

A Discussion of Private Housing Market Issues

Anne L. Sweaney and Carol B. Meeks

Abstract

The 1990s and beyond is going to be an era of extremely important and complex decisions concerning adequate shelter for a changing population. To meet the challenges of the times, a clear understanding of private housing markets is needed. This paper begins by presenting a discussion of a theoretical framework on which to anchor private housing market research. Seven current issues that affect private markets are then reviewed. The private market issues discussed are affordability, homelessness, discrimination, rural housing, home automation, housing for special needs groups, and factory built construction. Finally, specific concepts are identified on which to build a research agenda in the attempt to develop a knowledge pool from which governmental and private decisions can be made concerning strategies for action.

A Discussion of Private Housing Market Issues

Despite government involvement in housing, housing remains predominantly a private good produced, financed, traded, and consumed in private markets (Ford Foundation, 1989). Thus, housing is brought to consumers through the housing market. This paper analyzes the interdependence of supply and demand in the private housing market and identifies and discusses the prominent issues. The housing market differs from markets for other goods and services because housing is in a relatively fixed location, is durable, and provides services not only from the structure itself, but also from the quality of the neighborhood environment and the larger community. The structure of the market establishes a framework upon which additional issues are integrated. Recently, many of these issues have received national attention because of the marketplace itself, changing compositions of families, homelessness, and the economic forces at work in our country.

Housing markets distribute the housing stock. The delivery system for housing is a complex relationship between private market activity and government policy and programs. Activities or decisions in the private sector affect the government role in housing; likewise, government legislation and programs play an important role in private housing production and consumption (McFadden and Brandt, 1990).

Theoretical Framework

Traditional economic theory forms the foundation for our analysis and discussion of private housing market issues. The unique characteristics of housing markets are examined in this section. The housing market is an economic mechanism in which price and income determine the supply and demand for housing. The assumptions usually made within the theory of market operations are:

1. The market is competitive with many buyers and sellers, none of whom control the market, nor do they collude.
2. Buyers and sellers have perfect information about the market.
3. Products are homogeneous.
4. Entry and exit into the market is easy.

Anne L. Sweaney is an Associate Professor at the University of Georgia. Carol B. Meeks is a Professor at the University of Georgia.

These assumptions may not be valid in the real world. First buyers may not have perfect information about the market. Home buyers, especially first-time home buyers, are more often than not ignorant about the process and costs of buying a home. Low-income persons who are potential first-time home buyers are especially at risk of unfair practices from sellers, agents, and lenders (C. Dufries, personal communication, June 7, 1991). Second, ease of market entry and exit depends in part on the economic status of the market. Exit (selling a house) from a depressed market may not be easy. In addition, housing is not a homogeneous good.

Housing also differs from most other goods because of its higher price. Housing includes both consumption and investment components (Households use shelter [consumption] as well as enjoy expected increases in value of the home through appreciation [investment]). Housing markets are local and are composed of many submarkets, or market segments. Transactions in the housing market are regulated and costly. It is a durable good, but requires maintenance and repair, and perhaps adaptation. Not only does housing provide shelter, but it also provides access to an array of community services such as education, police protection, and recreational services. Despite these characteristics, the economic framework still provides the best method of analyzing how the housing market functions

Housing demand is the quantity and quality of housing that a household is willing and able to buy. The household chooses the quality and quantity that will yield it the greatest satisfaction given its income. Demand depends on the level and distribution of household income, the price of housing and other goods and services, demographic patterns, and household composition, size and preferences.

There is an extensive body of economic literature which examines the demand for housing (Chambers and Schwartz, 1988). Much of this literature focuses on the responsiveness of housing demand to income and price. Variability in data and methods has resulted in inconsistent results across studies. The general consensus, however, is that housing demand is "inelastic" in response to both income and price, although the studies vary on the degree of inelasticity.¹

Based on consumption theory, a household's demand for housing is derived from the household's utility function. This is a function of the price of housing, relative to prices of other goods and services and income. Studies using this basic model include: Carliner (1973), de Leeuw (1971), Lee (1964), (1967), (1986), Muth (1960), Polinsky and Ellwood (1979), Reid (1962), and Winger (1968). This research has indicated that income and housing price are important determinants of housing demand.

The literature has struggled with how to define housing quantity, income, and housing price to provide the optimum measure of demand (Brannigan and Meeks 1990). Housing quantity has been measured by using housing expenditures (Dynarski, 1985), and some researchers have used a housing price index (Gillingham and Hagemann, 1983; Goodman, 1988; Goodman and Kawai, 1982; Harmon, 1988; Haurin and Gill, 1988; Ihlanfeldt, 1981; Rosen, 1979). Housing price has been defined in a variety of ways (Henderson and Ioannides, 1986; Palmquist, 1984).

Because purchasing housing is a long term decision, "permanent" income is often thought to be the most appropriate choice of an income.² Income elasticity is substantially higher for permanent income than current income (Dynarski, 1985; Goodman and Kawai, 1982; Haurin and Gill, 1988; Henderson and Ioannides, 1986; MacRae and Turner, 1981). Other obligations, such as debts, can more severely impact home ownership opportunities.

Tax policy has provided an incentive for home ownership as witnessed by current Republican proposals for first time home buyers and withdrawal of IRA funds for home purchase. Tax considerations have been examined by Aaron (1970), Dynarski (1985), Gillingham and Hagemann (1983), Harmon (1988), Henderson and Ioannides (1986), MacRae and Turner (1981), Rosenthal (1988), and White and White (1977).

Of importance to this paper is the research on the simultaneous decision on housing consumption and tenure choice. Empirically, most researchers have examined the tenure decision with a profit analysis and then performed separate estimates of demand for owners and renters (Boehm and McKenzie, 1982; Goodman, 1988; Gillingham and Hagemann, 1983; Henderson and Ioannides, 1986; King, 1980; Rosen, 1979). This more sophisticated modeling of housing demand has confirmed earlier results regarding tenure choice.

The role of housing adjustment costs in influencing housing demand is not yet well understood (Harmon and Potepan, 1988). Turnover of housing involves high transaction costs. Transaction costs include: out-of-pocket expenses such as realtor's fees, closing costs, moving costs, etc., as well as attachment costs to a neighborhood and community. Harmon and Potepan (1988) found that these costs were important factors limiting mobility. This may result in households remaining in housing longer than is optimal.

Housing adjustment behavior from the sociological view has been studied more by Morris and Winter (1975). An assessment of cultural and family norms, the present housing situation, and barriers and constraints families experience in the process of housing adjustment are needed for this complex analysis. As noted by Morris and Winter (1978), the research on the norms for housing quality, expenditure and neighborhood is also limited. The most difficult of these to conceptualize is housing quality because it involves "the subjective reactions of people to attributes of a dwelling unit" (Morris and Winter, 1978, p. 126). There is some evidence that families are willing to pay more for dwellings that contain certain characteristics or attributes they hold as important. To some extent, the amount the family is willing to pay for a dwelling unit containing the attributes is a measure of the value they place on the combination of those attributes. This desirability equation is based on work in the fields of consumer behavior and demand for consumer goods by Lancaster (1971).

There are effects of housing adjustment on both the supply and demand sides of the market as addressed by Morris and Winter (1978) who say "the combination of those attributes and their value to the family represents a kind of desirability equation that has an impact on market value through the demand side of the market. The impact on market value through the supply side of the market occurs as the desirability equations of families are translated into the floor plans, landscaping, and other actual features of dwellings" (p. 126).

Several areas related to demand need to be mentioned. One of these is the demand for rehabilitation of the existing stock. Closely related to this is the demand for maintenance. Each of these topics deserves a detailed analyses which will not fit within the constraints of this project.

The supply of housing consists of both the existing stock, which varies in age, size, and quality, as well as newly constructed units. The lag between demand and the construction of new units is relatively long, but new production is crucial to the supply process. However, new production is only a small part of the housing stock at any point in time. Thus, the housing inventory changes slowly.

The supply of housing is provided by a diverse and highly fragmented industry, with no one firm responsible for more than 1% of annual housing starts (Kuehn, 1988). There are thousands of builders, sub-contractors, suppliers and manufacturers involved in the production of residential housing. Although small builders dominate the industry, builders of over 100 units per year accounted for 67% of units built in 1990 (National Association of Home Builders, 1991). The growing concentration of production by the Housing Giants reflects, in part, the growing complexity of production today. Because zoning laws and building codes differ by community, it might be expected that the Housing Giants would be at a disadvantage. Are the economies of scale so great that they can beat the local competition, or are the Giants the only companies strong enough to withstand the recent severe real estate recession that has taken place in many states?

Production levels vary by region. Regional costs reflect differences in building codes, market demand and general economic conditions. Housing prices have risen faster than incomes for the last decade (Kuehn, 1988). For existing stock, price increases are related to market demand, financing and energy costs. For newly constructed units, increased costs are a function of accelerating land costs, transaction costs, and development costs such as land acquisition and land improvements.

The literature reviewed here is based primarily on traditional economic theory with the addition of sociological theory related to housing adjustment. Researchers need to make better use of existing theory in empirical work. The root disciplines of economics and sociology will continue theoretical development and empirical scholars need to apply it.

Market Components

Market interactions are complex and are dependent upon the general economic conditions, the role of government, tax policy, and regulation. These macroeconomic and governmental factors will not be addressed here. The reader needs to keep in mind, however, that the housing market is affected by these factors. Two components will be discussed in this section: the role of capital in the market and constraints placed by the government on housing development.

The Role of Capital

The mortgage market operates because of the interaction of the supplier and demanders of mortgage funds. Critical to this interaction are mortgage rates and other mortgage terms. The amount of mortgage credit demanded or supplied depends on the price of money including interest rate, points, assumability, prepayment penalty costs, and down payment. When funds are plentiful and demand low, the interest rate drops and loan conditions are more flexible. When funds are tight and demand high, the interest rate rises and terms are more restrictive.

Credit has a major influence in the housing market. The capital market influences housing construction in two ways. First, when funds are scarce and interest rates rise, housing demand declines. This signals builders to cut back on construction. The second factor is the willingness of the secondary mortgage market intermediaries to make mortgage commitments. The secondary mortgage market participants are attempting to become more involved in affordability issues, as financial institutions are being encouraged to provide community programs and alternatives to low and moderate income households. Continued efforts in this area should be encouraged. Educational components related to the secondary market cooperation should be fostered.

The residential mortgage market is one of the largest users of borrowed funds in the U.S. economy. The arrival of the 1990s coincided with the disarray in the national financial markets as the costs of the savings and loan bailout escalate. The Financial Institutions Reform, Recovery, and Enforcement Act of 1989 (FIRREA) reorganized the financial regulatory landscape. It established a Federal Housing Finance Board (FHFB) to oversee the 12 federal home loan banks and abolished the Federal Home Loan Bank Board. FIRREA established an Office of Thrift Supervision under the supervision of the Treasury Department, with responsibility for examination and supervision of all savings and loans. A third agency established is the Resolution Trust Corporation (RTC) whose primary purpose is to liquidate, or otherwise dispose of, assets of institutions that were once FSLIC-insured and that are placed in conservatorship or receivership during the three-year period which began January 1, 1989. It has a real estate asset division to assist and advise in the sale of assets, as well as to identify properties of significant natural, cultural, recreational, or scientific value.

The implications of the changes brought by FIRREA are open to debate. The National Association of Home Builders (1991) claims the many adverse impacts of FIRREA are still being felt. For example, the disposition of properties by the RTC may have signifi-

cant effects in some local markets and may affect second mortgage markets. Capital requirements dictate that thrifts seek assets with lower risk and higher returns on assets with high risks. Construction, typically, is considered a fairly high risk activity. On the other hand, several provisions of FIRREA provide new incentives and subsidies for lending to finance housing for low- and moderate-income families.

Constraints

There are many constraints imposed on the development of private housing. The majority of these constraints are imposed by the local government at the community level, such as zoning, building code requirements, and subdivision covenants. In some communities, the political aspects of the decisions override "good" community development. Regulation at the state level is one of the fastest growing segments of the regulatory arena. Federal regulations also inhibit development. The recent controversy over wetlands protection is a good example of federal regulatory activity affecting development. Housing players need to join forces to help communities address their barriers.

A discussion of regulation is not a part of this paper, but regulation has a major impact on the housing supplied by the private market. Zoning and land use controls affect location, lot size, and price. Building codes determine many of the structural and mechanical features of the house itself.

Another constraint is the growth and composition of the population. Households are central to housing demand, and growth in the number of households is slowing. The slow down reflects a decrease in births and an increase in deaths as the population ages (National Association of Home Builders, 1991). It is predicted that the rate of population growth will continue to decline, thus providing a natural constraint of size.

Market Issues

Seven major private housing market issues are identified by the authors as critical for discussion during the current decade and into the 21st Century. The array of issues facing the private housing market is endless; however, due to the limitations on length and scope of this paper the authors have selected the seven key issues thought to be the most critical to the housing market. A discussion of current dimensions of affordability, homelessness, discrimination, rural housing, home automation, special needs groups, and factory built construction follows.

Affordability

Affordability has improved somewhat since the early 1980s, but the incomes of potential first-time buyers still lag behind the increases in homeownership costs (Apgar, DiPasquale, Cummings and McArdle, 1990; Affordable Housing, 1990). Fronczek and Savage (1991) reported that in the spring of 1988, 57% of all families and unrelated individuals could not afford to buy the median-priced home in the region where they lived. Of current renters, 91% could not afford the median-priced house. In 1987, 69% of renters and 46% of owners with below-poverty income devoted more than half their incomes to housing (U.S. Department of Commerce and Bureau of the Census and U.S. Department of Housing and Urban Development, 1989). The problem is particularly prevalent among the four million households living in unsubsidized rental housing. Single-parent households and single-person households also have high rent burdens. Apgar et al. (1990) suggest this burden is in part a reflection of underreporting of income. However, they conclude "that most poor households face payment burdens well in excess of 30--if not 50%--of income" (p. 21).

Stone (1989) suggests an alternative approach to affordability. He proposes using household size and income as two parameters and determining non-shelter needs. Non-shelter needs are based on components of the Bureau of Labor Statistics Lower Budgets. His calculations do not increase the extent of the affordability problem, but rather change its distribution. His measure shows that the affordability problem is much more concentrated among lower income and larger households, and relatively less se-

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vere among middle income and small households than is indicated by more conventional measures. Lazere, Leonard and Kravitz (1989) also explore this approach which they label the "market basket" method. They report that the market basket approach suggests that some smaller households could afford to spend more than 30% of income on housing.

Homelessness

Homelessness is a growing concern for communities as well as the nation. Homelessness, in part, is a result of the shifts in the private housing markets, affordability, and changing social and economic conditions. Although an accurate count of the homeless is elusive, it is well recognized that the numbers are growing and the characteristics of the homeless are changing. The most dramatic change in the past decade has been the growing number of homeless families. In 1984, HUD reported that 21% of the homeless were families; in 1986, the U.S. Conference of Mayors reported a 31% increase in homeless families in a two year study. The partnership for the Homeless in New York sponsored a study in 47 cities and found that in 54% of the cities, over 30% of the homeless were families with children (Burt and Cohen, 1989). The actual demographic composition has been found to be very different from the traditional stereotypes.

Homelessness may be the most extreme manifestation of the low-cost housing shortage (Turner and Reed, 1990). At the beginning of the 1980s, few people were homeless, but by the second half of the 1980s, both the size and composition of the homeless population had changed dramatically. The lack of support at the Federal level and the rising housing costs are rapidly contributing to an even greater crisis. As noted by the Ford Foundation (1989), the problem of homelessness is not solved by finding a place in a temporary shelter. When a place in a shelter is obtained, there are often few opportunities to move into permanent housing. Transitional housing alternatives are greatly needed to aid in the flow from shelter to a more stable environment.

Homelessness can no longer be considered exclusively an urban problem. As housing costs have risen and the economic climate of rural areas has shifted, the rate of homelessness in rural areas has risen. In a study of 921 homeless people in Ohio, First, Toomey and Rife (1990) found that homeless persons in rural as compared to urban areas were: younger, more likely to be women or mothers, and more educated. Homelessness in rural areas is often masked by the fact that many families are living together rather than on the street. One indicator of these hidden homeless is the increase in crowding in nonmetropolitan areas.

Discrimination

Discrimination related to many aspects of housing is illegal. There are laws on the rental, sale or financing of housing. Discrimination in the housing market can take many forms. Race, age and gender are the most frequently acknowledged. The Fair Housing Amendments Act of 1988 significantly increased the federal government's power to combat housing discrimination expanding the coverage of the 1968 Fair Housing Act. The amendments provide major new coverage by adding handicapped persons and families with children to those groups protected by the Act.

Although the amended Act provides HUD with important litigation and remedial authority, private organizations will play a critical role in making this authority effective. A recent study conducted at The Urban Institute by Turner, Struyk and Yinger (1991) found that Blacks and Latinos experienced some form of discrimination over half of the time when they attempted to rent or purchase homes in major metropolitan areas. A systematic attack on housing discrimination requires more than legislation. Organizations need to file complaints of discrimination with HUD or advise constituents to do so. Furthermore, additional information, such as test results that indicate a pattern or practice of unlawful discrimination, can be presented directly to the Department of Justice as well as to HUD.

"Black households suffer from the worst housing circumstances and the most limited housing opportunities of all Americans" (Turner and Reed, 1990). Blacks are less likely to own their homes, and more likely to live in inadequate housing, pay an unreasonably high proportion of income for housing and live in older, inner-city neighborhoods. These housing problems are due in part to the low incomes of blacks and the segregation of urban areas.

Housing market discrimination is viewed by Turner and Reed (1990) as a "vicious circle" that perpetuates itself and is based on prejudice and inequality. Prejudice prevails integrated neighborhoods and community organizations, and depresses schools. This reduces opportunities for minority children, and the cycle continues. More emphasis will be given to discrimination as community groups become involved in the issue.

Rural

Although rural America has become more like urban America in the last 50 years, the difference in the characteristics and problems faced by rural people suggest that different strategies and policies should be developed to meet their needs (Meeks, 1989). Homeownership is higher in nonmetro than metro areas, as is the percent of single-family housing units. Manufactured homes are more likely to be found in rural areas, while multifamily units are located in urban areas.

Poor quality housing seems to be concentrated in counties which are typically rural and poor (Meeks, 1988). Lerman (1986) identified several characteristics that influence the amount of substandard housing in rural parts in U.S. counties. Substandard housing was associated with poverty, a greater proportion of non-white households, low vacancy rates, increases in population growth rate, and larger households. In addition to concerns with housing quality, affordability is also a problem in rural areas, especially for renters (Meeks, 1988). Data from the American Housing Survey for 1985 show that most of the 3.9 million poor households in rural areas pay major portions of their incomes for shelter. These data revealed that 65% of the rural families paid 30% or more for housing (Lazere, Leonard, and Kravitz, 1989).

The provision of housing includes not only the physical structure, but also a bundle of services that are supplied by the community including roads, water, sewers, police and fire protection, and education. Usually these services are paid for through property taxes. Tax policies need to be targeted for maximum efficiency and development. The role of regulatory barriers in improving housing quality and affordability also needs to be assessed.

The economic conditions in rural areas play a major role in the provision of housing. High unemployment rates, lack of capital, and slow growth increase the risk of speculative production of housing and limits consumer choice.

Home Automation

Home automation will be making a major entrance into the private housing market in the next decade. Although a variety of these systems have been on the market for years, consumer acceptance has not been rapid. The process of accepting a new product is often explained by a general framework based on the diffusion of innovation. Rogers' (1983) concept of diffusion provides a classic definition. He defines innovation as "an idea, practice or object that is perceived as new to an individual or another unit of adoption innovation" (p. 35). This framework fits well as a foundation for research concerning the investigation of home automation systems.

Benefits of home automation systems, often cited by the building industry are security, convenience, communications, entertainment, energy management and comfort (National Association of Home Builders 1991). Consumer surveys conducted by the National Association of Home Builders (1991) have shown that families plan to spend more time in their homes in the 1990s and therefore prefer a larger living space with more amenities. Research by Meeks, Sweaney and Swagler (in press) reinforces the fact that consumers are aware and can verbalize attitudes and feelings about technical compo-

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nents of housing design. As new technologies are being developed for use with home automation systems, the role of the consumer in the acceptance of these technologies is crucial (Laquatra and McCarty, 1990). The acceptance or rejection of individual components can contribute to the success or failure of an entire system.

Special Needs Group

The classification referred to as groups with special needs can be very broad and include individuals with physical and mental limitations, age specific cohorts (elderly), various family compositions (single parents), income-limited households, and those from diverse social backgrounds (migrant farm workers).³ The major legislation affecting at least some of the members of special need groups mentioned above is the Americans with Disabilities Act (ADA) which was passed in 1990. The ADA addresses employment, public services, public accommodations, and telecommunications, all of which will have an impact on the provision and use of shelter (Rovner, 1990).

The special needs group receiving a great deal of attention is the elderly. The American Association of Retired Persons (1990) recently sponsored a study of consumer preferences, concerns, and needs of the elderly, which should be a valuable resource for those wanting to know about market and consumer needs. A significant finding is that there was a preference for "aging in place." Another finding addressed the concern and need for additional support services, especially with home maintenance. The subjects reported a lack of planning for future housing needs, which has important implications for future planning and development of housing alternatives. The large percent of those not involved in planning for future housing were those 75 years or older, a very vulnerable and fast growing cohort (American Association of Retired Persons, 1990).

As Lawton (1990) has acknowledged, the concept of aging in place is still a research area needing additional work. He reinforces the fact that the field of housing for the elderly and the aging in place phenomenon have not received the amount of attention in the research area as in the mid-1960s to 1970s. Lawton (1990) attributes the lack of work in the area to the lack of federal incentives and limited market research for private developers.

The elderly and their housing alternatives will continue to be a very critical area for future work. Care must be given to set a systematic agenda for the work so the parts of the whole can complement one another.

Factory Built Construction

Factory produced or industrialized housing include: precut homes and buildings, panelized homes, modular homes, and HUD-code homes. The market for such systems has seen gradual growth during the 1980s and is expected to continue for the near future (National Association of Home Builders 1991). The need for affordable housing and the expansion of overseas markets could increase growth. *Automated Builder* (March, 1991) suggests that the decade ahead will be the decade of complete industrialization in American housing.

There are still a series of issues that surround factory built housing. For example, HUD-code manufactured homes are still discriminated against in many communities through zoning ordinances that prohibit them. Communities need to examine the quality of current homes and their contribution to housing in the community and reexamine local regulation.

At the federal level, there is congressional discussion of national regulation of modular units. This regulation may follow the pattern of manufactured housing regulation or be a confederation of states regulation with reciprocity among participating states (National Association of Home Builders, 1987). Only time will tell. Research could help discover optimum approaches. National regulation reduces the costs associated with dealing with a multiplicity of codes, but brings with it problems of uniform enforcement and interpretation.

As policy makers examine the need for affordable units, close attention needs to be given industrialized housing. Computer-assisted design may give consumers greater control over unit design. Factory built housing provides more efficient and cost effective methods of provision of affordable housing. In addition, international competition should inspire the U.S. private housing markets to look toward factory built housing construction as a necessary alternative and as an opportunity to participate in global markets.

Research Agenda

The outcomes of the interactions of the issues with supply and demand factors is the creation of a research agenda to chart the future of work in the private market area. There is much work yet to be done to better understand the private housing markets operating in the United States and other countries. Following are some ideas the authors have generated to create a framework from which to set a research agenda:

1. Alternatives need to be explored where private markets can contribute to affordability. There are many opportunities today where these private markets can contribute to the public good. There is a great potential for major contractors and corporations to form non-profit companies for the sole purpose of producing housing alternatives to house the homeless population. Low income tax credits offer potential for these corporations to invest in partnerships for affordable housing. Due to the high costs of housing transactions, alternative options for housing adjustment need to be explored. In addition, the role of mobility in housing adjustment needs to be understood.

There is growing interest in employer-assisted housing where companies can assure housing assistance is given to nonmanagement workers. Employer assisted housing benefits the employers as well as employees. Lower absentee rates, worker recruitment and retention, shorter commutes, lower labor costs, and a greater labor supply have been given as benefits of the programs (Schwartz and Hoffman, 1990; Schwartz, Ferlauto and Hoffman, 1988).

2. Public/private partnerships need to be established with lenders through support of the Federal Reserve, Office of Thrift Supervision, Office of Comptroller of the Currency, or Federal Deposit Insurance Corporation to analyze data and develop community programs. A major role could be played in providing direction and leadership for the implementation of the Community Reinvestment Act (CRA). Many of the lenders are searching for ways to comply with the law which will benefit all parties.

3. Smart Technology and home automation in general is an area where much research is needed. The role of the consumer and acceptance realities are essential for home automation systems to succeed. If private industry uses foresight in the beginning of the innovation cycle in home automation, the diffusion process will be much more efficient

4. There is a growing need for private market alternatives for the elderly. Demographers have been predicting the growth in the older market segment for many years. However, now is the time when the private housing market needs to look more closely at the true implications for the future. The oldest-old market segment is of particular concern as this is where the largest growth will occur.

5. Creative alternatives for present housing stock must be considered. A complete analysis needs to be conducted at the community level to assess the future needs and attempt to use the present housing stock to the best advantage. An effort needs to be made to have the overhoused and underhoused reach equilibrium.

6. Finance, including credit and mortgages, needs further investigation. There is a need to better understand just how consumers make mortgage choice decisions so we can evaluate those that are successful and those who find themselves at risk and lose their home to foreclosure. Consumers need to be given good information. There are many concerns today in the financial arena and consumers and researchers need to learn more about equity lines of credit, sales of mortgages, private mortgage insurance,

and calculation of mortgage payments with ARMS. Changes in the FHA requirements may direct more people into private loans. FIRREA may reduce development in some areas, and there is a need for research on the impact of FIRREA on consumers.

7. Factory built housing needs considerable investigation. There has been a decline in the number of new manufactured homes used for residences every year since 1985 (U.S. Department of Commerce, Bureau of the Census and U.S. Department of Housing and Urban Development, 1989). Production is down and the need is up. Consumers are resisting the acceptance of manufactured housing even though it is an affordable alternative. What can be done to make manufactured housing a viable alternative?

Summary

The interaction of the supply and demand factors with the impact of finance alternatives will greatly affect the seven issues identified as critical for the 1990s. For housing researchers to meet the challenge that lies ahead, a cooperative effort should be developed. Funding for research can no longer depend on the public sector. Private industry must become more involved with expanding the knowledge base which directly impinges on their success or failure to meet present and future challenges. Public-private partnerships need to be fostered. Incentives should be given in the form of increased profitability of private enterprise as well as a decrease in the public costs associated with the unwise use of resources.

Researchers working in the area of housing need to take full advantage of the opportunities provided by the National Affordable Housing Act of 1990 to work with public and private sectors and to act as catalysts for developing strategies at all levels. There are, and will be, many areas where the expertise of housing researchers can aid in the data collection and interpretation of this most recent landmark legislation.

The research agenda developed in this paper should be shared with decision makers at the federal, state, and local levels. A search needs to begin to find those interested in individual and joint projects as well as funding sources to support the work. THE TIME IS RIGHT.

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Footnotes

- ¹ elasticity--proportional change in the consumption of a good divided by the proportional change in the price of a good.
- ² permanent income--household's expected average annual lifetime earnings.
- ³ Examples of special need categories are presented in parentheses.

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