

The Role of Limited-Equity Cooperatives in Providing Affordable Housing

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Abstract

This article develops an economic analysis of the role of limited-equity cooperatives (LECs) in providing affordable housing. Using a model of the user costs of housing that focuses on housing externalities, it examines methods for overcoming externalities in multiunit rental dwellings.

Investment in management can reduce these externalities and thereby improve the quality of the housing environment, but the added cost excludes low-income households from housing with a high level of management. LECs can reduce housing externalities without imposing the dollar costs of management on residents. They do this principally by attempting to attract a favorable resident population and by substituting self-management for traditional hierarchical management. Given these findings, the article makes recommendations regarding the structure of a federally sponsored LEC program and draws implications for affordable housing policies in general. Finally, it calls for further empirical research into the desirable (and undesirable) features of self-managed affordable housing.

Introduction

Limited-equity cooperatives (LECs) represent a form of affordable housing in which resident-members exercise considerable control over their housing environment, primarily through self-management and selection of members. LECs differ from traditional housing cooperatives in that the purchase price of a membership share and the rate of its appreciation are limited in order to maintain affordability. In this article, we develop an economic analysis of the role LECs can play within the framework of a multifaceted publicly assisted housing policy.

The basis for our analysis is an economic model of the user costs of housing—particularly the costs associated with housing externalities, such as having neighbors who are loud, engage in criminal or other undesirable activities, abuse the facilities, or use heating and utilities inefficiently. Most of these problems are especially severe in multiunit housing because of the proximity of neighbors and because of free riders. We argue that these

costs can be reduced through the expenditure of resources on various management activities, such as screening of potential residents and monitoring of resident behavior backed by the threat of sanction (e.g., eviction or retention of security deposits). However, management activities, while reducing the cost of externalities, increase the dollar cost of housing. Since households will have different degrees of aversion to housing externalities, we expect the market to offer a menu of housing options, ranging from buildings with high dollar costs and low external costs to buildings with low dollar costs and high external costs.

One problem with this market solution is that low-income households that value low external costs may not be able to afford the dollar costs of intensive management. Such households may find LECs an attractive alternative, since LECs try to reduce external costs without imposing on residents the high dollar costs of management. The principal means by which LECs reduce these costs, we argue, are to attract a favorable population of residents through screening and to substitute self-management for traditional hierarchical management. Thus, low-income households that are willing to live within LEC guidelines and contribute their time to management activities can obtain affordable housing with low external costs.

We emphasize that LECs are not a substitute for traditional public housing. This is true, first, because there are minimum income requirements for membership: Members must purchase an equity share up front that, though low, is usually not trivial. Clearly, this requirement excludes a set of very low income households. Second, many households that can afford LEC membership will be unwilling to conform to the membership requirements. To the extent that potential members of LECs do overlap with residents of public housing, we expect the presence of LECs to worsen the problems of public housing because LECs will disproportionately attract households that have higher incomes and that value and respect their housing more. As a result, if LECs are successful, public housing will increasingly become the housing of last resort. While this situation may trouble some, we believe that it is an unavoidable consequence of the desire of "good" tenants with somewhat greater economic means to separate themselves from tenants who generate high external costs.

A microeconomic analysis of housing externalities

The nature of externalities in housing

Housing externalities arise whenever households reside close together. The behavioral characteristics of households (noisy or quiet) and the way they maintain their houses (or fail to) enter into the utility functions of their neighbors. Although these externalities are present in nearly all forms of housing, their severity varies along several dimensions, including spatial proximity of units, whether units are rented or owned, whether there is common property, and the effectiveness of resident organizations (when they exist).

Obviously, the closer together units are, the more a household's behavior affects its neighbors, because the behavior is more noticeable or obtrusive. Housing externalities are also more severe in rental housing because tenants often ignore the impact of their maintenance decisions on future tenants of the same unit. This *rental externality* arises for two reasons: First, the tenure of a household is typically less than the life of a building, and second, as a renter, a vacating household cannot capture the capitalized value of the unit to future residents through the sale price. Consequently, renters tend to overuse or undermaintain units more than owner-occupiers (Henderson and Ioannides 1983). In addition, housing externalities will be more severe among residents who share common areas—for example, in condominiums, apartment buildings, co-ops, and planned developments. This is true because common areas are in effect public goods, thereby creating a free-rider problem in the sense that residents will have an incentive to overuse or undermaintain them (De Geest 1992; Hansmann 1991).

The common feature of these problems is that all are due to sharing or imperfect delineation of property rights among residents, either spatially or over time. And when rights are not clearly defined, they are typically used inefficiently (Mortensen 1982). Further, the presence of transaction costs generally prevents residents from arriving voluntarily at an efficient definition of these shared rights (Barzel 1989; Coase 1960).¹ Thus, a “coerced” definition of rights is usually necessary; for example,

¹ However, Henderson (1985, 101) argued that the reciprocal nature of most housing externalities often leads to voluntary resolution of problems.

most local governments promulgate zoning laws and other housing codes as a way of internalizing housing externalities.²

Although zoning can be effective in reducing external costs in neighborhoods composed primarily of single-family detached houses, it is of little help in multiunit rental apartments. Indeed, the housing externalities described above are perhaps severest in this form of tenure. Our interest here, therefore, is to examine institutional arrangements for delineating shared property rights in multiunit rental dwellings.

Responses to housing externalities in multiunit rental dwellings

In seeking an efficient allocation of property rights, the benchmark for comparison is the case of a single owner-occupier of a building because a single owner will internalize externalities both spatially and over time. Although this solution is clearly not feasible in multiunit dwellings (by definition), it suggests the elements that must be present in a solution: First, residents must be induced to behave as if they were owners, and second, they must be made to cooperate in some sense. Generally speaking, the ownership feature gives residents an infinite time horizon and so eliminates the rental externality. Cooperation is needed also to internalize externalities arising from common space and the proximity of neighbors. To understand the need for cooperation, observe that although residents of condominiums and full-equity co-ops own their units or a share of the building, that ownership does not by itself solve the problems arising from spatial externalities or the incentive to overuse common space. Ownership of one's unit is not enough given divided ownership of common space.

In addition, ownership is not feasible for many households, because of wealth and income constraints or other considerations (e.g., mobility). Since our concern is primarily with affordable housing, our analysis does not consider true ownership as a solution to housing externalities. However, we argue that it is important to create as many of the attributes of ownership as is feasible through other means. Similarly, since we assume that voluntary cooperation among residents is not likely because of transaction costs (especially as the number of units increases),

² For a good discussion of zoning in this context, see White (1975). A notable exception among local governments is Houston, which relies primarily on private covenants and deed restrictions (Siegan 1972).

we argue that coerced cooperation through various methods is desirable.

In this section, we first provide a general description of some methods by which housing externalities are solved in multiunit dwellings. We then develop a consumer choice model of how these methods arise in market equilibrium.

Screening. Potential residents of a multiunit building differ in their propensity to create housing externalities; that is, an adverse selection problem exists. Thus, one method for reducing externalities is to select a favorable population of residents by screening applicants. For example, a landlord or tenant association can attempt to identify problem tenants—those who will be loud, engage in criminal activity, abuse the facilities, or fail to pay the rent—by eliciting information about past behavior. Of course, perfect proxies for how a resident will behave are not generally available, and fair housing laws limit the sort of information that can be used to screen tenants, so some adverse selection is unavoidable.

Monitoring. Once a population of residents has been selected, there remains an incentive for them to behave inefficiently regardless of how favorable the selection process has been, because once they are in the building, tenants can overuse common space and ignore spatial externalities. That is, a moral hazard problem remains even if the adverse selection problem has been resolved by screening. Thus, some form of ongoing monitoring of the behavior of residents is necessary, backed by the threat of eviction or other penalty for undesirable behavior. Typically, the rental lease spells out the sort of behavior that is proscribed and the penalties.

One problem with this approach is that monitoring is costly and therefore imperfect. Thus, some undesirable behavior will inevitably go undetected and unpenalized. Moreover, since landlords are aware of this problem, they will charge up front for the expected costs of underdetection, an outcome that is necessarily second best (Henderson and Ioannides 1983). Another problem is that landlord threats to evict a tenant or withhold deposits are credible only if courts will enforce them. And since enforcement is often difficult (and always costly), the efficiency of monitoring is reduced further.

The costs of screening and monitoring as methods for reducing externalities are part of the overall user cost of housing. We include them generally as part of the cost of management. The

more effective the management function is, the smaller the external costs to residents are, but the higher the dollar costs of housing are. Alternatively, as management is reduced, dollar costs decline, but external costs increase (e.g., a less favorable tenant population is chosen, tenants are more boisterous, and the facilities are allowed to deteriorate). This tradeoff is important in the theory described below.

Limited-equity cooperatives. The final method we discuss for controlling housing externalities is the formation of LECs. LECs are one response to the tradeoff between the dollar costs of managing externalities and the utility costs of bearing them directly. As a form of affordable housing, LECs seek to control externalities without imposing the dollar costs on residents. They do this in several ways. First, they occasionally require prospective residents to contribute “sweat equity,” working to construct or rehabilitate their units. This requirement not only lowers the dollar cost of construction but also induces self-selection of residents who will take pride in their units and therefore maintain them over time.

Second, LEC residents contribute their time to the performance of management tasks such as screening new tenants and monitoring the behavior of those admitted. The idea is similar to a labor-managed firm that uses horizontal monitoring rather than a traditional capitalist firm that uses hierarchical monitoring. In this way, much of the dollar cost of management is transformed into the time cost of residents, which is generally cheaper for low-income persons. In addition, supporters of LECs argue that the sense of self-control that participating in management creates among residents replicates an important attribute of ownership. Unfortunately, no data are available for testing this proposition, but we suspect that a free-rider problem remains in that residents have an incentive to shirk in their contributions to self-management since it too is a type of public good.³

Third, an LEC resident receives an equity share in the unit upon payment of a membership fee. In a sense, therefore, residents are part owners of the LEC as in a full-equity co-op. This ownership is largely fictitious, however, since the initial fee is typically well below the market value of a share⁴ and the rate at which the share can appreciate is limited to a fixed amount (e.g., the

³ This problem is analogous to the problem of “who will monitor the monitors” in theories of the capitalist firm (see, e.g., Alchian and Demsetz 1972).

⁴ Membership fees are generally one or two months’ carrying charges.

rate of increase in local wages).⁵ The reason for limiting the rate of appreciation is to keep the units affordable, but because of the limit members do not expect to realize capital gains as a true owner would. In effect, the initial contribution functions much like a refundable security deposit.⁶

Finally, LECs often give members lifetime tenancy (in accordance with the membership agreement) along with the right to pass their shares to immediate family members. Like self-management, this right is designed to increase residents' sense of self-control and thus the sense of ownership. For example, LEC members do not face a threat of eviction simply because a landlord seeks an alternative use for the property. Nevertheless, they can be evicted for many of the same reasons a tenant in a rental apartment can, though perhaps they feel a greater security when being monitored by peers rather than by a landlord.

A theory of management of housing externalities

In developing our theory of management of housing externalities, we adopt the conventional view of housing as a bundle of characteristics or attributes (Rosen 1974; Sweeney 1974). The attribute we highlight is control or management of externalities. As we have argued, housing externalities can be reduced (albeit imperfectly) by a number of methods. Thus, in a conventional rental apartment (as opposed to an LEC), the landlord can "sell" management services aimed at lowering housing externalities, and tenants who value these services can purchase them by paying a higher rent. In contrast, tenants who value these services less can "unbundle" them by seeking a building with less management and a lower rent;⁷ these tenants are therefore willing to bear higher external costs in exchange for lower dollar costs. In this way, households sort themselves out according to their willingness to pay for a reduction in external costs, and in competitive equilibrium the market supplies a variety of units to fit the preferences of consumers, ranging from tightly managed

⁵ Members are at risk, however, if the true market value falls below their initial contribution.

⁶ Indeed, the LEC states in the membership agreement that it can withhold some of a member's share when he or she vacates if necessary to pay for damages.

⁷ Of course, we are holding all other attributes of housing constant in this exercise.

buildings to housing projects with little or no management of negative externalities.

We argue that LECs fit into this framework by offering an alternative for low-income households that prefer to live in buildings with low externalities but cannot afford the dollar cost of strictly managed traditional rental units. If LECs can reduce externalities while remaining affordable, they could be successful in filling this niche in the housing market. But reaching this goal is not easy because of the inherent conflict between ensuring affordability and establishing a sense of ownership, which are the hallmarks of LECs.

Issues related to wider implementation of LECs

Resident screening and eviction in LECs

Our model has suggested that screening of potential residents is an important component of successful management of housing externalities. Indeed, several critics of public housing have pointed to the lack of screening as one cause of the distressed state of some public housing projects (Schill 1993; Sleeper 1990). A related issue is the ease with which undesirable residents (those who generate significant external costs) can be evicted. These selection requirements naturally raise concerns about the legality, effectiveness, and consequences of screening and eviction of residents.

Legality and consistency with housing regulations. Clearly, LEC screening and eviction procedures must operate within the limits of national civil rights legislation and local housing regulations. National and regional housing cooperative associations can assist specific co-op projects in this matter. Because cooperatives, even subsidized ones, are membership associations, they are subject to legal restrictions specific to that ownership form (Fisher 1987; Schechter and Kasdan 1993). In addition, the U.S. Department of Housing and Urban Development (HUD) would have to promulgate regulations specific to LEC screening and eviction procedures, but substantial experience for that already exists through HUD's regulation of the approximately 63,000 units of LECs built in the 1960s and early 1970s under the Section 221(d)(3) and Section 236 programs (Willcox and Sazama 1994).

Practical problems of implementation. LECs have developed a fairly standard set of procedures for screening and evicting

residents (Fisher 1991). Ordinarily, there is a resident selection committee composed of co-op members that reports to the co-op's board of directors. The committee examines income and credit records, has a standard questionnaire, and engages in home visits. Part of what the committee looks for is a household's capacity to participate in co-op activities; the evaluation is based on such factors as previous participation in community activities, expression of interest during interviews, and quality of family life. The selection committee reports its recommendations to the board, which makes the final decision. Appeal procedures are available along the way, and ultimately a party has the right to appeal through the court system.

Because in the end these are judgment decisions made by a standing committee, the implementation of these procedures is not without problems (Welty and Ferguson 1993). For instance, care must be taken to keep personality conflicts to a minimum and to keep the committee active and responsible in carrying out its task, but the process has sufficient checks and balances that it usually works quite smoothly. Although no evaluation studies have focused on LEC screening and eviction procedures, research indicates that LECs have lower operating costs (Parliament, Parliament, and Regmi 1988), lower resident turnover rates (Task Force on City Owned Property 1993), less vandalism (Sadacca, Drury, and Isler 1972), and better care of common areas (Sullivan 1971, 172) than alternative forms of publicly subsidized housing.⁸

Skimming off the cream? Will effective selection and eviction processes for LEC residents mean that LECs will "skim off the cream" from public housing, as our theory predicts? While undeniably some skimming will occur, its scope will be limited by the fact that there is only a partial overlap between the "market" for LECs and that for public housing. To the extent this overlap does exist, the success of LECs will contribute to public housing's growing role as the housing of last resort. On the other hand, for LECs to be viable, residents must have their personal and economic lives in order so that they can meet the organizational and financial obligations of co-op living. Therefore, LECs could be seen either as a specific form of housing designed to help some households in their transition out of poverty or as an alternative form of housing to provide dignified housing for the working poor, some of whom might not be eligible for public housing. In this way, LECs could become part of a multifaceted affordable

⁸ For an evaluation of various aspects of LECs, see work by Sazama and Willcox (1994).

housing (and welfare reform) policy that meets the needs of different groups and satisfies various policy objectives.

Residents experience the consequences of their actions

In addition to screening, our model suggests that the effectiveness of LECs in reducing the negative externalities of multifamily housing depends on making residents more accountable for the consequences of their actions. As an illustration, economic and social incentives for accountability in LECs and in public housing are compared in table 1.

Table 1. A Comparison of Institutionalized Incentives in LECs and Public Housing

Incentive	LECs	Public Housing
1. Monthly charge or rent	Flat fee	Percentage of income
2. Resident control over budget and management	Some	Ordinarily none
3. Security deposits	Share equity acts as deposit	None
4. Possibility of capital gains	Limited	None
5. Maximum income limits on tenure	After initial admission none or few	Yes
6. Security of tenure with decrease in income	Low	Very high
7. Right to transfer occupancy to immediate family members	Yes	No
8. Resident training sessions	Ordinarily	Little or none
9. Formal residential control over project's social environment	Yes	Occasionally
10. Probability of eviction for disruptive behavior	High	Low

Economic incentives. The principal economic incentives of LECs are items 1 through 4 in table 1. With flat-fee monthly housing charges based on the unsubsidized portion of housing costs, and with resident control over the budget and management,

residents directly experience the effects of their individual and collective behavior in terms of housing costs (Sher 1991; Sulzberger 1987). In contrast, if rent is fixed at 30 percent of income, public housing tenants have no direct economic incentives to behave cost-effectively.⁹

As the name LECs implies, residents own limited-equity membership shares in the cooperative that owns the housing in which they live. These shares act as quasi security deposits, because the cost of damages can be deducted from the value of the equity share. In contrast, eviction is the only consequence of destructive behavior in public housing, and it frequently is difficult to evict people from public housing.

Requiring a low-income person to purchase equity shares does raise the question of affordability. However, households living in private rentals while waiting to get into publicly assisted housing pay security deposits. Also, the LEC shares can often be paid for in installments or, in a few cases, by sweat equity.

The possibility of a change in the value of an equity share offers another economic incentive with LECs. However, there is debate on how much appreciation to allow on the limited-equity shares. According to our microeconomic analysis, a market-rate housing cooperative (which allows for valuation of equity shares according to their full market value) partially internalizes the externalities of multifamily living, making this incentive component of market-rate cooperatives consistent with that of private homeownership. In this case there would be reduced economic incentive to postpone required maintenance expenditures, because such action would reduce the capital value of the housing share.¹⁰ A second reason some housing advocates use to argue for allowing equity shares to reflect market value is that this system will provide LEC residents with a savings base that could facilitate their transition to unsubsidized homeownership.

Some empirical support for the importance co-op members attach to realizing capital gains on share value is found in a survey of co-op residents by Ellendecker and White (1987). They found that limitations on resale price are an important concern for

⁹ A more extensive comparison of the advantages and disadvantages of flat-fee monthly charges and of rents charged as a percentage of household income can be found in work by Sazama and Willcox (1994, sec. 4.2).

¹⁰ However, as we noted, optimal maintenance of common areas would not necessarily occur, because of divided ownership.

LEC residents. However, the same survey found that a significant attraction of LECs is their affordability.

On the other hand, the possibility of a high rate of appreciation in LEC shares raises concerns among most advocates of affordable housing. The first concern is that high rates of appreciation in the equity share will effectively remove the LEC from the already limited stock of affordable housing. This problem can be partly solved by setting up loan funds from which new members can borrow money to buy shares from departing members, but these loans must be funded, and as a result, share appreciation could reach the point where the loan payment and the regular monthly housing costs exceed the costs of comparable private housing.

Affordability is also partly maintained by the restricted market for such shares, because shares can be sold only to those whose income falls within prescribed limits. Nevertheless, most of the currently organized LECs allow share values to increase only according to certain percentages or indices. A few allow no increase at all.

Besides affordability, a second argument favoring little or no increase in share values is the belief that LEC members should not receive gains that are attributable to outside subsidies. The possibility of such gains is beginning to be a concern for the LECs funded under the federal Section 236 and 221(d)(3) programs, in which the LEC can legally "privatize" itself after a substantial portion of its original mortgage is paid off.¹¹ However, formulas are available from some of the more recent LECs developed by nonprofits, which allow limited increases only on equity paid by the residents themselves (see, e.g., Colburn 1990a, 1990b; Fisher 1993). In addition, many nonprofit-sponsored LECs prohibit privatization through restrictive land covenants and renewable 99-year ground leases (Burlington Community Land Trust 1988). France and Italy legally prohibit the privatization of LECs (Birchall 1988, 193).

Finally, some LEC advocates argue that their practical experience shows that the receipt of capital gains is not a crucial component of the "ownership package" of LECs (Cunningham 1993; Spring 1993). In separate case studies of conversions to LECs, Kolodny (1973, ii) and Zimmer (1977, 61) concluded that resident control, not ownership, is the key. While their studies did not

¹¹ A discussion of the influence of windfall gains on the market for housing co-op shares in Sweden can be found in an article by Berger and Turner (1991).

focus explicitly on the importance of capital gains for adequate maintenance expenditures, they concluded that the important factor is that mutual ownership provides a mechanism for formalizing control and clarifying each occupant's responsibility for maintaining and supporting a decent living environment. Nevertheless, virtually all LECs are subject to some form of outside inspection, controls, and regulation concerning the maintenance of the physical structure.

Tenure security as an incentive. Items 5 through 7 in table 1 concern the security of tenure as an incentive for better resident management of affordable housing. Because LEC members are not forced to leave if their income increases above a specified amount, they have an extra inducement to make a long-term commitment to their housing. This security also removes both the incentive for LEC residents to hide income and the disincentive to save, which are created by the maximum income limits for tenants of public housing.

However, LEC residents have less security of tenure when faced with a decrease in income. As with private rentals, prolonged unemployment due to a recession or illness can result in eviction. Therefore those averse to risk may not be attracted to LECs. A related problem is the financial viability of LECs during a recession. In general, LECs have good records of financial viability (Sazama and Willcox 1994, sec. 4.5). For example, they generally maintain vacancy and late payment reserves. Still, new LECs have experienced financial difficulties during recessions.

LECs allow transfer of the right of occupancy to immediate family members. This transferability is part of the ownership package that helps increase residents' long-term commitment to the project. People who see themselves as long-term residents of a co-op are more likely to view the best interest of the co-op as being consistent with their own best interest (Cooper and Rodman 1992; Welty and Ferguson 1993).

Resident control over the social environment. Items 8 through 10 in table 1 concern incentives for resident management of the social environment of a project. On a theoretical level, our model has shown that active and quality resident control is essential for reducing negative externalities in subsidized multifamily housing. On a practical level, it appears that when residents have control over their social environment—either in LECs or in public housing by means of active resident management organizations—they ordinarily are quite effective in providing a livable

social environment in the project. More generally, though, the evidence on the effectiveness of tenant management is mixed, and much of public housing and nonprofit-sponsored rental housing is well managed even in the absence of resident control (Gentry 1993; Isler, Sadacca, and Drury 1974; National Commission on Severely Distressed Public Housing 1992; Turetsky 1993).

In our view, LECs are more likely than other ownership forms to provide sustained quality resident management of the social environment of a project because (1) control is institutionalized by an ownership charter; (2) social management is more generally linked to substantial control over the financial and physical management of the project; (3) residents ordinarily have a longer term commitment to their housing (Sadacca, Drury, and Isler 1972; Task Force on City Owned Property 1993); and (4) training programs are typically an integral part of introducing a new member to an LEC.

We acknowledge the conclusions of Sullivan (1971); Kolodny (1973); Isler, Sadacca, and Drury (1974); and Zimmer (1977) that the quality of internal leadership, an active and committed resident group, and quality outside professional and technical support are more important characteristics of successful resident management than the form of ownership. Nevertheless, all these studies point out the relative success of LECs in many aspects of resident management. A more recent study of alternative forms of ownership, based on a survey of 2,700 residents, comes out clearly in favor of LECs (Task Force on City Owned Property 1993, i).

Demand for LECs

Our theory of the housing market suggests that there might be a demand for LECs among low-income households that value a low level of housing externalities and are willing to devote their efforts to reducing them by self-management. Most potential residents of LECs will therefore come from that sector of the housing market where management is low or nonexistent. To date, LECs seem to have found their niche in the affordable housing market, as indicated by the more than 200,000 units built in the United States since the 1960s (see table 2) and the 60,000 units of no-equity/mixed-income housing cooperatives built in Canada in the same period (Cooper and Rodman 1992, chap. 2). Indeed, the crucial limiting factor for LECs seems to be not demand but supply. As the data in table 2 show, the past

Table 2. Limited-Equity Cooperative Housing in the United States, 1991

Sponsor	Number of Units
Federal government	
Direct	63,000
Indirect	19,000
State and local governments	
New York	60,000
All other states	47,000
Nonprofit organizations	35,000
Total	224,000

Source: Adapted from Sazama and Willcox (1994).

availability of subsidized funds for LECs has encouraged production.

This is not to argue that LECs are a general solution to the U.S. shortage of affordable housing. One of the authors of this article (Gerald Sazama) worked as a community organizer for an LEC project in Providence, Rhode Island. In his experience, prospective co-op members were very concerned about the relative quality of the housing, its location, and its net cost to them, as well as about the responsibilities of co-op living. It was clear that co-ops were not for everybody in the affordable housing market.¹² It also became clear that subsidies in some form are necessary to make LECs viable as a form of affordable housing.

Substantial experience has been accumulated in developing and marketing cooperative housing. In the 1980s there was the experience of the nonprofits with LECs (Davis 1994). In the 1960s and early 1970s there was the experience of the Foundation for Cooperative Housing Services (FCHS), which assisted LECs built in 30 states under the federal Section 236 and 221(d)(3) programs. Roger Willcox (1993), the director of FCHS at that time, stated that marketing in a new area involved building part of the projected total number of units in a project, marketing them (frequently in ways parallel to the marketing of private real estate), and training prospective residents in cooperative living before they moved into their housing. After this

¹² Those with previous knowledge of co-ops were more open to considering them. This group included those from areas where a significant cluster of housing co-ops exists (New York, parts of New England and the Great Lakes states, Atlanta, and California) and those familiar with co-ops as part of their cultural background (e.g., Latinos and recent immigrants from Africa).

base was built, the remainder of the units would be marketed and built, and the first residents would then help train the new residents. Willcox also stated that it was important that the expansion of LEC development activity did not exceed the capacity of the trained and experienced staff to support it. In the case of conversion of existing buildings to LECs, ordinarily the same residents remained after conversion. Leavitt and Saegert (1990) found that many of the success factors for conversion properties are similar to those for successful resident management discussed by Kolodny (1973) and by Zimmer (1977).

In an evaluation of the Canadian federal cooperative housing program, a report of the federal Canada Mortgage and Housing Corporation (1992, 66) stated that the market for cooperative housing in Canadian cities could be expected to be strongest when rental vacancy rates are low and when most moderate-income households cannot afford homeownership. Finally, a HUD-contracted study of LECs in rural areas concluded that the feasibility of developing rural cooperative housing projects may depend on an initially identifiable group of families who desire to form an LEC (Battelle Group 1981, 44).

Federal housing policy and LECs

Scope and form for a federal LEC program

A federally sponsored LEC program could take one of two forms or perhaps be some combination of the two. The first form would be a national program similar to the Section 236 and 221(d)(3) below-market-rate federal loan guarantee programs for LECs of the 1960s and early 1970s. More than 63,000 LEC units exist that were built under these programs, the vast majority of which operate very successfully. Most of the LECs are members of the National Association of Housing Cooperatives and have a strong network for communication between co-ops.

The second form for a national co-op program would be an institutionalization of federal capital and other assistance to the many local community development corporations (CDCs) that have been sponsoring LECs during the 1980s. This assistance could take several forms. First and most easily, it could reduce the formidable restrictions on co-ops that wish to buy abandoned property owned by HUD or the Resolution Trust Corporation. A second way to provide capital assistance to LECs is to change the 1986 tax law provisions to allow financing of LECs under the low-income housing tax credit. Third and most important,

adequate funding of an LEC program requires direct federal capital assistance for the local CDCs sponsoring LECs. This assistance could be given through HUD directly to the CDCs; through the state departments of housing, quite a few of which have LEC programs; through federally sponsored institutions such as the National Cooperative Bank, which now has a small LEC financing program; or through the federally sponsored Neighborhood Reinvestment Corporation, which has accumulated experience in working with local groups to develop mutual housing associations, a close relative of LECs.

In any case, experience suggests that a federally sponsored LEC program should grow at a pace at which the funds can be absorbed in a meaningful way. Both the 1960s experience of the Foundation for Cooperative Housing Services, which sponsored many of the LECs funded under Section 236, and the 1980s experience of the Neighborhood Reinvestment Corporation indicate that to avoid trouble, expansion cannot outpace the availability of trained and experienced staff to assist in the housing development. This is because LECs are not just bricks and mortar, but also involve some organizing, training, and technical assistance to the co-op members if the LECs are going to work.

Our analysis suggests that the following components be included in an LEC program. First, there should be clear resident control and ownership within the context of the co-op model; this will provide the incentive structures discussed earlier and help establish resident control over the housing environment. Second, monthly housing charges should be fixed rather than a percentage of income, and residents should have reasonable control over the project budget, again to provide the economic incentives discussed above. Third, upfront equity payments should at least equal one month's market-value rent on similar units (though part of this equity could be sweat equity), and the rate of increase of this equity should be limited to maintain affordability. Fourth, the property should be permanently established as an LEC and not allowed to privatize; these restrictions will prevent removal of affordable housing and windfall gains from public subsidies for LECs.

As we have argued, to be successful an LEC must attract tenants who are willing to participate in self-management and assume responsibility for their own housing. A policy that simply lowers the user cost of housing by subsidizing financing will not do this. What is also needed are offsetting costs of entry into LECs that induce self-selection of the desired population by making membership relatively cheaper for "better" tenants.

Implications of the model for federally assisted low-income housing in general

Our analysis to this point has focused on defining a role for LECs in a multifaceted affordable housing policy and assessing the prospects for their success in that role. More generally, the analysis establishes a principle that can guide policies regarding other forms of affordable multiunit housing. The principle is that to reduce the level of housing externalities, it is necessary to screen out tenants who will probably generate them or to establish incentives (financial and nonfinancial) to deter tenants from generating them. Unfortunately, this principle is, to some extent, incompatible with the notion that the government should be the landlord of last resort.

The reason for this conclusion is the simple economic fact that preventing an undesirable behavior requires attaching a cost to it. Screening and monitoring of tenants allow costs to be attached, but often at the expense of excluding or evicting people from housing or imposing a dollar cost on them (e.g., by withholding a posted deposit). For these reasons, LECs are not a replacement for other forms of federally assisted housing. As long as residents of federally assisted housing know that they cannot be denied housing of some sort (of last resort) and have no wealth at risk of being withheld, it is unlikely that they can be prevented, through economic means, from imposing external costs on other tenants.

The need for future research

Since we have relied primarily on anecdotal evidence to assess the prospects for LEC success (and success of tenant management programs in general), there is clearly a need for more rigorous research in this area. The United States has accumulated substantial experience with various LEC programs (table 2). One general direction for research is to do a careful institutional analysis of these programs to determine which characteristics are associated with success and which with failure.

Our theory indicates that flat-fee monthly housing charges combined with reasonable resident control over the project budget should induce more economically efficient behavior than rents set at a percentage of income. This hypothesis must be empirically tested. In addition, the tradeoff between affordability and the loss of economic incentives from limiting capital gains on equity must be examined further.

Another avenue of research concerns the type of residents who could benefit most from an LEC program and the issues surrounding screening. For example, how much of the population of public housing would be attracted to LECs? On a theoretical level, additional research is necessary on the general problem of free riders in multiunit housing and the factors that induce cooperative behavior.

Conclusions

This article has used a simple economic model of the market for low-income housing to evaluate the potential role of LECs in providing good-quality affordable housing. The model suggests that the niche for LECs is among low-income households that value low levels of housing externalities and are willing to conform to the requirements of LEC living to achieve this objective. Successful LECs will entail strict screening and monitoring of resident members, training programs, and adherence to membership agreements, most of which are enforced through self-management. In return, LEC members receive many of the rights and responsibilities of ownership. Additional research will show more clearly how well these features of LECs create their intended effect—namely, an environment wherein residents treat their housing, and one another, with respect.

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