

**Joint Center for Housing Studies  
Harvard University**

**Enhancing Access to Capital for Smaller  
Unsubsidized Multifamily Rental Properties**  
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**March 2007**  
**RR07-8**

*Prepared for  
Revisiting Rental Housing: A National Policy Summit  
November 2006*

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## **Acknowledgement**

The authors thank Ren Essene and Rachel Drew for thier assistance on this paper.



## **Introduction**

Nearly one-fifth of the rental housing stock is in smaller, multifamily apartment buildings with between 5 and 49 units. Even though relatively large shares of these units are occupied by lower-income families, the overwhelming majority is unsubsidized, and many are at risk of loss due to disinvestment, and/or conversion to higher-income occupancy. Unfortunately, little is known about the property ownership, management, and financial condition of this housing. What is known suggests that the scale and value of these properties makes it difficult for the current owners to achieve economies in property management and to absorb the high fixed cost of gaining access to debt or equity capital needed to operate, maintain and preserve these units. Indeed, in a paper prepared for the Millennial Housing Commission, the Housing Finance Task Force noted that “financing for small multifamily properties (defined here as 5 to 49 unit properties) is one of the most significant gaps in the mortgage industry.”<sup>1</sup>

Drawing on previous work by Shekar Narasimhan,<sup>2</sup> this paper will explore the potential for developing innovative new housing and capital market strategies targeted to the small, unsubsidized multifamily rental stock. It will use the Residential Finance Survey and other data to examine the ownership, management and condition of the housing in 5 to 49 unit properties, both in general and in comparison to the situation confronting owners of properties with 50 or more units. In many ways, the distinction between 5 to 49 unit properties and those with 2 to 4 units is an artificial distinction created by the secondary market practice of combining single-family and 2 to 4 unit properties into a common category. Though they differ in terms of some aspects of financing, on the ground a 4 unit or 5 unit property have much in common. This paper will then underscore the importance of small multifamily rental properties, defined for this paper as multifamily properties with less than 50 units, in meeting the housing needs of low-income households and the special problems facing the owners of these properties face.

An important policy question is what it would take to expand access to capital for this segment of the housing market. Currently, this market niche is filled by depository institutions at a relatively higher cost to the borrower. Several factors have limited the willingness of equity investors to participate in this segment and have impeded the development of an active

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<sup>1</sup> The Millennial Housing Commission Finance Housing Task Force (October 1, 2001) Policy Option Paper addressing Small Multifamily Properties, <<http://govinfo.library.unt.edu/mhc/papers/smallmf.doc>>.

<sup>2</sup> Narasimhan, Shekar. (November, 2001) “Why Do Small Multifamily Properties Bedevil Us?” *Brookings Institute, Capital Xchange*. Original article can be found at : <<http://www.brookings.edu/printme.wbs?page=es/urban/capitalxchange/article8.htm>>.

secondary market in small multifamily mortgages. First, their size is an obstacle. Small multifamily loans lack the scale necessary to spread out the upfront costs of securitization across high volume pools. Second, many owners of these properties do not keep detailed accounts of income and expenses that capital market investors require. Finally, the secondary market imposes stricter underwriting standards and higher fees on a percentage basis even on owners with well-documented income and expense histories to compensate for the costliness of doing full due diligence.<sup>3</sup>

There is reason to believe that investment and lending in the small property market can be profitable. A number of creative lending institutions have engaged successfully with this sector, and the capital markets are now actively testing models.<sup>4</sup> Other new initiatives are under active consideration by industry leaders. These include expanding information sharing among lenders for benchmarking, improving mortgage insurance products, and creating a new rating system for small property owners akin to the credit scoring systems used to rate the likelihood that borrowers will repay home and consumer loans.<sup>5</sup>

Though most of the literature on small property finance focuses on debt, this paper will explore the possible role that equity side solutions could play. Shekar Narasimhan, for example, proposes the creation of a federally-sponsored small Real Estate Investment Trust (S-REIT) that would aggregate ownership of older, smaller multifamily properties with low or modest rents. While this S-REIT model has not been undertaken by the market, the concept makes economic sense. In order to test this proposition, this paper recommends piloting an S-REIT type aggregation strategy utilizing an Essential Function Bond approach as the structural components are in place to begin executing this structure without regulatory changes.

An S-REIT structure would allow properties to be financed on a portfolio rather than a property by property basis, and bring economies to scale and professional management to what is generally a poorly managed segment of the housing market. This model also holds the potential to improve the efficiency of federal subsidy mechanisms, for example by developing the

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<sup>3</sup> Herbert, Chris. (2001). "An Assessment of the Availability and Cost of Financing for Small Multifamily Properties." *Prepared by ABT Associates, Inc. for the US Department of HUD.*

<sup>4</sup> Examples of these lending institutions include Shorebank, see <<http://www.shorebankcorp.com>> and the Community Preservation Corporation <<http://www.communitycp.com/>>.

<sup>5</sup> Joint Center for Housing Studies. (February 16, 2006). From a focus session convening of leaders in the rental housing arena discussing "Improving Management and Capital of Mid-Sized Rental Property Owners and Developers."

potential for allocating Low-Income Housing Tax Credits at the institutional level and in doing so reduce the cost associated with allocating credits on a building by building basis.

### **The Continuing Importance of Small Multifamily Rental Housing**

While much of the housing preservation debate focuses on the subsidized inventory, the vast majority of low-income renters live in privately-owned, unsubsidized single-family and small multifamily rental housing. With new production increasingly focused on the construction of either single-family homes or larger apartment buildings with 50 or more units, much of the vitally important small multifamily inventory is at risk of loss to disinvestment, demolition and abandonment. Along with preservation of subsidized housing, preservation of unsubsidized but affordable rental housing must therefore be an important component of the nation's housing preservation agenda.

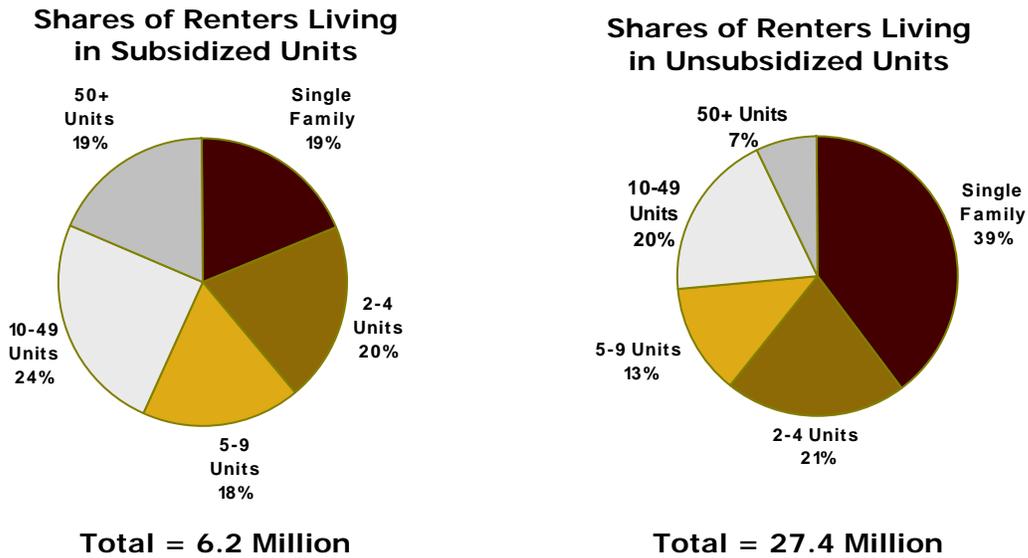
### **Most Renters Still Live in Smaller Structures**

Overall, the privately owned, unsubsidized rental housing inventory is home to more than 80 percent (27.4 million) of all renters and nearly two thirds (4.3 million) of the nation's lowest-income renters.<sup>6</sup> The vast majority of these unsubsidized rental units consist of single-family (including manufactured homes) and 2 to 4 family units that filtered down to the rental market, along with smaller apartment buildings of 5 to 49 units (Figure 1).

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<sup>6</sup> Note, lowest-income renters have incomes that fall in the lowest-quintile of the income distribution for renter households. See Joint Center for Housing Studies. (2006). "America's Rental Housing", Exhibit 26 and Appendix Table A-6.

**Figure 1: Most Renters Live in Single-Family Homes or Small Multifamily Apartments**



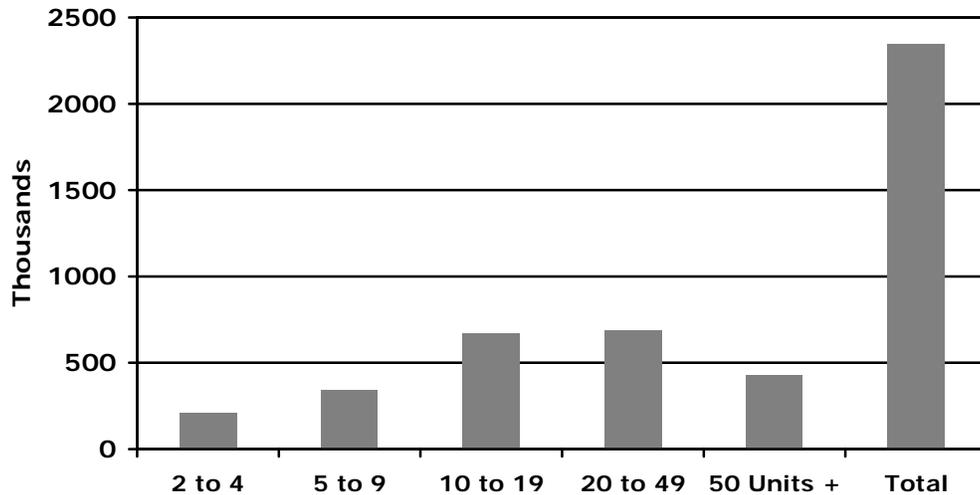
Note: Single-family units include manufactured housing  
Source: JCHS tabulations of the 2003 American Housing Survey

Even allowing for the many large publicly assisted housing complexes, over 39 percent of the assisted housing inventory is made up of single-family and 2 to 4 family homes and 42 percent live in 5 to 49 unit apartment buildings. These include units rented by voucher holders as well as public housing and project-based developments located in smaller metropolitan and non-metropolitan areas. Only one-fifth of assisted rentals are in buildings with 50 or more units. These larger properties are typically older public housing and project-based development, as well as newly built Low Income Housing Tax Credit (LIHTC) projects.

### **A Growing Share of New Construction Is In Larger Structures**

The dominance of small multifamily apartments persists despite the tendency for the building industry to focus on the construction of relatively high quality units in larger apartment buildings. Over the ten year period from 1994 to 2003, completions of multifamily rental units totaled 2.3 million. Of these, 1.1 million were in structures with 20 or more units, while another 1.1 million units were in apartment buildings with 5 to 19 units (Figure 2). Over the same period, completions of multifamily rentals homes in structures with two to four apartments – historically the mainstay of many urban rental markets - totaled less than 213 thousand.

**Figure 2: Nearly Half of All New Multifamily Rentals are in Buildings with 20 or More Units  
Units Completed, 1994-2003 (Thousands)**



Source: Joint Center for Housing Studies. (2006). “America’s Rental Housing: Homes for a Diverse America,” Table A-7.

In part, these trends reflect advances in construction technology, the high fixed costs linked to land acquisition and permitting, and a growing acceptance of apartment living, but growth of the LIHTC program has also played a role. HUD reports that the average project size of tax credit developments has increased steadily since the program’s inception and now stands close to 80 units. With half of all tax credit units located in developments with 50 or more units, the large multifamily structures have become the fastest-growing segment of the rental housing inventory. Indeed, between 1999 and 2004 alone, the share of rental construction in apartments with 50 or more units grew from 13 to 24 percent.<sup>7</sup>

Even accounting for the presence of tax credit units, the asking rents for newly constructed rental apartments is far above what the majority of renters can afford. Over the past ten years, the asking rent of new units moved up sharply to \$974, more than 37 percent above the median for all units. At the 30 percent-of-income standard, a household needs an income of \$38,000 to afford a newly built apartment. As a result, the vast majority of newly constructed rental apartments are well out of reach for the 14 million renter households with income less than \$20,000.

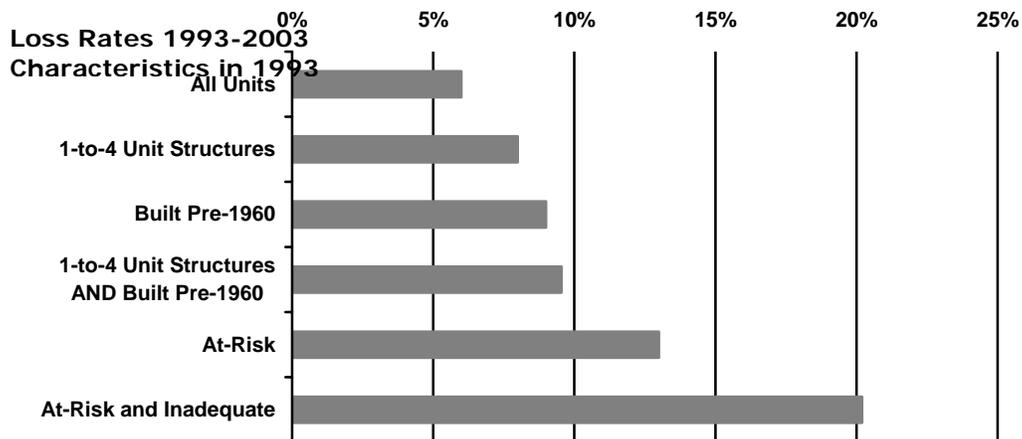
<sup>7</sup> Joint Center for Housing Studies, Harvard University. (2006). “State of the Nation’s Housing.”

### Much of the Affordable Small Multifamily Inventory is at Risk of Loss

With new construction focused on expanding the supply of more expensive apartments in large multifamily structures, the ongoing demolition and inventory losses of rental units in older small multifamily structures is rapidly depleting the available supply of affordable rental housing. Most of the privately-owned small multifamily rental stock was built at least 30 years ago when construction techniques and capital markets were less sophisticated and households were less affluent. Much of this inventory is now in need of substantial repair. According to the American Housing Survey, 3 million private market rental units have severe structural deficiencies and are at risk of loss.

Over the ten years beginning in 1994, an estimated 2.2 million rental units (6 percent) were demolished or otherwise permanently removed from the inventory (Figure 3). Over half of these rentals were in older (built before 1960) one to four-family buildings located in the nation's most distressed neighborhoods. As might be expected, loss rates are higher for properties with such additional risk factors as low rent, long-term vacancies, and structural deficiencies. For older, smaller multifamily units, these added risk factors push the loss rate to 13 percent. Combining all the risk factors including structural inadequacy pushes the loss rate to over 20 percent.

**Figure 3: Smaller, Older Rental Properties are Particularly at Risk of Removal**



Note: Loss rates defined as share of all units in 1993 that were reported as a Type C Non-Interview (permanent removal from stock) in 2003. At-risk units are those in 1-4 unit structures, built prior to 1960, and renting for under \$300, vacant for more than 6 months, and/or reported as severely inadequate. Single family structures include manufactured housing. Source: Joint Center for Housing Studies. (2006). Table A-10.

With new construction adding units mostly to the high end of the rent distribution, and inventory losses draining units of the low end, little wonder that the inventory of affordable rental units is declining rapidly. For the ten year period beginning in 1994, the number of units renting for \$400 or less in inflation adjusted terms fell by 13 percent – a loss of more than 1.2 million units. By comparison, the number of housing units renting for more than \$800 a month increased by 1.7 million over the same 10-year period.

### **The Changing Mortgage Environment**

The changing structure of the banking industry has had noticeable impact on the multifamily housing market. Like the single-family mortgage market, the past quarter century has seen dramatic shifts in the financing of multifamily apartments. Until the mid-1980s, local thrifts and savings banks were the largest providers. Following the industry shakeout from the Savings and Loan crisis of the 1980s, the historical role played by thrifts and savings banks in financing the acquisition and development of multifamily declined sharply, a trend that had particularly adverse consequences for the owners of smaller apartment buildings seeking financing. Indeed, by 2001, S&Ls provided just 17.2 percent of financing to properties with 5 to 49 units, compared to 36.9 percent in 1991.<sup>8</sup>

### **Utilization of Mortgage Financing Declines among Smaller Apartment Owners**

For the purposes of mortgage finance, the Federal Housing Administration (FHA) and the Government Sponsored Enterprises have defined “multifamily” to include structures with five or more units, while the term “single-family” lumps single-family detached homes together with two, three and four unit buildings. While the government-backed mortgage insurance programs and secondary market activities have greatly expanded access to capital for individual home buyers, they have done markedly less to expand access to capital for investors seeking purchase, rehab and/or build a two to four unit property or smaller apartment buildings. In particular, following the collapse of large segments of the Savings and Loan Industry in the 1980s and the rise of GSE financing in the 1990s, the mortgage market for multifamily apartment buildings has become bifurcated. As a result, by 2001, close to 90 percent of large apartment properties (those

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<sup>8</sup> U.S. Census Bureau (1991 and 2001) “Residential Finance Survey.” See: <http://www.census.gov/hhes/www/rfs/rfs.html>

with 50 or more units) had a mortgage, while less than 60 percent of apartment buildings with 5 to 9 units had a mortgage – below the 65.8 percent figure recorded in 1991 (Figure 4).

Over the 1990s, the combination of the economic stress of the small apartment sector of the housing market and the emergence of the GSEs as the primary source of apartment finance resulted in a dramatic decline in the number and share of smaller apartments with mortgages. According to the Residential Finance Survey, over the decade 1991 to 2001 the number of rental properties with 5 to 49 units fell by 15 percent (or from 557 thousand to 473 thousand). The declining share of smaller multifamily properties with mortgages further added to the overall decline in the size of the mortgage market for this segment, as the number of mortgaged apartment buildings with 5 to 49 units fell by more than 25 percent. Within the small multifamily segment, mortgage financing for 5 to 9 and 10 to 19 unit properties experienced the sharpest decline. The number of mortgaged properties with 5 to 9 units fell by 33 percent, while the number of mortgaged properties with 10 to 19 units declined 27 percent.

**Figure 4: Utilization of Fixed Rate Financing Expanded in the 1990s, Especially for Larger Multifamily Properties**

Number of Units in Structure	Share of Multifamily Properties with Mortgages		Share of Mortgages Properties with Fixed Rate Financing	
	1991	2001	1991	2001
5 to 9	65.8%	57.7%	57.6%	58.6%
10 to 19	74.6%	60.3%	61.6%	60.2%
20 to 49	81.4%	75.4%	56.6%	67.3%
50 to 99	87.2%	84.7%	63.1%	72.1%
100 to 199	88.6%	87.7%	66.4%	79.7%
200+	88.4%	85.8%	56.1%	78.5%
All	73.3%	63.7%	58.9%	63.7%

Source: Residential Finance Survey, 1991 and 2001.

## **The Rise of the GSEs**

During the 1990s, options for permanent financing of large properties expanded rapidly as secondary markets developed. Innovations in mortgage finance helped to stimulate multifamily production over the past decade. In particular, the share of multifamily mortgages (defined in the industry as loans on properties with five or more apartments) traded in the secondary market has more than tripled to over 30 percent, however growth was concentrated in mortgages for larger properties. The rising share of multifamily mortgage debt held in mortgage-backed securities, along with increased standardization of underwriting criteria and loan documentation, has created a larger, more stable, and less expensive supply of capital for developers and better diversification for investors. As a result, in 2001 the GSE funding accounted for approximately 39 percent of the mortgages made on all rental properties with 50 or more units, up sharply from the 1991 figure of less than 14 percent (Figure 5).

At the same time, the secondary market for construction and acquisition loans or financing of 5 to 49 units buildings has been slower to develop, in large measure because these loans often lack standardized features important to the securitization process. Even after a decade of growth, the Residential Finance Survey recorded that by 2001 GSEs served just 27.1 percent of all mortgages on properties with 5 to 49 units compared with 38.6 percent of all mortgages on properties with 50 or more units. Further, loans for smaller investment properties tend to be more expensive and have less favorable terms than loans on larger properties. The higher costs of financing, along with the lack of project-based subsidies, prevent owners from either investing in capital improvements or selling their properties to more capable owners.

In evaluating the expansion of GSE activity in the small multifamily market, it is important to note that the 2001 data reflect the impact of special “bonus points” designed to spur GSE involvement in small multifamily lending. In particular, from 2001 to 2003 GSE loans to owners of 5 to 49 unit properties serving lower-income renters received double credit in calculating GSE progress in meeting their federally mandated affordable housing goals. In a recent paper, William Manchester concluded that these bonus factors had the desired effect of expanding GSE activity in

the small multifamily market. Manchester also noted that these gains were short-lived and the GSEs, particularly Freddie Mac, pulled back once the bonus factors expired in 2004.<sup>9</sup>

For owners of larger apartments, the growing access to the secondary market provides significant advantages. Most securitized lending is fixed-rate, non-recourse, and intermediate to long term (10 to 30 years). For example, some 86 percent of all 200 unit apartment buildings have a mortgage, and some 79 percent of these mortgaged properties have longer term fixed-rate financing. In contrast, only 58 percent of the 5 to 9 unit apartments have a mortgage, and of these just 59 percent have longer-term fixed rate financing. In absolute terms, over the 1991 to 2001 period, the number of 5 to 9 unit apartments with longer-term fixed rate financing fell by a third to 88 thousand, while the number of 200 or more unit apartment buildings with longer-term fixed rate financing nearly doubled to over 10 thousand.

**Figure 5: GSEs Grow To Dominate the Multifamily Finance Market**

	Properties with 5 to 49 Units		Properties with 50 or More Units	
	1991	2001	1991	2001
<b>Commercial Bank</b>	23.0%	23.6%	17.3%	17.9%
<b>S&amp;Ls/FSB</b>	36.9%	17.2%	20.9%	11.0%
<b>GSEs</b>	5.5%	27.1%	13.8%	38.6%
<b>Life Ins.</b>	2.0%	3.0%	11.6%	4.7%
<b>State/Local HFA</b>	0.9%	4.0%	6.3%	7.0%
<b>Individuals</b>	13.4%	5.4%	4.7%	3.3%
<b>Other</b>	18.3%	19.8%	25.4%	17.6%
<b>Total</b>	100.0%	100.0%	100.0%	100.0%

Source: Residential Finance Survey, 1991 and 2001.

### **What Appears to be the Problem?**

The relatively low utilization of fixed rate mortgage products by the owners of smaller properties reflects both supply and demand side factors in the mortgage market. On the supply

<sup>9</sup> Paul B. Manchester. (May 30, 2006). “Effectiveness of HUD’s Housing Goal Incentives for Freddie Mac and Fannie Mae: Small Multifamily & Certain Single-Family Rental Properties”. A paper presented at the Midyear AREUEA Conference, National Association of Home Builders, Washington, DC.

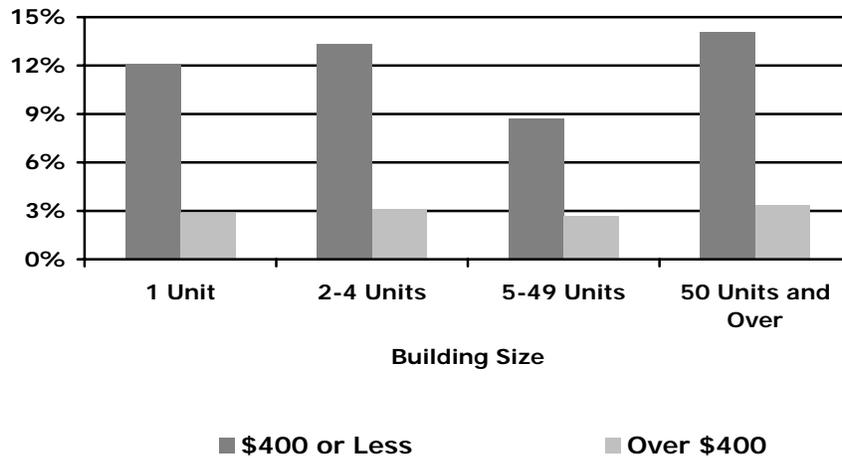
side, small properties pose significant challenges to a mortgage market that is increasingly driven by volume. In particular, a relatively large segment of the small apartment inventory is owned by thousands of individuals, including many cash flow investors/owners who are reluctant to assume the risk associated with debt financing and reduce their cash flow. The fragmented ownership structure makes it difficult to achieve the scale economies that are associated with many elements of property management. Finally, many owners of small rental properties appear to be motivated by a complex set of social and emotional issues that may adversely impact their willingness to assume longer term debt and/or sell a property that they lack the capacity to effectively operate.

### **Financing Small Multifamily Properties Presents Difficult Issues**

In part, there are many traditional lending reasons why accessing capital for financing small multifamily properties is legitimately more expensive. Many properties in this segment suffer from deferred maintenance that makes it difficult to charge rents that cover operating costs. Additionally, these older structures are typically energy inefficient and have faulty plumbing resulting in excessive water use, while many have limited cash flow. In 2001, the Residential Finance Survey data indicated that fully 12 percent of all rental properties with average rents of \$400 or less reported negative net operating income – an unsustainable condition that points to future accelerating losses of these low-cost units (Figure 6).

**Figure 6: Low Cost Units are at a Greater Risk of Loss<sup>10</sup>**

Percent of Properties with Negative Net Operating Income in 2001



Source: JCHS tabulations of the 2001 Residential Finance Survey.

Often, property owners with the ability to pay for debt service out of cash flow may be paying a premium for mortgage capital. Prospective investors or lenders often have difficulty establishing a property income valuation, assessing the property's physical condition, and ensuring that the property meets code requirements and regulations such as those governing lead paint. The general difficulties inherent in financing small, older properties that serve low-income markets are made greater by the fact that they are often located in deteriorating neighborhoods, making resale value difficult to judge. Compounding issues of overcrowding, code violations, tenant turnover, rent collection practices, lack of documentation, and problems associated with non-professional management make it difficult for prospective investors or lenders to assess the risk associated with the acquisition and/or finance of individual properties.

Finally, as noted earlier, there are several factors that have combined to impede the development of an active secondary market in small multifamily mortgages. First, their size is an obstacle. Small multifamily loans lack the scale necessary to spread out the upfront costs of securitization across high volume pools. Second, many owners of these properties do not keep detailed accounts of income and expenses that capital market investors require. Third, the secondary market imposes stricter underwriting standards and higher fees on a percentage basis

<sup>10</sup> Joint Center for Housing Studies, Harvard University. (2006). "State of the Nation's Housing", Figure 33.

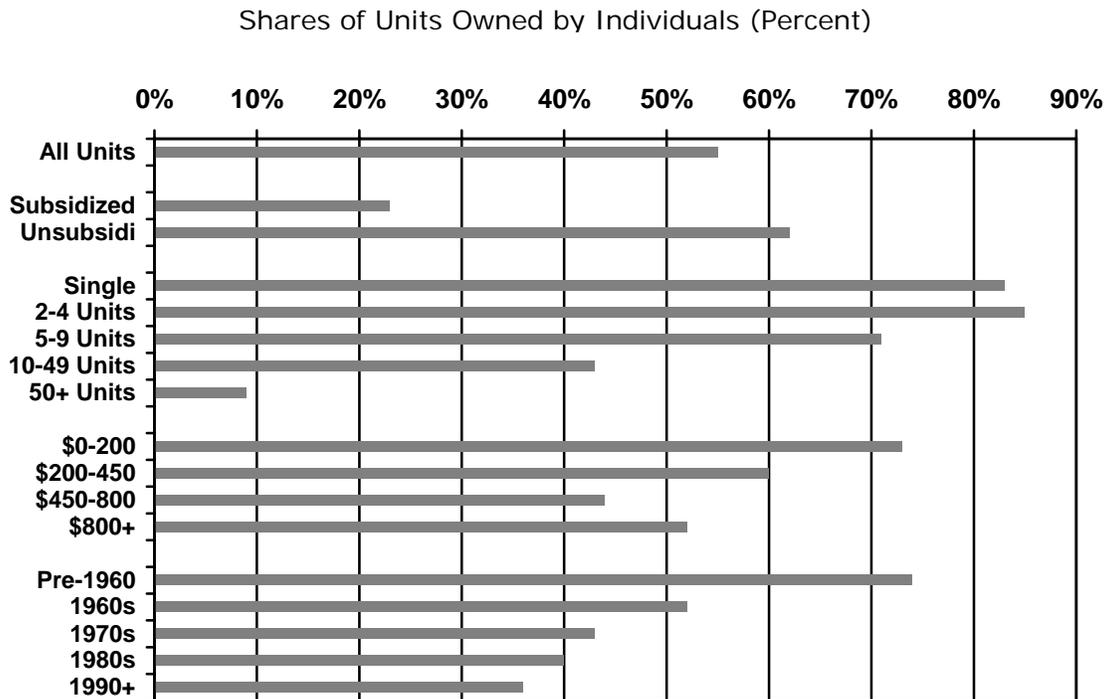
even on owners with well-documented income and expense histories to compensate for the costliness of doing full due diligence.

### **Fragmented Ownership Acerbates the Small Multifamily Lending Problem**

Information on the characteristics of rental property owners is limited, but recently released data from the 2001 Residential Finance Survey (RFS) suggest that many owners—and especially those with only a few units—are ill-equipped to operate and maintain their properties profitably. Overall, the RFS data indicate that close to two-thirds of the nation’s nearly 26 million unsubsidized rental units are owned by individuals or couples (Figure 7). The rest are owned by a variety of corporations and other entities, ranging from limited partnerships to churches and nonprofit organizations to real estate investment trusts.

For many of these individual owners, the rental business is a part-time activity that can provides supplemental income or housing for friends or relatives. The Joint Center for Housing Studies, citing data from the 2003 Residential Finance Survey, notes that 4.3 million households reported receiving income from a rental property. Property revenue accounts for about 11 percent of household income for those less than 60 years of age, and for as much as 25 percent of income for those in their 70s and older.

**Figure 7: Individuals Own Large Shares of the Rental Housing Inventory**



Note: Single-family units include one-unit detached and attached structures and condominium units for rent. They do not include manufactured homes.

Source: JCHS tabulations of the 2001 Residential Finance Survey.

Most of these owners are not well diversified because they own too few properties to spread risks across market areas. Indeed, 3.4 million of the 4.3 million owners report having only one rental property. Moreover, these smaller owners seldom hire professional managers because they would sacrifice some of their rental income. As a result, only one in five rental units owned by individuals and married couples are under professional management.

The fragmented ownership of relatively few properties also implies that the typical owner has limited capacity to realize the many economies of scale of management that are critical within the tight margins of tenant and property management. Indeed, owners of a limited number of units located in a handful of smaller properties are doubly disadvantaged in that they are unable to realize the scale economies that accrue to owners of larger buildings as they spread their attention over several buildings that may be geographically dispersed.

Though detailed data on operating costs of rental buildings of various sizes and characteristics is limited, what data that are available points to the existence of economies of scale in the operation of large apartment buildings. In a recent assessment, Jack Goodman

observed that operating costs per unit for properties with at least 200 units are from four to eight percent lower than those recorded for smaller apartment buildings. Significant economies of scale are observed for most of the individual cost components, though controlling for other features that may influence per unit cost (such as property age or construction characteristics) make this a challenging task. Even so, this analysis suggests that in areas such as property insurance, utilities, administration and management significant scale economies exist.<sup>11</sup>

Less is known about the economies associated with the ownership of a portfolio of smaller buildings. For buildings too small to support a resident manager, management is difficult at best. Whatever the specifics of potential economies of scale, there is little doubt that most small scale owners operate at the margin of profitability. Though now a decade old, the Property Owners and Management Survey conducted by the U.S. Department of Housing and Urban Development in 1995 provides a comprehensive look at the economics of owning small rental properties. Over all, these data suggest that small properties are the least profitable, with average total costs slightly lower than total receipts.<sup>12</sup> Such budget stress adversely effects the maintenance and repair activities of absentee-owners of 1 to 9 family structures. Despite the fact that their units are most likely among all property types to have structural deficiencies, 14 percent report spending nothing on maintenance, while 22 percent defer required major and minor repair.<sup>13</sup>

### **Small Owners Often Are Risk Adverse**

Small-scale owners are disadvantaged by definition: they are less well-capitalized and excluded from the economies of scale that are critical within the tight margins of tenant and property management. Competently managing rental housing requires expertise in many areas, and there is a history of lack of management capabilities in the low-rent inventory across the country.

Further, many owners may be reluctant to assume debt, especially in situations where the only debt available comes in the form of adjustable rate, short term loans. In his 1960s

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<sup>11</sup> Jack Goodman. (July 2004). "Determinant of Operating Costs of Multifamily Rental Housing," *Joint Center for Housing Studies*, Working Paper W04-7.

<sup>12</sup> Sandra Newman. (2005). "Low-End Rental Housing: The Forgotten Story in Baltimore's Housing Boom" (p. 22 quoting Emrath (1997)), *The Urban Institute*.

<sup>13</sup> Joint Center for Housing Studies tabulations of the 1997 Property Owners and Managers Survey as reported in the State of the Nation's Housing, 1997, Exhibit 14 and Appendix Table A-13.

path breaking book *The Tenement Landlord*, George Sternlieb documented the operations of the owners of small apartment buildings in distressed neighborhoods.<sup>14</sup> While some financed their operations with debt, others avoided the risk associated with debt financing and instead operated their properties on a cash and carry basis. In this type of operation, steady cash flow is a key objective. With a lack of geographic diversification, many owners of just one or two small apartment buildings are reluctant to magnify this risk by leveraging their investment and exposing what may be razor thin cash flows to the risks associated with short term, adjustable rate financing.

Though recent data on these topics is scarce, the data that are available paint a similar picture. For example, in his study of owners of 1 to 4 family rental structures, Allan Mallach observed that many had once lived in their own properties and many have family and friends that still do. This social aspect of ownership may not only enhance their risk aversion when it comes to making decisions about how best to structure the financing on their apartment building, it may also influence their decision to sell. As a result, for at least a portion of the individuals that own rental properties, decisions concerning the operation, management, and potential sale of their investment property must be seen as not just an economic decision, but as an emotional decision as well.

Within the one-four family rental industry specifically, over 40 percent of owners have no plans for selling their property in the next five years.<sup>15</sup> Another roughly 40 percent reported that they don't know their anticipated length of future ownership and less than 16 percent planned on selling over the next 5 years. Like the overall single family and small multifamily inventory, owners of 1 to 4 family units are mostly part-time owners and property managers with a high motivation for cash flow, and with appreciation related motivations such as retirement security and long-term capital gains.<sup>16</sup>

Given that approximately one third of owners of 1 to 4 family rentals acquired the units as their residence and became inadvertent landlords, many owners often have an emotional attachment to the home and their reluctance to sell may not be economically driven. While many

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<sup>14</sup> George Sternlieb. (1966). *The Tenement Landlord*. (New Brunswick N.J: Rutgers State University).

<sup>15</sup> Allan Mallach reports from the *1995 Property Owners and Managers Survey* (POMS) data that around 45% of owners anticipate owning for more than the next five years, while less than 40% do not know their anticipated length of future ownership. (2006). *Landlords at the Margins: Exploring the Dynamics of the One to Four Unit Rental Housing Industry*. Prepared for the Revisiting Rental: A Symposium on the Importance of Rental Housing, Cambridge, Massachusetts, November 14-15, 2006.

<sup>16</sup> Allan Mallach, p. 20.

owners hold on to their real estate to either supplement their annual income or provide for future capital, the greatest number of these units are owner managed and often have substantial deferred maintenance issues.

Further, many owners may be influenced to hold on to their property rather than pay taxes on the real gains of their property. While this is a separate issue from that of the capital gains issues and exit tax related to subsidized housing, there remains a perception that it is difficult to exit rental housing ownership. The taxes owed at a profitable sale are not just on the gain, but also on the depreciation claimed over the years. The most common methods to avoid paying capital gains, are 1) to move back into a unit for 2 of the 5 years prior to selling the property to claim it as a primary residence, or 2) to make a 1031 ‘exchange’ for a like-kind property, rolling over the gain. As even the Dummies.com website states, the rules for properly doing a 1031 exchange are complex and having an expert involved in these transactions like an attorney and/or tax advisor is important.<sup>17</sup> This complexity may deter potential Sellers from marketing their property.

However, these same owners may become motivated to sell if there was a way to replace the cash flow or have an immediate capital flow without the associated capital gains issues. While emotional ties may exist, the difficulties associated with the management of rental property, whether the proliferation of regulations; difficulty in finding and holding reliable, rent paying tenants; lack of ability to provide cost effective maintenance; or the aging nature of this housing stock may motivate owners to become sellers in the near term if a suitable exit option existed.

### **New Approaches to Accessing Capital for Small Rental Properties**

While a host of issues threaten small multifamily properties, these issues scale up to create a greater capital problem often keeping lower cost financing at bay. Whether it is scale economies, uncertainty about management, unclear resale values or deteriorating conditions, this “capital problem” is believed to be one of the principal causes of the loss of multifamily properties. Small multi-family housing is currently underserved by capital sources, and most of these properties that have financing typically have variable rate, recourse and shorter-term

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<sup>17</sup> From Dummies.com, Making and managing money tab section entitled “Enjoying Rental-Property Tax Breaks”, which is adapted from “[Investing for Dummies, 4th Edition](#)”.

maturity (5 years) on their debt. To help overcome many of these barriers, Narasimhan<sup>18</sup> first proposed in 2001 the concept of a small REIT (S-REIT) as a new equity vehicle to help expand access to capital for small multifamily structures. This section briefly describes the essence of this S-REIT concept.

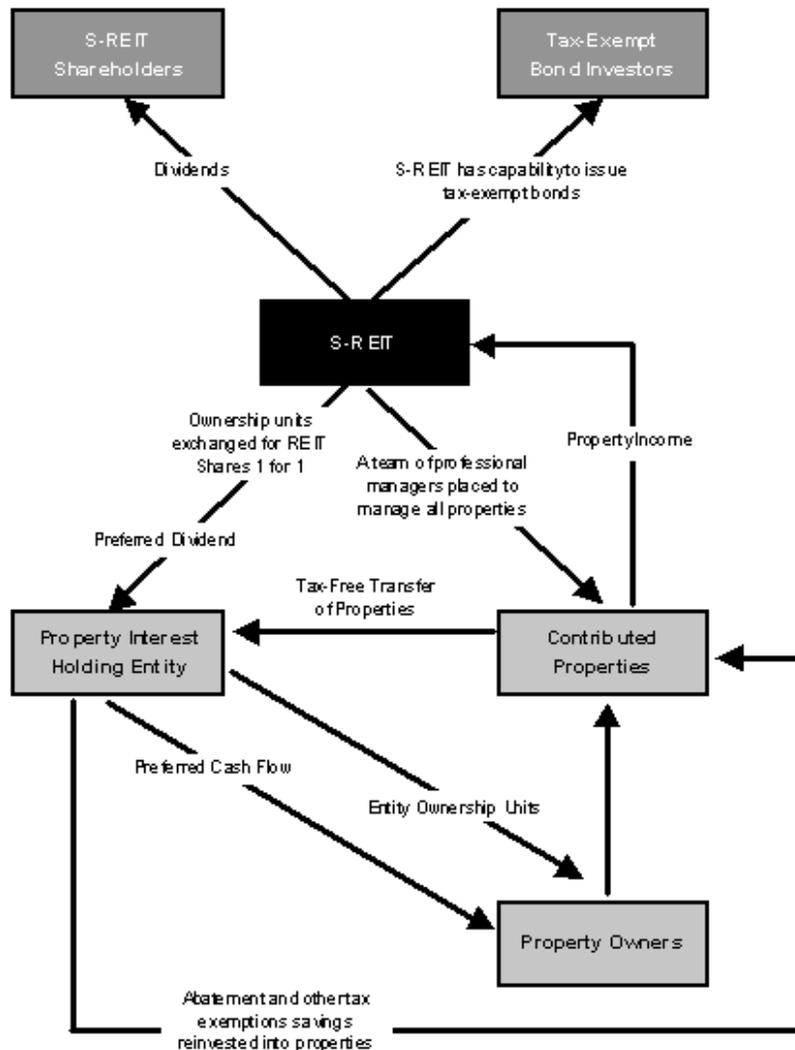
### **An Initial Proposal**

As outlined by Narasimhan the S-REIT structure would enable the owners to exchange (tax free) their small multifamily properties for S-REIT partnership units (Figure 8).

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<sup>18</sup> Narasimhan, Shekar. (2001).

**Figure 8: The Small Multifamily REIT (S-REIT)**



Source: Shekar Narasimhan. Why Do Small Multifamily Properties Bedevil Us? *Brookings Institute, Capital Xchange*. November, 2001.

These units would in turn entitle the owner to a preferred cash flow and a share of potential appreciation rights, and to the benefit of having the best local management, whether for-profit or non-profit. In addition to being exempt from recording taxes, SEC and state registration costs, Narasimhan proposed that this S-REIT should have the ability to create a tax-exempt bond issuing capability, and have the capacity to obtain equity and debt financing at the corporate level so as to match assets and liabilities without the costs of single asset financing. Ideally, this S-REIT would receive preference for other federal resources such as the Low-

Income Housing Tax Credit (LIHTC), HOME and CDBG and negotiate for local government tax abatement support so that cash flow savings are reinvested in the properties.

The proposed structure solves many of the underlying issues that have hindered previous efforts to expand the availability of debt and equity capital for the preservation of small multi-family properties. These include:

***Use Scale Economies to Reduce Operating Expenses.*** In discussion of the S-REIT concept, Narasimhan underscores the importance of scaling up local, lean professional management services to address the real needs of the properties and the renters within these often urban locations. The aggregation of individual properties under a single management entity would provide scale economies that should substantially lower the operating costs. Examples of potential savings include bulk purchase of energy, and other utilities, building materials for maintenance and repairs. Better scheduling and other economies of scale could also reduce per unit personal and administrative costs, and rather than securing property insurance on a building by building basis, units in the pool could be covered by a less expensive bulk policy.

Though the exact savings from these economies will depend on a number of factors, Narasimhan presents a scenario for what he argues is a representative pool of 1200 units with an average monthly rent of \$760 located in 30 buildings with 5 to 49 units each. Compared with the costs associated with individual ownership of these properties, Narasimhan estimates that under the REIT structure, monthly operating costs (not including local real estate taxes) could be cut 30 percent (or nearly \$90) per unit per month. The potential to negotiate additional property tax abatement with local governments would only add to this potential cost savings.

***Avoid the Costs Associate with Single Asset Financing.*** Obtaining financing or securing subsidies for smaller multi-family properties is often difficult because the administrative complexity and costs may be as great for a property owner with a 10 unit building as for a property owner with a 100 unit building. Narasimhan gives three reasons that capital is currently expensive for these properties: the cost of due diligence, the perception of higher losses and the unknown resale value and sector of small multi-family. By creating a portfolio of properties, the hope is that the scale will reduce due diligence costs and create a more stable structure to reduce losses.

As a result of the high fixed costs of single asset financing, the small rental property market has yet to benefit from the expansion of financing options available through the burgeoning secondary market. Moreover, the high fixed costs also limit the ability of owners of smaller structures to utilize currently available supply side housing assistance programs – including the Low-Income Housing Tax Credit Program. As is true with financing, the per unit costs associated with accessing equity investment through the Tax Credit program are prohibitively high, even though units in smaller multifamily housing account for the bulk of units at risk of loss from the affordable housing inventory.

*Encourage Owners to Transfer Properties.* Finally, Narasimhan’s approach should help overcome what many view as the traditional reluctance of many small owners to sell their property. From the perspective of a broader national housing market, the current ownership structure is not efficient. Even as other sectors of the economy (e.g. building material retailing) consolidated in the face of potential economies of scale, the size distribution of ownership of the housing inventory has been slow to change. This may reflect the fact that while the current ownership pattern has obvious shortcomings, it still benefits many owners of small rental properties by providing a mechanism for wealth holding that has important social and economic benefits. Social benefits include the creation of a place where the owner could return should the economic conditions change or a place to house needy families or friends. While returns are modest, ownership of small multi-family units can also provide a small cash flow and potential appreciation gains.

By allowing owners to swap their units for a preferred premium and potential cash flow, the S-REIT enables the owner to keep what they value in the current arrangement. Establishing a mechanism that would give owners the ability to trade their REIT shares for the right to move back into their building, or to provide some security of tenure for those family members and friends living in building, would likely increase the willingness of some owners to convert to an S-REIT.

### **Can the S-REIT Approach Work?**

Narasimhan describes how the S-REIT concept could work in theory. The S-REIT creates an opportunity for securing the long-term affordability and improving the efficiency of

the management structure of these properties by creating a structure where the ownership transfers from individual to institutional hands. Through this pooling mechanism, small multi-family projects have access to affordable and flexible capital, professional management, and capital for minor rehabilitation while maintaining the present affordability.

### **Efforts to Achieve Scale Economies of Management**

Available evidence suggests the presence of significant economies of scale in the operation of larger buildings, yet much less is known about the potential scale economies linked to the operation of a pool of smaller properties. The fact that properties may be scattered over several locations adds further complexity to issues of coordinating and scheduling the labor and material used in building management and operations.

Recognizing the inherent difficulty of managing small multifamily properties in the 1980s the Enterprise foundation launched the City Homes Program, an effort to document the potential advantages of professional management in the operation of a portfolio of small rental properties.<sup>19</sup> Following a series of bulk purchases of Baltimore row houses, City Homes identified and documented cost effective practices that could take advantage of the scale economies associated the pooling of the management of small rental properties under a single entity. These ideas were catalogued in a widely distributed manual – The Cost Cuts Manual – that was utilized by for-profit and non-profit entities seeking to enhance the quality and lower the costs of owning and operating rental housing targeted to lower-income occupants.<sup>20</sup>

Other efforts to manage portfolios of single and small multifamily properties are ongoing today. For example, as part of an effort to “deconcentrate” assisted rental housing through construction of “scattered site” units, many housing authorities and local community groups now have over a decade of experience managing portfolios of small multifamily housing. Though scattered site management is by no means easy, many of the best managed entities provide examples of what is possible.<sup>21</sup> Adding to the mix of public and nonprofit agencies, various private sector firms are taking up the challenge of scattered site management. For example, in

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<sup>19</sup> See Ellen, Ingrid. (May 1991). “City Homes in Baltimore: Minimum Rehab to Combat Abandonment,” *Kennedy School of Government, Harvard University*, Case Study 616-90-1010.

<sup>20</sup> Santucci, R.M., Thomas, J. Cassidy, C. and Werwath, P. (1991). “The Cost Cuts Manual: Nailing Down Savings for Least-Cost Housing,” *Enterprise Foundation*.

<sup>21</sup> For a summary of the issues see: Enterprise Foundation. (1999). “Developing and Managing Scattered-Site Housing.” The Enterprise Foundation, Columbia Maryland.

2004, Redbrick Partners launch a REIT designed to acquire, rehab, and operate a pool of single-family rental housing. Through efforts to secure capital gains by “turning around” single-family properties, or by focusing on market areas with unrealized potential home value appreciation, the Redbrick approach by design required that they effectively manage a pool of several thousand homes located in selected metropolitan areas.<sup>22</sup>

### **Efforts to Reduce the Cost of Due Diligence**

These scale economy issues also plague the resale of these properties, as there are fixed transactional costs whether the sale is four or forty units such as appraisals, environmental reviews and attorney opinions. These fixed costs, along with limited documentation and low fees related to the scale, are in part what limit the competition for financing, particularly in small, rural markets. Local depository institutions have overcome these barriers by using a more hybrid underwriting approach, relying in part on the creditworthiness of the borrower, and using a less costly evaluation process. Simplifying the appraisal and underwriting process has given depositories the greatest market share. Because of the lack of competition, these institutions can also charge higher fees and interest rates for these loans, and constrains borrower choices regarding loan product.<sup>23</sup>

Often, programs remain hampered by size. The lauded LaSalle Bank program has a national multifamily Advantage Program that serves small scale existing apartment properties with fixed terms up to 15 years fully amortizing.<sup>24</sup> However, of the six projects they highlight on their website the smallest multifamily project was 33 units and the lowest size loan was \$860,000, and most of the loans were ARMs, interest-only or short-term. Fannie Mae announced a plan to make available \$25.6 billion for multifamily rental financing 2005, of which \$5.2 billion was targeted for small loans, up to \$3 million in size, a number that is still quite large recognizing that many small multifamily sell for less than \$100,000 per unit. Absent implementation of a streamlined underwriting process, such small loans also carry with them

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<sup>22</sup> Hagerty, James. (March 4, 2005). “Entrepreneur’s Unusual Tactic: Buying Up Homes by Hundreds.” *Wall Street Journal*.

<sup>23</sup> Herbert, Chris. (2001).

<sup>24</sup>From LaSalle Bank’s website on September 27, 2006: <[http://www.lasallerecm.com/l\\_multifamily.php](http://www.lasallerecm.com/l_multifamily.php)>

high fixed costs.<sup>25</sup> Moreover, streamlining may remain a challenge as principal-agent issues abound.<sup>26</sup>

### **Practical Alternatives for Showing Proof of Concept**

While the portfolio concept is compelling, the challenges of creating a congressionally chartered new equity vehicle are substantial. Alternatively, there already exist examples of market driven efforts to utilize the REIT structure to aggregate single-family and small rental properties. Examples to date are profit driven and don't necessarily apply the concept portfolio in the most socially beneficial way. What is needed is a structure that combines public sector social responsibility with the best practices in capital market structuring.

One possibility is to build on the innovative practices of the nation's best Local Housing Authorities (LHAs). Currently, many LHAs are in a period of reform and innovation as they reinvent themselves to be more entrepreneurial in serving their mission, in an age of dwindling Federal resources. Therefore an opportunity exists. Consider for example a property aggregation vehicle which utilizes the current capacity and financing authority available within the PHA structure: utilizing Essential Function Bonds (EFBs). This bonding authority provides a steady stream of low cost financing while utilizing a "trusted partner" to reduce loan losses. Combined with the use of professional and lean management services that build on existing LHA experience of managing scattered site housing, the EFBs offer an opportunity to market test many of the key principles embedded in the S-REIT approach.

### **Budget Cutbacks Spur Local Innovation**

Ongoing budget pressure has led many Local Housing Authorities to rethink their strategy for how best to meet the housing needs of the very-low-income people that they serve. Unfortunately some have been forced to retrench their activities, while others have found innovative ways to create new sources of capital to fund the development or preservation of affordable rental housing. This section briefly describes how local housing agencies could use their capacity to issue Essential Function Bonds to acquire and preserve a portfolio of currently

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<sup>25</sup> As noted on Fannie Mae's website at: <http://www.fanniemae.com/multifamily/index.jhtml?p=Multifamily>

<sup>26</sup> See Herbert, Chris. (2001), p.21 for more discussion of overcoming these barriers such as bright line tests, loss sharing arrangements and desire for repeat business.

non-subsidized small multifamily and single family rental property, and in doing so provide a market test of the basic concepts of the S-REIT approach outlined earlier.

While often examined only in terms of their involvement in the federally funded and regulated Public Housing and Section 8 programs, as state chartered legal entities most local housing authorities (LHAs) have the authority needed to become engaged in a wide range of housing, community, and economic development activities including financing and acquisition, along with the ownership and management of rental housing targeted to the meet the housing needs of low-and moderate income renters. LHAs have long had the authority to issue tax-exempt bonds, but over the past decade agencies across the nation have issued tax-exempt bonds for the purpose of financing housing owned by the agency and for other purposes linked to their “essential function.” Under federal tax law, these Essential Function Bonds (or EFBs) are subject only to the same general restrictions as other government purpose bonds and most significantly are not subject to federally imposed state-wide bond caps.

In states that permit local housing agencies to issue bonds on their own behalf, the use of EFBs has soared over the past decade. Though not all states allow LHAs to issue bonds, a Joint Center for Housing Studies Survey found that as of July 2002, some 64 agencies in 27 states had financed a construction or acquisition of over 40,000 units by issuing a total of \$2.12 billion in EFBs – a substantial increase in total EFBs activity recorded in a previous study done in 1995. Notably six states (Washington, Illinois, Oregon, Maryland, Minnesota and California) accounted for over three-quarters of the EFB activity recorded in the survey. Though the precise definition of “essential function” varies from one state to the next, generally state enabling legislation authorizes LHAs to engage in a wide range of activities related to the construction, preservation, and ongoing ownership management of housing affordable to low- and moderate-income households.<sup>27</sup>

The Quality Housing and Work Responsibility Act (QHWRA) of 1998 handed housing authorities a powerful new tool to address the modernization needs of conventional public housing. The 1998 legislation enabled local housing authorities to pledge future allocations from the Public Housing Capital Fund to secure private loan or bond financing. In a recent HUD

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<sup>27</sup> General capacity to issues bonds, are distinct from the more limited authority granted to states to issues special purpose bonds, such as tax-exempt multi-family revenue bonds that are subject to Congressionally mandated bond cap. See Apgar, William (2003) “Essential Function Bonds: An Emerging Tool for Affordable Housing Finance.” *Joint Center for Housing Studies, Harvard*, for more information about EFBs.

funded study, Harvard's Graduate School of Design documented several approaches to utilize the new financing tool. In one model, EFBs are issued by a LHA and the proceeds are used for Capital Fund eligible activities. In combination with a growing investor belief that future Capital Fund appropriations are a reasonably secure source of funding, investment grade bond rating can substantially enhance the marketability of this new type of financial investment.

While QHWRRA expanded the ability of LHAs to issue EFBs to help finance public housing preservation efforts, the flexibility of the authority granted by states to LHA, to issue EFBs goes beyond simply revitalizing traditional public housing. For example, in 2000 the Housing Authority of the City of Santa Barbara (HACSB) used EFBs to purchase a 60 unit senior development. Due to its expiring affordability restrictions, the previous private owners threatened to "opt out" and convert the property, a move that was avoided when the property was sold to HACSB.

Recognizing that adding credit enhancement can increase the complexity and costs of bond issues, over half of all EFBs covered by the Joint Center survey reported having no credit enhancement in place, a tribute to the fact that many LHAs using the EFB tool are among some of the nation's best run LHAs. Indeed, the survey found that it is not uncommon for EFBs without credit enhancement to secure investment grade credit ratings.

Among those bonds with credit enhancement, local government guaranties can play a particularly important role. Close to 30 percent of all the bonds included in the survey were either backed by local government including special tax pledges or other pledges that make repayment a general obligation of the city, county, or state government. By backing bonds with the "full faith and credit," LHAs can substantially reduce borrowing costs in the tax exempt bond market.

Finally, the flexibility of the EFB enables local LHAs to finance a "pool" of properties with a single bond issue. For example as of 2002, Dakota County Community Development Agency (DCCDA) in Minnesota has constructed 711 units of senior housing utilizing a single bond issue. Under the EFB bond structure in place, rental revenues from these projects are then pooled to pay for the expenses and debt service for all buildings reducing the risk to the lender.

## **A Prototype Program**

Though the S-REIT concept discussed before has many good qualities, full implementation would require changes to existing federal tax and housing legislation, an unlikely near term event given the crowded federal legislative calendar and limited federal level support for new housing initiatives of any type. Alternatively, it would be relatively simple for one or more LHA – acting individually or in concert – to use their existing authority to issue EFBs and use the proceeds to acquire and preserve a portfolio of currently unsubsidized multi-family or single-family rental properties.

As noted earlier, many LHA authorities have experience with managing “scattered site” units. Indeed the application of best practices in portfolios of “scattered site” properties acquired using the proceeds of EFBs could be superior since they would not be subject to the same complex regulations that often hinder effective management of units operated under the Public Housing Scattered Site program. Alternatively, an LHA could partner with the growing number of private sector management entities with expertise in this area.

Though it would be helpful to layer this approach with rental subsidy, the reduced costs of tax exempt bond finance combined with local property tax exemptions may well be sufficient to offer the units at modest rents. Even without subsidy, the approach would help stem the loss of many small multifamily properties. In doing it alleviates the ongoing pressure on market rents that undermine the well being of the nation’s lowest income renters.

## **Conclusion**

Though much of the national discussion of preservation of affordable housing focuses on the subsidized portion of the inventory, developing strategies to preserve the inventory of affordable but nonsubsidized small multifamily properties is equally important. Drawing on previous work by Shekar Narasimhan, this paper has explored the potential for developing innovative new housing and capital market strategies targeted to the small, unsubsidized multifamily rental stock. Though untested in their entirety, there is ample evidence that the most important elements of these new approaches are not only possible but ultimately desirable.

Unfortunately, lack of interest at the federal level may hinder full scale implementation of these bold initiatives. This paper argues therefore that by building on the best practices of Local Housing Agencies and other local public and private entities, it is nevertheless possible to

demonstrate the wisdom of these new approaches through a series of local demonstrations. The key challenge is to identify ways to bring the cost reducing power of scale economies to the small multifamily housing sector that to date remains among one of the most fragmented segments of the overall housing market. Such efforts are not only key to creating a truly comprehensive national affordable housing preservation strategy, but also hold the potential of unleashing a wave of innovative financing techniques similar to wave of innovation that transformed single-family finance nearly two decades ago.

## **Bibliography**

- Apgar, William, (2004), "Rethinking Rental Housing: Expanding the Ability of Rental Housing to Serve as a Pathway to Economic and Social Opportunity," *Joint Center for Housing Studies, Harvard University*, December 2004, Working Paper W04-11.
- Apgar, William and Whiting, Emily J., (2003), "Essential Function Bonds: An Emerging Tool for Affordable Housing Finance," *Joint Center for Housing Studies, Harvard University*, February, 2003, Working Paper W03-2.
- Ellen, Ingrid, (1991), "City Homes in Baltimore: Minimum Rehab to Combat Abandonment," *Kennedy School of Government, Harvard University*, May 1991, Case Study 616-90-1010.
- Enterprise Foundation, (1999), "Developing and Managing Scattered-Site Housing," *The Enterprise Foundation*, Columbia Maryland.
- Goodman, Jack, (2004), "Determinant of Operating Costs of Multifamily Rental Housing," *Joint Center for Housing Studies, Harvard University*, July 2004, Working Paper W04-7.
- Hagerty, James, (2005), "Entrepreneur's Unusual Tactic: Buying Up Homes by Hundreds," *Wall Street Journal*, March 4, 2005.
- Herbert, Christopher, (2001), "An Assessment of the Availability and Cost of Financing for Small Multifamily Properties," a paper prepared for the U.S. Department of Housing and Urban Development.
- Joint Center for Housing Studies, (2006), "America's Rental Housing: Homes for a Diverse America," *Harvard University*, Cambridge, Massachusetts.
- Joint Center for Housing Studies, (2006), "The State of the Nation's Housing," *Harvard University*, Cambridge, Massachusetts.
- Joint Center for Housing Studies, (2004), "Middle Market Rental: Hiding in Plain Sight," *Harvard University*, Cambridge, Massachusetts.
- Mallach, Allan, (2006), "Landlords at the Margins: Exploring the Dynamics of the One to Four Unit Rental Housing Industry," Prepared for the *Revisiting Rental: A Symposium on the Importance of Rental Housing*, *Harvard University*, Cambridge, Massachusetts, November 14-15, 2006.
- Manchester, Paul B., (2006), "Effectiveness of HUD's Housing Goal Incentives for Freddie Mac and Fannie Mae: Small Multifamily & Certain Single-Family Rental Properties," A paper presented at the *Midyear AREUEA Conference*, *National Association of Home Builders*, Washington, D.C., May 30, 2006.

Millennial Housing Commission, Finance Housing Task Force, (2001), "Policy Option Paper Addressing Small Multifamily Properties," October 1, 2001, <<http://govinfo.library.unt.edu/mhc/papers/smallmf.doc>>.

Narasimhan, Shekar, (2001), "Why Do Small Multifamily Properties Bedevil Us?" *Brookings Institute, Capital Exchange*, November, 2001.

Newman, Sandra, (2005), "Low-End Rental Housing: The Forgotten Story in Baltimore's Housing Boom," *The Urban Institute*, p. 22.

Santucci, R.M., Thomas, J. Cassidy, C. and Werwath, P., (1991), "The Cost Cuts Manual: Nailing Down Savings for Least-Cost Housing," *Enterprise Foundation*.

Segal, William, (2003), "Segmentation in the Multifamily Mortgage: Evidence from the Residential Finance Survey," *Journal of Housing Research*, Volume 13, Issue 2, pp. 175-198.

Sternlieb, George, (1966) *The Tenement Landlord*. New Brunswick N.J: Rutgers State University.