennessee; United States</u>. Accessed May 5, 2022.

<sup>&</sup>lt;sup>11</sup> Ajamy, David. "Blackstone sells last of its stake in rental home business, WSJ reports." November 21, 2019.

Partners of America for \$6 billion and expanding its portfolio from 17,000 to 23,724 homes and also making a \$300 million investment in the 31,000-home Tricon Residential.<sup>12</sup> Brookfield Asset Management took a \$300 million controlling stake in Conrex and its portfolio of over 10,000 single-family rentals in 2020.<sup>13</sup> Pretium Partners, owner of more than 80,000 rental homes through its Progress Residential company and other subsidiaries, launched a \$700 million joint venture with the Canadian pension fund PSP Investment to buy more U.S. homes across the Southeast and Southwest.<sup>14</sup>

Even more private equity firms are getting into the rental house game. In 2021, private equity giant KKR launched My Community Homes, which will buy and rent single-family homes.<sup>15</sup> Rockpoint Group launched a \$250 million joint venture with Resicap that aims to purchase 9,500 single-family rental homes, already holding 2,000 homes by November 2021.<sup>16</sup>

Private equity is also partnering with the homebuilding industry to construct homes as single-family rental housing—a strategy the industry refers to as "build to rent" and a big change from builders aiming to sell homes to families.<sup>17</sup> Allianz Real Estate and Centerbridge, for example, formed a joint venture with homebuilder Lennar to buy \$4 billion of newly constructed single-family homes for rental properties.<sup>18</sup>

• **Private equity firms own at least 1 million apartment units** around the U.S. as of June 2022 (see Table 2).<sup>19</sup> Private equity owns garden apartment complexes, luxury high-rises, older apartment buildings, senior housing, and student apartment buildings. Private equity owns around 3.6 percent of all apartments in the country—about one out of every 26 apartment listings.<sup>20</sup>

<sup>&</sup>lt;sup>12</sup> Blackstone RealEstate IncomeTrust (BREIT). <u>2021 Annual Report</u>. March 16, 2022. Accessed May 6, 2022; Tricon Residential. [Press release]. "<u>Tricon announces \$300 million investment led by Blackstone Real Estate</u> <u>Income Trust, Inc</u>." August 27, 2020; Grant, Peter. "<u>Blackstone bets \$6B on buying and renting homes.</u>" *Wall Street Journal*. June 22, 2021.

<sup>&</sup>lt;sup>13</sup> Clark, Patrick. "<u>Brookfield bets big on single-family rentals with \$300 million fund.</u>" *Bloomberg*. July 21, 2020. <sup>14</sup> https://pretium.com/psp-investments-and-pretium-announce-joint-venture-to-invest-in-single-family-rentals/

<sup>&</sup>lt;sup>15</sup> Clark, Patrick and Gillian Tan. "<u>KKR makes new single-family bet as Wall Street piles in.</u>" *Bloomberg*. June 24, 2021.

<sup>&</sup>lt;sup>16</sup> Rockpoint Group, LLC. [Press release]. "<u>Rockpoint Group announces \$250 million single-family rental joint venture with Resicap.</u>" October 19, 2020; Rockpoint Group. [Press release]. "<u>RESIVAP and Rockpoint Group expand joint venture strategies.</u>" November 15, 2021.

<sup>&</sup>lt;sup>17</sup> Berke, Michael. "<u>Private equity and home builders align to accelerate and transform the industry.</u>" *Builder*. May 13, 2021.

<sup>&</sup>lt;sup>18</sup> Ziady, Hanna. "<u>Wall Street is buying up family homes. The rent checks are too juicy to ignore.</u>" *CNN*. August 2, 2021.

<sup>&</sup>lt;sup>19</sup> AFREF analysis of PE-backed apartment owners identified through Pitchbook, corporate websites, and media accounts, and includes private equity firms, private equity backed firms, firms that offer private equity real estate funds, or firms with other private equity co-investors or joint ventures. National Multifamily Housing Council. <u>2021</u> <u>NMHC 50 Largest Apartment Owners</u>. 2021; Blackstone Real Estate Income Trust, Inc. (BREIT). Form 10-Q for the Quarterly Period Ended March 31, 2022. At pp. 38-39.

<sup>&</sup>lt;sup>20</sup> Assuming 30.1 million apartments, see: Joint Center for Housing Studies of Harvard University. "<u>America's</u> <u>Rental Housing 2022.</u>" 2022 at p. 16.

Private Equity Investor	Apartment Units in 2022
Blackstone Group	176,777
Starwood Capital Group	115,056
Greystar Real Estate Partners	80,121
Nuveen Real Estate (formerly TH Real Estate)	69,714
PGIM Real Estate	64,083
J.P. Morgan Asset Management	51,618
FPA Multifamily	42,335
GID	40,913
Invesco Real Estate	40,614
TruAmerica Multifamily, LLC	39,493
Heitman	33,977
American Landmark Apartments (Electra America)	33,303
Knightvest Capital	32,984
Peak Capital Partners	30,754
AEW Capital Management, L.P.	30,320
Eaton Vance Management	30,300
Carroll Organization	27,019
Northland Investment Corporation	26,519
Sentinel Real Estate Corporation	26,500
JRK Property Holdings	26,464
The NRP Group (Angelo, Gordon & Company	26,117
Security Properties	26,075
Total Private Equity Apartments	1,071,056

### Table 2. Private Equity-Backed Apartment Companies, June 2022

Source: National Multifamily Housing Council 2020 50 Largest Apartment Owners; Pitchbook; and company reporting.

In some cases, the private equity investments were facilitated by publicly-subsidized loans from the government-sponsored enterprises Fannie Mae and Freddie Mac that have a statutory mandate to encourage affordable housing, but the predatory practices of private equity landlords have undermined that goal. A ProPublica investigation found that private equity firms account for 85 percent of Freddie Mac's 20 biggest deals financing purchases of buildings by a single borrower.<sup>21</sup>

• Private equity firms and their affiliates own an estimated 275,468 manufacturedhome sites as of June 2022 (see Table 3).<sup>22</sup> While private equity national ownership is somewhat diluted in the vast rental home and apartment markets, PE firms control around

<sup>&</sup>lt;sup>21</sup> Vogell, Heather. "When Private Equity Becomes Your Landlord." ProPublica. February 7, 2022.

<sup>&</sup>lt;sup>22</sup> AFR analysis of data from Mobile Home Park Owners Allegiance. "<u>A-Z Partial Listing of MHC Owners in the</u> <u>United States.</u>" 2022. Accessed June 2022; private equity ownership based on Pitchbook investor and company data.

13 percent of all manufactured home lots, collecting rents from one in eight manufactured home residents.<sup>23</sup>

Private Equity Firm	Manufactured Housing Firm	Units
Brookfield Asset Management	RHP Properties	73,900
Stockbridge Capital Group	YES! Communities/Four Leaf Properties	54,000
Federal Capital Partners	Horizon Land Company	34,900
TPG	Strive Communities/ MHP Funds*	28,000
Calzada Capital Partners	Hometown America	24,350
Blackstone Group	Treehouse Communities, Summit Communities	16,143
Apollo Global Management	Inspire Communities	13,000
Havenpark Capital	Havenpark Communities	7,500
Green Courte Partners	Homefirst Communities	5,175
Riverstone Growth Partners	Riverstone Communities	7,500
West Partners	Home Source One/ Asset Development Group	6,000
Carlyle Group		5,000
Total Private Equity MH Sites		275,468

### Table 3: Private Equity Ownership of Manufactured-Home Sites, June 2022

Source: Mobile Home Park Owners Allegiance; Pitchbook.

Private equity firms own very different kinds of residential rental properties—apartment buildings, single-family homes, and manufactured home communities—but tenants in all property types face similar strategies that harm families and extract economic value:

• *Private equity landlords raise rents:* Private equity owners frequently steeply raise rent shortly after purchasing properties. Tenants at private equity-owned single-family rental homes have faced rent hikes much higher than the national average—rising 8 percent annually during the pandemic compared to the 5.4 percent national average.<sup>24</sup> The average rent at Blackstone-owned apartments and manufactured homes has risen 12 percent during the pandemic, adding over \$1,600 in annual rent costs for families from 2019 to 2021.<sup>25</sup> Blackstone notes these rent averages exclude tenant recoveries (which means fees and penalties).<sup>26</sup>

<sup>&</sup>lt;sup>23</sup> Assuming 2.1 million home sites, see: Joint Center for Housing Studies of Harvard University. "<u>America's Rental</u> <u>Housing 2022.</u>" 2022 at p. 16.

<sup>&</sup>lt;sup>24</sup> Clark, Patrick. "<u>Rent surges on single-family homes with landlords testing market.</u>" *Bloomberg News*. May 7, 2021; Lerner, Michelle. "Rents on the rise as pandemic pricing disappears." *The Washington Post*. June 16, 2021.

<sup>&</sup>lt;sup>25</sup> Blackstone Real Estate Income Trust, Inc. (BREIT). <u>U.S. Securities and Exchange Commission (SEC) filing 10-</u>

Q. September 30 at 33; BREIT. <u>SEC filing 10-Q</u>. September 31, 2021 at p. 41. <sup>26</sup> *Ibid*.

- *Private equity landlords impose new fees and charges:* Private equity landlords exploit their tenants by imposing an often-dizzying array of new fees. These include unavoidable new fees to use mandatory digital rental payment platforms, administration fees, processing fees, fraudulent late fees that quickly pile up (and can be illegal), lease termination fees, maintenance fees, and new fees for previously free amenities.<sup>27</sup> These fees further increase overall housing costs for tenants, while disputing frivolous fees is time-consuming, stressful, and costly and can trigger eviction. For example, fees and tenant clawbacks—like keeping tenants' security deposits—generated at least \$26 million for Colony Starwood Homes (now called Starwood Waypoint Homes).<sup>28</sup>
- *Private equity landlords skimp on upkeep:* Renters often struggle to get their landlords to make needed repairs to their homes, but those renting from private equity seem to face higher hurdles to get needed repairs—even those that pose health and safety risks—addressed. Tenants at Pretium Partners-owned HavenBrook Homes in Minnesota found it almost impossible to get significant health and safety issues addressed—including no heat in the winter, overflowed sewer systems, broken doors and windows, mold, and other issues that often make HavenBrook homes "uninhabitable for tenants," according to a Minnesota Attorney General lawsuit.<sup>29</sup> When Blackstone owned the single-family rental company Invitation Homes (which it sold in 2019), tenants faced "leaky pipes, vermin, toxic mold, nonfunctioning appliances and months-long waits for repairs," according to a *Reuters* investigation.<sup>30</sup>
- *Private equity landlords aggressively pursue tenants in court—including pandemic evictions:* Private equity landlords rapidly file eviction proceedings against tenants even for minor infractions. "If you're even a day late on your rent payment, you're likely to see some kind of eviction notice" from private equity landlords, according to Georgia State University professor Dan Immergluck.<sup>31</sup> A 2017 Federal Reserve Bank of Atlanta study found that private equity owners were 8 percent more likely to evict tenants than smaller landlords—some private equity firms moved to evict nearly one-third of their tenants annually.<sup>32</sup> A 2018 study of evictions in Memphis, TN—where two-thirds of the

<sup>&</sup>lt;sup>27</sup> Myklebust, Sara et al. Bargaining for the Common Good, the Institute for Policy Studies, Americans for Financial Reform Education Fund. "Cashing in on Our Homes: Billionaire Landlords Profit as Millions Fact Eviction." March 2021 at 17, 18, 24, 30, 31, and 33.

 <sup>&</sup>lt;sup>28</sup> Mari, Francesca. "<u>A \$60 billion housing grab by Wall Street</u>." New York Times Magazine. March 4, 2020.
<sup>29</sup> The Office of Minnesota Attorney General Keith Ellison. <u>Attorney General Ellison sues HavenBrook Homes, one</u>

of the largest landlords in Minnesota, for failing to repair rental homes, violating law. Press Release. February 10, 2022.

<sup>&</sup>lt;sup>30</sup> Conlin, Michelle. "Spiders, sewage and a flurry of fees—the other side of renting a house from Wall Street." *Reuters*. July 27, 2018.

<sup>&</sup>lt;sup>31</sup> Champlin, Caroline. "<u>Pandemic puts more rental properties in private equity hands.</u>" *NPR Marketplace*. October 21, 2021.

<sup>&</sup>lt;sup>32</sup> Raymond, Elora et al. Federal Reserve Bank of Atlanta. "<u>Corporate Landlords: Institutional Investors, and</u> <u>Displacement: Eviction Rates in Single-Family Rentals.</u>" December 1, 2016.

population is Black—<sup>33</sup>found that rental homes from FirstKey, a portfolio company of Cerberus Capital Management, "consistently have a higher rate of eviction filings than other single-family rentals in the same areas."<sup>34</sup> The Private Equity Stakeholder Project found that corporate landlords, including private equity firms, filed nearly 170,000 eviction notices in six states against tenants from the beginning of the pandemic until the end of 2021.<sup>35</sup> During that time, aggressive eviction harassment, which can be a tactic to push out existing residents to upgrade the units and get higher-paying tenants, fell heavily on renters of color, who were more likely to be behind on rent and reported higher rates of difficulty covering usual household expenses.<sup>36</sup> For example, Front Yard Residential and Progress Residential, both affiliates of private equity firm Pretium Partners, moved to evict in majority-Black counties at a higher rate than in mostly-white counties during the pandemic, according to another report examining court filings.<sup>37</sup>

For more than a decade, private equity landlords have been using these tactics to increase profits at the expense of residents' well-being. We estimate that there are at least 1.6 million families renting their homes from private equity landlords and millions more have rented from them in the past. The cumulative effect is a massive transfer of wealth from mainly low- and middle-income renters, who can't afford the onerous barriers to homeownership, to some of the wealthiest men in America.

### III. Methodology:

This estimate is based on a survey of corporate websites and disclosures from a selected number of private equity landlords for which reliable data is publicly available. Private equity ownership or backing was identified based on *Pitchbook* investor and company data and supplemented with corporate websites and media accounts. We include private equity firms, private equity-backed firms, firms that offer private equity real estate funds, or firms with other private equity co-investors or joint ventures. For SFR, we selected the private equity firms or affiliates from a list of the largest SFR institutional investors compiled by Amherst.<sup>38</sup> For apartment units, we based our analysis on the list of the 50 largest apartment owners regularly published by the National Multifamily Housing Council. For manufactured homes, the estimate is based on data from the

<sup>&</sup>lt;sup>33</sup> U.S. Census Bureau. <u>Quick Facts: Memphis city, Tennessee; United States</u>. Accessed May 5, 2022.

 <sup>&</sup>lt;sup>34</sup> Frankel, Todd C. and Dan Keating. "Eviction filings and code complaints: What happened when a private equity firm became one city's biggest homeowner." *The Washington Post*. December 25, 2018. Accessed May 5, 2002.
<sup>35</sup> Chang, Mellissa. Private Equity Stakeholder Project. "Record acquisitions and high evictions by corporate landlords in 2021 draw scrutiny from Congress." January 31, 2022.

<sup>&</sup>lt;sup>36</sup> Center on Budget and Policy Priorities. <u>Tracking the COVID-19 Economy's Effects on Food, Housing, and</u> <u>Employment Hardships</u>. Last updated October 2021. See Figures 6 and 10. Accessed May 5, 2022.

<sup>&</sup>lt;sup>37</sup> Sorensen, Pilar. Private Equity Stakeholder Project. "<u>PANDEMIC EVICTOR: Don Mullen's Pretium Partners</u> <u>Files to Evict Black Renters, Collects Billions From Investors</u>." April 2021. Accessed May 5, 2022.

<sup>&</sup>lt;sup>38</sup> Amherst estimates based on CoreLogic County Record and Transaction Data as of December 31, 2020. See: "<u>U.S. Single-Family Rental: 2020 Institutional Activity.</u>" March 2021 at p.3.

Mobile Home Park Owners Allegiance.<sup>39</sup> We only include companies for which a current number of units is available and exclude companies that have owned rental homes but disclose only the number of homes purchased over time, not their current holdings.

<sup>&</sup>lt;sup>39</sup> "<u>A-Z Partial Listing of MHC Owners in the United States.</u>" 2021. Accessed November 2021; private equity ownership based on Pitchbook investor and company data.