

Some Possible Directions for Research on Multifamily Housing

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Abstract

The combination of a growing demand for information and a literature that has not emphasized multifamily housing has produced an information gap in multifamily housing research. This article seeks to shed light on the areas in which the information gap is widest and to put forth a research agenda for the study of multifamily housing. The article starts from a definition of multifamily housing that includes all rental housing in structures with five or more units, and it goes on to develop a more precise definition. Next the various components of the market for multifamily housing are discussed. These include the demand and supply of multifamily housing and its sources of financing. The discussion examines each of these components with an eye toward identifying questions and issues in need of further study. Data needed for further research are the subject of the sixth section. The final section highlights questions of particular interest to public policy makers.

Because of the lack of information about multifamily properties, the list of possible research questions is long. A better understanding is needed of how multifamily housing markets operate—for example, what factors influence the supply of multifamily housing and how it is financed. There is also a need to examine specific public policy issues, including the impact of tax policy on residential rents, ways of detecting financial distress in federally insured multifamily properties, and the performance of nonprofit organizations in delivering and maintaining affordable multifamily housing. Recently released data from the 1991 Survey of Residential Finance, the U.S. Department of Housing and Urban Development's planned 1995 Landlord Survey, and the newly founded Multifamily Housing Institute could play key roles in studying these questions.

Introduction

The literature published by economists on housing markets and policy is voluminous. A critical distinction in much of this literature is the tenure of the occupant. The determinants of the demand and supply of owner- versus renter-occupied housing are considered to be sufficiently different to justify this distinction. The way most housing data are provided and collected also encourages the analysis of housing by tenure type.

The distinction between single-family and multifamily housing is less frequently stressed in the literature.¹ Focus solely on multifamily housing is even less common. There are several reasons for this pattern. First, housing multiple families is considered a feature rather than an essential ingredient of housing; multifamily housing involves more sharing of public space and a denser and less private form of living than typical single-family housing. Although these differences are sometimes important, they have probably been regarded as less important than other characteristics, such as size, location, and quality of the housing unit, which are frequent subjects of housing studies.

Second, publicly available information on multifamily housing leaves much to be desired. Much information is available on single-family housing and on individual housing units within multifamily housing structures, but little on the multifamily structure itself. One obvious example is the lack of information on the price of such structures. Much work has been done to construct constant-quality indexes of the price of single-family housing; the development of such indexes for multifamily housing is in its infancy (see Abraham 1994; de Leeuw 1993). Similarly, little is known about the operating characteristics and common space associated with multifamily structures. The American Housing Survey (AHS) has made some important improvements in this area in the 1980s, but more is still known about the single-family structure than the multifamily structure.

Third, the definition of multifamily housing itself may be a source of confusion or disagreement. The generic definition offered above surely masks some important differences between the various forms of multifamily housing. The standard industry definition of multifamily housing is a structure with five or more units; this is the definition used to distinguish between single-family and multifamily housing starts, mortgages, and Federal Housing Administration (FHA) mortgage insurance programs. Multifamily housing is also generally considered to be renter-occupied housing; owner-occupied condominiums are usually not considered multifamily housing units even though they may be located in multifamily structures. About 18 million renter-occupied housing units are in structures with five or more units and thus satisfy this definition. More refined definitions of multifamily housing depend on the income of the tenants, the size and

¹ The distinction is often used in forecasts of housing construction because construction activity is reported for both types of housing. Even here the distinction is usually considered a proxy for the more important distinction between owner- and renter-occupied housing.

density of the structure, and the ownership of the property. Some attempts at more refined definitions are offered below.

Last, our society strongly associates single-family owner-occupied housing with the American Dream. The association is displayed in many ways. One of the most important and visible is the preferential tax treatment granted owner-occupied housing relative to renter-occupied housing. Such preferential treatment of owner-occupied housing, especially single-family housing, is surely one reason that multifamily housing has been relatively understudied. Whatever the reasons for the current state of the economics literature on multifamily housing, the demand from business and government for information on multifamily housing appears to be growing. The primary reason is that multifamily housing was shown in the past decade to be a potentially valuable vehicle for channeling investment funds to the housing market. Mortgages on multifamily properties are also receiving more attention as candidates for securitization. Consequently, equity investors, commercial lenders, investment bankers, and investors in mortgage-backed securities (MBS) require more information about the economic performance of multifamily housing.

The perception of an increasing housing affordability problem among low- and moderate-income renters creates another source of demand for information about multifamily housing. Multifamily housing units remain a low-cost method of delivering affordable housing to many low- and moderate-income households,² especially if ways can be found to counteract the problems often observed with large concentrations of low-income households, particularly large public housing projects.

A third source of demand may be the shift in federal policy during the 1980s away from the production of public housing and toward greater reliance on housing projects produced by the private and nonprofit sectors. Such a shift requires the federal government to increase its monitoring of the projects. The government (the principal) seeks to provide incentives for its agents (private and nonprofit producers) to accomplish the program objectives because the goals of the principal are not always compatible with the goals of its agents. Establishing these incentives requires a greater investment in information about these projects, many of which are multifamily housing projects.

² According to the 1980 Survey of Residential Finance, the median value of a housing unit in a 5–49-unit structure in 1980 was \$17,900; the median value of a single-family detached unit was nearly \$54,000 (U.S. Bureau of the Census 1983).

The combination of a growing demand for information and a literature that has not placed great emphasis on multifamily housing has produced an information gap. This article seeks to shed light on the areas in which the information gap is widest; as such, it attempts to put forth a research agenda for the study of multifamily housing. The article is a broad-brush review of the main issues and questions that should be addressed, not a detailed discussion of a few key issues. Although the selection of issues is influenced by a sense of what is doable, a detailed discussion of how the research can be done is the domain of a specific research proposal, not the research agenda.

The article does not reflect a systematic and methodical search of all the literature on this topic.³ In fact, the development of a research agenda on this topic would benefit from such a search.⁴ Nor does it present a comprehensive overview of all aspects of the economics and finance of multifamily housing; some basic knowledge of the market and the literature about it is assumed.⁵

What is multifamily housing?

Housing economists have developed a concept that is useful in a discussion of multifamily housing. According to this concept, the purchase or rental of a housing unit is a transaction in which a consumer obtains a heterogeneous bundle of characteristics for a specified price. The characteristics include the size, quality, location, and other features of the housing unit (accoutrements, design, etc.). The owner purchases the asset and is entitled to the flow of services that comes from the unit; the tenant pays rent in exchange for the rights to those services for a fixed period. A supplier of housing constructs and sells (or leases) a unit with a variety of features that are difficult to sell separately.

³ This article focuses on the economics literature. There is also substantial literature on multifamily housing in other disciplines, such as urban planning, which is not covered extensively here.

⁴ Computer technology allows for an exhaustive but inexpensive search of the literature of the past few years. Such a search should examine academic, policy-oriented, and professional journals and books. The resulting list could then be distributed to a group of academics and professionals for further refinement. The bibliography and continuous updating of it would be a valuable contribution to any further work on this subject.

⁵ For example, the article does not lay out the microfoundations of the market, since most of these are similar to those of the more general housing market and can be found in the literature (e.g., Follain and Jimenez 1985; Mills and Hamilton 1989).

Now apply this concept of housing to multifamily housing. An essential characteristic of multifamily housing is its lack of privacy relative to single-family housing because, as a rule, residents of multifamily housing share common space and reside close to adjoining units.⁶ As such, multifamily housing, like any other housing unit, can be described in terms of its size, amenities, quality, and location; the primary difference is that, all else being equal, multifamily housing features shared common space, less privacy, and denser living relative to single-family structures.

Beyond this general characterization of multifamily housing is a more detailed one that stresses ownership patterns and tenant traits. A review of data from the 1991 AHS, the 1980 Survey of Residential Finance (SRF), and my own sense of this market suggest four types of multifamily housing. Because of the scarcity of data on the ownership and financing of multifamily properties, these categories ought to be viewed as hypotheses in need of further verification:⁷

1. *Large multifamily structures for low- and moderate-income households.* Properties that include 50 or more units total about 55,000, according to the 1980 SRF. The number of units in these structures is about 3.4 million. More than 1 million renters receiving some type of federal housing assistance live in these structures, which suggests that tenants of this type of multifamily housing are disproportionately low- and moderate-income households (U.S. Department of Housing and Urban Development [HUD] 1992, table 1-1⁸). Almost all these households are in urban areas, and more than 50 percent are in the northeast region of the country.

⁶ Although this essential ingredient of multifamily housing is somewhat obvious, "shared" facilities come in many different sizes and shapes, as do the various definitions of multifamily housing. Moskowitz and Lindbloom (1993) provide many more categories of multifamily housing, such as garden apartments, mid-rise, high-rise, quadruplex, and town house.

⁷ Data from the 1991 SRF are not referred to because the printed volume has not yet been released. The 1991 SRF will produce information similar to that produced in 1980; however, the 1991 SRF is available as a public-use microdata file, which will allow a wider range of questions and issues to be addressed. In fact, an ongoing project by the author, sponsored by the U.S. Department of Housing and Urban Development, will produce a series of papers during 1995 that analyze the 1991 SRF.

⁸ This study is available only for 1989, so the exact number for 1991, the year of the most recent AHS, is unavailable.

2. *Small structures with one landlord.* Another type of multifamily housing contains a modest number of units, is owned by an investor who probably also serves as the landlord, and serves primarily moderate-income households. This arrangement probably applies to many of the 4 million renter households that live in structures with five to nine units; only 12 percent of these households receive any sort of housing assistance.
3. *Popular investment vehicle.* A third type has become a popular form of investment for limited partnerships, pension funds, and real estate investment trusts (REITs): large properties that cater to middle-income renters. Sixty percent of multifamily structures with 50 or more units, and 20 percent of those with 5 to 49 units, were owned by partnerships in 1980. Although the Tax Reform Act of 1986 (TRA) reduced the value of tax-oriented shelters that were particularly favorable to the partnership structure, partnerships are likely to remain a strong force in the multifamily housing market. The low-income housing tax credit (LIHTC), also introduced by TRA, has already been shown to be a popular vehicle for partnerships; it may also stimulate greater involvement of corporations because they are largely immune to the passive loss limitations faced by many partnerships.
4. *Nonprofit housing.* According to the 1980 SRF, about 16,000 properties with 5 to 49 units and 3,500 with 50 or more units were owned by churches or church-related institutions or by "other" forms of ownership.⁹ The nonprofit organizations (NPOs) are probably playing an increasing role in providing housing to low- and moderate-income renters because of developments in the late 1980s and early 1990s. For example, the new HOME program places special emphasis on NPOs. Also, many projects that make use of the LIHTC include nonprofits as general partners.¹⁰

In sum, multifamily housing is defined as a particular type of rental housing that tends to provide less privacy and involve the sharing of common space; it probably serves a higher proportion of low-income tenants than single-family housing does, at least

⁹ The "other" category includes nonprofit organizations and others; the 1991 SRF includes nonprofits as a separate category.

¹⁰ Some interesting results and a guide to recent policy and the literature in this area are provided by Dreier and Hulchanski (1993).

in urban areas. Multifamily housing is owned by a wider variety of organization types than single-family housing. Last, and perhaps most important, the scarcity of publicly available data based on large and representative samples severely inhibits a better understanding of the nature of multifamily housing and its role in our economy. As a result, any research agenda on multifamily housing ought to place a high priority on analyzing available data (such as the 1991 SRF) and, if possible, gathering and analyzing new data (e.g., data provided by the newly established Multifamily Housing Institute).

Demand for multifamily housing

The literature on the demand for housing is probably the strongest part of the economics literature. Nonetheless, at least four sets of questions about the demand for multifamily housing are in need of additional research. The first involves the choice of tenure. The second concerns the demand for the characteristics most closely associated with multifamily housing: privacy and shared space. The third explores considerations unique to low-income households. The fourth discusses a forecast of the demand for multifamily housing.

Tenure choice

Because deciding to live in multifamily housing involves deciding to rent rather than own, the demand for multifamily housing units stems in large part from the tenure choice decisions of households. In fact, the literature is filled with studies of tenure choice (e.g., Follain 1982; Haurin, Hendershott, and Ling 1988; Rosen 1979). These studies identify a well-accepted model for analyzing such choices and produce many useful insights.

Despite this large literature, there are several opportunities for future research. One question seems especially important: Is there a pent-up demand for owner-occupied housing? Alternatively stated, are a large number of renters soon to abandon rental housing? If so, how many of these renters currently reside in multifamily housing, and how would such a switch affect the value of existing multifamily housing?

Pent-up demand, if it exists, stems from three sources. First, the decline in interest rates in the past few years has reduced the nominal cost of owner-occupied housing. Second, demographic factors continue to point toward an increase in the demand

for owner-occupied housing (e.g., Follain 1993). Third, improvements in the macroeconomic situation are likely to increase the consumers' optimism about their future economic opportunities and so encourage some renters to switch to homeownership.

Such pent-up demand can be measured by a new tenure choice study that focuses on the decisions of moderate-income and young renter households residing in multifamily housing. Their housing choices should be tracked over time using the household panel data set produced by the Survey Research Center of the University of Michigan, or something similar, to determine the number of renters who may be ripe for homeownership (e.g., Henderson and Ionnides 1986; Krumm 1989).

Another issue pertains to the tenure choice decisions of the elderly. A recent survey shows that consumer interest in homeownership increases during early adulthood, peaks in the 30s and 40s, and then declines (National Association of Realtors Research Division 1992). The decline among the elderly is especially interesting because homeownership rates among those 65 and older are the highest of any age group. This and other evidence suggests that some elderly will find it profitable to switch out of homeownership at some point. They may prefer to move into multifamily properties that provide important social services and security. So an important source of demand for multifamily housing may stem from a decline in the demand for homeownership by the elderly, especially those beyond age 70. In any event, tenure choice among elderly households is a ripe area for future research.

Demand for privacy and common space

Although the demand for housing has been studied in great detail, relatively little is known about the demand for multifamily housing per se. An understanding of this demand requires a knowledge of the factors that influence the choice of multifamily housing once a person has decided to rent.

This demand can be analyzed in many ways. Probably the best approach builds on the literature on demand for housing characteristics begun by Sherwin Rosen (Rosen 1974; see also Follain

and Jimenez 1985). Such an approach views the demand for housing as a choice among housing units that embody a wide variety of characteristics, such as size, quality, and location.¹¹

According to this approach, the study of the demand for multifamily housing per se begins by identifying housing characteristics that capture the essential nature of multifamily housing. For example, measures of the extent of privacy, the size and quality of common space, the density of the housing, and other features of the multifamily structure itself are needed. Given such information, models can be developed and estimated to determine the income and price elasticities of the demand for the essential features of multifamily housing, conditional on the decision to rent. Such demand is also likely to be sensitive to age, marital status, and the number of children associated with each renter household.

Unfortunately, data to conduct such studies are typically difficult to obtain. A promising project is under way at HUD to produce a new Landlord Survey during 1995, which will elicit a wide variety of information about multifamily properties and their operation. In addition, one or both of the government-sponsored enterprises in housing finance or the National Multi Housing Council may be able to obtain access to proprietary information from some large owners of apartment complexes to study this issue. Absent such information, a less ambitious approach may simply examine proxies for multifamily living, such as the number of stories or the number of units in the structure. In any event, studies of this type are essential to understanding the demand for multifamily rental housing. Otherwise, it is difficult to distinguish the demand for rental housing from the demand for multifamily housing.

Housing demand by low-income and very low income households

Providing low-income and very low income households with affordable conventional multifamily housing that meets local housing codes and requires no subsidies seems to be difficult or impossible in many parts of the country (e.g., urban areas of California and New York City). What may be needed are new

¹¹ For example, Follain and Jimenez (1985) point out in their review of the literature that the best estimates of the income elasticity of the demand for space appear to be less than unity while those of the income elasticity of the demand for quality exceed unity.

types of housing that offer fewer of the amenities associated with conventional housing. For example, housing structures that include less space for private quarters and more common space may be an affordable strategy for serving low-income and very low income households. Private quarters may be quite small and involve no more than a separate bedroom. Households that reside in these structures may also be provided with easy access to important social services.

Producing housing of this type may present some technological challenges, but the largest obstacle is likely to be the public's sense of acceptable housing, which is often reflected in federal, state, and local programs and codes. Also, the problems associated with large concentrations of poor people are substantial. If these problems can be addressed, many low-income households would probably choose such housing arrangements over some of the highly undesirable alternatives currently used (homelessness, abandoned housing, etc.).¹² Whether they would choose such housing over the kind available from a large-scale housing voucher program that offers recipients considerably more choice is a question in need of further exploration. In brief, we need to know whether low-income households value the benefits of improved choice more or less than the lower cost of publicly provided housing.

These considerations suggest several areas for additional research. First, how do low-income households view the trade-off between certain housing characteristics such as privacy and other items on which their scarce budget must be spent (e.g., health and education for their children)? Second, should the tenure decision be further dichotomized in order to study the choice between subsidized and unsubsidized rental housing? Mervyn King (1980) used this approach to study tenure choice in the United Kingdom. Perhaps the same thing can be done in the United States, especially given the large amount of multifamily housing allocated to households that participate in formal rental assistance programs.¹³

¹² Christopher Jencks (1994) discusses homelessness and some historical responses of the public to the portion of the shelter market that serves very low income people.

¹³ The Bureau of the Census and HUD produced a special data set in 1989 of all renter households receiving some sort of housing assistance (HUD 1992). A similar effort is under way using 1991 AHS data. These data in combination with other data on the housing situations of low-income households can be used to study the factors that affect the allocation of low-income renters among the various types of housing assistance programs.

Forecasting the demand for multifamily housing

If tenure choice and housing demand equations of the type just described can be estimated, they can be used as the basis for forecasting the demand for multifamily housing in the 1990s. Many exercises of this type have been conducted for owner- and renter-occupied housing (e.g., DiPasquale and Wheaton 1992; Struyk, Turner, and Ueno 1988). To my knowledge, little has been done to forecast the demand for multifamily housing in particular. It would be interesting to develop such models in metropolitan areas with substantial amounts of multifamily housing. Forecasting the demand for housing by low-income households is another area of interest, especially in regions and metropolitan areas expected to experience increasing concentrations of such households.

The supply of multifamily housing

Analysis of the supply of housing is a generally weak link in the economics literature on housing markets. Because of this fact and the special characteristics associated with the supply of multifamily housing, numerous questions are ripe for further research. Indeed, analysis of the supply side of the market is probably the area in most need of additional research.

Price elasticity of housing supply

One of the most important unresolved issues in the housing economics literature regards the price elasticity of the supply of housing.¹⁴ The controversy pertains to the responsiveness of new construction to profit incentives as well as the supply of housing services from the existing stock. Furthermore, most of this debate has focused on owner-occupied and single-family housing, not multifamily housing. Consequently, study of this elasticity remains a priority.

One aspect of this problem is the analysis of the responsiveness of rent to changes in the user cost of capital. Much of the analysis of the effects of tax reform on rental housing assumes that rent equals the user cost of capital in long-run equilibrium. Empirical evidence to support this proposition or to identify the speed at which rent approaches its long-run equilibrium is modest, at best. DiPasquale and Wheaton (1992); Follain,

¹⁴ The controversy and many references to it are discussed in Follain (1993).

Leavens, and Velz (1993); and Blackley and Follain (forthcoming) explore this issue, but more work with better data is needed.

Answers to these questions are not simply matters of academic interest. They point to the heart of policies designed to improve the efficiency of housing markets. If supply is quite elastic and rent is quite responsive to changes in user cost (e.g., tax policy), then demand-side subsidies or changes in tax law can be relied on to generate substantial benefits for tenants. If not, the primary beneficiaries of such programs are likely to be builders, investors, and other supply-side agents.

Varied types of suppliers

Identifying the determinants of the supply of multifamily housing is challenging because the suppliers are motivated by different objectives. Some of the suppliers conform to the textbook case: private builders who build when the current asset price of housing exceeds the cost of building the unit. However, much of the supply of multifamily housing probably stems from two other sources, which follow different decision rules: governments and NPOs.

Interest in the behavior of NPOs has increased recently because of an increased emphasis on the use of NPOs by government. For example, recent federal policies such as the Cranston-Gonzalez Act of 1990 and the HOME program provide incentives for the creation of nonprofit community housing and development organizations (CHDOs) to provide housing for low-income households. Implicit in this legislation are two assumptions about the behavior of CHDOs and other NPOs. First, the goals of NPOs are thought to be more aligned with those of the federal government than the goals of a strictly private sector organization would be. Therefore, agency costs—the costs of monitoring the behavior of agents assigned to do work for the principal—are likely to be lower with NPOs than with private firms. Second, NPOs may be an effective means of directing more local resources toward the improvement of neighborhoods. This redirection seems desirable given the shortage of funds for such work and the fact that the bulk of the benefits of neighborhood and housing improvements accrues to residents of these neighborhoods and nearby communities. More evidence is needed to identify the truth of these assumptions and, more generally, to evaluate the relative performance of NPOs versus private and federally operated programs. Furthermore, as discussed below, NPOs may have a

disadvantage relative to private firms in projects that require substantial amounts of debt financing.

Several analyses of the supply of housing provided by NPOs have just been completed or are under way (Abt Associates 1993; Urban Institute 1993). Each of these studies attempts to identify the relative efficiency of nonprofit versus for-profit organizations in providing affordable housing. My own perusal of this literature suggests that the studies raise as many questions as they answer and that room for improvement and extension of them exists.¹⁵

Murray (1992) has recently explored an aspect of this issue: Does the production of rental housing by the federal government result in lower production of rental housing by the private sector? He finds evidence of such substitution, at least through the early 1980s; evidence is mixed since then. Perhaps the change in the pattern is related to the growing importance of NPOs and a decline in the major federal housing programs such as Section 8 and public housing prior to 1980.

Operating costs

Another area in which information is limited concerns the costs of operating multifamily housing (utility, maintenance, marketing, etc.). Do such costs vary with the size of the structure? What technology is available for individual monitoring of housing units within multifamily structures? Do households that have utilities included in their rent (and thus pay average costs) consume different amounts of utilities than those that are billed separately (marginal cost pricing)? Also, studies comparing the operating costs of public housing projects with those of projects operated by NPOs and the private sector ought to be done. If substantial differences are observed, consideration should be given to methods for managing these costs more efficiently, including providing incentives to tenants.

The data collected by the Institute of Real Estate Management (IREM, various years) seem to offer an opportunity to study these issues. These data include a variety of statistics on operating costs, such as their composition and relationship to net operating income; the data are available for many geographic locations and property types. They are reported in annual

¹⁵ Burton Weisbrod (1988) says little about housing-oriented NPOs but does provide guidance on how a study of them might proceed.

publications to subscribers, who pay a substantial fee. To my knowledge, these data have not been subjected to careful regression analysis by academic researchers, nor have patterns in these costs been carefully analyzed. Perhaps an arrangement can be struck among the IREM, a research organization, and a research sponsor to study the data methodically. Such a study may yield some important insights into the nature of operating costs.

Taxation issues

Two other tax issues are worthy of attention. First, how do property taxes affect rents? Many economists probably believe that such taxes are passed on to tenants in the form of higher rents in the long run, but empirical evidence for this claim is weak. A recent study by Carroll and Yinger (1994) indicates that only 15 cents of a \$1 increase in the property tax is passed along to tenants in the form of higher rents for communities in the Boston metropolitan area. Furthermore, the rent increase varies considerably among communities. More work along these lines in other communities is needed.

Second, the LIHTC is in need of a major evaluation; this innovative program has been in existence since 1986 (see Stegman 1991 for a discussion and critique). A particularly interesting issue is the efficiency of the typical relationships that exist in many LIHTC projects between the NPOs and the limited partners that benefit from the tax credit. Another question one can ask about the LIHTC is whether the NPOs will be able to follow through on their commitment to target the housing to low-income residents for the full 15-year period. If not, the program goals may not be met, and the investors in such properties may be in for some disappointing days ahead. A recent plan announced by Michael Stegman, the assistant secretary of policy development and research at HUD, to develop a comprehensive database for LIHTC projects will advance efforts to analyze and evaluate the program.

Rehabilitation and conversions

This topic can be considered as part of the more general discussion of the nature of the supply function for multifamily housing. However, given the important role that rehabilitation plays in the range of the market that serves low- and moderate-income households, it deserves special attention. After many years of debate, conventional wisdom seems to hold that modifying

existing housing is preferable to constructing new housing. Mayo (1986), Reeder (1985), and Sa-Aadu (1984) provide some recent evidence on this issue and summarize some of the earlier literature. My own opinion is that support for this proposition is modest.

My concerns about the existing evidence are threefold. First, a difference in these costs is not expected in competitive housing markets. A unit of housing costs the same whether it is new or used. A unit of existing housing may cost less than a unit of new housing not because the price per unit of housing differs but because the quality of the housing differs.

Second, rehabilitation projects operated by NPOs and governments probably suffer from excessive and expensive goals. Modest rehabilitation of existing housing may be a cost-effective way to serve low-income and very low income households, but some rehabilitation projects end up producing high-quality housing at a cost far beyond the reach of these households. More modest rehabilitation projects allow the benefits of a fixed amount of subsidies to go much farther.

Third, the ideal study must take account of differentials in operating costs of both new and existing buildings over the expected life of the new building. It can easily be shown that the cost of a new unit in a nice neighborhood exceeds the cost of modifying existing units in a depressed central-city neighborhood, but this misses the point. What is needed is a careful comparison of the costs of providing new and existing housing of similar quality in similar neighborhoods, inclusive of differential maintenance costs, which are likely to be higher for older housing, and future rehabilitation costs needed to ensure that the existing building lasts as long as the new one.

Zoning and impediments to land development

This issue is relevant for two reasons. First, a long-standing issue in the provision of low-income housing is whether local housing standards are too high. If so, it is difficult to provide affordable housing to low-income households without massive subsidies. Of course, local governments that do not want low-income households within their boundaries set their standards to exclude such households. A related issue concerns housing code enforcement. My sense is that code enforcement varies considerably among neighborhoods. Thus, de facto variations in the

quality of housing exist in many cities. These explicit and de facto policies deserve serious study.

Second, Anthony Downs (1988, 1994) and others have long argued that zoning regulations and other impediments to land development are a great cause of the high cost of housing. Most of this work seems directed toward the growth management plans that have the effect of increasing the cost of owner-occupied housing. Although the NIMBY (not in my back yard) debate does include a discussion of zoning policies that exclude multifamily housing, it seems that less attention has been focused on multifamily housing.

Racial discrimination

Judging by the amount of public attention and research on racial discrimination during much of the 1980s, one might conclude that the severity of the problem has declined. Recent research suggests otherwise.¹⁶ This research relies primarily on the experiences of pairs of people shopping for rental housing; the pairs are identical in all ways but one: race. A recent conference by Fannie Mae and another sponsored by HUD summarized this research and identified ways to extend and improve it. What follows are several of my own thoughts about the research and how it can be improved.

First, has racial discrimination improved or worsened? The research does not speak clearly to this issue because some of the earlier work on the subject is not comparable with the newer work. More generally, it is important to determine the extent of racial discrimination among housing markets.

Second, do black and white households ultimately find housing at similar rates? The research surely points to the continued existence of racial discrimination in rental housing but just as surely suggests that many landlords, probably the majority, do not discriminate. This finding implies that the dominant effect of racial discrimination is increased search time for black households relative to whites. Is this inference correct? Are there inexpensive ways of reducing the search time needed to identify landlords who do not discriminate on the basis of race?

¹⁶ See Turner, Struyk, and Yinger (1991) for a discussion of recent evidence obtained by the paired audit approach. Galster (1992) also provides an extensive discussion of existing research and a comprehensive research agenda.

Third, what are the best ways of combating discrimination? Investing in search behavior and improved monitoring are two ways suggested by the previous two points. Another obvious one is the penalty assigned to those found guilty of racial discrimination. Which penalties work, and which do not?

Fourth, how does race affect rents and the values of multifamily structures? Some work has examined whether blacks pay more or less than whites for similar housing. My own reading of the work suggests the evidence on price differences since the mid-1970s is ambiguous; Chambers (1992) discusses some of these issues. The problem is distinguishing among the quality of the neighborhood, the racial composition of the neighborhood or building, and the race of the individual tenant. No work, to my knowledge, has been done to identify whether the racial composition (or for that matter the income distribution) of the multifamily property affects the rents tenants are willing to pay and the values of these structures. This would be a fascinating area for future research, and the 1991 SRF seems to offer an opportunity for such research.

Rent control

Much research has been conducted on rent control. Indeed, it is surely the consensus among economists that rent control, as a rule, is damaging to a housing market. Nonetheless, the specifics of a rent control program do affect its impact and distributional consequences. Also, measuring the effects of rent control is likely to require monitoring a housing market over many years. Recent discussions of this large literature are provided by Malpezzi (1986) and Olsen (1988).

Financing of multifamily housing

The academic literature on the financing of multifamily housing, like that on the supply of multifamily housing, is sparse. One explanation for the scarcity is the lack of publicly available data on the financing of such properties. Some information is available on specific investments such as returns on equity REITs for apartments, but statistically valid and publicly available information on the sources of debt and equity financing for multifamily housing is unavailable in large amounts.¹⁷ In this regard, the 1991 SRF seems to offer a unique opportunity to

¹⁷ I refer to “publicly” available data because proprietary data sets surely exist for subsets of the market.

examine the sources of financing for multifamily property, as discussed in detail below. Data collection and assembly efforts by the Multifamily Housing Institute and the National Multi Housing Council should also be important.

Another explanation is the complexity of the issue itself. The factors that influence the use of debt and equity in a multifamily housing project are varied. They include the standard factors that affect any financial decision, such as the expected return and riskiness of the investment. They also include a variety of public policies, which are often complex and in flux; this is especially true for affordable housing. This complexity has hampered the development of a general theoretical model capable of shedding light on the optimal debt-to-equity ratio for multifamily housing. I know of few attempts to develop such a model; the article by Gau and Wang (1990) comes closest to what I have in mind.¹⁸

One consequence of the shortage of academic literature on the financing of multifamily housing is an abundance of questions in need of examination. The most important questions fall into three categories and concern the suppliers of equity, the suppliers of debt, and the optimal debt-to-equity ratio.

Suppliers of equity

The first question is, Who are the suppliers of equity? Although little information is available on this question, the 1980 SRF does provide some highly aggregative data about the distribution of ownership. The top three categories of ownership of properties with 5 to 49 units are individual (71 percent of properties), partnership (19 percent), and real estate corporations (4.5 percent). Among properties with 50 or more units the distribution is 20, 60, and 12 percent, respectively. The distribution of the *value* of the stock among various ownership categories cannot be determined from the 1980 data. The sources of equity finance for affordable housing are probably more varied and include a wide variety of public, private, and nonprofit organizations. Much more information on this question is needed.¹⁹

¹⁸ A large literature does exist in professional journals like *Real Estate Finance* and others that cater to professionals trying to develop multifamily deals. It would be interesting to compile a list of articles from these journals and summarize important lessons or issues raised in them.

¹⁹ The 1991 SRF ought to help in this regard because it will indicate whether a property or its tenants receive any form of housing assistance.

Another question pertains to the motives for investing in multifamily housing. These investments offer opportunities for portfolio diversification, expected yields in excess of government bonds, and tax advantages. On the other hand, the heterogeneity and local nature of housing make it an investment that requires investors to have much more information (or pay for more information) than is necessary for most other investments (e.g., stocks). Many studies have examined the benefits of adding real estate to investor portfolios (e.g., Hartzell and Schulman 1987). At a minimum, this literature needs to be reviewed, but my sense is that it still leaves many questions unanswered. For example, the debate about whether REITs are stocks or real estate is still unresolved, as is the importance of regional diversification. Another uncertainty concerns the pros and cons of investing in one large project or smaller portions of many projects. An interesting but more specific subject of study is the performance of these investments during the October 1987 stock market crash: Did real estate exhibit desirable properties?²⁰ Many more questions along these lines can be raised.

How have changes in the taxation of rental housing affected the way such housing is financed? Tax issues are important determinants of investments in conventional multifamily housing, but tax considerations are less important than they were before TRA. In fact, TRA probably tilted the playing field toward equity REITs and away from highly leveraged and tax-driven limited partnerships, but more study of the optimal ownership form of real estate is needed. The decline in the values of much real estate in the late 1980s—which was caused by a variety of factors, including TRA—makes this shift in the playing field difficult to detect in market data, but as the real estate market returns to equilibrium in the 1990s, studies of this type should be fruitful.

The use of the LIHTC probably dominates equity investment decisions in low-income housing. As noted above, many questions can be asked about the LIHTC. One relevant to the supply of equity is whether regular corporations have been large suppliers of equity or whether limited and general partnerships have dominated. A related issue is how state policies on allocation of the LIHTC have tilted the playing field. A report by ICF, Inc. (1991), discusses some of these issues.

²⁰ Many studies of REITs can be found in the *Journal of the American Real Estate and Urban Economics Association* (e.g., the summer 1993 issue). See also Howe and Shilling 1988.

Public policy or concerns about social responsibility no doubt play a role in the investment decisions of some investors. What kinds of investments are being made in the name of social responsibility, and who is making them? Is there concern among private investors, especially pension funds, that legislation will be enacted to force them to invest more in these areas?

*Suppliers of debt*²¹

No one can deny that multifamily mortgage originations are well down from the 1980s: Originations in 1992 were less than 25 percent of those in 1985, for example. But the cause of the decline is controversial. Most agree that an important source of the difficulties is cyclical: Traditional sources of financing for rental housing have appropriately tightened their underwriting criteria in recent years because policies in force during the 1980s helped produce a glut of multifamily rental housing, which still affects many local housing markets.²² In time, according to this view, the excess supplies will diminish, asset prices and rents will rise, and the climate for the financing of multifamily housing will improve.

Many believe that the problems stem from an additional and structural source: The traditional providers of mortgages for multifamily housing have reduced their financing, and new sources have been unable to fill the shortfall left by their departure. This structural change has produced difficulties in obtaining financing for developers of new multifamily projects and for those who wish to refinance existing projects; some believe the problems are especially severe for low- and moderate-income projects.²³

This alternative view rests on three key observations. First, the major and traditional sources of financing for permanent multifamily housing, especially the thrift industry, have reduced their presence in the market. The principal cause of this decline is the

²¹ This section draws heavily on a longer paper by Follain and Szymanoski (forthcoming).

²² Recent trends and policies toward rental housing, especially the impact of federal income tax policy, are discussed by Follain, Hendershott, and Ling (1992).

²³ Excellent discussions of these issues are presented by DiPasquale and Cummings (1992) and the National Task Force on Financing Affordable Housing (1992).

savings and loan debacle of the 1980s, which greatly reduced the size of the thrift industry.

The commercial banking industry has picked up some of the slack left by the departure of thrifts, but not all of it. About 40 percent of multifamily mortgages were originated by commercial banks in 1992—up from 20 percent in the early 1980s. However, total volume of lending by commercial banks has changed little in real terms since the 1980s. Greater participation by commercial banks is unlikely in the near future for two reasons. One is related to the cyclical problem noted above: Bankers and bank regulators seem reluctant to see substantial amounts of commercial real estate added to bank portfolios until the market improves and banks dispose of the sizable default problems they now face. The other problem is the system of risk-adjusted capital requirements for banks and thrifts, which places multifamily mortgages at a disadvantage relative to other kinds of investments in their own portfolios (e.g., Treasury securities and MBS backed by single-family loans).

The second observation is that FHA has greatly reduced its presence in the financing of multifamily housing. In 1992, FHA originations were less than 3 percent of total multifamily mortgage originations, compared with 15 percent in 1987 and higher percentages in the early 1980s (Dickie 1993, table PM-A8). Part of this decline represents an unavoidable reaction to the unexpected problems in the FHA coinsurance program. For example, Coopers & Lybrand (1993) has estimated that the recent default of many loans in FHA's general insurance fund (the bulk of which is devoted to multifamily loans) has left the fund with a net worth of about *negative* \$10 billion. Such an unexpectedly poor performance surely leads investors to require a substantial risk premium on similar multifamily loans made without a federal guarantee.

A third and offsetting development is the improvement in the secondary market for multifamily mortgages, which has the potential to provide adequate financing for multifamily housing. Although only 10 percent of the stock of multifamily mortgages is currently securitized, compared with more than 50 percent of single-family mortgages, efforts are ongoing to develop a secondary market for multifamily mortgages. These efforts include those by the Resolution Trust Corporation (RTC), the National Multi Housing Council, and several Wall Street investment banking firms, as well as recent legislation to explore the

possibility of risk sharing by FHA.²⁴ Despite these promising developments in the securitization of multifamily mortgages, it is premature to announce that securitization will do for multifamily housing what it has done for single-family housing.

These developments do raise a series of questions about the future of debt financing of multifamily housing. What is the justification for government intervention, and if it is justified, how should government intervene to help develop a secondary market in multifamily mortgages? There is also a series of questions related to further development of this market by the private sector. The questions fall into several categories: agency problems, likely involvement of primary lenders, and technical and data issues.

Agency problems

This term refers to a set of potential obstacles to the development of a secondary mortgage market, including investor fears of adverse selection, moral hazard, and the inability to insure against critical government behavior. Remedies lie in improvements in contract designs that limit such risk. For example, what kinds of covenants should be included in a multifamily MBS to minimize moral hazard risk? Some private MBS, for example, incorporate precise rules for distributing project revenues. How successful are these rules in limiting moral hazard problems in multifamily housing projects?

Another problem concerns the kinds of recourse arrangements available to the issuers of MBS that rely on delegated underwriting. How can the issuers insure against adverse selection problems by mortgage originators? For example, should issuers of MBS have recourse to the initial lender? Also, how can the equity of the delegated underwriter be monitored to insure that it has enough capital to provide a credible recourse arrangement?

Subtler agency problems may occur when the LIHTC is used to raise equity for projects in which the NPO serves as the developer, operator, and general partner. This organizational structure seems to produce a situation in which the many investors and participants in the project have small stakes in its success. In that case, moral hazard and adverse selection problems are possible, and debt financing is likely to be expensive and difficult to obtain.

²⁴ Ellson (1992), Follain and Szymanoski (forthcoming), and the National Task Force on Financing Affordable Housing (1992) discuss these efforts in more detail.

Other forms of lending

Securitization has become the dominant form of lending in the market for single-family mortgages, and even though the multifamily MBS market seems to show signs of growth, the dominance of securitization over a more traditional buy-and-hold approach is not yet established. What can banks, insurance companies, and pension funds do to improve or create an advantage in this regard? Do any of these financial intermediaries have an advantage over the others in the issuance of debt for multifamily housing? My own sense is that the information requirements associated with some forms of multifamily lending are substantial and ought to favor those who invest significant time and energy in learning about this market. A regional bank seeking to develop a unique market niche may be able to learn its market well enough to gain an advantage. A large insurance company may also be able to develop a staff and the data needed to establish such an informational advantage.

Technical and data questions

The development of pricing models for multifamily mortgages is a high priority. In some ways, application of option pricing theory may be expected to improve on estimates based on single-family mortgages because investors in multifamily mortgages probably conform better than the typical homeowner to the notion of a ruthless exerciser of prepayment and default options. On the other hand, the stochastic factors that influence the value of multifamily mortgages are likely to differ from those for single-family mortgages.²⁵ In particular, interest rates are probably less important for multifamily mortgages, but the stochastic behavior of rents and vacancy rates are probably more important. These considerations suggest that a pricing model must be developed especially for multifamily mortgages; simple application of the models used for single-family mortgages is unlikely to be accurate.

²⁵ The high loss rates (loss severity) on many FHA and Freddie Mac multifamily defaults suggest that the process that drives multifamily housing prices is different from and more volatile than that for the prices of owner-occupied housing. Loss rates assumed in the Coopers & Lybrand study were 75 to 80 percent.

At the top of the list of data needs in this area is information about default patterns of multifamily debt.²⁶ Without such information it is difficult to develop realistic and accurate price information. Furthermore, historical data must be used with caution. Historical default rates were probably influenced by old programs, contract designs, and data availability. There is no reason to believe that future default behavior will duplicate past behavior. This is true for FHA multifamily programs and for others that include fundamental changes from previous programs. For example, if Freddie Mac returns with a delegated underwriting multifamily program, unlike its first program, then historical information on its previous program is less valuable.

A related issue is the study of workout methods for delinquent loans, an emerging issue of study in the area of single-family mortgages. Two questions of particular interest are these: when a lender should foreclose on delinquent properties and when it should show some forbearance. At the time of this writing, HUD was just about to issue a report to Congress on workout methods for single-family loans. Given the prevalence of workouts in multifamily loans, a similar study of the multifamily market seems appropriate. RTC's experience should be interesting to study in this regard.

Another area in which little research is done concerns spatial autocorrelation among mortgage data. The possibility that mortgage defaults may be spatially correlated is especially worth investigating. Consider a neighborhood with many multifamily properties. The default on one mortgage may lead to less maintenance and, possibly, abandonment. This situation, in turn, may have an adverse impact on nearby properties, which may trigger additional defaults. Moreover, spatially autocorrelated defaults may result if economic change is concentrated on particular neighborhoods or communities. For example, the closure of a military base or a factory may have an adverse effect on nearby properties. In such cases, taking account of spatial autocorrelation may increase the precision of default models. Much work has been done to develop methods in spatial econometrics, although none of it has been applied to the issue of mortgage default.²⁷

²⁶ The best published work on this topic is probably by Kerry Vandell and his colleagues. Although much of the work examines nonresidential real estate defaults, he has given much thought to the problems of multifamily defaults as well (see, for example, Vandell et al. 1992).

²⁷ An excellent discussion of these methods is found in Griffiths (1990).

Optimal debt-to-equity ratio

Whether an optimal debt-to-equity ratio exists is a much discussed issue. Much has been written about this topic in the finance literature in reference to the nonfinancial corporation, but little in the area of housing, especially multifamily housing. Gau and Wang (1990) discuss some of the issues related to this question, as does a recent article by Shilling (1994).

Is there such a ratio? The standard finance model suggests that the answer is no unless there are market “imperfections” such as inequitable tax treatment of debt and equity, substantial bankruptcy costs, asymmetric information between issuers of debt and owners of the corporation, and liquidity constraints. Of course, examples of all these factors exist in the area of multifamily mortgages.

The research on this question must examine these factors carefully to develop a model capable of answering the question and then test the model’s predictions with data. This is not an easy exercise, especially given the lack of data and the increasing problem of defining debt and equity precisely. Nonetheless, it may lead to a much better understanding of the likely growth in the demand for debt and equity for multifamily housing. Such analysis seems especially needed in the area of affordable housing because of the many “distortions” and players in this part of the market.

Data and information needs

Study of all the above topics requires more and better data on multifamily housing. This section summarizes the most important data needs and mentions some others. A brief summary of possible sources of more and better information about multifamily housing is also provided.

Price indexes

Development of price indexes is the clear priority. Private efforts are under way to develop price indexes for investment-grade properties. These efforts ought to be studied and expanded. Repeat sales approaches ought to be considered as Fannie Mae and Freddie Mac have done with single-family housing. The National Council of Real Estate Investment Fiduciaries does produce a series on the returns to apartments, but it begins in

the late 1980s, pertains to a high-quality category of properties, and is proprietary. The National Real Estate Index produces an index of a similar nature and duration.

Proprietary appraisal data ought to be examined as well. Although methods of evaluating multifamily properties seem to be well understood, the precision of these methods is not well established. These methods are particularly weak at measuring valuation changes triggered by macroeconomic events. Developing more data and better appraisal methods ought to be a high priority.

Default and prepayment data

Collecting data on default and prepayment risk is another high priority. Default is clearly the more important of the two. A high priority ought to be given to making the FHA data accessible and as clean as possible.²⁸ Surveys of private sources of default data ought to be conducted and, when possible, made available for study in ways that protect confidentiality and proprietary requirements.

Vacancies and other measures of the slackness of the market

Consistent data series on vacancy rates for large numbers of metropolitan areas and submarkets within these areas would be extremely valuable. Time-series data are essential to a better understanding of the dynamic adjustment of rental housing markets. Microdata on the vacancy patterns within particular housing projects would also shed light on how individual landlords respond to vacancies.

Raw vacancy data alone are not sufficient to measure the slackness of housing markets. One concern is the variation in the quality of vacant units. Another is the variation in vacancy rates among submarkets (e.g., high versus low income). In this regard, the Urban Institute and HUD's Policy Development and Research Division have been doing some interesting work using alternative measures of the tightness or slackness of the housing

²⁸ An effort under way at the Urban Institute under the direction of Charles Calhoun and Chris Walker may yield some help on this. Also, staff of HUD's Policy Development and Research Division may have some ideas as to how these data can be made more valuable.

market.²⁹ Simply stated, these measures compare the distribution of housing units by size and rent with the distribution of renter households by income. This is an important line of research.

Financial performance of projects

Information is needed about the performance of existing projects, including rent collections, operating expenses, vacancies, and tax payments. These data will be useful in measuring the economic return on such investments and signaling potential problems. FHA is in particular need of such “early warning systems.”

Lender behavior: Mortgage lending survey

Although HUD’s survey of mortgage lending does provide some information about multifamily lending, much more is needed. Specific information about the type and distribution of loans made would be very useful. For example, what are the terms of multifamily loans (e.g., maturity, interest rate, fixed or variable interest rate, penalties)?

Several data sources on multifamily housing exist, several are under development, and many other possibilities exist. Some are mentioned briefly in this section.

1991 SRF

The 1991 SRF is at the top of my list for further exploration because it is based on a national sample and, most important, offers information about the entire multifamily housing stock. The questionnaire is similar to that for 1980, and the Census Bureau released a public-use microdata file in early 1994. This survey represents a major opportunity to learn more about the financing of multifamily housing and ought to be studied carefully. The SRF will permit the examination of rent-to-price ratios in different markets and by different forms of ownership (e.g., nonprofits and limited partnerships). It also provides detailed

²⁹ Kathryn Nelson of HUD is conducting research in this area. See her article in this issue (Nelson 1994), in which she compares numbers of rental units affordable at 30 percent of income with numbers of renter households along a continuum of incomes expressed as percentages of HUD’s area median family income.

information about the mortgages underlying these properties and whether the projects receive certain types of housing assistance (e.g., LIHTC).

1995 Landlord Survey

HUD and the Census Bureau will conduct the Landlord Survey during 1995, with results expected by September 1995. Information will be obtained about the capital and operating costs of multifamily properties, the management philosophies of the landlords, trends in property values, and a variety of other points similar to those examined by the SRF.

FHA multifamily data

FHA multifamily housing data are complex and fraught with problems. Nonetheless, they are probably the best available source of historical information about multifamily properties, especially affordable housing. A substantial investment ought to be made to clean up these data and make them publicly available.

RTC

Data collected by RTC ought to be analyzed carefully before RTC disbands. They offer a unique opportunity to understand the complex problems surrounding workouts and the real estate experience of the 1980s.

Multifamily Housing Institute

This new organization may be the key to major research opportunities in the 1990s and beyond. It should be supported to produce the best possible data set and to make the data available to researchers. Small grants to potential researchers may help. The institute may also want to work with some private organizations that have already begun to develop their own price indexes and databases on multifamily housing. Perhaps the institute can organize a conference or research program early in its existence to analyze data needs and untapped resources.

Public policy and business questions

Further research along the lines suggested in this article will improve our understanding of the workings of the multifamily housing market. What will we do with this better understanding? The ultimate benefit of this research is improved public policy and business decisions in the area of multifamily housing. The final section of this article identifies questions of particular interest to those responsible for such policies and decisions. What follows are my choices for the top public policy issues relevant to multifamily housing.³⁰ Most are implicit in the discussion to this point, and the final section highlights the most important ones. Some others are new.

Tax policy toward multifamily housing

The LIHTC is a policy in obvious need of study. The enactment of the LIHTC represented a major change in U.S. housing policy and was done with little previous study or experimentation with a policy of this type. If a comprehensive database of LIHTC projects can be developed, a study of the program during its first seven years ought to yield some strong conclusions about the effectiveness of the LIHTC.

More generally, the impact of federal, state, and local tax policy on multifamily housing markets remains an area in need of research. The incidence of such taxes is of particular importance. The policies in need of study include provisions that directly affect multifamily housing, such as depreciation rules, as well as policies that affect it less directly, such as tax treatment of owner-occupied housing. The effects of state and local taxes, such as the property tax, are especially in need of study.

Measuring the need for additional multifamily housing

An often-cited principle is that housing policy ought to be flexible. For example, it is often said that demand-side policies are appropriate in some markets and supply-side policies in others, and it is difficult to disagree. Unfortunately, implementing this principle remains a major challenge because measures of the tightness of housing markets are woefully inadequate. Vacancy rates, affordability ratios, and some of the other standard measures found in housing plans developed by and for

³⁰ The order conveys no information about the priority placed on the questions.

the federal government are inadequate and must be further developed to apply the principle more efficiently.

Economic development and multifamily housing

More and more people seem to be coming to the conclusion that neighborhood revitalization requires much more than better housing. It also requires good jobs for the residents, safety, and a feeling among residents that they have a stake in the neighborhood. We need to understand better how policies to improve neighborhoods affect one another and how to develop policies that include components for providing housing, economic development, and safety. Multifamily housing is likely to be a part of this discussion because it is likely to be included in most affordable housing programs. We also need to ask a difficult and basic question: Is renter-occupied multifamily housing sufficient to give residents a stake in the neighborhood? Should homeownership be a major component of neighborhood revitalization efforts instead?

FHA multifamily housing programs

The recent records of many FHA multifamily housing programs are not good, and developing a plan to improve them is a complex task. Issues that must be addressed include disposing of properties under HUD ownership, reducing property value declines under HUD ownership, developing early warning systems, assuring investors that Section 8 project awards will continue even if budget considerations force a move to shorter term contracts, and pricing HUD guarantees accurately.³¹ Another issue deserving special attention is the development and ultimate evaluation of HUD's two-year program to explore risk sharing in the insurance of multifamily mortgages. This excellent opportunity to learn more about this issue should not be squandered. Surely efforts to improve the effectiveness and cost of HUD's multifamily programs ought to be a high priority in any effort to "reinvent" HUD.

NPOs

Current housing policy emphasizes the role of NPOs in the delivery and maintenance of affordable housing, but there has

³¹ See Wallace (1994) for a more detailed discussion of some of these issues.

been little evidence regarding the efficiency of such organizations and their long-term viability. Furthermore, the impact of such a policy on the output of the private sector is not well understood. In theory, a plan that uses NPOs offers some advantages and disadvantages relative to one that subsidizes private sector activity without the creation of public-private hybrids. Research ought to be conducted on these issues to improve on existing programs and determine whether emphasizing NPOs is the best direction for future housing policies.

Attracting more debt and equity to affordable housing: Rules or incentives?

The public sector is putting forth much effort to attract capital for investment in multifamily housing, especially affordable housing. The primary incentive for providing capital for multifamily housing ought to be a reasonable rate of return for investors, be they lenders or equity investors. But rate of return is not the only, or even the primary, lever the federal government seems to be using these days. The Federal Home Loan Bank System is required by the Federal Institutions Reform, Recovery, and Enforcement Act to invest funds in such housing. Pressure on Fannie Mae and Freddie Mac to do so increased in the government-sponsored enterprise legislation of 1992. Regulatory pressure is also increasing on financial institutions to do more in this area. Pension funds are being asked to devote some of their funds to this purpose, but so far the public sector has not resorted to “rules” and laws to force their involvement.

Government ought to weigh carefully its reliance on rules and regulations to provide more funds to the market. Using rules instead of relying on market forces and regular budgetary authority may have undesirable effects on the market and the institutions on which the rules are imposed. In cases in which the market has failed and government success seems possible, the government should rely on carefully considered and targeted subsidies. It is here that research can help to define market failures and develop workable programs.

Concentrations of poor people and public housing

One obvious problem with some previous housing policy is the development of multifamily housing projects with large concentrations of poor people, many of whom are minorities. Eliminating the negative externalities that often accompany these

projects ranks among the greatest challenges in housing policy today. The problems are especially severe when many structures of this type are located close together.

Efforts to combat these problems will certainly affect the future of multifamily housing of this type. For example, one option is to rely less on multifamily structures; instead, lower density housing would be used to house low-income households throughout a metropolitan area. This option helps avoid the NIMBY problem and reduces the negative externalities associated with concentrations of poor people. It reduces the demand for multifamily housing, all else being equal. The problem with this approach is its expense. Multifamily housing has been shown to be much cheaper than most one- to four-family housing. So the challenge for supporters of multifamily housing is to develop a strategy that takes advantage of its lower cost per unit and minimizes the problems associated with concentrations of low-income households.

Racial discrimination

Evidence of racial discrimination in the rental housing market exists. In my opinion, the federal government and most Americans want to eliminate this problem and have wanted to do so for some time. Improved monitoring procedures, tougher penalties, and other strategies need to be developed and refined to combat racial discrimination in the rental housing market. Perhaps experiments can be conducted to examine the effectiveness of alternative strategies. Continuing studies are needed to measure changes in the extent of racial discrimination over time and among markets.

Investing in data

The study of multifamily housing is severely hampered by inadequate data. Efforts to collect additional data and make use of existing data ought to have high priority. The federal government can play an important role in these efforts. Its existing multifamily data sets ought to be improved and made easily accessible. New programs ought to include carefully considered data collection and evaluation components. Also, the federal government may invest in other efforts to collect such data and encourage state and local governments and NPOs to do the same.

Nongovernmental participants in the market ought to play a major role in increased data collection and utilization. The Multifamily Housing Institute could lead this effort—for example, by encouraging Fannie Mae and Freddie Mac to make their data accessible for research. It can also work with private institutions to identify and make accessible proprietary data sets for research.

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References

- Abraham, Jesse M. 1994. A Cash Flow Model of Property Performance. Paper read at the 1994 American Real Estate and Urban Economics Association meeting, Boston.
- Abt Associates. 1993. *Nonprofit Housing: Costs and Funding, Final Report of Abt Associates, Volume I—Findings*. Washington, DC: U.S. Department of Housing and Urban Development.
- Blackley, Dixie, and James R. Follain. Forthcoming. In Search of the Linkage between User Cost and Rent. *Regional Science and Urban Economics*.
- Carroll, Robert J., and John Yinger. 1994. Is the Property Tax a Benefit Tax? The Case of Rental Housing. *National Tax Journal* 47(2):295–317.
- Chambers, Daniel H. 1992. The Racial Housing Price Differential and Racially Transitional Neighborhoods. *Journal of Urban Economics* 32:214–32.
- Coopers & Lybrand. April 29, 1993. *Assessment of the Financial Condition of the Insured Multifamily Portfolio and an Estimation of the Required Insurance Reserves*. Prepared for the U.S. Department of Housing and Urban Development.
- de Leeuw, Frank. 1993. A Price Index for New Multifamily Housing. *Survey of Current Business* 73(2):33–42.
- Dickie, John N. August 9, 1993. Mortgage Market Report. Memo to Eleanor M. Clark. U.S. Department of Housing and Urban Development.
- DiPasquale, Denise, and Jean L. Cummings. 1992. Financing Multifamily Rental Housing: The Changing Role of Lenders and Investors. *Housing Policy Debate* 3(1):77–116.

DiPasquale, Denise, and William C. Wheaton. 1992. The Cost of Capital, Tax Reform, and the Future of the Rental Housing Market. *Journal of Urban Economics* 31:337–59.

Downs, Anthony. 1988. The Real Problem with Suburban Anti-Growth Policies. *Brookings Review* 6(Spring):23–9.

Downs, Anthony. 1994. *New Visions for Metropolitan America*. Washington, DC: The Brookings Institution.

Dreier, Peter, and J. David Hulchanski. 1993. The Role of Nonprofit Housing in Canada and the United States: Some Comparisons. *Housing Policy Debate* 4(1):43–80.

Ellson, Richard. 1992. *The Emergence of Multifamily Securitization*. Donaldson, Lufkin, and Jenrette (October).

Follain, James R. 1982. Does Inflation Affect Real Behavior? The Case of Housing. *Southern Economic Journal* 49(3):570–82.

Follain, James R., and Edward J. Szymanoski. Forthcoming. A Framework for Evaluating Government's Evolving Role in Multifamily Mortgage Markets. *Cityscape*. Washington, D.C: U.S. Department of Housing and Urban Development.

Follain, James R. 1993. The Outlook for Owner-Occupied Housing in the Year 2000. In *Urban Finance under Siege*, ed. Thomas R. Swartz and Frank J. Bonnelo, 79–106. Armonk, NY: Sharpe.

Follain, James R., Patric H. Hendershott, and David C. Ling. 1992. Real Estate Markets since 1980: What Role Have Tax Changes Played? *National Tax Journal* 45:253–66.

Follain, James R., and Emmanuel Jimenez. 1985. Estimating the Demand for Housing Characteristics: A Survey and Critique. *Regional Science and Urban Economics* 15:77–107.

Follain, James R., Donald R. Leavens, and Orwin T. Velz. 1993. Identifying the Effects of Tax Reform on Multifamily Rental Housing. *Journal of Urban Economics* 34:275–98.

Galster, George C. 1992. Research on Discrimination in Housing and Mortgage Markets: Assessment and Future Directions. *Housing Policy Debate* 3(2):639–83.

Gau, George, and Ko Wang. 1990. Capital Structure Decisions in Real Estate Investment. *Journal of the American Real Estate and Urban Economics Association* 20:501–21.

Griffiths, Daniel. 1990. *Methods in Spatial Econometrics*. Amsterdam: North-Holland.

Hartzell, David J., and David Schulman. 1987. *Real Estate Returns and Risk: A Survey*. New York: Salomon Brothers.

Haurin, Donald, Patric Hendershott, and David Ling. 1988. Home Ownership Rates of Married Couples: An Econometric Investigation. *Housing Finance Review* 7:85–108.

Henderson, J. Vernon, and Yannis M. Ionnides. 1986. Tenure Choice and the Demand for Housing. *Economica* 53:231–46.

Howe, John, and James D. Shilling. 1988. Capital Structure Theory and REIT Security Offerings. *Journal of Finance* 43(September):983–93.

ICF, Inc. 1991. *Evaluation of the Low Income Tax Credit: Final Report*. Report to the U.S. Department of Housing and Urban Development.

Institute of Real Estate Management. Various years. *Income and Expense Analysis*. Chicago.

Jencks, Christopher. 1994. *Nowhere to Go: Why the Homeless Are Everywhere, and What to Do about It*. Cambridge, MA: Harvard University Press.

King, Mervyn. 1980. An Econometric Model of Tenure Choice and Demand for Housing as a Joint Decision. *Journal of Public Economics* 14:137–59.

Krumm, Ronald. 1989. Effects of Homeownership on Household Savings. *Journal of Urban Economics* 26:281–94.

Malpezzi, Stephen. 1986. Rent Control and Housing Market Equilibrium: Theory and Evidence from Cairo, Egypt. Ph.D. dissertation, George Washington University.

Mayo, Stephen K. 1986. Sources of Inefficiency in Subsidized Housing Programs: A Comparison of U.S. and German Experiences. *Journal of Urban Economics* 20:229–49.

Mills, Edwin S., and Bruce Hamilton. 1989. *Urban Economics*. 3rd ed. Glenview, IL: Scott, Foresman.

Moskowitz, Harvey S., and Carl G. Lindbloom. 1993. *The New Illustrated Book of Development Definitions*. New Brunswick, NJ: Center for Urban Policy Research, Rutgers University Press.

Murray, Michael. 1992. Subsidized and Unsubsidized Housing Starts Revisited. Unpublished paper, Bates College.

National Association of Realtors Research Division. 1992. *Survey of Homeowners and Renters: Key Findings*. Washington, DC.

National Task Force on Financing Affordable Housing. 1992. *From the Neighborhoods to the Capital Markets*. Washington, DC.

Nelson, Kathryn P. 1994. Whose Shortage of Affordable Housing? *Housing Policy Debate* 5(4):401–442.

Olsen, Edgar O. 1988. What Do Economists Know about Rent Control? *Journal of Real Estate Finance and Economics* 1(November):295–308.

Reeder, William. 1985. The Benefits and Costs of Section 8 Housing. *Journal of Public Economics* 26:349–77.

Rosen, Harvey. 1979. Housing Decisions and the U.S. Income Tax. *Journal of Public Economics* 11:1–23.

Rosen, Sherwin. 1974. Hedonic Prices and Implicit Markets: Product Differentiation in Pure Competition. *Journal of Political Economy* 82(1):34–55.

Sa-Aadu, Jarjisu. 1984. Another Look at the Economics of Demand Side versus Supply Side Strategies in Low Income Housing. *Journal of the American Real Estate and Urban Economics Association* 12:427–60.

Shilling, James D. 1994. Taxes and the Capital Structure of Partnerships, REITs, and Other Related Entities. Unpublished manuscript. Department of Real Estate and Urban Land Economics, University of Wisconsin–Madison.

Stegman, Michael A. 1991. The Excessive Costs of Creative Finance: Growing Inefficiencies in the Production of Low-Income Housing. *Housing Policy Debate* 2(2):357–73.

Struyk, Raymond J., Margery A. Turner, and Makiko Ueno. 1988. *Future U.S. Housing Policy*. Washington, DC: The Urban Institute Press.

Turner, Margery, Raymond Struyk, and John Yinger. 1991. *Housing Discrimination Study: A Synthesis*. Washington, DC: The Urban Institute and Syracuse University.

Urban Institute. November 1993. *An Assessment of the Non-Profit Housing Sector*. Report to the U.S. Department of Housing and Urban Development (draft).

U.S. Bureau of the Census. 1983. *1980 Census of Housing, Volume 5, Residential Finance*. Washington, DC.

U.S. Department of Housing and Urban Development. 1992. *Characteristics of HUD-Assisted Renters and Their Units in 1989*. Washington, DC.

Vandell, Kerry, Walter C. Barnes, James D. Shilling, and Richard Green. 1992. Toward a Secondary Commercial Mortgage Market: Standardization and Credit Risk Evaluation Issues. Unpublished manuscript. Center for Urban Land Economics Research, University of Wisconsin–Madison.

Wallace, James E. 1994. The Dilemma of the Disposition of Troubled FHA-Insured Multifamily Rental Property. *Housing Policy Debate* 5(1):1–34.

Weisbrod, Burton. 1988. *The Nonprofit Economy*. Cambridge, MA: Harvard University Press.