

Homeownership Counseling Performance: How Can It Be Measured?

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Abstract

Homeownership counseling encompasses several educational activities. Early approaches focused on reducing the risk of default and foreclosure among participants in government-assisted mortgage programs, but more recent approaches have focused on increasing homeownership opportunities among low-income and minority households. Unfortunately, little is known about the effectiveness of these approaches in terms of the number of new homeowners and the mitigation of default risk. To address that gap, this article presents a theoretical and methodological framework to evaluate counseling efforts.

A successful counseling program is defined as one that assists a household with a low long-term probability of ownership in buying a home and reducing its default risk. We concede that the methodological requirements for evaluating counseling are somewhat restrictive. However, if we establish an evaluation procedure using these goals as a framework, we can more accurately determine the effects of counseling on the sustainability of low-income homeownership.

Keywords: Homeownership; Low-income housing; Programs

Introduction

A wide variety of programs offer homeownership counseling, but little is known about their effectiveness. Differences among programs and across program factors have made it difficult to understand the impacts of counseling. Counseling programs differ in a number of ways, including their ultimate goal or desired outcome, their scale and content, and the type and magnitude of financial assistance provided. Programs confront different market conditions, such as differences in the socioeconomic and demographic characteristics of participants and differences in housing and economic conditions. Methodologically, it has been difficult to take into account all these differences to examine the impacts of counseling systematically.

In spite of these difficulties, an evaluation of homeownership counseling efforts is becoming increasingly necessary because of the current emphasis on increasing homeownership opportunities for low-income households. Pressures to expand low-income lending come from three sources. First, the federal government has imposed low-income mandates on the government-sponsored enterprises (GSEs) Fannie Mae and Freddie Mac. Similarly, stricter enforcement of the Community Reinvestment Act has pressured financial institutions to lend in low-income areas. Second, many see the expansion of low-income homeownership as a way to reverse undesirable neighborhood trends through the alleged stabilizing effects of homeownership. Finally, the Clinton administration has expressed the goal of increasing homeownership by 2.5 percentage points nationwide. Regardless of its source, the expansion of low-income lending that results from loosening underwriting guidelines is typically accompanied by a counseling requirement, with the hope of reducing any additional risk that may result from making loans traditionally considered risky.

Lenders underwrite loans to control for the likelihood of future default. Loans made to borrowers with credit problems, insufficient savings, and unstable incomes and those made in areas with declining property values (all of which may apply to low-income families) tend to bear higher risk of credit loss (Quercia and Stegman 1992). Therefore, the goal of increasing homeownership opportunities to low-income households is likely to conflict with the goal of minimizing default risk. If the two goals are indeed in conflict, an increase in homeownership opportunities is likely to be accompanied by increased credit losses due to the greater number of program participants who default. This contention suggests that increasing homeownership opportunities and minimizing default risk should be treated not as two separate goals of counseling but as a single goal. Increasing homeownership opportunities should be considered desirable only if default risk is not increased significantly; the goal should be to minimize the tradeoff between expanding homeownership and increasing default risk.

Counseling goals cannot be achieved independently of other benefit and cost considerations. Are the overall benefits derived from counseling worth the cost? From a borrower's perspective, a number of indirect benefits and costs are associated with successful homeownership and default counseling, including the educational value of counseling, receipt of any program-related subsidy, avoidance of the anguish and poor credit ratings associated with foreclosure, and other personal benefits. These are

separate from the benefits derived from homeownership itself, such as the alleged increase in personal pride. In addition, counseling may discourage people from buying a home who, for one reason or another, would be better off as renters. Homeownership may also entail costs for individual borrowers. Possible costs, besides those associated with foreclosure, might include reduced mobility and the financial stress of making the mortgage payment.

Indirect benefits and costs for society are also associated with successful homeownership and default counseling. For instance, homeowners may be more likely to get involved in community issues and in the electoral process (Rossi and Weber 1996). All other benefits allegedly derived from homeownership may also be considered indirect societal benefits. Potential indirect costs to society include the misallocation of resources if homeownership is promoted unevenly relative to other societal investments (Mills 1988). Important indirect costs and benefits for society and individuals are difficult, if not impossible, to quantify.¹

Direct program costs and benefits are more easily quantified. Direct costs include the cost of counseling and any subsidy offered. Direct benefits may include increased homeownership rates or decreased losses compared with lending that does not include counseling. Although it would be desirable to examine the methodological issues involved in measuring the indirect impacts of counseling, such an examination is beyond the scope of this article.

Given that the promotion of low-income homeownership is likely to continue and that little is known about the effectiveness of counseling, it is imperative to develop a theoretical and methodological framework to evaluate the direct benefits and costs of counseling.² The first section of this article presents a brief history of counseling along with a review of counseling programs. The second section presents the factors that determine housing tenure choice and the default decision and how counseling can

¹ For instance, some counseling may be provided to increase homeownership opportunities in a given neighborhood with the hope that this will reverse undesirable conditions or patterns of neighborhood disinvestment. Similarly, counseling may be provided with the hope that low-income households will gain economic self-sufficiency through the alleged benefits of homeownership. Finally, homeownership counseling can be provided to promote integration to further fair housing goals.

² The homeownership counseling industry needs both performance standards and measures of success. Performance standards are needed to help practitioners offer a more effective service and to assist in developing an industrywide

affect those determinants. The third section discusses methodological considerations for empirically evaluating the impacts of counseling.

Homeownership counseling programs

Brief history

The counseling industry dates back to the late 1960s.³ The industry evolved from the implementation of the 1968 Housing and Urban Development Act. Under this act, the U.S. Department of Housing and Urban Development (HUD) could authorize public and private organizations to provide counseling to mortgagors in the Section 235 and 237 programs. The resulting services and infrastructure provided the foundations for the industry.

Other legislative milestones continued to shape the industry. A 1969 amendment to the 1968 act allowed HUD to authorize additional entities to provide counseling and expanded counseling to include topics such as money management and child care. In 1971, HUD implemented legislation (Section 106) to set up a system to approve housing counseling agencies. The following year, HUD required approved counselors to help implement the assignment program, which was initiated as a result of suits brought against HUD by Section 235 participants who lost their homes.⁴ In 1977 and 1987, HUD legislation broadened counseling to include single-family homeowners (Title II of the National Housing Act), emergency homeownership, and home equity conversion.

certification process. Although the central focus of this article is the development of a framework for evaluation, the framework can be expanded to examine performance standards in future research.

³ The material in this section is based on Shabecoff (1994).

⁴ Under the Home Mortgage Assignment program, the lender is permitted to surrender the homeowner's mortgage to HUD for further servicing rather than institute foreclosure proceedings against the defaulting homeowners. If certain conditions are met, the assignment program allows defaulting homeowners to retain ownership of the property and to avoid foreclosure action by the lender. The rights of defaulting borrowers under the assignment program and their rights to lender forbearance were the result of the *Ferrell v. Landreiu* litigation (HUD 1983). The default rate in the Section 235 program that triggered the lawsuit, 19 percent, was far higher than the 4 percent rate for mortgages insured under the Federal Housing Administration's Section 203 program (see Wachter 1980).

In spite of repeated amendments to the 1968 act, it was only in 1974 that legislation authorized HUD to fund counseling. Section 801 of the 1974 Housing and Community Development Act authorized HUD to grant funding for housing counseling agencies.⁵ With the 1977 fiscal year, funding for counseling efforts began to be appropriated regularly, ranging from \$3 million in 1977 to \$12 million in 1993. In the 1988–93 period, HUD provided operating support to about 330 agencies.⁶

As a result of HUD's increasing involvement in counseling, the National Federation of Housing Counselors (NFHC) was created in 1973 to provide training for its members and to act as a lobby. Members include nonprofit agencies, community-based development organizations, housing development organizations, lenders, real estate agents, companies with employee assistance programs, and mortgage insurance companies.

More recently, heightened enforcement of the Community Reinvestment Act of 1977 and the Federal Housing Enterprise Financial Safety and Soundness Act of 1992 has refocused attention on counseling. The latter act directs the secretary of HUD to establish affordable housing goals for the GSEs (Schill and Wachter 1995). Such community reinvestment and affordable housing programs often include a counseling component.

Counseling programs under these legislative initiatives usually involve more than one entity, with for-profit entities (mainly financial institutions) increasingly working with nonprofit community groups. Typically, joint efforts result from an interest in expanding low-income lending by for-profit entities, which require counseling for low-income borrowers. They team up with nonprofit entities because, traditionally, counseling has been within the expertise of the latter. For example, GE Mortgage Capital Corporation and Fannie Mae worked with Housing Opportunities, Inc. (HOI), a Pennsylvania-based nonprofit

⁵ A 1972 appropriation supported default counseling on a demonstration basis.

⁶ HUD provides financial support through programs such as the Housing Counseling Program; Home Ownership for People Everywhere (HOPE) 1, 2, and 3; the Community Development Block Grant program; and HOME. There are a number of entities in addition to HUD that provide financial support to counseling agencies. For example, the Fannie Mae Foundation has provided more than \$1 million in grant support to homeowner education programs (Shabecoff 1994). The Fannie Mae Foundation is one of 51 foundations that provide financial support. Also, a number of states fund housing counseling efforts. Overall, it is estimated that more than 1,000 counseling entities were receiving some form of financial support in 1993 (Shabecoff 1994).

organization, to develop the counseling component of the Community Homebuyers Program.⁷

Although counseling has evolved since the 1960s, the industry remains fragmented because of the diversity of counseling types, delivery structures, and funding sources. Systematic studies of the efficacy of counseling efforts have been hindered by the nature of the industry.

Counseling efforts: What do we know?

The conventional wisdom is that homeownership counseling should raise homeownership rates and decrease default rates. Studies have examined the accuracy of this wisdom in both direct and indirect ways.

Although not controlled, some studies of counseling impacts have indirectly derived implications about the efficacy of counseling. The basic approach is to compare default rates in concessionary lending with those in conventional lending, assigning the lack of significant differences to the benefits of counseling and other interventions. Mills and Lubuele (1994) examine the aggregate incidence of delinquency among low-income borrowers who obtained their loans through community reinvestment activities and compare them with conventional borrowers. They find that low-income borrowers participating in community reinvestment programs have payment performance similar to or better than that of their conventional counterparts. On the basis of this finding, they conclude that such community reinvestment lending programs are viable. However, using similar comparisons of default experience (data for loans made under expanded underwriting guidelines and insured by the Mortgage Guaranty Insurance Corporation in 1992–93), Steinbach (1995) finds evidence that loosening underwriting guidelines to expand ownership results in high default and foreclosure rates. Neither Steinbach nor Mills and Lubuele directly examine the efficacy of counseling.⁸

⁷ See Hoffman and Wachter (1994) for an evaluation of the HOI program.

⁸ The use of simple ratio comparisons to analyze counseling's impacts may be appropriate under certain circumstances. For instance, perfectly matched pairs of treatment and control households would allow us to identify impacts by simply looking at aggregate homeownership and default incidence over time without the controls. If borrowers are clearly otherwise unable to borrow for

Only a limited number of studies have directly examined the impacts of counseling. A recent review of this literature concludes that prepurchase counseling is somewhat effective in increasing the likelihood of homeownership, while the evidence that postpurchase counseling reduces default risk is mixed (Housing Assistance Council 1994). The studies in the review are summarized in table 1. Unfortunately, differences in program, participant, and market characteristics limit the generalizability of the studies reviewed.⁹

Program differences. There is little uniformity among counseling programs. The most obvious differences are in their desired outcomes. Most programs focus on increasing homeownership opportunities; others focus on reducing the risk of default and foreclosure; some focus on both. Although a number of programs offer both home purchase and default counseling as part of their prepurchase efforts, programs that offer both pre- and post-purchase counseling are relatively rare.

Programs also differ in the characteristics of the counselor,¹⁰ the program content, the type of sessions,¹¹ the duration of the

homeownership and if default rates are no higher under concessionary programs than in conventional lending, then inferences about the efficacy of counseling may also be possible. Statistical techniques necessary to derive inferences are discussed later.

⁹ The studies also suffered from a number of methodological flaws, any of which could affect the validity of the conclusions. These flaws included, but were not limited to, outcome measurement problems, sample selection problems, and the use of limited statistical analysis. Refer to Housing Assistance Council (1994) for an excellent critical overview of these studies and their methodological problems.

¹⁰ The characteristics of the counselor may affect the achievement of program goals. Important characteristics include the training and preparation that the counselor has received (level of expertise), how accessible a counselor is, and whether the counselor is an area resident. Counselors also differ in the extent to which they have a stake in the transaction: They may receive compensation for each participant who goes to closing, or they may have no financial stake in the outcome. Also, program structure may affect whether a counselor's goal is homeownership itself or homeownership without an increase in default.

¹¹ Counseling may be provided in groups or in one-on-one sessions. Typically, group sessions are used to cover general topics, such as the responsibilities of homeownership, the home search and purchase process, and the sales contract. One-on-one sessions are used to discuss issues of a personal nature, such as personal finances, credit repair, budget planning, and savings accumulation. Advocacy efforts that may accompany counseling, such as representing first-time home buyers with different market participants, are one-on-one efforts. Similarly, default counseling offered to borrowers with mortgage repayment difficulties is conducted one-on-one. In both types of sessions, educational materials such as videotapes and printed materials may be used or distributed.

Table 1. Selected Studies on Homeownership Counseling

Study	Counseling Type	Program Evaluated	Research Design	Sample	Measure of Success	Main Findings	Notes
San Francisco 1970	Prepurchase HO	Experimental homeownership program	Treatment group received counseling and subsidy; control received neither	104 upwardly mobile low-income families	Homeownership	Assistance in purchasing a home (+); job counseling (NS); financial management (NS)	Did not consider broader market conditions
University of California 1972	Prepurchase HO	HUD Section 235/237	Counseled and rejected groups	53 counseling agencies; 66 counseled clients	Home purchase budgeting, planning, saving behavior	Counselees more likely to become homeowners (+)	Noncomparable group; non-representative sample
Organization for Social and Technical Innovation (OSTI) 1974	Pre- and postpurchase HO and D&D	3 HUD-sponsored programs: fee-funded, voluntary, and concentrated default	Counseled and uncounseled groups	Several samples (treatment and control groups)	Preparation for homeownership; consumer protection; default mortgages brought up to date and default avoided; others	Counseled found to be better prepared, fared better in consumer protection, and had lower default risks (-)	Noncomparable groups; important socioeconomic data missing
HUD 1974	Pre- and postpurchase D&D	HUD Section 235	Counseled and uncounseled groups	58 counseled families; 67 uncounseled families	Default and delinquency	Prepurchase counseling (-); postpurchase counseling (NS)	Sample too small; noncomparable groups; limited generalizability

Table 1. Selected Studies on Homeownership Counseling (continued)

Study	Counseling Type	Program Evaluated	Research Design	Sample	Measure of Success	Main Findings	Notes
HUD 1975	Postpurchase D&D	HUD Section 235, concentrated default	Families referred and not referred to D&D (matched pairs)	4 cities	Mortgage status default/foreclosure (difference in % of borrowers delinquent or foreclosed)	Referred found to be more current in payment and less in default (-); referred who did not receive counseling had best record of all (NS)	Sample too small; nonrepresentative cities; time frame too short; pairs poorly matched; referrals not random
HUD 1977	Postpurchase D&D	HUD Section 235, concentrated default	Families referred and not referred to D&D (matched pairs)	5 cities, 1,500 owners, 10 HUD-approved counseling agencies	Foreclosures; number of months behind in payments (same as OSTI 1974)	Mixed results	Important data not considered; problem with randomness of sample; data collection problems
National Urban League 1980	Postpurchase D&D	HUD Home Mortgage Assignment Program	Groups selected on the basis of D&D variation	5 cities with high level of D&D; 898 homeowners; 2 cities with low level of D&D	Default/foreclosure	Higher proportion of those counseled but rejected for assignment defaulted than those not counseled and rejected (-); length of counseling (-)	Mortgagors who did not request assignment not considered; aggregate results

Table 1. Selected Studies on Homeownership Counseling (continued)

Study	Counseling Type	Program Evaluated	Research Design	Sample	Measure of Success	Main Findings	Notes
Morgan Management System 1980	Postpurchase D&D	HUD Section 235	Referred and nonreferred groups	4 HUD-approved agencies in Detroit; 4,000 referred, only 787 counseled (data collected on about 1,000 of those referred for counseling)	Default/foreclosure	After 3 years, those not referred to counseling were found to have lower default risk (+)	Missing data; overestimated number of referrals; mortgagors not randomly assigned to referred and nonreferred

Source: Housing Assistance Council (1994); HUD (1988).

Note: HO = homeownership counseling; D&D = delinquency and default counseling; (+) = significant and positive effect; (-) = significant and negative effect; NS = no significant effect.

counseling, the depth of counseling provided, and the quality of materials used. Programs also differ in the type and extent of financial assistance that they offer to participants.¹²

Content may differ across programs. Typically, prepurchase counseling includes education on the process of buying a home, determining the feasibility and desirability of homeownership, selecting a home, applying for a loan, going to closing, and monitoring the condition of a dwelling.¹³ Prepurchase counseling may also include instruction on personal financial planning, credit repair, budget planning, and savings accumulation. Programs may also counsel on life-cycle skills and other general topics. Similarly, the typical postpurchase default counseling offered to borrowers with repayment problems includes assistance with budget planning, debt retirement, and other areas.

Many programs combine counseling with financial assistance, which may take the form of preferential loan terms such as below-market interest rates, low- or no-down-payment silent second mortgages, or emergency relief out of revolving funds. The type of financial assistance offered largely depends on the lending institution working with the counseling effort. These structural incentives differ among programs and may affect the behavior of program participants after home purchase.¹⁴

Market differences. Differences across housing markets are also important. The socioeconomic and demographic characteristics of households in each housing market will determine the potential counseling participants. These pools of potential participants are likely to differ across communities. As a result, programs use different outreach mechanisms to

¹² Counseling programs differ in scale, too. Although most programs are local, many are available nationwide. The scale of the program may have two important consequences: First, programs that are available in more than one housing market may have more resources at their disposal than local programs, because they have access to funding sources in several communities. Second, programs that are active in more than one community are likely to be differentially affected by real estate outcomes in their markets.

¹³ Both the Fannie Mae and the GE educational efforts include all these elements.

¹⁴ Programs may offer certain mortgage products or other mechanisms to expand homeownership opportunities. For instance, they may make available lease-purchase agreements to participants. Although not a formal subsidy, these mechanisms should be considered a form of assistance if they are unavailable to households outside the counseling program. The availability of these mechanisms can be expected to affect tenure choice and the default behavior of program participants.

attract households from these pools. Mechanisms may range from radio, television, and newspaper advertisements to fliers, introductory workshops, radio programs, and seminars for real estate agents (Housing Assistance Council 1994).

Housing market characteristics also have some effect on the way households are selected for program participation. The length of time participants need to meet underwriting requirements is often used as a qualifying device for program participation. That time is directly related to the price of housing in a market because the time needed to accumulate the required down payment will be longer in markets with higher house prices.

Most important, a community's overall economy will mediate the impacts of counseling efforts. For instance, a downturn in the local economy may lower real estate values and cause individual program participants to lose their jobs, thus increasing the frequency of mortgage repayment problems. The impact that economic and other market conditions have on the achievement of counseling goals should not be underestimated.

Program participant and market characteristics must be taken into account to evaluate the impact of counseling on homeownership and default decisions. Moreover, a full evaluation must incorporate these differences in a framework that includes the major theoretical determinants of these decisions.

Determinants of the homeownership and default decisions

This section identifies the important determinants of tenure choice and the default decision from the literature. These determinants need to be considered to isolate the effect of homeownership counseling on behavior.

Tenure choice

Traditionally, a household is said to be more likely to own than to rent if owning a home makes the household better off. Tenure choice has been explained by determinants such as household income and the relative costs of owning and renting. Turner and O'Neal (1986) discuss a wide range of variables that have been used to explain the decision. These variables can be grouped into five categories: (1) income, wealth, and credit history;

(2) life-cycle status; (3) race and ethnicity; (4) price and other market factors; and (5) location and neighborhood attributes.¹⁵

Household income and wealth play a prominent role in determining a household's ability to own a home. Virtually all studies of tenure choice have found income to be a statistically significant determinant of the probability of ownership. Income affects tenure choice partly because mortgage lenders require that households have sufficient income to meet mortgage service on the desired home. Analytically, the most desirable measure of long-term income capacity is household permanent income, which includes human and nonhuman capital.

The literature also emphasizes the ways that current wealth affects tenure choices (Linneman and Wachter 1989). Mortgage lenders require that current wealth be sufficient for a down payment on the desired home. A lack of current wealth increases the probability that a household will rent. Linneman and Wachter (1989) conclude that wealth constraints are more important than income constraints in limiting a household's ability to purchase a home.

Similarly, credit history is crucial to loan approval and thus to tenure choice. Households without a sound credit history can work to rebuild or repair their credit. Credit-rating companies may use different definitions to determine a household's credit-worthiness, which implies that credit can be built or repaired in different ways and different amounts of time.¹⁶

Life-cycle considerations also play a role in tenure choice. They have been captured with measures such as age, family type, and household size. There are three hypotheses about why life-cycle status plays a role in tenure choice. First, different types of households exhibit different demands for housing relative to other goods. From this perspective, households that desire higher levels of housing consumption will choose to become homeowners. Second, certain types of housing, such as single-family suburban housing, are more likely to be available for sale than for rent. Households preferring such dwellings will therefore be more likely to own. Finally, households have expectations about the immediate future with respect to moving costs and the possible investment characteristics of the housing bundle. Thus,

¹⁵ The discussion in this section is based on Wachter and Megbolugbe (1992).

¹⁶ In many low-income homeownership programs, households are considered credit worthy if they can show proof of timely payment of rent and utilities. This is necessary because many low-income households have little or no formal credit history.

households that are expecting to move soon may be better off renting than buying, given the high transaction costs commonly associated with home purchase.

Race and ethnicity have been found to play a role in homeownership rate differences among groups. Many researchers contend that differences in the major determinants, such as income and wealth, can explain much of the disparity in ownership rates for households in various racial and ethnic groups. However, in spite of these contentions, the unexplained portion of the disparity remains large. Some have argued that racial residential segregation and discriminatory practices in the housing and mortgage markets may be responsible.¹⁷

House prices are also key considerations in the tenure decision. Prices have been found to be important because they affect the decision from both the consumption and the investment points of view. Higher prices will discourage many households from purchasing a home by making it less affordable, yet expectation of increasing prices may indicate potential appreciation gains, thus increasing the attractiveness of owning a home.¹⁸

Location and neighborhood attributes are also key considerations. Important attributes include the availability and quality of services and the characteristics and quality of stock. Location and neighborhood attributes do not have to enter the tenure choice equation directly if price indices are measured to control for them.

¹⁷ Race and ethnicity affect the probability of ownership in two ways: They influence homeownership indirectly, through differences in household endowments (income, education, age, gender, family type, etc.) and market endowments (price and location); and they may directly influence the probability of ownership through racial and ethnic discrimination. See Wachter and Megbolugbe (1992) for a discussion of the inadequacy of using the variable "race" alone to capture both sets of effects.

¹⁸ Goodman (1988) introduced two ratios to capture these considerations: the value-rent ratio and the owner-renter price ratio. The value-rent ratio, the ratio of house value to renter value, is a house-specific ratio that indicates the different relationship between consumption and investment in renting and in owning. With high expected appreciation, which encourages homeownership, this ratio is expected to be positively correlated with the homeownership decision. The owner-renter price ratio is market specific. It controls for the quality of houses across markets. This ratio is expected to have an inverse relationship with owner-occupancy. Other measures that have been used to capture relative house price include observed rents, rent index (Shelton 1978), and user cost (Hendershott and Shilling 1982).

Mortgage default decision

Mortgage borrowing and repayment are complex processes.¹⁹ Borrowers repay the mortgage principal plus the corresponding interest payment for a number of years after home purchase. At each payment period, borrowers have five choices. They can choose to make the scheduled mortgage payment, to pay the balance of the loan through refinancing, to pay the balance through sale of the property, to stop payment temporarily (delinquency), or to stop payment altogether (default).²⁰

Modern studies of the default decision view default as an option (Foster and Van Order 1984, 1985). At each payment period, borrowers are said to have the option of giving the home to the lender in exchange for extinguishing the mortgage obligation. In assessing whether to exercise the default option, borrowers primarily consider the value of the equity in the home. Consistently, negative equity has been found to be associated with a higher incidence of default (e.g., Vandell and Thibodeau 1985). Negative equity occurs when borrowers owe more than they own in the home.²¹

The value of the equity is affected by several factors, primarily the value of the outstanding debt and the value of the property. The debt is determined by the amount of principal at origination and the amount of interest and principal paid over time. The property value is affected by the original house value, neighborhood change, and property upkeep and alteration decisions.²²

Traditionally, home equity has been considered to be beyond a borrower's control, yet borrowers can affect the value of the equity. The omission (or undertaking) of necessary maintenance and repair will lower (or increase) the value of the property over time. This is an important point, since borrowers may neglect

¹⁹ The discussion in this section is based on Quercia and Stegman (1992).

²⁰ The likelihood of failure to repay mortgage financing (default) varies substantially with type of loan and borrower (Van Order 1990). For instance, the claim rate for a cohort of loans with a 90 percent loan-to-value ratio and borrowers with excellent established credit is 1 percent. The comparable claim rate for a cohort of loans with a 95 percent loan-to-value ratio and borrowers with adverse credit history is 6.6 percent (Steinbach 1995).

²¹ As a result, lenders try to minimize default risk by requiring an accurate appraisal of the value of the property at the time of loan origination and by requiring borrowers to make a substantial down payment.

²² On the basis of these factors, the estimation of equity in owner-occupied single-family homes is straightforward. The estimation of equity in

maintenance and repair for a long time before they stop mortgage repayment.²³

The default decision is affected by its costs. These include, but are not limited to, moving costs, loss of credit rating, fewer opportunities for future home purchase, and sometimes reduced opportunities for employment or advancement (Giliberto and Houston 1989). The default option has an intrinsic value. The value of the mortgage is affected by the option to default in the future (Epperson et al. 1985). Typically, researchers have used the ratio of the contemporaneous value of the mortgage to the contemporaneous value of the property, the so-called loan-to-value ratio, to capture equity considerations.

Although there is a consensus regarding the importance of equity in the default decision, the role of borrower-related factors is not so well understood (Quercia and Stegman 1992). Recent research, however, has shown that borrower-related events that make the term of the mortgage random (for instance, when borrowers with nonassumable mortgages are forced to move) may affect the exercise of the default option (Quigley and Van Order 1992). Significant borrower-related events that may force borrowers to move include cash flow shortfall and crises such as job loss or marital disruption (Quercia, McCarthy, and Stegman 1995).

Counseling effects on tenure choice and the default decision

Overall, counseling can mediate the influence of certain determinants of tenure choice and the default decision. Counseling can affect tenure choice in several ways. First, it might encourage people who never thought they could qualify for homeownership to consider and work toward it. Counseling can raise people's

condominium units, however, is not so simple because the value of a given unit is also likely to be affected by the mix of owner-occupied and rental units in the building and the overall maintenance and repair activities of the owners of the rental units. This is an important issue because low-priced condominium units may be the only type of units affordable to low-income households. Default risk in condominium complexes that include both owners and renters remains an unexplored area of research.

²³ This contention would explain why traditional delinquency and default counseling offered to borrowers with repayment problems has been found to be ineffective. The decision to neglect maintenance (to disinvest in the unit) may often precede formal default, possibly by a long time. Thus, counseling efforts offered at the time when mortgage payment difficulties are apparent may be too late to be effective.

comfort level and ability to deal with lenders, whom they might otherwise find intimidating, and may help participants acquire the skills and confidence to pursue the mortgage lending process.²⁴

Second, education in the process of buying a home may facilitate home purchase through the acquisition of skills such as budgeting. In addition, counseling that is accompanied by advocacy efforts may further facilitate home purchase because knowledgeable advocates may accompany or represent participants in the lending process, thus making loan approval more likely.

Counseling can affect the default decision as well. First, it may help identify those most suited for homeownership and discourage those at risk of default. Second, counseling can educate prospective buyers about budgeting and other skills that may make timely debt repayment more likely. With improved budgeting skills, borrowers can plan for future events and minimize cash flow problems that may otherwise force them to choose between mortgage delinquency and a reduction of non-mortgage expenditures.²⁵

Finally, counseling may assist participants in dealing with potential crises. For instance, counselors may be able to establish a long-term relationship with participants. When counselors are accessible, participants may be more likely to approach them at the first signs of personal or employment-related problems. Early detection of these problems may lead to successful resolution.²⁶

Empirically testing the impacts of counseling

To identify the impacts of counseling, program, participant, and market differences should be taken into account in a model that also incorporates the determinants of the homeownership and default decisions. A number of important methodological issues need to be considered in developing such a model, including the

²⁴ These points were made by an anonymous referee.

²⁵ Counseling may also teach program participants the importance of and techniques for home maintenance, thus reducing the chance that the home will lose value over time. Also, borrowers who learn to work on their homes—who put some of themselves into their homes—may be less likely to walk away from their homes if problems arise (Quercia, McCarthy, and Stegman 1995).

²⁶ Also, counseling can impart to participants the benefits of approaching lenders in a timely manner rather than avoiding contact when problems occur.

selection of the appropriate research design, sample selection, variables and measurement, and statistical analysis.²⁷

Research design

The appropriate research design is key to testing the impacts of counseling. The ideal research design is a controlled experiment in which participants are randomly assigned to a treatment (or experimental) group and a control group. The two groups should be equivalent except that the treatment group will receive counseling and the control group will not. To assess the effect of counseling, the tenure choice and default behavior of families in both the treatment and the control groups are observed over time. If the difference in the treatment group's ownership and default probabilities is significantly larger than that in the control group, it can be inferred that counseling had an impact on these behaviors.²⁸

A forward-looking research effort is desirable, rather than an evaluation based on past data. This does not mean that past data should not be used in the evaluation. Past data provide insight into aspects of counseling efforts that need to be considered throughout the research effort.

²⁷ Regardless of the research design adopted, default behavior should be observed as part of any evaluation of homeownership counseling. This is consistent with the central contention of this article that increasing homeownership opportunities should be considered desirable only if default risk is not increased significantly as a result. Even in the absence of this contention, the experimental design described in this section would be needed to assess the impacts of counseling in the three types of programs: pre-, post-, and both pre- and postpurchase counseling. For programs that offer pre-purchase counseling exclusively, only the tenure choice of the treatment and control groups would be observed over time.

²⁸ Factors that can invalidate inferences include differences that may exist between treatment and control groups prior to counseling. Changes that occur during the study period that are not the result of counseling may also bias results. Two methods of control can be used to counteract the effect of these potential biases: matching and randomization. Matching controls for known variables and differences across groups so that households can be paired on the basis of important factors. Randomization helps offset the effect of both known and unknown factors. Matching is often used in biomedical research. There, treatment and control groups are matched with as many similar important characteristics as possible, most of which are known. The remaining differences in sample characteristics between the two groups are then controlled for through traditional techniques such as the inclusion of control variables for use in multivariate analysis. In general, the advantage of randomization over matching is that it controls for numerous factors simultaneously, even when many of these factors are unknown (Frankfort-Nachmias and Nachmias 1992).

Sample selection

A concern in this type of study is that the analyzed sample must allow inferences for the overall population.²⁹ Programs use different screening mechanisms to select participants from those who respond to outreach efforts. The characteristics of this screening pool will affect the generalizability of results.³⁰

Although it may be difficult to generalize to the target population at large, more limited generalizations can be made—namely, to households that approach the program for participation and that meet screening requirements. Ideally, all these households can be assigned to a treatment or control group through random assignment. The treatment group could receive both counseling and subsidy, and the control group could receive only the subsidy. By offsetting confounding effects of known as well as unknown factors, random assignment permits an assessment of counseling's effects on potential program participants. In the absence of an experimental design with random assignment, the number of controls would need to be increased considerably.³¹

²⁹ "A population is the aggregate of cases over which generalization is desired. It is often impractical to collect data from all potential units of analysis. As a result, generalizations about program evaluation have been based on partial data from a subset of the population, or sampling frame. A particular value in the population (e.g., median income) is called a parameter. Its counterpart in the sample is called a statistic. Three issues need to be addressed to estimate parameters with statistics: (1) the definition of the population or sampling frame, (2) the sample design, and (3) the sample size" (Frankfort-Nachmias and Nachmias 1992, 95).

³⁰ These characteristics are determined by the characteristics of those in the community who want to buy a home but do not qualify for conventional financing (assuming that outreach mechanisms are not specific about how participants are ultimately selected or screened). Given these considerations, one possible target population might be defined as all those in the community who want to buy a home but do not qualify for conventional financing, and who are no more than, for instance, 18 months away from likely loan approval under the program.

After defining the population, a representative sample needs to be drawn, ideally from a complete list of the sampling frame. Because it would be very expensive, if not impossible, to identify all households in the target population of counseling programs, it will not be possible to determine the probability that each of those households is selected to participate in the program. The unknown probability of sampling limits the generalizability of any evaluation of counseling.

³¹ Although ideal, an experimental design with random assignment of households to treatment and control groups is not always feasible. A number of quasi-experimental designs could be used to evaluate the impacts of counseling more easily and at a lower cost, although the inferences that can be made

The size of the sample is also a key consideration in determining the accuracy of any generalization. A full analysis of the impact of counseling that controls for alternative explanations of outcomes requires a large sample size. Typically, studies of the tenure and default decisions include 15 to 20 variables to capture the effect of important determinants. A sample size of 10,000 households may be necessary to examine the impacts of counseling on default, assuming that these impacts are captured through the use of one dummy variable and that 2 percent of all program participants are likely to default.³² This large sample size suggests that a considerable effort is needed to rigorously examine the efficacy of homeownership counseling.

Variables and measurement

On the basis of the literature, a number of important determinants need to be controlled for in the empirical analysis to identify the effects of counseling.

For tenure choice, these include:

1. Income (current and permanent)
2. Assets
3. Household characteristics (e.g., age, gender, race, marital status, household size)
4. Previous tenure

from this type of approach are more limited. Refer to Cook and Campbell (1979) for a discussion of quasi-experimental approaches.

An alternative research design would be one with no formal control group (i.e., all households are included in the treatment group). This alternative approach incorporates important determinants of the tenure and default decisions, including multiple indicators of counseling quality and quantity. A baseline control group can be assembled for each geographical area from a nationally representative database such as the American Housing Survey or the Survey of Consumer Finance. In this way we could control for sociodemographic aspects to determine the propensity for homeownership and the probability of default.

³² Sample size = 100 [(10 cases per variable rule) (20 variables)/2] (Quercia, McCarthy, and Stegman 1995). If more variables are used to capture key features of counseling programs, a much larger sample may be needed. In contrast, if a default rate greater than 2 percent is used, a smaller sample size may be needed. For instance, using Steinbach's 6.6 percent rate (1995), the necessary sample size would be 3,030 households. Using Quercia, McCarthy, and Stegman's 9 percent rate (1995), a sample size of 2,222 would be needed. The 2 percent rate is roughly twice the rate experienced in conventional lending (Steinbach 1995).

5. Employment status and history
6. Credit history
7. Cost of owning relative to cost of renting

Several measures of tenure choice have been used in prior evaluations of counseling efforts, including changes in homeownership rates among counseled and noncounseled households, differences in tenure choices between the two groups, and participants' perceptions of the helpfulness of different types of counseling (see table 1 for sources). Although the perceptions are of some interest, only the first two measures capture actual tenure choice changes.

A major problem in examining tenure choice is the determination of the appropriate time frame for observing whether participants become homeowners. The choice of time frame is crucial because participants who have not purchased a home by the end of an evaluation may still do so later as a result of counseling. Given the importance of examining tenure choice over time, the correct evaluation of counseling impacts must consider this natural censoring, as discussed below.

The determinants of default decisions that need to be controlled for include:

1. Loan-to-value ratio
2. Household income
3. Mortgage payment
4. Property tax and insurance payments
5. Household composition changes
6. Employment changes

As in the case of the homeownership decision, several measures of default have been used in evaluating counseling efforts: (1) a comparison of default rates for persons receiving either pre-purchase or delinquency and default counseling with those for persons not receiving counseling; (2) a comparison of defaulting borrowers in 6 cities where counseling was available with defaulting under the same subsidy program in 11 cities without counseling; (3) a comparison of defaulting borrowers who were referred to counseling with borrowers under the same subsidy program in the same cities who were not referred to counseling; and (4) the same as number 3 but including mortgagors participating in different subsidy programs (see table 1 for sources).

As in the case of prepurchase counseling, measuring the effect of default counseling is not simple. However, the default literature

suggests a way to deal with the problem of natural censoring. Default is most likely to occur within two to three years of loan origination (depending on key loan characteristics such as loan-to-value ratio). After this time, default risk declines considerably. This information can be used to determine a time frame for measuring the effects of default counseling.³³

Counseling can be expected to mediate the influence of the above determinants. Important counseling program factors are:

1. Whether counseling was received (pre- or postpurchase)
2. Financial assistance in program (e.g., subsidy)
3. Counseling agent type (e.g., third party)
4. Nature of program (e.g., voluntary or compulsory)
5. Program content
6. Educational materials used
7. Type, number, or duration of sessions
8. Scale of program (local, regional, or national)
9. Screening mechanism
10. Outreach mechanisms
11. Lender type associated with program
12. Market characteristics (e.g., housing, population, economy)

At a minimum, the first two variables must be considered to identify the impacts of counseling in an experimental design with random assignment. Counseling program design (characteristics) can also have an impact on efficacy. With the appropriate research design and sample size, the impact of specific program characteristics on tenure and default decisions can be examined.

Statistical analysis

Ideally, the statistical procedures for evaluating the effect of counseling involve the estimation of equations that incorporate all important determinants of tenure and default decisions, including indicators of counseling. This estimation allows for the identification of any effects that counseling may have, once the effects of all other important determinants are accounted for. Also, the impact of counseling must be separable from any housing assistance or subsidy offered with the program.

The determinants of the propensity to own a home may be estimated with a proportional hazard model. A hazard-type duration

³³ The current emphasis on the use of proportional hazard methodology in default studies addresses the issue of natural censoring.

model with time-varying covariates is considered necessary to control for natural censoring in the data (e.g., an individual who has not yet purchased a home might still do so at some point in the future). Time-varying covariates are necessary to take into account the effects of discrete changes in such variables as marital status and number of children in the home.

The impacts of counseling can be isolated by incorporating into the model determinants of the homeownership decision, such as measures of income and asset constraints, sociodemographic characteristics, and market parameters. Similarly, a proportional hazard model can be used to estimate the determinants of the propensity to default, isolating the effect of counseling by incorporating default determinants. Proportional hazard estimation is considered appropriate because it addresses the problem of natural censoring and the evaluation need not be limited to a particular duration.

The proportional hazard model can be used to examine the efficacy of counseling regardless of the type of counseling offered. For programs that offer only postpurchase default counseling, the differences in hazard rates of default between treatment and control groups must be estimated.

The effect of counseling on tenure and default decisions can be assessed in two ways. First, at a minimum, a dummy variable can be incorporated that identifies households that participated in the counseling effort (treatment group). Second, with the appropriate sample size, a model can be estimated that includes variables capturing the effects of counseling characteristics such as program content, type of session, and counselor type. Log-likelihood tests can be used to assess the significant contribution of the counseling variables to the variance of the decisions.

Finally, the interrelationship between the goals of increasing homeownership access and minimizing default risk suggests it would be appropriate to estimate a sequential model, one in which default probabilities are estimated contingent to the estimation of prior homeownership probabilities.

Conclusion

This article presents a framework for evaluating homeownership counseling performance. The central postulate is that the goals of increasing homeownership opportunities and minimizing default risk should not be taken in isolation when evaluating

counseling efforts. Recognizing the interrelationship of the two goals, we need to define counseling as the educational effort aimed at increasing homeownership opportunities as well as decreasing the heightened mortgage default risk that is otherwise likely to result. Increasing homeownership opportunities without regard to a borrower's ability to keep the home in the long run is likely to undermine the long-term viability of counseling. Regardless of the type of counseling offered, default behavior should be observed as part of any evaluation of homeownership counseling performance.

Such an evaluation is crucial to the long-term success of current public policy efforts to expand homeownership opportunities for low-income households, which typically have a counseling requirement. Inner-city neighborhoods may attract a less than optimal supply of loans, so increased availability of loans to low-income households in these communities may stabilize house values and forestall disinvestment. On the other hand, if the higher than average default risks associated with low-income lending reported in some studies are not addressed, pressures to expand lending to these households may ultimately exacerbate the process of neighborhood disinvestment. Evaluating the efficacy of homeownership counseling programs can shed light on these potential tradeoffs.

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