THE NEW MORTGAGE LENDING ENVIRONMENT:

IMPACTS OF SECONDARY MARKETS AND STANDARDIZED UNDERWRITING ON AFFORDABLE HOMEOWNERSHIP OPPORTUNITIES IN BOSTON

by

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ABSTRACT

This thesis was prepared to further understanding of the influence of secondary mortgage markets on residential mortgage lending practices and the availability of mortgage credit for affordable housing options in the City of Boston. The study is empirically based upon the experience of the Massachusetts Housing Partnership's Homeownership Opportunity Program (HOP) and the characteristics of Boston's potential first-time moderate income homebuyers.

The study consists of three primary elements. Surveys of developers who have initiated or completed Boston HOP projects detail the extent to which secondary markets influence the affordability and mortgagability of community based public/private sponsored homeownership projects. The formation and growth of secondary mortgage markets, standardization of underwriting guidelines and the appropriateness of these guidelines in the Boston context are then discussed through a combination of secondary literature reviews and current professional opinion on the subject. Finally, the potential costs and benefits of several alternative underwriting initiatives are compared to additional financing and home price subsidies as a means of improving affordability and furthering community development goals.

This thesis will be of interest to community based organizations, public interest research groups, mortgage lenders, and state and local public officials who share a concern about the financing and development of affordable homeownership opportunities. Secondary mortgage markets will continue to play an increasingly important role in determining access to mortgage credit among first time homebuyers. By endogenizing these factors of affordability into the housing production planning process, developers and public sponsors will be better able to cope with the restrictions of secondary markets, and better prepared to negotiate for more flexible, regionally appropriate underwriting guidelines.

Executive Summary

While residential mortgage underwriting guidelines and lending risk have traditionally been the concern of bankers and actuaries, several trends in the mortgage lending environment and local housing markets have made this subject a matter of more general public interest among affordable housing advocates today. This study was undertaken to further understanding of recent trends which 1) have given rise to nationally oriented mortgage markets and 2) have increasingly tightened underwriting standards in ways that restrict access to mortgage credit for many moderate income first time buyers in Boston neighborhoods.

Perhaps most illustrative of the degree to which these changes in the lending environment impact access to housing credit among first-time buyers is the case of the Massachusett's Housing Partnership's Homeownership Opportunity Program (HOP). Units produced under the program and designed for households with incomes under $32,500 sit empty months after construction completion, despite the dire need for more affordable housing in Boston. While interest in the units was high among targetted buyers (with as many as 800 applicants for a 40 unit project), a substantial number of applicants were eliminated because they could not fit into the initial screening "matrix" of underwriting standards, or were later disqualified on a more specific underwriting criterion.

Interviews with developers of 10 HOP projects in the city of Boston indicate that these underwriting trends have: narrowed the "window" of programatically eligible buyers by raising the floor of lowest allowable incomes and down payments; delayed sale of units by requiring burdensome documentation and verification processes; and, ultimately, discouraged production of affordable homeowernship projects. Developers have responded by instituting various marketing and applicant preparation strategies, but many report that these costly and time consuming hurdles for meeting underwriting requirements are making them think twice about future affordable housing projects.

The paradox of "HOP units which sat empty" despite the best intentions and strongest of efforts by banks, developers, and state and local governments to produce and fill these units on schedule are reflective of a larger trend in mortgage lending over the past decade. At root of these forces are dramatic changes in the nature of residential mortgage lending due to the phenomenal growth of the national secondary mortgage markets. These markets, where loans are bought and sold in the form of marketable securities, have shifted mortgage risk assessment from an individual case-by-case process to one which employs nationally uniform standards and approximate, though quantifiable, standards of risk.

Specifically, the underwriting model which dominated the pre-

secondary market lending environment was based on individualized standards which stressed "character, collateral and capacity" of a particular buyer. In contrast, today's "new mortgage lending environment" is investor driven due to the demands of investors in securitized mortgage loans for quick risk assessment of mortgage loans made and sold in massive volume over a national market.

During the early 80's, secondary market agencies and primary mortgage insurance companies experienced dramatic increases in the incidence of loan default. These increases are widely recognized today as stemming predominantly from macroeconomic factors related to regional "boom-bust" economies, high unemployment, and declining home values associated with this nation's worst recession since the Great Depression. However, secondary market and PMI underwriters have responded to these macro factors by instituting more stringent "micro" underwriting standards concerning, for example, debt ratios, income documentation, and down payments of the individual buyer.

The combined impact of both standardization of underwriting and the more recent restrictive underwriting practices adopted by secondary market agencies and private mortgage insurers have fallen almost exclusively on the first time moderate income homebuyer. This is the case because these households, by definition, have no prior ownership history and thus little

equity to make a down payment; tend to have moderate incomes relative to owner occupants; tend to have shorter, less stable work and credit histories; and almost invariably require primary mortgage insurance, where the bulk of underwriting restrictions have occurred in recent years.

The experiences under the HOP program and the reactions to them mark both a need for and the possibility of more regionally appropriate mortgage underwriting standards -- appropriate in the sense that from the lender's and borrower's perspective, they more accurately reflect both the macro and micro factors affecting the riskiness of particular loans in the Boston context. Amended standards would depend less on strictly followed ratio and down payment standards and more on a combination of specific borrower characteristics (such as past rent paying history and particular credit experience), representing a return in part to more individualized underwriting. Additionally, this new process would give greater emphasis to the regional "macro" factors concerning the context of the local housing market and outlook for local economic health.

Particularly given the Boston housing context and the current amount of subsidy required to reduce home prices to levels affordable by moderate income families, more regionally-oriented mortgage underwriting guidelines can contribute substantially to

homeownership affordability. For example, even a 3% change in allowable housing expense to income ratios (ie, the amount of income a buyer can devote to monthly mortgage payments) can be more cost effective and, arguably, more equitable than an additional $10,000 home price reduction or 1% mortgage interest subsidy.

Such a program could be developed by local lenders and national underwriters alike in a manner that opens doors to an increased number of still profitable lending opportunities while averting the highest risk loan cases. The model may require higher "transactions" costs associated with more careful and individualized screening, i.e., similar to the "careful case-by-case screening" used in the Federal Housing Authorities underwriting process[1]. Nevertheless, it may also contribute to local efforts to provide affordable housing, may provide a feasible and profitable way for banks to get into the business of making loans to lower income communities, and may provide a model representative of what national secondary agencies and mortgage insurers could do to meet local needs in the future, particularly by considering greater involvement in "non-conforming" loans.

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[1]The FHA is a currently active public mortgage insurance agency created in 1938 by federal government for the purposes of insuring lenders against loss due to default and thus increasing the flow of available credit into mortgage markets -- see HUD, 1986.

CHAPTER 1: INTRODUCTION, STUDY SCOPE AND DATA SOURCES

Boston's potential homebuyers, like all Boston residents, are currently faced with an unprecedented gap between the income they can afford to allocate toward housing expenses and median housing prices in the city. Between 1979 and 1987, average home prices for single family dwellings increased 156% (from roughly $48,000 to $175,000), while during the same period wages rose by less than 60% (from roughly $17,000 to $27,000).[1] Relative to the rest of the nation, Boston's homebuyers fare among the worst off: in 1986, Boston's median area home price at $159,200 was double the national average while Boston area median wages, at $21,936, were only 10% higher than the national median.[2]

The affordability gap has hit the moderate income first time homebuyer particulary hard, because of this household's dual constraints of income and wealth. A moderately priced home in Dorchester selling for $130,000, for example, would require a minimum income of $47,000 and up-front cash of roughly $18,000 to afford under conventional lending terms.[3]

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[1]BRA, "Boston Housing Facts & Figures", and "Boston's Housing 1988".

[2]Greiner, p. 16

[3]Author's calculations based on 10% down payment, mortgage financing starting at 9.5%, and monthly expenses and closing costs as calculated in Appendices III and IV.

Given these circumstances, an unprecedented amount of subsidy has become required to provide affordable homeownership opportunities for the moderate income households who have traditionally been the target of federal and state housing programs. Over the past few years, The Massachusetts' Housing Partnership's Homeownership Opportunity Program has offered a combination of reduced prices at 25% to 50% below median neighborhood home prices and initial interest rates of 5-6% (nearly half the current market rate). Yet, in today's market, even these subsidy levels have managed to reach only the top third of moderate income households -- those with incomes between roughly $27,500 and $32,500.[4]

Today's policymakers are faced with the questions of which additional policy tools could increase homeownership access to households of lower-moderate incomes, and whether or not the costs of such additional subsidies can be justified given more pressing needs of other population groups. Starting from the premise that increased homeownership opportunities in lower income neighborhoods is a feasible and desireable policy goal, there are several possible policy options to consider, including: increased mortgage subsidies through further interest rate buy-downs; additional home price subsidies through decreased

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[4]MHP, HOP Guidelines and HOP data base for Boston projects occupied as of 2/27/89.

construction financing costs and lower cost design elements; or reduced home prices through alternative forms of social homeownership.[5]

Another alternative, the focus of this thesis, is the adoption of less restrictive mortgage underwriting guidelines. These guidelines determine access to homeownership for households with lower incomes and little wealth by establishing, for example, minimum downpayment requirements and maximum debt to income ratios. Underwriting guidelines are intended to reflect the level of risk associated with certain types of buyers, loans and properties which, together with structural economic conditions, determine the liklihood that a given loan will end in default.[6]

Financial intermediaries have always used judgements concerning particular loan and borrower attributes in order to evaluate loan riskiness. However, largely due to the growth in the secondary mortgage market, this process has become

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[5]Limited equity cooperatives and land trusted properties, for example, are alternative homeownership forms which have become the focus of many community based developers and loan funds. The former may lower homeownership costs by limiting equity of cooperative members to a share in the coop association, which owns and maintains the property. The latter reduce home prices by retaining land within a community trust, selling only the actual structure to the buyer.

[6]HUD, 1986, p. 5.8

increasingly uniform and simplified in recent years.[7] The secondary market, established by the Federally Sponsored Credit Agencies, provides liquidity to mortgage loans by purchasing loans from financial intermediaries, packaging those loans into marketable securities backed by government or agency guarantees, and selling those securities to investors on the secondary market.

In order to trade huge volumes of mortgage loans in a national secondary market, lenders, insurers and investors must have a fairly uniform procedure for valuing loan packages and assessing their risk of default. The appproximate, but quantifiable standards which are set by the federally sponsored credit agencies and mortgage insurers[8] are now employed on an industry-wide basis.[9] However, due to depressed economic conditions, slow home appreciation rates and new mortgage instruments of the early 1980s, default experience was high among these national mortgage underwriters, and many have since adopted increasingly restrictive underwriting guidelines.[10]

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[7]Freddie Mac, 1988. This standardization of underwriting will be explained more fully in Chapter 3.

[8]e.g., Fannie Mae, Freddie Mac, Ginnie Mae, Federal Housing Administration and Veterans Administration insurance, and private mortgage insurance companies.

[9]Freddie Mac, pp 17, 25-26.

[10]HUD, March 1986, p. 5.1

Affordable housing advocates today question the reasonableness of these national standards given the contemporary Boston context, and have argued that less restrictive standards are requisite to providing homeownership access to Boston's first time moderate income buyers. The Massachusetts Affordable Housing Alliance, Massachusetts Urban Reinvestment Advisory Group, and Massachusetts Association of Community Development Corporations, for example, have brought to public forum issues facing their homebuyer and community developer constituents, negotiating initiatives with the city, state and private financial intermediaries to address these concerns. As many of these issues are also on the forefront of community-based negotiations with private lending institutions, it becomes particularly encumbant upon affordable housing advocates to understand the nature of risk and potential risk related costs of such initiatives, their likely benefits, and, in general, the highly complex mortgage lending environment which has surrounded this perceived trade off.

This thesis is undertaken with three purposes in mind: 1) to provide an understanding of the evolution of the secondary mortgage lending environment and the recent trends toward nationally uniform and increasingly restrictive measures of mortgage lending risk; 2) to assess the appropriateness of these standards for assessing risk in the Boston context; and 3) to

assess the potential impacts of the institution of less restrictive underwriting standards on access to affordable housing in Boston. It will be argued that more flexible and less restrictive (though not necessarily less rigorous) underwriting guidelines can be employed in a fashion which could increase access to lower income and equity households while controlling for a maximum acceptable level of risk by more effective screening of higher risk cases. Additionally, evidence is presented to indicate that the wholesale commodification of mortgage lending has led to a situation in which Boston's households, and particularly moderate income first time buyers, are likely to be judged infavorably by national underwriting standards.

Such an analysis must confront the basic trade-off known to exist between increased risk exposure and increased access to homeownership. While it is beyond the scope of this thesis to determine the extent to which these proposed underwriting changes would lead to increased risk and loan default, it will be demonstrated that even under extreme increases in the incidence of foreclosure (eg, a quadrupling of cases), underwriting amendments are likely to be both more cost effective than either additional financing write-downs or home price subsidies.

In addition, despite the near impossibility of predicting

the liklihood of default based on past lending experiences,[11] current literature on risk experience does suggest that the national mortgage industry's predominant underwriting standards are likely to be unreasonably restrictive in Boston. As will be explained, Boston's moderate income households and the affordable homes they buy have several characteristics which are commonly viewed as compensating factors in mortgage lending risk assessment. In order to successfully consider these compensating factors in mortgage loan underwriting while avoiding the truly high risk cases, review processes themselves, including the policies and procedures for documenting and verifying income and credit histories, will require change. This combination of more flexible guidelines and consideration of compensating factors will probably entail an increase in the "transaction" costs of processing a mortgage loan as each loan must be underwritten on the basis of its particular characteristics rather than upon nationally accepted standards. Any regionally based loan underwriting and insurance initiative that aims to increase access to first time buyers will need to recognize those costs and should integrate them into the overall program. Nevertheless, even with these addedd costs, underwriting amendments can provide an effective means of extending homeownership access. Moreover, experience has demonstrated that

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[11]Mortgage default is widely thought to be "caused" by many factors. In addition to loan, buyer and property characteristics, the general health of a local economy is thought to be of utmost importance. See HUD, 1986, p. 5.2

without such change, even large subsidies can fail to provide homes for seemingly eligible and programatically targetted buyers.

The "problem" of the new model of mortgage underwriting has been framed through the experiences of developers and buyers under The Massachusett's Housing Partnership's Homeownership Opportunity Program (HOP). HOP provides an illustrative context in which to examine the impacts of various secondary market underwriting criteria for three reasons: 1) because HOP units are subsidized in part through mortgage bond financing, they are highly tied to secondary market standards and the demands of ultimate investors in those bonds; 2) studies have indicated that the most frequently cited problem with the HOP project has been the "difficulty in finding qualified buyers for HOP units because of the narrow window of eligibility -- that is, households must have incomes low enough to comply with the HOP guidelines, but high enough to cover mortgages"[12]; and 3) no less than six initiatives, including many underwriting-related amendments, have been enacted or discussed under the HOP program in recent months[13]. These initiatives, which are being replicated or considered among other groups, provide a practical context in which to estimate the effects of marginal underwriting changes

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[12]Nash et al, 1989.

[13]conversations with MHP staff, new HOP guideline brochure, 3/89

across various neighborhoods and income levels. They include:

- increases in allowable "housing-to-income" and "debt-to-income" ratios from 28% to 30% and possibly 33%
- reductions in up-front cash requirements, e.g. down-payments and closing costs via the allowance of gift letters and "soft second" mortgages
- reductions in primary mortgage insurance premiums
- a further write down in unit prices via a second mortgage
- a marketing clearinghouse which would provide pre-screening and mortgage application training to prospective buyers.[14]

While price writedowns and mortgage interest subsidies have always been features of the HOP program and are not considered "secondary market" underwriting guidelines, these tools are also discussed as they directly affect the affordability of HOP units. Moreover, interest rate write-downs are among the elements commonly discussed in private initiatives as well, for example in negotiations of community-based organizations with local banks to formulate first-time buyer programs.

This analysis of secondary market impacts on local housing affordability and credit availability is organized in five chapters. Chapter 2 reviews the experience of the Homeownership Opportunity Program in terms of the initial goals, strategies and activity under the program. Interviews with developers of 12 HOP projects in Boston provide lessons from their first-hand experience with underwriting review processes during the course of developing and marketing HOP units.

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[14]Information from HOP applicants manual, MHFA Newsletters, interoffice memos within the Massachusetts Housing Partnership, and preliminary proposals submitted by MHP to the Massachusetts Association of Community Development Corporations, 9/89-3/89.

Chapter 3 outlines broad changes in national credit markets underlying the HOP experience. This chapter briefly reviews the nature of underwriting standards as a factor of housing affordability. Then, widespread changes in the mortgage lending environment, the role of secondary markets in establising and promulgating uniform underwriting standards, and the present rigidity of these standards are discussed.

Chapter 4 discusses the risk related implications of proposed changes in underwriting standards. Given the particular context of the Boston housing market, HOP housing units, and Boston's moderate income buyers, it is argued that more flexible underwriting standards make sense regionally.

Finally, in Chapter 5, initiatives being implemented and discussed for the HOP program are presented and analyzed in terms of their potential impact. A comparison among actual buyers of HOP units to date and potential buyers under proposed changes is set against the background of the total first time buyer population in Boston's lower income neighborhoods in order to estimate the probable effect of these initiatives on the HOP "eligibility window". A maximum acceptable limit of increased default is calculated to demonstrate how much lending risk would have to increase in order for such changes to be less cost effective than certain other subsidy alternatives.

DATA SOURCES AND DEFINITIONS USED IN THIS STUDY

The HOP Experience

Data employed in the HOP analysis consist of two primary sources. In addition to interviews with HOP developers, the Massachusetts Housing Partnership kindly provided information on appraised values, unit prices, purchaser incomes, HOP subsidy amounts and closing dates for Boston projects. In addition, the Department of Public Facilities provided the names of developers and marketing agents who were contacted for the survey.

Boston's Population Characteristics: Income, Owner Occupants vs. Renters, and Rental Expenses

Income and rent data used in this thesis are obtained largely from the 1985 Boston Redevelopment Authority Household Survey. The BRA household survey, conducted during the first quarter of 1985 and published in August 1985, contains the most detailed data on Boston at the Neighborhood Statistical Area (NSA) level since the 1980 U.S. Housing census was published. All in all, nearly 200 questions were asked in the survey, and only a small amount of this information is employed in this thesis. The use of computerized data from this survey, in conjunction with a database manager and structured query language, allowed extraction of particular population groups and the linking of these groups with other characteristics relevant to homeownership.

As a sample survey and not a census of the entire population, the BRA Household survey is subject to a degree of sampling error. A description of methodology used in the BRA sample and in subsequent elimination of "non-valid" cases for the purposes of this analysis is contained in Appendix I, along with a discussion of the advantages, limitations and level of confidence associated with this data.

Boston's Lower Income Neighborhoods

Neighborhood data employed in this study are based on Boston's 16 Neighborhood Planning Districts (NPDs) as defined by the Boston Redevelopment Authority. "Low income" neighborhoods refer to those with 1989 median incomes below $15,000, including Roxbury, East Boston, South Boston, Jamaica Plain, and North Dorchester. Moderate income neighborhoods refer to those with median incomes between $15,000 and $25,000 including South Dorchester, Fenway-Kenmore, Allston-Brighton, Mattapan, Roslindale and Hyde Park. The term "lower income" will be used to refer to both low and moderate income NPDs. In most cases, however, the discussion of lower income NPDs will concentrate on those neighborhoods containing HOP projects (see Table I).

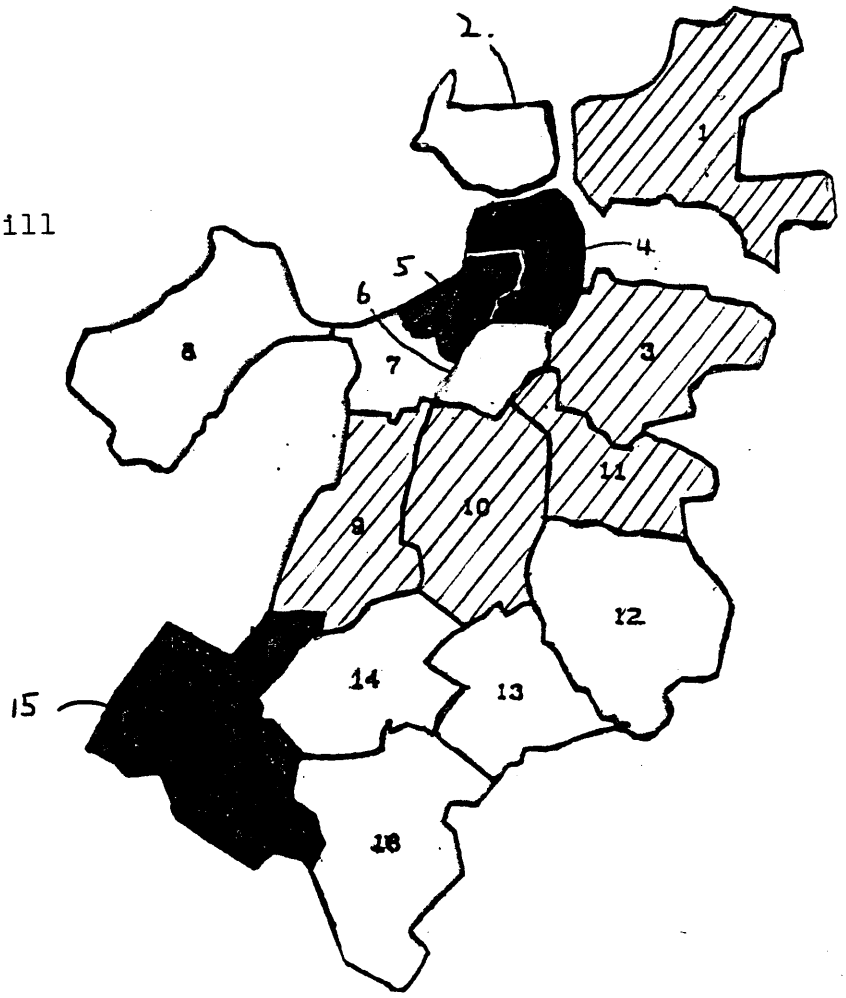
Definition of the First-Time Homebuyer

Traditional definitions of first-time homebuyers are considerably more restrictive than the definition used within this report. In previous research, income data used to determine affordability to first-time homeownership have been restricted, for example, to married couples between the age of 25 to 29 who

TABLE I

Boston's Neighborhood Planning Districts,
Low and Moderate Income Neighborhoods,
and Neighborhoods in Which HOP Projects Have Been Developed

* 1. East Boston
* 2. Charlestown
  3. South Boston
* 4. Central
  5. Back Bay/Beacon Hill
* 6. South End
  7. Fenway/Kenmore
  8. Allston/Brighton
* 9. Jamaica Plain
* 10. Roxbury
* 11. N. Dorchester
* 12. S. Dorchester
  13. Mattapan
  14. Roslindale
  15. West Roxbury
  16. Hyde Park



LEGEND:

= Low Income NPDs
(1988 median renter incomes below $15,000)

= Moderate Income NPDs
(1988 median renter incomes b/t $15,000-$25,000)

* = Neighborhoods with HOP projects

Source: Income Based on BRA Household Survey, 1985, inflated to 1988 dollars with the CPI for Boston, 1985-1988. Inflator: Federal Reserve Bank of Boston, Quarterly Econ. Indicators. HOP neighborhoods: Mass Housing Partnership Database as of 2/27/89.

are renters.[15] The present study does not exclude renter households of a particular age, or of a particular marital status. Both the reality of current demographics and the explicit non-discriminatory nature of the state's homeownership programs imply that "married" and "between 25-35" are inappropriate limits to the present analysis of homeownership demand.

While including renter households regardless of family composition, age, or income, a target group will be defined as those who are "income eligible" for subsidized homeownership opportunities. Generally speaking, the specific definitions vary depending on the specific program, housing tenure, and subsidy involved. "Moderate income" households are defined by federal and state requirements as falling between 50-80% of the Boston SMSA median income. "Low income" is similarly defined as those households at or below 50% of median. Here, the definitions used have been chosen to approximate those of the HOP program and to accomodate available statistics:

> "Moderate income" households will refer to those who make between $17,500 and $32,500, or 43-80% of area median. These are households programatically eligible for "HOP" units under the HOP program, although to date, the majority of homebuyers have tended toward the top of this income range.[16]

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[15]See, e.g., Joint Center for Housing Studies, "The State of the Nation's Housing: 1988", and DePasquele, Denise, "First Time Homebuyers: Issues and Policy Options", p. 3.

[16]Ibid

For each of Boston's Neighborhood Planning Districts, the proportions of renter households and moderate income households are estimated in Table II. These populations, together, will be referred to as "first time buyers".

TABLE II

Total, Renter, and Moderate Income Household Populations
in Boston Neighborhood Planning Districts

	Total Household Population*	% of Households who Rent**	% of Renters w. Moderate Incomes***	Total Cases In BRA Survey****
East Boston	NA	69%	30%	83
Charlestown	13199	65%	29%	60
South Boston	29054	70%	17%	66
Central	22341	67%	8%	61
Back Bay/Beacon	24811	81%	37%	85
South End	23112	90%	32%	69
Fenway/Kenmore	25884	94%	26%	86
Allston/Brighton	61334	80%	42%	99
Jamaica Plain	41383	80%	23%	134
Roxbury	56875	80%	24%	135
N Dorchester	25443	80%	22%	64
S Dorchester	58853	59%	31%	117
Mattapan	39118	60%	34%	131
Roslindale	31800	37%	44%	63
W Roxbury	33816	31%	24%	70
Hyde Park	32118	24%	25%	74
	519141	68%	29%	1399

* Does not include households in group quarters.
Source: BRA Neighborhood Profile, 1988

** Source: BRA Household Survey, 1985

*** Defined as households between 50-80% of SMSA area median. In 1989, moderate income is defined as falling between $20,250 and $32,400
Source: BRA Household Survey, 1985

**** 84% of these survey respondents completed questions on incomes and rents

CHAPTER 2 - THE HOMEOWNERSHIP OPPORTUNITY PROGRAM EXPERIENCE

In recent years, a paradox in affordable housing has shocked state administrators, developers, and affordable housing advocates alike: Units produced under the Massachusetts Housing Partnership's Homeownership Opportunity Program (HOP) and designed for moderate income families were difficult to sell, despite the tremendous need for affordable housing in Boston's lower income neighborhoods. This chapter reviews the HOP experience and identifies the problem of meeting HOP affordability goals as a problem in obtaining mortgage credit due, in large part, to difficulty meeting secondary mortgage market and private mortgage insurance underwriting standards.

The Massachusetts Housing Partnership's Homeownership Opportunity Program

One of the largest undertakings by the Commonwealth to address the housing affordability gap, and the only program of its kind in the nation, was initiated in January of 1986 when Governor Michael Dukakis announced the inception of the "Homeownership Opportunity Program" (HOP). The $250 million program is designed to increase the affordability of homeownership by encouraging new construction of low-priced units and assisting lower-income households in purchasing those units.

Projects funded under the HOP program are generally designed as mixed-income developments which contain both market and below-market rate homeownership units. At least 30% of homes in HOP

projects must be priced affordably for low-and moderate-income residents of Boston.[1] Up to another 20% of the homes may be affordable to moderate- to middle-income families[2]. Based on their level of subsidy, these units are termed "HOP" and "MHFA" units, respectively.

A wide variety of tools, some of which are traditional to first-time buyer programs, some of which are recently innovative, are employed to achieve this target and make HOP projects financially feasible (with limited profit) for developers. These "margins" of affordability include:

-- low-interest mortgage money through tax-exempt financing,
-- low down payments
-- developer incentives, including eligibility for municipal and/or state technical assistance, expedited permiting processes, linkage money, city-owned land at nominal cost
-- deed restrictions to ensure long-term affordability
-- mixed-income development design, such that market-rate unit sales offset a portion of low-income unit prices.

The first two items have long been standard public policy tools for increasing the availability and reducing the costs of mortgage financing. Under the HOP program, the use of Massachusetts Housing Finance Agency (MHFA) bond-financing has

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[1]Massachusetts Housing Partnership, HOP Program Guidelines, September 1988. Moderate income is defined as 50-80% of median Boston SMSA income, or $20,250 - $32,400 in 1989.

[2]Ibid. Though no lower income level is specified for these units, the upper income limit is currently set at $43,000, or just above the Boston area median income.

provided 8.4% financing for the MHFA units[3]. An additional MHP subsidy provides an interest rate buy-down for HOP units; Starting at three points below MHFA rates (or 5.4%, currently) HOP mortgage interest rates increase to the MHFA rate over the first ten years of the loan.

The other tools used under the program -- developer incentives, mix-income development design, and deed restrictions -- are relatively recent innovations, designed to make these developments financially feasible for developers and to keep units affordable into the future. Boston HOP projects in particular tend to involve more pro-bono services, land grants, improvements, and so forth -- partly because the City holds title to and is willing to convey a large number of properties, and partly because of the array of other Boston development resources such as linkage funds, technical assistance, CDBG funds, the LEND program, etc. Also, a greater proportion of HOP projects in Boston are undertaken by Community Development Corporations than projects in the state as a whole.[4] In addition to a willingness to forego higher profit margins, as non-profits these CDCs are eligible for, and frequently utilize, technical assistance, pre-development planning, and other development related grants (e.g. those of the quasi-governmental Community Economic Development

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[3]This rate fluctuates with changes in capital market rates; at 7.9-8.5%, MHFA interest rates have fallen some 2 points below residential mortgage market rates over the past two years.

[4]conversations with MHP staff.

Assistance Corporation (CEDAC) and Community Technical Assistance Corporation (CTAC).5

Deed restrictions, which are being employed in practically all newly constructed housing in Massachusetts, limit the amount of equity based on appreciation that an owner may capture upon sale of the property. In the case of HOP, this limit is based on the difference between the appraised value of HOP units and their sales prices, generally between 15-50% of the appraised value. Any HOP-assisted unit initially selling for 85% or less of its appraised value will have its subsequent resale price limited by the same percentage of cost-to-value.6 Six of the seven developments studied in this thesis had HOP units priced at less than 85% of their appraised value (see Developer Survey Summaries, pp 49-55).

For HOP units priced at 86-100% of their appraised value, their is no deed restriction requirement, unless the zoning for the development was secured through the comprehensive permit process (this has been typical of Boston HOP projects).7

5Ibid.

6HOP brochure, undated (issued early 1989), p. 8.

7Ibid, and conversations with MHP staff.

THE HOP EXPERIENCE
Expectations and Experiences to Date

Since the HOP program's inception in 1986, response from both non-profit and for-profit developers interested in producing HOP units has been high, "far surpassing the expectations of everyone at MHP", program Director Kate Racer notes. A combination of the incentives which lower development costs and an interest or belief in mixed-income developments has drawn 25 applications from developers with HOP proposals for a total of 330 affordable units in the Boston area (see Table III).

The large volume of HOP proposals received by MHP during the first two years of the program has allowed program administrators to be more selective in the developers, project types, sites, and income mix they chose to fund under HOP. In the Spring of 1988, program guidelines were changed to institute a competitive application process entailing two funding competition rounds each year.[8]

Ironically, while the demand to produce HOP units has far exceeded anyones expectations, selling those units to households of targetted incomes has proved much more difficult. As one developer explains, "you had the paradox of people screaming for more affordable housing, it's certainly needed, and a number of

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[8]Interoffice Correspondance, The Executive Office of Communities and Development; and the MHP newsletter, "HOMEWORD", Spring 1988.

TABLE III

HOMEOWNERSHIP OPPORTUNITY PROGRAM, COMPLETED AND PIPELINE PROJECTS
Status of All Applications for Boston Projects as of 2/27/89

		CHPTR 705	HOP UNITS	MHFA UNITS	Market Rate	Project Status*
1) Back of the Hill	ROXBURY	16	33	58	58	1
2) Blue Hill Avenue	ROXBURY	0	1	4	0	1
3) Bradford Estates	DORCH	0	16	8	0	1
4) Codman Commons	S DORCH	0	6	8	24	1
5) Rockvale/Lourdes	JAMAICA PL	0	4	3	7	1
6) Sumner Street	N DORCH	0	5	5	0	1
7) Roxbury Crossing	ROXBURY	0	22	0	0	1
8) Webster School	E BOSTON	0	9	0	15	1
9) Winslow Court	ROXBURY	0	24	0	0	1
10) Buildable Lots	N.A.	0	45	0	0	2
11) East Berkeley	S END	4	11	1	12	2
12) Fountain Hill	N DORCH	0	16	4	26	2
13) Homestead St	N.A.	0	6	0	0	2
14) Infill Bldgs	ROX/DORCH	20	20	0	8	2
15) Main St	CHAS.TOWN	0	13	0	13	2
16) Tremont St	ROXBURY	3	6	9	9	3
17) Markir Lots	N.A.	0	7	2	0	3
18) Dacia St.	ROXBURY	5	24	0	0	3
19) Edgewood/Sthwd	ROXBURY	3	7	0	8	3
20) Erie Ellington	N DORCH	4	26	0	0	3
21) Geneva Court	N DORCH	1	3	4	0	3
22) Langham Court	N.A.	0	6	0	23	3
23) Monsgnr Lyons	N.A.	0	8	2	0	3
24) Robinson St	N DORCH	0	6	2	4	3
TOTAL BOSTON		56	324	110	207	
Unit Type as a % of Total Units		8%	46%	16%	30%	

*Code: 1 = complete and occupied; 2 = in construction;
3 = in Predevelopment Stage.

Source: Mass Housing Partnership, HOP Database as of 2/27/89.

developers would like to build affordable units...but the HOP units sat empty".[9] While this has been attributed by both developers and particularly the MHP as a "marketing problem" due to a narrow window of income eligibility[10], developer surveys subsequently indicate that given this narrow window, demand was relatively high, even among programatically eligible buyers. However, a large portion of even these potentially eligible buyers seemed to frequently be hanging very tenously in a delicate balance between a number of underwriting standards.

The following sections attempt to construct an understanding of the changing variables which narrowed the HOP eligibility window by pushing the minimum floor of the HOP window some $5,000 higher than anticipated, creating a rift between the initial expectations of the program and its actual performance. Seven case studies of HOP projects subsequently demonstrate that a majority of pre-screened applicants were frequently delayed and often eliminated under an intensive underwriting review process.

From Program Design to Project Execution - A Changing Market Context and Narrowing of the HOP Eligibility Window

When HOP was first announced, in early 1986, press releases

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[9]Interview, Lewis Garfield, developer for the Blue Hill Avenue HOP project, 3/28/89.

[10]the series of workshops and conferences recently held by HOP have all been entitled, and tend to emphasize this "marketing" problem aspect.

and media reviews predicted (and initial HOP guidelines actually stated) that this combination of project cost write-downs, developer incentives, and low-cost buyer-financing would result in HOP assisted units that were affordable to households earning $20-25,000 a year.[11] Yet, in none of the projects surveyed were the average incomes of low-income buyers less than $26,000, and most ranged between $29,000 and $33,000 (see developer survey tables, pp 49-55). What accounted for that difference?

Because the income figures above were quoted in nominal dollar amounts, inflation certainly accounts for a part of that difference. Allowing for inflation of 4% per year[12], these projects could have been expected to sell to families with incomes of $22,000-27,000 by the time that Boston HOP units were sold in 1988-1989. However, with the exception of one development in East Boston, the actual incomes of HOP units in Boston developments--at $28,000 or $29,000--averaged toward the higher of these figures (see Developer Survey tables, pp 49-55).

Interest rates on MHFA bonds, increasing nearly a full 1% in harmony with movements in market-rate interests, may also have played a role in raising income levels of HOP buyers: some of those projects which were in pre-development planning or early

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[11]MHFA Newsletter, 3/86, and Boston Globe,

[12]Roughly the consumer price index for 1987 and 1988- Federal Reserve Bank of Boston Quarterly Economic Indicators.

construction during 1987, when HOP and MHFA rates were 5.0% and 7.9%, may not have counted on 5.5% and 8.5% rates when their buyers closed during the summer and fall of 1988.

Perhaps a greater factor accounting for this limitation in affordability is the recent soft market in certain Boston areas-- As Kate Raiser, director of the MHP explains, the program's characteristic mixed-income component was designed for a hot market in which market-rate units could partially offset the costs of subsidized units.[13]

More than one developer noted that because of the locations HOP projects are in, "the only people who move into the market rate units [in HOP projects] are those who either have no other choice, or believe in the neighborhood and in mixed income developments."[14] Presumably, the soft condo market at current prices has given the former group more housing alternatives.

For example, developers point out that above $90,000, the HOP and MHFA start loosing their competitiveness over market-priced units in lower-income neighborhoods. In concurrance with the BRA survey estimates that most "would be" homeowners would

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[13]MHP Conference, 4/3/89. Also, conversation with MHP staff.

[14]Interview, Sylvia Watts, developer for the Bradford Estates HOP project, 3/30/89. Similar observations made by developers of Blue Hill Avenue, Back of the Hill, Erie-Ellington, and Codman Commons.

prefer one, two- or three family homes, they point out that many of the prospective HOP buyers would also prefer these homes, especially if they can find one for not too much more than HOP units.[15] In lower-priced housing markets, such as Roxbury, North Dorchester, and Jamaica Plain, this price differential may be some $20,000 or $30,000 for single family homes.[16] It should be noted, however, that only part of the homebuyer's subsidy is attributable to below market unit prices, with the other part due to subsidized mortgage financing.

In any case, the combined result of these market developments was to narrow the window of eligibility to roughly the top 40% of the moderate income range, or to $26,000-32,500 income households in practice. Moreover, this income range, which is defined by the incomes of all households (renter and owner occupant) in all of metropolitan Boston, represents the "wealthiest" 20% of Boston's lower income neighborhoods (see Appendix I, Table B). As a result of this disjuncture between its initially publicized goals and actual performance, and perhaps also due to relative nature of what is perceived by Boston residents as "moderate income", it is not surprising that

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[15]Between 70% and 90% of "Would be Homebuyers" (see Appendix I, Table A for definition) in the BRA survey reported that they would prefer a single, two or three family dwelling over a condominium or other form of ownership.

[16]The mean prices for a single family home in Roxbury and Jamaica Plain in 1987 were roughly $100,000 and $114,000, respectively (BRA "Facts and Figures", 1988).

HOP has been criticized for its lack of affordability by affordable housing organizations, developers, and homebuyers alike.

A secondary effect from the disjuncture between the program's stated affordability goals, peoples' perception of "affordable", and actual performance, arises from the resulting narrow window of income eligibility. The program was from the start likely to be sensitive to even small changes in the margins which could affect the eligibility of applicants, including development costs and unit prices, mortgage financing costs and applicant income and debt characteristics. Again, while some Boston HOP units have been priced lower, the majority have been in the $85,000-$95,000 price range, and thus have been affordable only to those with incomes between 27,500 to 32,500 -- a narrow range of eligibility that covers less than 10% of the renter population in many lower income neighborhoods.[17]

Moreover, even those who still fit inside the window despite a higher income floor are theoretically in a very tenous position. As will be demonstrated in Chapter 3, a 1% change in interest rates or 3% change in housing expense to income ratios can shift income needed to support a given loan by several thousand dollars -- more than enough to push a household with an income of 27-28,000 over either limit of the eligibility range.

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[17]See Appendix I, Table B.

Every $25 increase in a monthly mortgage payment at HOP price and income ranges translates into $1077 added income per year to meet the 28% requirement. In fact, any marginal change which increases or decreases monthly housing expenses (ie, estimated annual income, interest rates) or up-front cash requirements (ie, a change in PMI premiums, "points", appraisal fees etc, or a change in loan-to-value ratios), can each individually make or break the eligibility limit for those with incomes falling in this range.

In the following section, interviews with developers of 7 of the nine HOP projects which have closed in Boston indicate that this hypothetical hypersensitivity to any marginal change, and particularly underwriting changes, bears out in HOP experience. However, while this impossibly narrow window could produce only a small number of even potential buyers, several other underwriting factors -- the most typical of which include credit rating issues, income sources, and income and down-payment verification -- are equally important factors in mortgage loan approval, according to HOP developers.

Major Barriers to Project Marketing - A Survey of Boston HOP Developers

In order to determine the frequency of occurance, extent of impact and methods of response to these underwriting-related factors, 10 project managers or other development staff and/or

marketing agents were interviewed in March and early April of 1989. An attempt was made to interview representatives from all 9 developments which contained three or more closed HOP units as of 3/6/89, and 7 of these nine interviews were completed. Additionally, developers for three of sixteen pipeline projects which are currently or will soon be under construction and have begun marketing processes were interviewed.

Those completed projects included in this study are: Blue Hill Avenue, Roxbury; Brush Hill Commons, Mission Hill (Roxbury); Fountain Hill/Bradford Estates, North Dorchester; Roxbury Crossing, Roxbury; Back of The Hill, Mission Hill (Roxbury); Sumner Street Townhouses, North Dorchester; Codman Commons, and South Dorchester. The three projects currently under construction or in predevelopment planning and included in this study are: Erie/Ellington, Roxbury; Geneva Avenue, Dorchester; and Main Street Townhouses, Charlestown.

Interviewees were asked questions from a questionnaire regarding their marketing strategies; choice of location, design and income mix; total number and characteristics of applicants for HOP and MHFA units; the underwriting standards (e.g., down payments, income ratios, documentation and verification requirements, credit screening) which most frequently delayed or disqualified applicants; and the nature of the developer's and applicants' interaction with MHFA, MHP, the loan originators, the

community in which they operate, the City of Boston, and primary mortgage insurance companies. Interviews ranges in length from 20 minutes to over an hour. A list of interviewees and the projects they represented is contained in the bibliography of this thesis.

These surveys indicate that while income ratios and down payments initially limit the income ceiling and especially the income floor for HOP units, a secondary "funneling" effect occurs under the actual application process, primarily due to case-by-case judgements in which an applicant is disqualified or delayed due to the sources of their income, their credit history, or the nature of their downpayment. While the risk of individual circumstances can only be ascertained on a case by case basis, it is clear that developers are bearing the brunt of both the cost of careful screening and the burden of proof of an applicants "ability and willingness to pay".

Passing the Initial Screening -- Housing Expense to Income Ratios and Down Payments

According to HOP developers, both housing expense-to-income ratios and down payments limited the pool of lower income applicants eligible during initial applicant screenings. While down payments were reported a much more ubiquitous problem among subsidized applicants, developers and marketing agents nevertheless indicated that many were "at the margin" with

respect to both underwriting standards.

Six of the seven developers or marketing agents interviewed referred to these problems as ones which created a "narrow window of eligibility". Lewis Garfield of Bergmeyer Development Corporation, the Developers of the Blue Hill Avenue HOP project, noted "There were major problems finding applicants who could fit into the window by meeting the ratios, and still have the savings for a downpayment". Developers of Brush Hill Commons, the Bradford Estates, Roxbury Crossing, (Back of the Hill) and Sumner Street Development Corporation all noted that housing ratios and down payments immediately or eventually disqualified their lowest income applicants, many by narrow margins.

Martha Dewaney, marketing agent for the Codman Commons project, noted the interrelatedness of the factors, explaining, "without a ten percent down payment, many of our applicants couldn't meet the income requirements, but that left us the problem of trying to see how these buyers with very few savings could come up with the up-front cash requirements."[18]

With the exception of one developer[19] whose units closed recently enough to receive closing cost and down payment

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[18]Because lower down payments increase the loan size for a given home price, they are associated with higher monthly payments.

[19]Back of the Hill Community Development Corporation

assistance under new HOP/MHFA initiatives, every developer interviewed also noted that down payments were a major barrier to not only the lowest income group, but to those making toward the top of the HOP income limit and even MHFA buyers. Most of these developers indicated that even 5% down payments, when coupled with additional closing costs equalling roughly 4.5% of the home price[20], were tough for their applicants to come up with.

Given a typical 2 bedroom HOP unit selling for $85,000, a 5% down payment and standard closing costs would require an applicant to have on hand over $8,000 in up front cash requirements. With a 10% down payment, up front cash requirements increase to $12,300. If buyers could obtain gifts from their families for half of the down payment, these figures would still amount to $6,000 and $8,000, respectively. Even those developers who were able to qualify buyers for 95% loan-to-value ratios expressed difficulty in finding applicants who could come up with cash requirements, or in helping them to do so. Four -- including developers of Bradford Estates, Sumner Street, Roxbury Crossing, and Codman Commons -- maintained that despite the allowance for 2 1/2% gift payments (from families, under past rules) or the ability to work around those rules, even then the lack of savings among both lowest and moderately low HOP and MHFA buyers restricted tiehr pool of applicants.

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[20]See Appendix II

Because of the ubiquitousness of the down payment problem, in fact, many applicants apparently were not "pre-screened" on this qualification in a practical sense. Most of the developers pre-screening processes did not require full documentation for income and available savings for up-front cash requirements, thus many applicants presumably "fudged" their initial applications. This was particularly true for down payments, which many applicants felt they could somehow "come up with" (through family, friends, or immediate efforts to save) before verifications would be required.

Five developers, in fact, openly stated their willingness to work with applicants to find ways around the down payment requirements. Many implied that down payment gifts were obtained somehow, and made to fit the MHFA and PMI's criterion that allow gifts only from family members. Ellen Grout, Office Manager of Sumner Street Development Corporation, reported that the developers were having such a hard time finding buyers who met the income and down requirements that they "finally decided to just give buyers $5000 outright, but MHFA wouldn't allow that".

This difficulty was exacerbated in cases in which developers were unable to obtain the primary mortgage insurance required to permit 5% down loans, particularly if marketing was based on the premise that such insurance would be available.

Down Payments and Primary Mortgage Insurance

In order to qualify for a mortgage loan with only a 5% downpayment, MHFA and virtually all secondary brokers require borrowers to have primary mortgage insurance. While even those who were able to obtain primary mortgage insurance and thus qualify for 5% down payments had problems coming up with that money, four developers experienced the additional problem of finding a PMI (or getting MHFA to find a PMI) which was willing to underwrite these loans.

Sylvia Watts of Bradford Estates noted that while they had started marketing for the project in spring of 1987 and had selected buyers, the PMI company that was going to insure those buyers (VEREX) went bankrupt. The resulting delays in closing while a new PMI was sought required the development company to obtain a third mortgage from the Neighborhood Redevelopment Corporation to pay for the empty units.

Another developer, who asked not to be cited by name, noted that while MHFA had made financing commitments for 5% down loans, they later seemed to hedge on this commitment when difficulty arose in finding a PMI: "after we had selected buyers, and started sending them to the bank, the bank started calling to say, 'don't send us any more 5% down buyers -- we can't process them because you can't get the PMI for them'. We finally got

MHFA to get us PMI, but only with a lot of hassle".

Ellen Grout of Sumner Street also noted that finding a PMI to underwrite the 5% down loans delayed the application review process. "We were in limbo for two months. MHFA was supposed to be working on it, but didn't".

Similarly, the developers of Codman Commons had to find buyers who could come up with 10% down payments as a result of a $1500 increase in yearly PMI premiums for 10% down loans and the inability of MHFA to provide PMI for 5% down loans.

In two of these cases, there seemed to be some level of confusion as to whose responsibility it is to obtain PMI. While in the early days of the program, no clear policy was defined, MHFA has increasingly assumed responsibility for this role, and today, a MHFA/GE co-insurance plan has been initiated for the express purpose of insuring 5% down loans. Unfortunately, however, there is evidence that this reluctance of some PMIs to cover 5% down loans is becoming an industrywide trend. As will be discussed in later chapters of this thesis, when coupled with a growing reluctance of banks to portfolio loans or to self-insure 5% down loans, this could endanger the 5% down loan altogether.

Meeting the income ratios and down payments required by

secondary market (including housing finance agency and PMI) underwriting standards have, in fact, become two of the most common barriers to first-time homebuyers cited by organizations of homebuyers, public interest research groups initiating CRA agreements, and community-based developers alike.[21] However, while these two standards together constituted the primary restrictions which limit the lowest potential eligibility limit for HOP projects, many projects had ten to fifteen times the number of pre-qualifying applicants than units, and still experienced difficulty in filling them due to the underwriting review process.

Most Marginal Buyers -- Higher Risk, or Unnecessary Inflexibility?

A second category of "marginal" HOP buyers, these developers report, consists of those who did pass preliminary screening, but were later rejected for countless variations on a couple of themes: their credit histories, family sizes, income verification, and changes in income or debt position. The high level of post-screened rejections resembles a funneling effect in which only one-half, one-fifth, or even one-tenth of thoroughly screened applicants remain after "washouts".

In part, it is the base amount of time taken to process applications which allows for considerable change in an

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[21]See, e.g., MAHA, 2/89; Boston Globe, 3/5/88;

applicants situation in what is an already dynamic situation. Because many marketing agents have experienced situations in which a person's debt composition changes, this experience has been referred to the "whatever you do, tell your applicants not to go out and buy a car" lesson. However, the incredible diversity, complexity, and inconsistency with which various secondary market standards are employed seldom fails to take marketing agents, developers and even mortgage bankers for HOP by surprise.

Documentation and Verification for Sources of Income, Down Payments, and Credit History- "Whatever you do, Don't Go Out and Buy a Car"

The underwriting requirements currently set down by MHFA and PMIs which determine the exact documentation and verification for stable sources of income and for items at issue on credit reports take their toll in the amount of time required to approve a buyer.

For example, developers reported unanimously that their efforts to find eligible buyers for HOP and MHFA units were often thwarted by what seemed illogical or inconsistent policy with respect to approving various sources of income. Five developers[22] cited one or more cases in which income they felt positively should not have counted toward family income was

[22]Roxbury Crossing, Sumner Street, Blue Hill Avenue, Codman Commons and Bradford Estates

counted, and vice-versa.

These cases involved, for example, individuals who had recent overtime because they were trying to save for furniture (the developer, who had evidence of previous income levels, felt that this was clearly not a source of stable income); individuals who had kids who were saving for college, or for marriage and an apartment of their own; or household which currently rely and are likely to rely on income from a second job, more than one wage earner, bonus pay, or overtime.

While in each of these cases the developer felt they had sufficient information on which to judge the quality and likely stability of income, the burden of proof often requires several months time and substantial work on the part of the developer and applicant to prove. If there were no unforeseen circumstances, developers reported that the application process took from 3-6 months (Bradford Estates, Back of the Hill, Sumner Street). If reverification or further documentation was required, this processing time might be extended by several additional months. Consider the following estimates made by developers:

- time to review initial applications required by the bank, MHFA, and HOP, per applicant: 1-2 hours.
- time to obtain copies of tax returns: 3 months
- time to correct an item on a credit report: 3-6 months +
- time to obtain employer income verification -- varies,

depending on employer, but can be months especially if overtime, dual incomes, unusual income are involved.

In addition, the community outreach which is requisite for finding initial buyers takes considerable time, and many developers are also in the process of trying to do pre-ownership and property training.

Despite these estimates by developers, the secondary giants (Freddie Mac and Fannie Mae) and bankers alike have long boasted decreased average processing times for mortgage loans. The former contend that as a result of uniform standards promoted by the Federally Sponsored Credit Agencies, "our automated and expedited underwriting system has reduced processing from an average of 90 days to an average of 17 days".[23] This may be true for higher equity, higher income buyers, but the HOP experience indicates, for first time moderate income buyers buying with 5% down payments, the underwriting process is, not infrequently, many times longer than advertised or anticipated.

Similarly, Linda Bullard (Loan Officer for Shawmut Bank, Master Lender of the HOP Program) maintains that the underwriting process should take no more than a few weeks if the buyer is prepared and has a completely clear record.[24] However, in

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[23]Goetz, Vice-President of FHLMC, at a conference on "Secondary Mortgage Markets and Local Housing Programs", 2/9/89, Washington D.C.

[24]Bullard, at a HOP Marketing Conference, 4/3/89.

addition to income and down payment verifications, applicants are required to have a completely clean "hard copy" credit report[25] for the past two years, and be able to prove exceptional circumstances for any questionable items over the life of the reports (which just recently have been revised to include 10, rather than 7 years of credit).[26] These rigid credit requirements appear to create the longest and most frequent delays in applicant approval.

Credit History - "You Cant' Make Less than $30,000, have more than 2 kids, and not have a credit problem".

This statement by Sylvia Watts seemed to echo that of every developer, whatever their applicants' particular experience. Every HOP project which had closed in Boston had an anecdote to tell about "notorious Sears", or other revolving credit companies which report their customers for every dollar that is a day late; about individuals who had been defrauded at one time or another and contested a bill which nevertheless remained on their record; about a hospital bill which was past due because of slow insurance processing; the list is endless. Bullard estimates that even for conventional buyers, some 15% of all credit reports contain inaccuracies due to "double reporting" alone (ie,

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[25]Hard copy credit reports take several weeks to obtain and are somewhat more detailed than "soft copy" reports which can be generated daily through a loan originator's on line computer system.

[26]Linda Bullard, Mortgage Officer of Shawmut Bank, Interview, 4/3/89.

combined items from another individual's, often a family member's, record).27

As is the case with income verification, the burden of proof lies in the applicant's ability to prove "exceptional" circumstances, and the required correction on a hard copy credit report can take two or even several months. Again, while some developers indicated that many applicants truly were bad credit risks, all indicated that the erroneous cases did occur, and sometimes more frequently than even what they considered "legitimate" credit risks.

Other Underwriting Technicalities: Family Sizes, Construction Design, and First-Time Buyer Qualifications

Less frequently cited by developers were underwriting issues which involved family and unit sizes, construction design and first-time buyer qualifications. Two developers experienced problems placing applicants because of family sizes, one because families were larger than units called for, the other because they were smaller than the allowable size. In the former case, a woman and her two children in a South Dorchester project were disqualified for a two-bedroom unit because MHFA does not allow

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27Bullard, 4/3/89.

children over the age of 12 to share rooms.[28] In the latter case, a family which had two children and planned to have more was disqualified for a three-bedroom unit. "This type of requirement doesn't allow a family any flexibility to grow, and is especially exclusionary given the fact that buyers are asked to sign a 30 year lease, in effect", noted one developer.[29]

In one non-Boston HOP project, a technical disqualification occured when a woman made it almost to closing, but was disqualified when it was discovered that her name was placed on a piece of investment property of her father's years ago. Technically, the woman was not a "first time buyer".[30] While this was perhaps an extreme case, it nevertheless points to the rigidity of rules on paper and the distance between underwriter and borrower under today's lending environment. One developer noted that "the borrower never even meets anyone from MHFA or PMIs"[31] and several developers noted confusion as to the role of MHFA, the bank and PMIs in getting the borrower through the underwriting process. For some developers, banks seemed to be interpreting rules harshly; for others, MHFA seemed to call the shots; still others thought that the PMIs were the primary

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[28]Interview, Ellen Grout, 3/28/89. Also, see MHFA Single Family Programs, 1988, p.

[29]Interview, Pable Calderon, 4/89.

[30]Developer at a HOP Marketing Conference, 4/3/89.

[31]Pablo Calderon, Developer for Roxbury Crossing HOP project.

obstacle to getting mortgage financing. As the following chapter will discuss, the feeling that underwriters are shielded from borrowers is largely an outgrowth of secondary mortgage marekts and the new standardized underwriting model.

Developer Responses - Marketing Hints, and Suggestions for Programatic Change

Partly as a matter of financial necessity, partly in order to achieve affordability goals, developers have responded by devoting a considerable amount of time in consulting with, training, and playing a general advocacy role for buyers to get them mortgage financing. While some developers have addressed these issues by hiring a "good marketing agent" and a "credit consultant who straightened up these families' credit situations"[32], many others are assuming these roles themselves.

Again, the strategies being adopted by developers of HOP projects can be classified as those which try to increase the initial pool of "appropriate" applicants, and those which try to ensure that those applicants will get through the review process. It has already been noted that as a result of the tremendous washout rate, developers (and state officials) typically

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[32]Interview, Sylvia Watts, 4/89.

recommend selecting three to four times more eligible[33] applicants than units.

Many developers of the HOP projects studied attempted to increase their initial applicant pools by using certain newspapers which were more effective than others in a particular community (e.g., especially in communities with large populations of non-english speaking individuals); performing community outreach with churches, community based developers, MAHA, and other groups with strong community ties who could often provide a good pool of applicants; or even redesigning a development's informational pamphlet to encourage application by households who were more likely to exceed minimum income limits (e.g., Bradford Estates changed advertisement income guidelines to an hourly wage of $14 to circumvent confusion about what income sources counted or didn't. However successful, such an approach may limit the number of applications from those with secondary income sources who might otherwise be viable borrowers).

Some developers have held special homeownership training workshops and encourage early preparation techniques such as obtaining a credit report and planning a budget. Many of the these tactics and suggestions are entailed in HOP's new pilot

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[33]Thoroughly screened - which generally means having submitted a complete application, identifying account numbers and sources of income, debt, etc, but not necessarily having presented complete documentation.

clearinghouse program, as outlined in the following section of this chapter. The availability of marketing assistance will be particularly significant for those non-proit developers who have extremely limited staff and financial resources to play the role of credit counsellor.

Summary

In general, what these variety of cases indicate is that, like the Director of Underwriting for FHLMC says, "underwriting is an extremely judgemental process. It cannot be accomplished by ratios alone".[34] Outside of thorough reviews for each applicant there is, obviously, no way to separate out those who lie about their incomes, or have incomes which are likely to be instable, or are serious credit risks because of their past histories, from those who can demonstrate "ability and willingness to pay". As the recommendations in the concluding section of this study will indicate, this does not necessarily imply that the costs of screening must be high or take an undue amount of time. It does mean, however, that any program designed to enhance mortgage credit access will need to address not just ratios and down payments, but documentation and verification criteria as well.

As the current situation stands under the HOP program, it

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[34]Interview, John Hempschoot, Freddie Mac, 4/89.

is apparent that the burden of proof and the costs (both in time and money) of providing that proof currently rest on the shoulder of the applicant and the developer. "Despite our concern, (and a host of initiatives to prove it), developers and their communities are still responsible for the marketing of HOP units", maintains Kate Racer in regard to the "marketing" problem.35

A priori, we would expect there to be some limit beyond which these costs would be perceived as prohibitive. In the least serious case, either the developer has become less selective in who occupies a unit (generally meaning, has selected higher income applicants) or a frustrated buyer has dropped out of the review process.

More seriously, and that which affected each and every buyer surveyed, is the situation in which units which do not close on schedule cost the developer money and threaten the financial viability of the project or the company. The Project Surveys on pp 48-54 indicate that each of these HOP projects had units which remained open for two or more months past construction completion and initial closing dates. Some projects have been filled only over the course of a year or more. What this amounts to is, as one developer puts it, "we basically end up paying the

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35MHP Conference, 4/3/89.

bank for financing empty units".[36]

Perhaps the most detrimental long term impact of these underwriting standards indicated by the HOP experience is the feeling among developers that the trouble may not be worth the effort. The developers of Sumner Street feel that "the paper work is horrendous and no one wants to budge an inch. The time factor is so bad that we have become discouraged about the prospects of doing projects in the future". Those of Blue Hill Avenue maintain that "PFD is still trying to understand how private developers wok, but at the same time, they seem to be working against providing them incentives". The serious threat that these problems pose to future production of affordable homeownership units demands that underwritig issues and policies be integrated or taken endogenous to a homeownership program. This has, as will be demonstrated, only been partially accomplished within the initiatives being implemented under HOP.

The HOP program has (sometimes jokingly) been referred to as the "program that makes up the rules as it goes along",[37] and there is some truth to this characterization. In part, program administrators and developers have had to contend with a window of eligibility which was from time units came on line much narrower (and higher) than anticipated. Despite this narrow

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[36]Henry Joseph, Developer for Brush Hill Commons, 4/89.

[37]Attendee at a HOP Marketing Conference, 4/89.

window, however, demand and even programatically eligible demand for HOP units has been high.

What created the difficulty in marketing HOP units was actually mortgaging HOP buyers. In sum, the predominant opinion among developers as to the causes of this mortgageability problem are: 1) ratios and down payment requirements that are overly restrictive; 2) credit reviews, income verification processes, and documentation requirements which are overly burdensome and rigid; and 3) a combination of lack of coordination between originators, insurers, and purchasers, as well as a general inaccessibility and distance of loan underwriters who, again, as one developer points out "never even meet with buyers".[38] As the following chapter will suggest, these problems are largely the outcome of changes in the mortgage lending environment generated by a young, but tremendously large and influential, secondary mortgage market.

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[38]Interview, Pable Calderon, 4/89.

HOP SURVEY RESULTS BACK OF THE HILL/BRICKLAYERS HSG CO - ROXBURY

1) # Unit Total.....	HOP.....	33
	MHFA	58
	Market	58
	BRA	16
2) Average HOP 2 BDRM.....	Appraised.....	112,500-135,000
	Price	79,900
	Range	60,500- 87,500
	Mortgage	75,500
	Income	26,800
3) Average MHFA 2 BDRM.....	Appraised.....	125,000
	Price	105,500
	Range	94,500-107,500
	Mortgage	N.A.
	Income	41,988

4) MARKETING

# Applicants.....	700-800 Passed Initial Screening
# Lottery	100 selected
# Initially Filled	56 signed a P & S; 44 fell through

Marketing Period

Lottery Date:	8/88
Units Sold As of 2/27/89:	14 HOP, 9 MHFA
Closing Date(s):	1/89-2/89

UNDERWRITING PROBLEMS

1: Documentation/Verification - length of time for obtaining and correcting reports.
2: Credit Problems (Poor Credit & Bad Items among MHFA; No History, for HOP applicants
3: Redocumentation Required every 120 days.

OTHER DELAYS (e.g., coordination, paperwork, const, etc)

Length of Processing: 3-6 months

LOCATION

Characterized by a heterogeneous population, Mission Hill has housed an increasing number of students & young professions, and has undergone significant "upscaling" in recent years.

SUGGESTIONS/STRATEGIES

- select 3-4 times more pre-screened applicants than units.
- held first time buyer workshops.
- multi-lingual "how to buy a home" leaflets

Note: Price, Mortgage, Income and Closing Dates based on units Sold as of 2/27/89, data from MHP HOP database.
All else based on Developer Surveys.

HOP SURVEY RESULTS — BLUE HILL AVENUE - ROXBURY

1) # Unit Total..... HOP.....1
MHFA 3
Market 0
BRA 0

2) Average HOP 2 BDRM..... Appraised.....106,000
Price 86,000
Range 86,000
Mortgage 81,700
Income 33,072

3) Average MHFA 2 BDRM..... Appraised.....106,000
Price 86,000-99,000
Range 86,000-99,000
Mortgage 81,700-94,900
Income 44,000

4) MARKETING

Applicants..... 60
Lottery 22 qualified, 4 selected
Initially Filled 3

Marketing Period
Lottery Date: 5/88
Units Sold As of 2/27/89: 1 Low, 2 Mod
Closing Date(s): 11/88

UNDERWRITING PROBLEMS
1: Housing Expense/Income Ratio - "narrow window"
2: Up Front Cash Requirements
3: Design Elements, e.g. use of electric heating

OTHER DELAYS (e.g., coordination, paperwork, const, etc)

Lengthy Project approval process

LOCATION

Somewhat rough neighborhood, subject to crime, drug problems.

SUGGESTIONS/STRATEGIES

- City can help primarily with soft costs, e.g., provide eligible buyer lists.
- public sector should compensate for added risk incurred by developers (in cutting costs by using, e.g., less experienced contractors, alt. design elements). Expedite project approval.

Note: Price, Mortgage, Income and closing dates based on HOP units Sold as of 2/27/89, data from MHP HOP database.
All Else Based on Developer Surveys.

HOP SURVEY RESULTS — BRADFORD ESTATES - N DORCHESTER

1) # Unit Total..... HOP.....16
MHFA 4
Market 26
BRA 0

2) Average HOP 2 BDRM..... Appraised.....112,500
Price 89,500
Range 89,500-113,000
Mortgage 83,900
Income 29,100

3) Average MHFA 3 BDRM..... Appraised.....116,000
Price 110,000
Range 110,000
Mortgage N.A.
Income 41,988

4) MARKETING

Applicants..... 500-600 "Inquiries"
Lottery (no lottery)
Initially Filled --

Marketing Period
Start: Spring 1987
Units Sold As of 2/27/89: 13 HOP, 2 MHFA
Closing Date(s): Spread over 1/88-1/89.

UNDERWRITING PROBLEMS
1: Up Front Cash Requirements (Gift Pymt rule)
2: Income sources--overtime, bonus treated inconsistently
3: Credit Problems (Poor Credit, Bad Item, No History)

OTHER DELAYS (e.g., coordination, paperwork, const, etc)

Length of Processing: 3-6 months
PMI company went bankrupt
(construction length: 8 months)

LOCATION

Somewhat rough neighborhood, subject to crime, drug problems.

SUGGESTIONS/STRATEGIES

- hired a Credit Consultant
- construction and Permanent Mtg Lenders should be the same
- support community based movements such as Freedom House

Note: Price, Mortgage, Income and closing dates based on HOP units Sold as of 2/27/89, data from MHP HOP database.
All Else Based on Developer Surveys.

HOP SURVEY RESULTS — BRUSH HILL COMMONS - ROXBURY

1) # Unit Total..... HOP.....4
MHFA 3
Market 7
BRA 0

2) Average HOP 3 BDRM..... Appraised..... 118,000-120,000
Price 86,500
Range 86500
Mortgage 81,700
Income 28,600

3) Average MHFA 2 BDRM..... Appraised.....122,000
Price 97,500
Range 97500
Mortgage 92,625
Income 39,600

4) MARKETING

Applicants.....50 for all 15 units, pre-screened
Lottery N.A.
Initially Filled 4

Marketing Period
Start: January 1988.
Units Sold As of 2/27/89: 4 HOP, 2 MHFA
Closing Date(s): 10/88-1/89

UNDERWRITING PROBLEMS
1: Credit History (poor history, bad items, no formal history)
2: Ratios: "narrow window" of eligibility
3: Finding a PMI that would insure 5% down loans
4: Up-front cash requirements

OTHER DELAYS (e.g., coordination, paperwork, const, etc)
Lengthy project and applicant approval processes.
Excessive Paperwork

5. LOCATION

Mission Hill has undergone considerable revitalization/ gentrification in recent years.

6. SUGGESTIONS/STRATEGIES

HOP units went faster than MHFA; market rate units went slowest

Note: Price, Mortgage, Income and Closing Dates based on units Sold as of 2/27/89, data from MHP HOP database.
All else based on Developer Surveys.

HOP SURVEY RESULTS — CODMAN COMMONS - SOUTH DORCHESTER

1) # Unit Total.....	HOP.....	6
	MHFA	8
	Market	24
	BRA	0
2) Average HOP 3 BDRM.....	Appraised.....	109,000
	Price	96,000
	Range	--
	Mortgage	85,000
	Income	27,200
3) Average MHFA 2 BDRM.....	Appraised.....	109,000
	Price	109,000
	Range	103,000-109,000
	Mortgage	97,850
	Income	37,900

4) MARKETING

# Applicants.....	400 Original; 250 passed screening
# Lottery	10 selected
# Initially Filled	4 of 6 HOP units filled

Marketing Period

Lottery Date:	N.A.
Units Sold As of 2/27/89:	6 HOP, 3 MHFA
Closing Date(s):	1/88-9/88

UNDERWRITING PROBLEMS

1: Juggling b/t Down Pymt & Debt/Income Ratio-"narrow window"
2: Applicant (especially recent immigrants) attributes - Lack of credit history/2 years stable employment history in U.S.; Cultural differences result in little banking history

OTHER DELAYS (e.g., coordination, paperwork, const, etc)

Bankers now want to see mktg done before releasing project financing. Overly harsh interpretation of MHFA standards by banks.

SUGGESTIONS/STRATEGIES

- uses a bank that is willing to bend more on documentation/ verification requirements (for non-HOP projects)

Note: Price, Mortgage, Income and Closing Dates based on units Sold as of 2/27/89, data from MHP HOP database. All else based on Developer Surveys.

HOP SURVEY RESULTS — ROXBURY CROSSING - ROXBURY

1) # Unit Total.....	HOP.....	22
	MHFA	0
	Market	0
	BRA	0
2) Average HOP 4 BDRM.....	Appraised.....	140,000
	Price	105,000
	Range	56,000-110,000
	Mortgage	98,400
	Income	34,320
3) Average HOP 2 BDRM.....	Appraised.....	140,000
	Price	88,000
	Range	N.A.
	Mortgage	82,700
	Income	28,212

4) MARKETING

# Applicants.....	260 passed thorough review
# Lottery	40 qualified for the 3 $56,000 units,
# Initially Filled	8 selected, all 8 plus two more rejected.
Marketing Period	
Start:	January 1988.
Units Sold As of 2/27/89:	3 HOP
Closing Date(s):	3/89

UNDERWRITING PROBLEMS
1: Credit History (bad items, especially for lowest income)
2: Up-Front cash requirements
3: Income verification, sources
4: family size

OTHER DELAYS (e.g., coordination, paperwork, const, etc)
Lengthy project and applicant approval processes. Excessive Paperwork. No bilingual staff at MHFA, no interaction between MHFA and Buyer. Confusion about subsidy form, deed restriction.

5. LOCATION
High abandonment and vacancy rates. Bordered by commercial, institutional land uses. Considerable crime and drug problems.

6. SUGGESTIONS/STRATEGIES
- support community based programs for credit counselling, homeownership training.
- cut down on reporting requirements (consolidate PFD, MFHA forms)

Note: Price, Mortgage, Income and Closing Dates based on units Sold as of 2/27/89, data from MHP HOP database. All else based on Developer Surveys.

HOP SURVEY RESULTS — SUMNER ST TOWNHOUSES - N DORCHESTER

1) # Unit Total..... HOP.....5
MHFA 5
Market 0
BRA 0

2) Average HOP 2 BDRM..... Appraised..... 116,000
Price 85,000
Range 85,000
Mortgage 80,800
Income 28,800

3) Average MHFA x BDRM..... Appraised..... N.A.
Price 105000
Range 105000
Mortgage N.A.
Income N.A.

4) MARKETING

Applicants.....265
Lottery 40 qualified, 20 selected
Initially Filled 3

Marketing Period
Lottery Date: Spring 88 (3 mo. before const. completion)
Units Sold As of 2/27/89: 4 Low
Closing Date(s): 1/89-2/89

UNDERWRITING PROBLEMS
1: Up Front Cash Requirements
2: Finding a PMI that would insure 5% down loans
3: MHFA would not allow a $5,000 sales concession

OTHER DELAYS (e.g., coordination, paperwork, const, etc)
Lengthy approval process
Excessive Paperwork
Unclear roles and resposibilities of MHFA, PFD.

5. LOCATION
In the Uphams Corner/Savin Hill area. Older, fairly well maintained neighborhood of duplexes, triplexes.

6. SUGGESTIONS/STRATEGIES

- City/State should sponsor an applicant clearinghouse.
- HOP easier to sell than MHFA. Lower Income applicants had less credit history, therefore fewer credit problems.

Note: Price, Mortgage, Income and closing dates based on HOP units Sold as of 2/27/89, data from MHP HOP database.
All Else Based on Developer Surveys.

CHAPTER 3 - SECONDARY MARKETS AND THE STANDARDIZATION OF MORTGAGE UNDERWRITING

What has occured in the mortgage lending world that has made it so difficult for prospective buyers of state sponsored homes to obtain mortgage loans? Since the advent of mortgage lending, financial intermediaries have underwritten mortgage loans on the basis of particular loan, property and borrower attributes. However, in today's lending environment, this judgemental process of assessing "ability and willingness" to support a mortgage loan has become simplified and roughly approximated due to the recent wholesale commodification of mortgage loans through the secondary mortgage markets.

Of increasing influence in establishing industrywide underwriting standards have been the secondary market Federally Sponsored Credit Agencies (FSCAs -- including Fannie Mae, Freddie Mac and Ginnie Mae) and the mortgage insurers they now require for loans with less than 20% down payments. This chapter describes the development and growth of national secondary mortgage markets, the extent of rigidity they have introduced into the mortgage underwriting process, and the empirical evidence documenting the correlation between various underwriting standards and the incidence of loan default. First, however, a short review of the nature of underwriting standards as a factor of affordability is warranted.

Underwriting Guidelines and the First Time Buyer

The affordability of homeownership can be technically described as a function of home prices, household incomes, up front cash requirements (including down payments and closing costs), interest rates, and type of loan instrument (e.g., fixed rate versus adjustable rate or graduated payment mortgages).[1] As noted in the previous chapter, underwriting standards enter the homeownership affordability equation by setting rules regarding, for example:

- how much income a borrower can devote to housing
- what constitutes a stable or unstable source of income
- whether to allow co-borrowers or accept "gift money" toward a down payment
- the amount of rent payments that an owner-occupant of a multi-unit building must reserve for maintenance and repair
- how many units in a multi-unit project may have deed restrictions
- and whether to underwrite alternative forms of housing such as limited equity cooperatives

Essentially, when Fannie Mae issues a guideline that the housing expense to income ratio for conventional loans should not exceed 28%[2], it is suggesting that past lending experience has demonstrated this ratio to be related to a statistically acceptable degree of risk of loan default. Any higher ratio would presumably lead to greater probability of default or

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[1]DiPasquele, p. 7.

[2]i.e., monthly principle, interest, taxes and insurance--"PITI"--divided by monthly income

foreclosure since the borrower would have less income to devote toward other necessary budget items. Adjustable rate and graduated payment mortgages, which are thought to be riskier than fixed interest payment mortgages, have an allowable housing expense to income ratio of 25%.[3]

Similar reasoning underlies the conventional wisdom that loan-to-value ratios over 80% are riskier because buyers have less equity and personal investment involved, and hence are more likely to "walk away" from a home and a mortgage obligation. Thus, Fannie Mae requires primary mortgage insurance (PMI) for all loans with less than 20% down payments, requires a minimum down payment of 5%, and requires that down money come from a household's savings or from immediate relatives.[4]

As a factor of affordability, underwriting standards can significantly extend or limit access to mortgage credit among first time buyers. The effects of even small changes in these underwriting standards are summarized in Appendices II and III. At a range of prices between $110,000 and $60,000, four approximate, but consistant rules of thumb may be applied:

1) closing costs total about 5% of the loan amount (including a 1.5% PMI premium). Thus:
   - a 10% down loan requires up front cash of .15 x loan and
   - a 5% down loan requires up front cash of .10 x loan

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[3]FNMA Servicing Guidelines, 1986; VEREX Rate cards, 1986.

[4]Ibid

2) a 5% decrease in down payments will reduce up front cash requirements by 33%, but increase monthly expenses and required income by 5%.

3) a 1% change in housing expense to income ratios leads to a 3.5% change in required income, but no change in monthly payments.

4) mortgage insurance (PMI) coverage, in addition to raising up front cash requirements by 10%, raises monthly payments and minimum qualifying incomes by 3%

By way of example, take the case of a $100,000 house, financed with a 5% down payment and a $95,000 conventional mortgage at a fixed rate of 10.0%. To qualify for this mortgage loan, a family would need $46,000 under a 25% ratio, and $41,100 under a 28% ratio (see Appendix II). Similarly, a decrease in the required down payment from 10% to 5% can reduce up front cash requirements on a $100,000 home from roughly $15,000 to $10,000 (see Appendix III). At the same time, however, the larger mortgage amount associated with a lower downpayment will raise income requirements by about five percent, or from $39,200 to $41,100 (Appendix II).

First time buyers are commonly considered more sensitive to underwriting guidelines because of particular attributes which make it difficult for them to demonstrate "ability and willingness to pay" for a mortgage loan. Previous research has traditionally emphasized younger households in the family formation stage who have fewer savings to apply toward up-front cash requirements; more frequent employment changes and shorter

work histories; non-existant or poor formal credit histories; and less income with which to support monthly payments.[5]

As one scholar points out, the defining characteristics of first-time homebuyers have been broadened in recent years to reflect the "fact that the central issue is really the affordability of homeownership".[6] Today, it is not just younger families, but also newly arrived immigrants, single parents, dual wage earner households, and long time residents of middle age and middle incomes that share the same barriers of limited savings and low incomes relative to home prices. Under such a situation, the influence of underwriting standards becomes even more apparent as greater numbers of households are pushed toward the "margins" of underwriting limits.

The Development of a National Secondary Market

The institutionalization of industrywide underwriting standards owes itself, in large part, to the establishment of the quasi-governmental secondary mortgage market corporations. Prior to the early 1970's, secondary mortgage markets were virtually non-existant. The Savings and Loans Associations (SLAs) which originated the vast majority of mortgage loans raised their funds through the deposits of customers, made loans locally, and held

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[5]Rosen, 1984, p 30.

[6]DiPasquele, 1988, p. 3.

mortgages in their portfolios until they were paid off.[7]

But because of the long life of these assets, the illiquidity of mortgage loans was perceived to create mortgage credit mismatches characterized by shortages of mortgage funds in somes areas, and surpluses in others.[8] At the root of cyclical instability in mortgage supply were chronic episodes of disintermediation, during which depositors moved their savings from low-yielding passbook rates at SLAs to shorter term, higher yield financial instruments (e.g., money market accounts) that commercial banks or other financial institutions could offer.[9]

Federal regulation limiting interest rates on passbook savings accounts and mortgage interest rates are generally credited with introducing asset/liability mismatches and liquidity problems for SLAs, who were obliged to carry long term liabilities (mortgage loans) but unable to lenghthen the term of their asset structures (savings deposits). In large part, the secondary markets were fostered by federal government to provide an outlet to SLAs, and increasingly to other mortgage loan originators. By purchasing loans advancing mortgage money during periods of tight credit, it was thought that the secondary market

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[7]Freddie Mac, 1988, p. 6

2Ibid. See also Williams, pp 4-10.

[9]Ibid.

could smooth the disruptions of cyclical instability.[10]

While the Federal National Mortgage Association (Fannie Mae) had existed as early as 1938 to provide a steady outlet for mortgage loans which were insured under the Federal Housing Administration and Veteran's Authority (FHA/VA) programs, few secondary market options for conventional or other residential mortgage loans existed prior to 1968. In response to the chronic credit mismatch, congress reorganized FNMA and chartered two new organizations during 1968-1970 -- Ginnie Mae and Freddie Mac-- to create a national secondary market outlet for conventional home mortgages.

The purpose behind the establishment of these Federally Sponsored Credit Agencies (FSCAs) was not only to redistribute credit from surplus to deficit areas via purchases and cash advances, but also to encourage investment in mortgages by "nontraditional" investors, thus channelling greater proportions of credit into mortgage markets.[11] The availability of the secondary market option allows mortgage lenders to restructure their asset portfolios by selling a portion of loans on the secondary market and thus freeing up principle for reinvestment in new residential mortgages or other activities.

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[10]Williams, p. 13

[11]Rosen, 1984, pp 108-109.

Each of these "secondary giants" is structured with slightly different organizational types and responsibilities. Ginnie Mae as a wholly owned government corporation under the Department of Housing and Urban Development, was chartered to purchase FHA/VA loans; Fannie Mae is a privately held corporation chartered to purchase market rate loans (with the provision that a substantial portion of purchases represent lower-income households); and Freddie Mac was created by the Emergency Home Finance Act of 1970 in the context of a "market gone bust and 9% interest rates which seemed the end to mortgage lending".[12]

In addition, the FSCAs are required to perform certain public services by virtue of the public benefits these agencies enjoy (for example, the ability to borrow funds from the federal goverment on advantageous terms).[13] According to Fannie Mae's regulator, the Department of Housing and Urban Development, Fannie Mae is obliged to provide sufficient support for low and moderate income families, and to provide sufficient capital to inner city areas.[14]

Over the years, Fannie Mae and Freddie Mac have gained authority to issue mortgage backed securities for a variety of

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[12]Fannie Mae, 1988, Freddie Mac, 1988, and Goetz, FHLMC at a Conference on Secondary Markets, Washington D.C., 2/9/89.

[13]Hearth, 1983, p. 24.

[14]Ibid.

loan products and under various arrangements with loan originators and servicers. Deregulation of the banking industry (undertaken in part to circumvent disintermediation by loosening restrictions on asset and liability structures of SLAs) has encouraged new mortgage instruments such as graduated payment mortgages (GPMs) and adjustable rate mortgages (ARMs). As deregulation has allowed savings and loans to diversify their lending and investment activity, reducing their dependence on long-term residential mortgage liabilities, the secondary market giants have developed new products to provide an outlet for these loans.[15]

Today, a vast array of actors and complex products characterizes the secondary market: under its Guarantor program, Freddie Mac may "swap" mortgages originated by a thrift for participations in a mortgage-backed security; a mortgage banker may originate loans for sale to FNMA with pre-approval authority and buyback provisions; investors, including financial intermediaries, pension funds, insurance companies, and invididuals, may purchase marketable securities backed by a variety of mortgage loan instruments; Freddie Mac may issue a Collateralized Mortgage Obligation", a mortgage backed security with call protection (ie, investor protection against sudden loan prepayments); and state housing finance agencies such as the Commonwealth's MHFA may issue bonds and uses the proceeds from

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[15]Williams, 1987, p. 7

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these bonds to finance both general mortgages and mortgages for prioritized purposes.[16]

Despite the complex array of secondary market operations, most of these operations conform to the general "originate, service, and sell" model illustrated in Table V. Entitled after Fannie Mae and Freddie Mac's motto, "Connecting Main Street to Wall Street", the chart illustrates the stream of mortgage payments from borrower to investor on the top tier; the bottom tier show the cash flow resulting from purchases and sales of mortgage loans. The price paid by a secondary broker for a mortgage loan pool is a function of the expected cash flows associated with that mortgage. In deciding whether to hold loans in their portfolios, lenders and investors alike compare yields on mortgage loans with other investments. The riskier a loan or security is perceived to be, the greater its yield, or expected cash flow value must be to compensate for this risk.

The Massachusetts Housing Finance Agency, which has issued residential mortgage bonds since the early 1970s, functions similarly, although it does not have the wide array of CMO, passthrough and other products used by the national secondary giants. In recent years, bond series have been issued about twice a year for three designated purposes: general lending,

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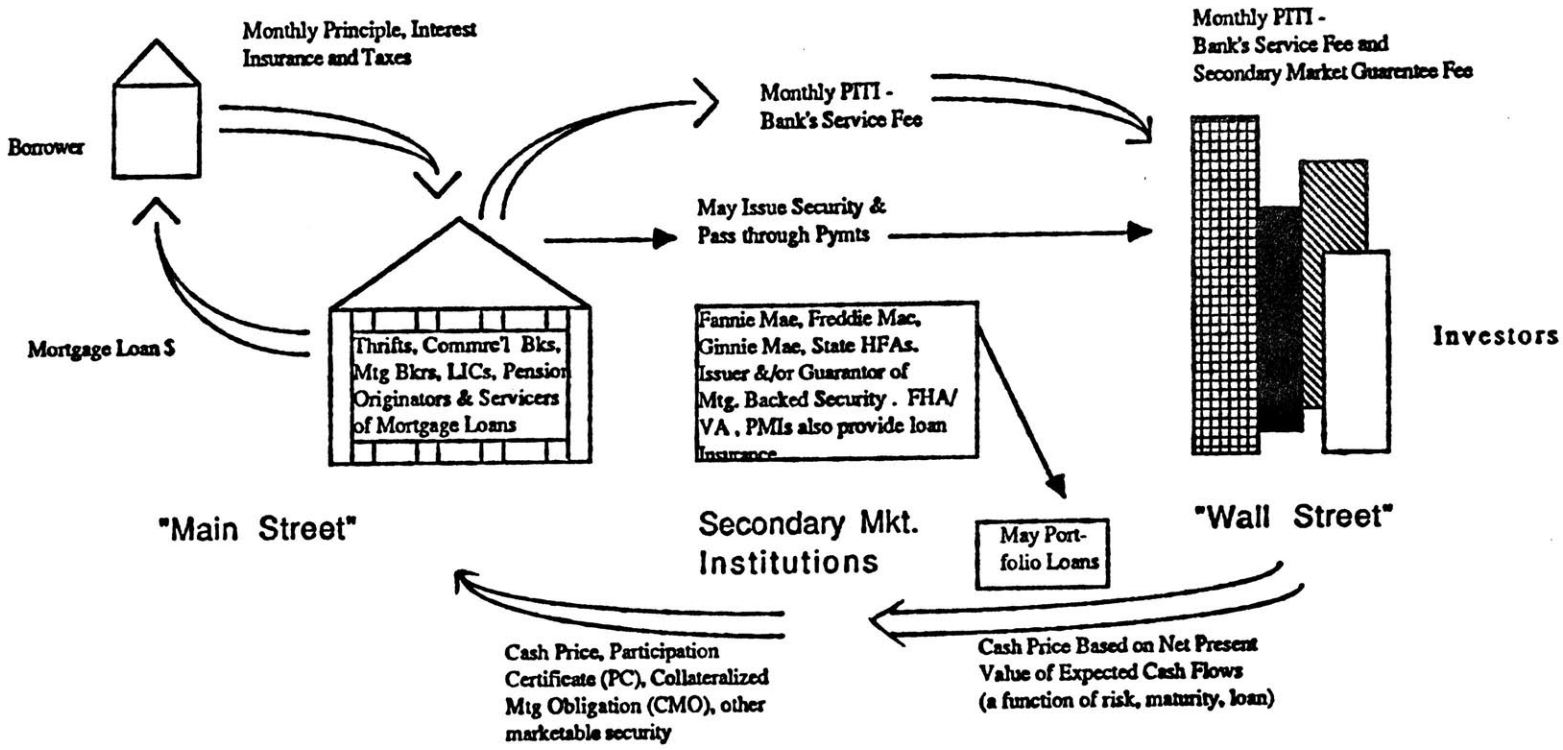
[16]Fannie Mae, 1988, Freddie Mac 1988, Williams, 1987, MHFA, 1988.

TABLE IV



The Secondary Mortgage Market: "Connecting Main Street to Wall Street"

Source: Freddie Mac "Citizens Guide to the Secondary Mortgage Market", 12/88

prioritized lending for lower income buyers, and new construction lending for 1-4 family dwellings. The most recent issue in February 1989, for example, provides $40 million in loan funds at 7.9%, or about 400 mortgages for $100,000 homes each.[17]

As was noted, the secondary market agencies function to provide a certain level of protection against lending risk, as these agencies guarantee payments to investors. While only GNMA carries a guarantee backed by the full force of the U.S. Government (FNMA and FHLMC carry only the guarentee of those agencies), all three FCSAs in effect carry the status of government backed securities in practice, and each has recently had "AAA" Standard and Poor ratings.[18]

For loans with limited down payments, another feature of the secondary market is the requirement for mortgage insurance to cover the additional risk attributed to loans with higher Loan-to-value ratios. These mortgage insurers have included (and currently include) the Federal Housing Authority and Veteran°s Administration insurance programs (which guarentee repayment of 100% of the loan amount) and private primary mortgage insurance companies (PMIs), which generally insure against loss on the

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[17]MHFA Official Statement For Series 7 Revenue Bonds, dated 2/16/89.

[18]Williams, 1987 and Hines, 1988.

first 20-30% of the loan amount.[19] Thus, the underwriting standards of these mortgage insurers play heavily into the degree of homeownership access afforded to households with lower income and little wealth for down payments. The underwriting history and risk experience of these insuring agents will be returned to shortly.

Magnitude/Extent of Penetration of the Secondary Market

By almost any stretch of the imagination, the volume of sales and puchases of residential mortgages on the secondary market is huge, and the relatively quick penetration of secondary markets into the mortgage lending environment has also been phenomenal:

> Well over 80 percent of the conventional mortgages made since the 1970s, when Freddie Mac and Fannie Mae began introducing uniform documents, are standardized.[20]

Consider also the explosive growth in the volume of loans sold on the secondary market: In 1960, Fannie Mae, the largest secondary agency, bought $3 billion in mortgage loans; by 1985, mortgage lenders sold $160 billion in mortgages on the secondary market; in both of 1986 and 1987, they sold roughly $300 billion in mortgages.[21] As Tables V (a-b) indicate, thrifts, mortgage

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[19]Hines, p. 156.

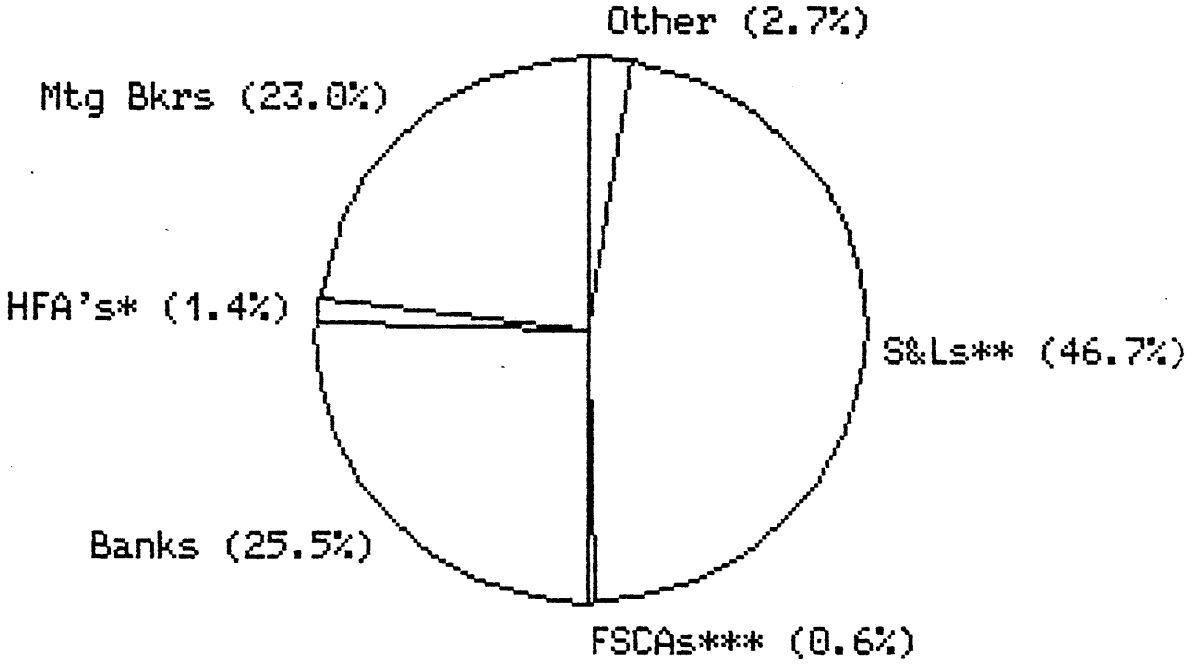
[20]Freddie Mac, 1988, pp 13 & 17.

[21]Freddie Mac, pp 1-5. See also Hearth, 1983, for earlier figures.

TABLE Va.

Originations of Mortgage Loans By Originator, 1987

(Total Originations: $380 billion)

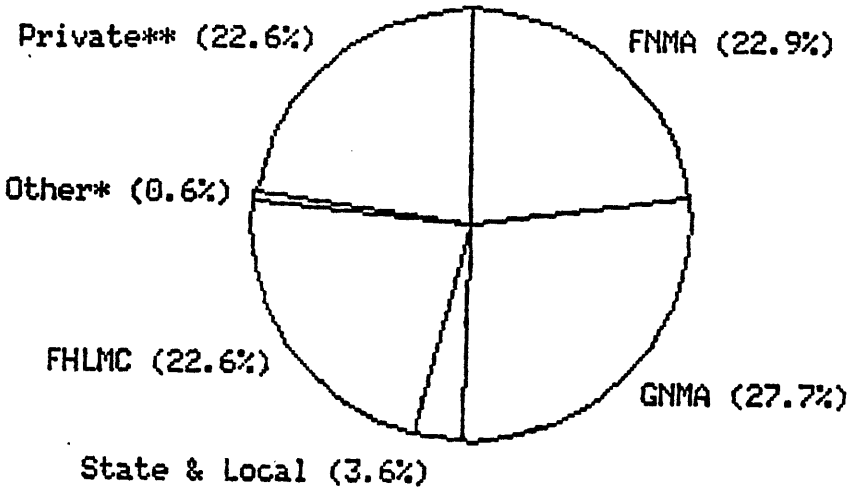


* State and Local Housing Finance Authorities
** Includes Savings and Loans and Mutual Svgs. Banks
*** Federally Sponsored Credit Agencies

Source: Freddie Mac "A Citizen's Guide", 1988.

TABLE Vb.

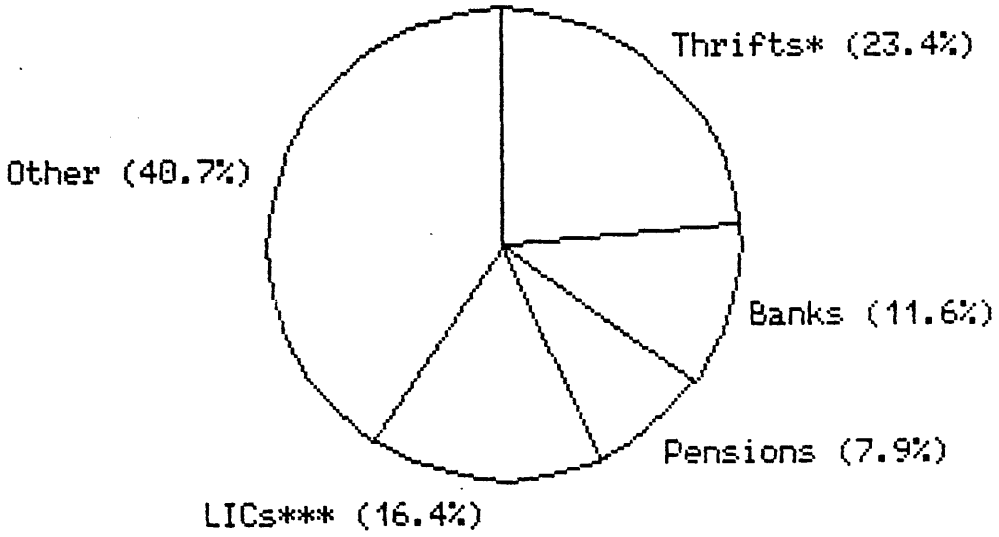
Sales of Mtg Backed Securities
By Issuer, 1987
(Total Sales: $330 billion)



* Other Federal Agencies
** Private Issuers

TABLE Vc.

Purchases of Mtg Backed Securities
By Buyer, 1987
(Total Purchases: $350 billion



* Includes Mutual Savings Bks and Svgs. and Loans
** Other Firms and Individual Investors
*** Life Insurance Companies

bankers and commercial banks account for most of the loan originations and sales, while the federal agencies account for the majority of secondary market purchases. Reflecting post-deregulation diversification of financial institution's investments, the proportion of loans originated by SLAs and commercial banks and mortgage banking companies have nearly reversed since 1975, when SLAs originated roughly 55% of all mortgage loans and the latter two financial institutions originated 35% of all mortgage loans. Among the ultimate investors of mortgage-related securities are thrifts, banks, life insurance companies and pension funds (Table V c).

While levels of certain types of secondary activity, such as FHA/VA lending has been low in Boston relative to other regions[22], by all accounts the vast majority of loans made in the Boston area are also sold on the secondary market. Linda Bullard, who directs Shawmut Bank's role as Master Lender for the Massachusetts Housing Partnership's HOP program, estimates that in recent years, Shawmut has portfoliod 10 to 15% of its residential mortgage loans. Moreover, 100% of these portfoliod loans are ARMs - "with interest rate volatility, no banker is willing to hold 30 year fixed mortgages -- that's how the thrifts got into so much trouble".[23]

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[22]e.g., Freddie Macs outstanding volume of FHA/VA loans in the New England area totalled $23 million, compared to $585 for the mid-south region, and $282 million for the deep south.

[23]Interview, Linda Bullard, 4/3/89.

Renee Beatty, State Manager for CitiCorp Mortgage Company, notes that portfolio holdings are almost nil for mortgage companies (who do not have their own capital to make loans) such as CitiCorp's, noting that Fannie Mae has purchased the vast majority of their residential mortgage loans.[24] Both the Bank of Boston and the Bank of New England have also indicated that they are reluctant to approve loans which are likely to pose difficulty in sale on the secondary market, including loans for innovative forms of housing tenure, such as limited equity cooperative housing.[25] Even those who market real estate in Boston claim that the effects of the secondary market penetration here have led to a situation in which they "will do anything to get a lender to portfolio a loan".[26]

Since they were established over ten years ago, there has been considerable debate as to whether or not the existence of the secondary giants actually does serve to increase the volume of mortgage credit. Conclusions of most recent studies tend to agree that a considerable amount of secondary mortgage market activity is offset by reductions in primary portfolio lending.

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[24]Interview, Renee Beatty, 4/89

[25]Meetings on Coop Housing with the Massachusetts Urban Reinvestment Group and Bank of New England, 2/89; and with MURAG and Indianhead Bank, 10/88.

[26]Interview, Martha Dewaney, Marketing Agent for Saaks Realty and for the HOP Sumner Street project, 4/89.

Testing this hypothesis in 1983, for example, Douglas Hearth found that the upward pressure on interest rates activated by FSCA purchases and debt financing "crowded out" primary investment in mortgage loans.[27]

The Standardization of Mortgage Underwriting Guidelines

Whatever the effect of the secondary giants on the volume of mortgage credit, no one disputes the effect that secondary market operations have had on the standardization of underwriting guidelines and uniformity of mortgage lending practices.

The fact of the matter, one which FNMA and GNMA proudly and frequently remind us of, is that secondary markets and mortgage insurance cannot exist in absence of standardized underwriting guidelines. In order to get the secondary market off and running, the secondary giants recognized that they would need to introduce this uniformity so that pools of mortgages could be valued and "sold wholesale to investors"[28] who knew what they were buying. During the 1970s, Freddie Mac and Fannie Mae developed and promoted a uniform set of standards which are today known throughout the industry as "underwriting guidelines":

For conventional mortgages, they developed "uniform

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[27]Hearth, Douglas, Federal Intervention in the Mortgage Markets: An Analysis, UMI Research Press: Ann Arbor, MI, 1983. pp 5-6.

[28]Freddie Mac quote, 1988 p. 10.

> instruments", standard mortgage documents for use in every state in the union. They developed standard "underwriting guidelines", a checklist for use by lenders when qualifying the credit of would be homeowners. They developed standard appraisal forms for evaluating properties. And they introduced requirements for mortgage insurance to help protect investors from losses due to homeowners who default.[29]

In order to process the growing volumes of loan purchases over the years, the secondary giants have computerized the loan underwriting process by assigning a score to each mortgage according to the degree of risk it carries.

> This system allows the corporation to buy an immense volume of mortgages without sacrificing the quality of the mortgages it buys. The proof of their effectiveness lies in the corporation's statistics for credit losses. Freddie Macs are consistantly below industry average.[30]

The question arising in this thesis concerns the extent to which this wholesale commodification of mortgage lending has affected the ability of moderate income households to obtain mortgage financing in Boston. Whatever the exact standard or geographic area of impact of the secondary market, the tendency is to move from a case-by-case consideration of not-so easily identifiable risk factors to an easily-applied norm having statistically acceptable margins of error. Thus, what is efficient for the lender, underwriter, and investor in terms of risk probability becomes "averaged" or "typified" in a manner

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[29]Freddie Mac, "A Citizen's Guide to the Secondary Mortgage Market, 12/88. p 10.

[30]Ibid, p. 26.

which in all probability reduces the ablility of the underwriter to take into account the exigencies of the particular buyer, project, development costs, and regional housing markets and overall economic conditions.

This "commodification" of mortgage loans and its impact on the nature of lending has been recognized by all authors writing on the subject, whether they believe secondary markets to, on balance, increase the supply of credit or not. As Rosen notes, today "the mortgage market has to be discussed and analyzed for the most part in national terms because regional and intrametropolitan effects are largely nonexistent due to the highly fungible nature of financial credit".[31] M.A. Hines, on the other hand, who contends that secondary markets do increase the flow of mortgage credit, still notes that "capital markets are much more impersonal [than credit markets]. The borrowers securities must meet the needs of the investors while at the same time serving the purposes of the borrower. The capital market, in other words, is more investor motivated than borrower motivated."[32]

Even loans made through the Massachusetts Housing Finance Agency, which one might presume to be more sensitive to regional markets, are closely tied to national secondary markets in at

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[31]Rosen, 1984. p. 41.

[32]Hines, 1988 p. 2.

least three respects:

1) banks who originate and service MHFA loans must also be Fannie Mae or Freddie Mac approved lenders, or have prior experience with MHFA.[33]

2) Investors of MHFA mortgage bonds sold nationwide, MHFA contends, demand the same amount of security from risk as FSCA-backed securities, and thus they are bound to the same or similar risk-related underwriting standards[34]

3) MHFA, like the FSCAs, requires PMI for all mortgages of greater than 75% loan-to-value ratios, thus they are restricted to the standards of these national underwriters as well.[35]

This last connection to secondary markets is particularly onerous as the number of PMIs who provide insurance services has fallen from some 15 companies in the early 80's to some 4-5 companies today. Moreover, experts at Fannie Mae, PMIs and banks alike agree that only two of these PMIs -- General Electric Mortgage Insurance Company (GEMIC) and Mortgage Guarantee

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[33]MHFA Single Family Programs Operations Manual, 9/88, Eligibility Guide, Part 2, Section 1 (e) and (h).

[34]conversations with MHFA staff (Carol Asklund and Frank Sorenson), PMI representatives (Bill Schumann), and Freddie Mac Representatives (John Hempschoot).

[35]MHFA Loan Servicing Guidelines, 1988.

Insurance Company (MGIC) -- continue to insure 5% down loans.[36]

Underwriting Rigidity and the Question of Risk

While both secondary giants and banks attest to the tremendous extent of market penetration of secondary operations, there is considerable disagreement as to how flexible the underwriting standards that secondary giants and PMIs issue are. What degree of variation from the standards can or is tolerated by secondary giants and ultimate mortgage investors?

John Mempschoot, director of underwriting for Freddie Mac, agrees that because of the volumes of loans processed and the percentage of these which are securitized, "mortgage underwriting has become a very mechanical process" . But FHLMC, he maintains, has strived to convey the message to mortgage lenders that the agency is "very flexible". The loans that are less appropriate for securitization, Hempschoot stressed, are those which induce variation in the stream of income which is channelled through to investors -- for example, balloon payment or graduated payment loans.[37]

However, Hempschoot maintains that FHLMC can be flexible with regard to income ratios, allowing higher ratios in areas

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[36]Ibid.

[37]Interview, Hempschoot, 4/89.

with high market rents and prices; it has purchased loans involving sweat equity; and typically allows grants for "soft second" mortgages on local housing authority projects. "The feeling that banks can't impact the credit assessment process is wrong". Why then, do banks seem to shy away from "non-conforming" loans? Hempschoot replies that "this is an educational function that our office needs to work on".[38]

While FHLMC integrates its policy for purchasing non-conforming loans as a part of its overall operations, FMNA has dealt with the flexibility problem differently by setting up a separate office specifically for the purpose of tailoring products for low and moderate income housing to meet local needs. Some of the alternatives the Office of Low and Moderate Income Housing offers include equity investments, mortgage purchases for community development projects, and purchases of state or municipal mortgage revenue bonds. Martin Levine, the office's Director, maintains that the Office encourages special deals, has been working on a system with which to value sweat equity, and has loosened ratios somewhat.[39] Of particular interest in the Boston context are two stated program elements: the willingness to buy loans from local housing partnerships which entail soft second mortgages (for example, for closing costs and downpayments); and the willingness to exceed ratios in certain

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[38]Ibid

[39]Conversation with Martin Levine, 2/89.

cases, specifically, "when borrowers have consistantly and successfuly devoted greater portions of their income to rent and shown and ability to accumulate savings".[40] However, as will be noted, rents in Boston are so high that housing-to-income ratios of 30, 35, and 40% may make it impossible for households to also save for downpayments; and this is particularly true at lower income levels, where fewer dollars remain for other essentials.

Moreover, while in theory Fannie Mae will make deals on non-conforming loans, bankers often note that "they've been saying that for years, and yet have demonstrated little"[41]. It is difficult to obtain data on the volume of non-conforming and lower income loans as a percent of the FSCA's total (in-house and securitized) portfolios. Fannie Mae representatives note that "a substantial portion of loans are originated on home prices below $60,000"[42]; however, this indicates very little in the Boston context, where few habitable homes sell for this price. In 1978, findings of HUD research indicated that Fannie Mae was performing poorly in its obligations to support low income and inner city lending.[43] The Massachusetts Urban Reinvestment

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[40]Fannie Mae "Low and Moderate Income Programs", 1989, p. 25.

[41]John Sullivan, at a meeting on cooperative housing with the Bank of New England and Massachusetts Urban Reinvestment Advisory Group.

[42]Conference on Secondary Mortgage Markets and Local Housing Programs, February 9, 1989.

[43]Hearth, 1983, p. 24.

Advisory Group has recently engaged in research determing that total low and moderate income loans are likely to be well below the charter law's requirements (which were at one point set at greater than 50%), and that HUD, in whom the authority is vested, has failed to set these requirements from time to time.[44]

Given the current affordability gap which requires tens of thousands of dollars of subsidy to reach moderate income households, the task of FNMA has become impossible outside of special deals for non-conforming loans and local affordable housing programs. Yet, none of the 50-odd "deals" represented in Fannie Mae's Low and Moderate Office handbook include Massachusetts projects. And of the project types being represented, few pertain to the ratio, limited downpayment, and limited equity at issue in the Boston context.[45]

The Massachusetts Housing Finance Agency has also introduced specific products to better meet local needs. A share loan program for limited equity cooperatives, for example, provides mortgage financing for affordable homes produced by the Greenfield Area Land Trust.[46] With interest rates some 2 points

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[44]Conversations with, Mary O'Hara, President of the Massachusetts Urban Reinvestment Advisory Group.

[45]Fannie Mae, "Low and Moderate Income Housing Initiatives, 1989.

[46]Community Economics, newsletter of the Institute for Community Economics, Spring 1989.

below market rates, MHFA loans have also presumably been able to reach a lower-income population than FNMA or FHLMC, and the state agency also reserves a portion of bond issues for "high-priority" lower-income households. But to a large extent, they are still tied to the requirements of primary mortgage insurance companies, who are noted by developers, bankers and secondary giants alike as the most rigid of all with respect to underwriting requirements. Carol Asklund, MHFA Underwriting Manager, notes that "Since we're selling mortgage revenue bonds on the secondary market, we've made certain representations to both our investors and the bond raters (Moody's). In this sense, we're largely tied to the same underwriting and documentation requirements of Fannie Mae and of the PMIs who insure our 10% and 5% down loans".[47] An estimated 80% of all MHFA loans require PMI.[48]

Underwriting Standards and the Question of Risk - FHA vs. PMIs

Because the mortgage credit in question for this study pertains to mortgage loans for high (over 90%) loan to value ratios, the relevant underwriting standards in question are largely those used by mortgage insurance institutions which underwrite the additional risk usually associated with these loans.

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[47]Interview with Carol Asklund, 5/1/89.

[48]Interview, Frank Sorenson, MHFA, 4/89.

Acceptable coverage as defined by the FSCAs includes coverage provided under the FHA/VA Title II Section 203 program, or coverage by a qualified private PMI company. The primary evidence relating to the risk associated with the lower-equity loan, more moderate income buyer, and looser debt to income ratios thus centers around FHA and PMI insured loans. Both because of the alternate markets these groups are viewed as serving, and because of the difference in the nature of their underwriting policy, these two secondary market loan underwriters provide a good basis from which to hypothesize about risk. While no future probability of risk for particular loans is estimated in this thesis, the historic experience of these mortgage insurers (and to a less extent the FSCAs) with loan defaults provides a broad indication of the additional default which might be expected under marginal underwriting changes, and the costs associated with those defaults.

The Emergence and Growth of Mortgage Insurance

The FHA Title II Insurance Program was created in 1934 for the purpose of insuring mortgage lenders against loss due to default, and thus increasing the flow of credit into mortgage lending.[49] PMI companies emerged with the establishment of the Mortgage Guarantee Insurance Corporation (MGIC) in 1956.[50] PMIs

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[49]HUD, 1986, pp 1-5.

[50]Hines, 1987, p. 178.

have grown popular more recently, largely due to the secondary market's establishment of an outlet for conventional (non-FHA) loans with private mortgage insurance.

Both PMIs and FHA charge borrowers a premium for insurance on loans. FHA has recently charged a flat fee of 3.8% of the loan amount, amortized over the life of the loan.[51] General Electric Mortgage Insurance Company's latest rates for 5% down buyers are 1.5% for the first year, and .5% amortized for each year thereafter.[52] GE, like most PMIs, covers the top 30% of the loan value, while FHA insures the entire loan amount.[53]

In general, FHA underwriting standards have been considerably more flexible and less restrictive than those of either PMIs or FSCAs. For example, FHA's ratio guidelines in recent years have been set at 38% for housing expenses, and 50% for total debt expenses.[54] Also, when FHA's loan-to-value ratios are calculated relative to total acquisition costs including closing costs, a substantial portion of loans originated by the agency have effective LTVs of close to or even greater than 100%.[55] It has been a conscious policy of the agency to assume

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[51]HUD, 1986.

[52]GEMIC Rate Card, dated 4/88.

[53]Ibid, and HUD, 1986.

[54]HUD, 1986.

[55]Ibid

somewhat higher risk probabilities while maintaining the self-supporting and solvent nature of the agency. This is achieved by allowing more flexible standards while instituting other more careful screening processes which consider a greater number of loan variables, including "compensating" factors which might offset loans thought to be higher risk (e.g., low down-payment loans).[56]

While FHA standards have become even more relaxed in recent years, these loans have generally been unavailable to Boston residents due to the low maximum acquisition price allowed by FHA; until 1984, the maximum loan amount which could be insured by FHA was 90,000. Thus, in past years, the proportion of insured loans in Boston which are covered by FHA have accounted for less than 5% of all insured loans nade in the city, compared to FHA market shares of 20% or more in lower priced housing markets.[57]

The PMI companies which have subsequently become the only alternative of local lower equity buyers (and to a lesser extent FNMA) have adopted more restrictive standards in recent years. These difference in trends toward flexibility must be understood in the context of the insurer's respective risk requirements, underwriting processes and default experience.

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[56]HUD, 1986, p. 5.3.

[57]Ibid.

Recent Loss Experience and Tighter Underwriting Standards

During the late 1970s and early 1980s, as PMIs enjoyed tremendous growth rates, many began loosing credit restrictions, insuring new mortgage instruments such as graduated payment mortgages, and expanding business in rapidly growing markets in the U.S. and overseas.[58] Some raised their allowable housing to income ratios up to 33%, 35% or even higher during this period.[59]

However, when the affordability crunch hit with the worldwide recession of the early 80's, skyrocketing interest rates and depressed local economic conditions led to widespread occurance of "negative amortization" on high loan-to-value loans; since GPM and ARM payments were increasing (in unregulated fashion) payments faster than incomes, many buyers were unable to make payments.[60] In areas where housing markets were saturated and home values declining (e.g., in Houston, Dallas, Detroit, and other economies characterized by extreme depression or a "bust boom" cycle), PMIs, FSCAs, and FHA/VA all realized increased claims and losses on recent mortgages. Fannie Mae was losing $1 million a day[61]; the FHA default rate increased from roughly 2.5%

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[58]HUD/FHA, 1987, and DiPasquele, 1988.

[59]Ibid

[60]Rohde, 1982.

[61]Goetz, V.P. of FHLMC, at a Conference on Secondary Markets, Washington D.C., 2/89.

to 9%; and the PMI default rate increased sixfold from .5% to 3%[62].

As a result, FNMA and many PMIs have adopted lower debt to income ratio requirements (FNMA switched from 28% to 25% for higher LTVs in late 1985, and several PMIs followed suit), and more recently, fewer PMIs have been willing to cover 5% down loans.[63] While most of the 15 existing PMIs covered 5% down loans in the early 80s, only two are known to insure them today, including MGIC and GE Mortgage Insurance Corporation.[64] In addition, many PMIs began to require increased documentation to verify income (e.g., through two years of tax returns, and, in questionable cases, an additional 8 weeks of paycheck stubs); "hard copy" credit reports (which are most detailed and take longer to obtain than "soft" copy reports which can be obtained in a day with the help of an on-line computer modum); requirements for 2 months of PITI in a reserve escrow for loans with low down payments; and a complex formula requiring purchasers of 2 and 3-family homes to calculate maintenance reserves.[65] More recently, credit reports have been extended by

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[62]HUD/FHA, 1986, p. 5.5.

[63]HUD, 1986, p. 5.1, and Conversations with William Schumann, Old Republic Insurance Corporation, FNMA staff, and Frank Sorenson, MFHA.

[64]Ibid

[65]Interviews with Carol Asklund, Linda Bullard; and VEREX/GEMIC rate cards, 1986.

three years, requiring households to remember why a particular payment was past due as long as ten years ago.[66]

Part of this rigidity may be attributed to the fact that because they deal primarily in mortgages with loan-to-value ratios of 90% and under, PMIs have less diversified holdings with which to insulate themelves from the exigencies of the market. But many academics and practitioners feel that the recent restrictions adopted by PMIs and income ratio restrictions adopted in recent years (including decreases in allowable income ratios, increased documentation and verification of income and debt) are not an accurate reflection of risk: "they were a knee-jerk reaction to losses of the early 80's which resulted from conditions in specific markets and for poorly designed mortgage instruments." [67]

Anita Champ, Director of Loan Servicing Standards of Fannie Mae, also notes that the Agency now acknowledges that losses of the early 80's were due to "oil patch economies" and other structural economic factors, and that little default experience has been tied directly to higher debt/income ratios.[68] These views concur with the findings of a recent FHA study which compares FHA/VA borrower and loan characteristics and default

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[66]Interview, Linda Bullard, 4/3/89.

[67]Conversation with John Hempschoot, FHLMC, 4/89.

[68]Interview, 2/9/89

experience among FHA and PMIs. Like most previous literature, the study found that for both PMI's and FHA, defaults have been higher for loans with lower down payments.[69] Also like former studies, findings on the correlation between higher debt-to-income ratios and default experience has been less conclusive, with defaults sometimes representing higher, and sometimes lower ratio buyers.[70] For FHA originattions, buyers with lower debt ratios have had higher than average rates of default, and buyers with high debt ratios have had lower than average rates of default, in 1977, 1979, and 1981.[71] The Agency attributes this difference to the more complete screening performed on higher ratio buyers.[72]

Of crucial importance, however, the study notes, are the structural economic conditions surrounding mortgage lending. This importance can be illustrated most clearly by the upsurge in default rates, which were highly regional in nature, during the worst years of this country's last recession, 1980-1982. For FHA and PMI insured loans, default rates are higher in metropolitan areas with lower housing appreciation rates (below

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[69]HUD, 1986, Chapter 5. See also Hearth, 1983; Rosen, 1984; Hines, 1988.

[70]Ibid

[71]Ibid

[72]Ibid

4.5%) and high unemployment rates.[73]

Contrary to the rest of the nation, however, Massachusetts began to experience economic recovery much sooner, and both incomes and home values were increasing rapidly during this time.[74] Home price appreciation rates in Boston ranged between 10% and 30% per year during the early 80's.[75], and default rates were low. The Massachusetts Housing Finance Agency, for example, has to date paid out roughly $26 million dollars in PMI premiums on 80% of $1 billion of loans. Of this $26 million in premiums, the PMIs have paid out only $100,000 in claims to PMIs over the last several years.[76] As Frank Sorenson of the MHFA notes, "the PMIs tell us that Massachusetts, and for that matter all of New England, are paying for loan losses that occured in Dallas, Houston, Detroit, and so on".[77]

Summary

Due to the high liquidity of mortgage loans made possible by the secondary mortgage market, mortgage credit markets have been subsumed under national capital markets in recent years. The

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[73]HUD, p. 5.10.

[74]BRA, 1988.

[75]Ibid

[76]Frank Sorenson, MHFA

[77]Ibid.

transfer of mortgage loans into marketable securities requires mortgage loans to compete on a national scale directly with a broad range of marketable securities, including stocks, bonds, and corporate debentures. By-products of this new mortgage lending environment are the creation of standardized underwriting guidelines and the increased difficulty of approving non-conforming loans and low equity loans for sale to investors in the secondary market.

This commodification of mortgage loans has led to a situation in which individual borrowers are judged by nationally uniform standards, and in recent years, these standards have become increasingly restrictive in response to high default rates of the early 80's. However, while scholars and practitioners alike agree that this default experience was due primarily to structural or macroeconomic forces (namely, the largest worldwide recession since the Great Depression), Fannie Mae and PMIs have reacted largely by instituting microeconomic underwriting amendments -- for example, by decreasing maximum allowable debt to income ratios, and increasing documentation and verification requirements.

Low income, low equity borrowers, who are thought to be higher risks than wealthier borrowers with larger down payments, have borne the brunt of these amendments in recent years: In the process of adopting stricter underwriting policies intended to

restrict mortgage credit from higher risk borrowers, these underwriters close the door to credit access for many buyers who might otherwise exhibit "ability and willingness" to support a mortgage loan. This indirect impact on access to credit among presumably creditworthy households was most vividly demonstrated through the HOP experience. The next chapter, Chapter 4, lends further indications that present underwriting standards may exclude many otherwise eligible homebuyers.

CHAPTER 4 - UNDERWRITING STANDARDS IN THE BOSTON CONTEXT

What is special about the Boston context and Boston's moderate income households that both point to a need for and the appropriateness of more flexible and regionally responsive underwriting standards? At root, it is the city's (and for that matter, the New England region's) unaffordable housing market which makes national underwriting standards appear relatively restrictive in the Boston context, and provides rationale for reforming these standards locally.

The HOP experience demonstrated that the availability of mortgage credit in these neighborhoods is requisite to opening homeownership access to moderate income groups. There are several factors about the Boston population and the proposed underwriting amendments which suggest that opening credit markets to lower income neighborhoods needn't mean that lenders resign themselves to doing "bad business" or making charitable contributions at all. In fact, with marginal changes in current underwriting standards and some commitment on the part of loan originators and underwriters to consider new underwriting processes and criteria, lenders could conceivably tap large markets of latent, creditworthy homebuyers.

Although risk analysis is not within the scope of this thesis, there are several aspects about the Boston housing

market, HOP projects, and Boston's moderate income households which suggest that more flexible underwriting standards can also be justified from the standpoint of risk. On the "macro" level, two structural aspects of Boston's economy suggest this City to have a less risky mortgage lending market than the average metropolitan area, including the city's low unemployment rates and high home appreciation rates. Between 1984 and 1987, Massachusetts has enjoyed one of the lowest unemployment rates of the nation's industrial states.[1] Still below 4%, Boston still enjoys the lowest unemployment rate in a state that compares favorably to others vis-a-vis total employment.[2]

Boston's homeowners have also enjoyed tremendous appreciation rates in recent years: Appreciation rates for Dorchester subneighborhoods, for example, have ranged from 7% to 93% between 1982 and 1985. Typical rates of appreciation in nearly all neighborhoods were upward of 30% during this period, and lower income neighborhoods have had some of the highest appreciation rates of all (see Table VI). These rates are extremely high compared to the FHA's definition of high appreciation markets with average rates of 4% or greater.[3] While the Assessor's office and Boston Redevelopment Authority note that these rates have dropped somewhat in recent years, they also agree that the

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[1]Greiner, p. 12.

[2]Boston Globe, 5/23/89 and Greiner, p. 12.

[3]see HUD, 1986.

TABLE VI

Appreciation Rates of Boston Homes, By Ward

1985 Constant Dollars

	1981-1982	1982-1983	1983-1984	1984-1985
East Boston	25%	39%	39%	30%
Charlestown	23%	26%	49%	31%
Downtown	-11%	40%	93%	36%
South End/Fenway	-8%	43%	37%	31%
Back Bay/Beacon	1%	67%	7%	45%
S Boston (N)	29%	42%	24%	28%
S Boston (S)	33%	37%	2%	22%
Roxbury-City Hospt1	0%	12%	1%	41%
Roxbury-Madison Pk	-9%	115%	10%	67%
Parker Hill/Mission Hill	14%	24%	53%	48%
Rox-Egleston Sq	20%	56%	22%	33%
Rox-Washington Pk	14%	12%	36%	39%
Dorchester - Savin Hill	5%	44%	30%	49%
Dorchester - Franklin Fld	22%	17%	31%	93%
Dorchester (N Central)	-4%	56%	36%	57%
Dorchester-Pt Norfolk	5%	39%	31%	7%
Dorchester-Pierce Sq	7%	31%	45%	24%
Hyde Pk/Mattapan	12%	38%	28%	2%
Jamaica Plain/Roslindale	13%	41%	22%	1%
W Roxbury/Roslindale	8%	30%	41%	10%
Brighton	4%	48%	67%	55%
Allston/Brighton	14%	30%	48%	22%
Boston	10%	38%	33%	36%

Source: BRA 1988 Housing: An Informational Report.

outlook for higher than average (relative to other major metropolitan areas) appreciation rates is good.[4]

These two aspects of Boston's economy are the type of "structural" or "macro" considerations that are considered theoretically and empirically to be among the most important risk determinants. Yet, they appear to have little bearing upon underwriting decisions in the Commonwealth: again, as Frank Sorenson of the MHFA notes, "PMI's tell us that Massachusetts and New England are paying for losses that occured in [depressed market areas outside New England]".5

It should be pointed out that recent appreciation rates and unemployment rates are not necessarily good predictors of Boston's future economic performance, and bankers reflect this fact in their current nervousness about the future of the economy and about all loans, particularly real estate loans. Many business leaders agree that the Massachusetts regional economy will enjoy positive, though slower, growth and stress that a slowdown from phenomenal growth levels does not imply the beginning of a "bust" cycle similar to that experienced by the "oil patch" economies.[6] Massachusett's economy, which is much

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[4]Conversations with John Avault, BRA and George Moses, City of Boston Assessing Department

[5]Interview, Frank Sorenson, 5/1/89.

[6]Boston Globe, Survey of Business Leaders, 5/23/89.

more diversified, is probably not as susceptible to volatile world markets.

Moreover, because affordably priced housing markets are often isolated from overall regional markets[7], one should view current nervousness about residential real estate markets skeptically: demand for luxury-priced condominiums or commercial office space may be saturated, while demand for moderately priced and alternative forms of housing, which have been largely unfunded by private financial intermediaries, could remain very strong. Given the tremendous response to HOP units, and the current unaffordability of market rate homes to Boston's moderate income households, this appears to be exactly the case.

There are several "micro" related underwriting concerns which also suggest that higher ratio, lower down payment buyers of HOP units might be less risky in Boston than similar buyers under different circumstances. First, HOP units themselves tend to have a built in protection against loss due to default: As was noted in the HOP Project Summary Tables (see pp 58-64), the appraised values of HOP units are some 15-35% higher than the sales value of these units. Generally, what this means is that despite the low down payments of HOP buyers, there is a built in equity factor from an underwriting standpoint: In the worst case

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[7]both by nature of their conveyence to targetted community members, and by the deliberate efforts of community based housing developers to keep these units off the market.

scenario, if a HOP unit should require foreclosure proceedings and resale, this difference between market (appraised) value and loan amount creates a hedge against the possibility of monetary loss to the lender or loan insurer. In other words, given a $30,000 difference between loan amount and appraised value, an average cost of default at 11,000[8] would be covered several times over, assuming the unit sold near its appraised value. It is noteworthy that similar affordable housing projects with limited equity provisions have reportedly very low rates of default, including those of the Institute for Community Economics (which has initiated some 40 land trusted homeownership projects) and the Neighborhood Housing Services Program (which sells units to "unmortgageable" applicants).[9]

A second "micro" level feature of Boston's potential first time buyers that might make Boston loans less risky than similar loans in other areas concerns the rent-paying capacity of Boston's lower income renter households. As noted in Chapter 3, housing expense to income ratios are intended to reflect previous mortgage loan-paying or rent-paying ability of various households. One study indicates that the median rent-income ratio for the metropolitan area of Boston, at 21%, is higher than in any other city in the nation. When similar ratios are calculated based on the City of Boston only, rent-income ratios

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[8](see Appendix IV)

[9]Conversations with I.C.E. staff and NHS Guide, 1988.

appear much higher, and it becomes apparent that many moderate income households currently pay more toward rent than they would be allowed to pay toward a mortgage under current industry underwriting guidelines.

As illustrated in Table VII, the ratio of median rents to median incomes in Boston's neighborhoods is much higher than the 21% ratio similarly calculated for the Boston metro area.[10] This is largely due to the fact that renter households in Boston neighborhoods have lower incomes than all households in the Boston metropolitan area. While rent income ratios are typically calculated by dividing mean or median rents into mean or median incomes, both of the "ratios of medians" in Table VII should be viewed cautiously. Because these figures simply represent the median rent of each neighborhood over median income in that neighborhood, they do not indicate what any given household is paying toward rent -- not even the so called "typical" or median household. However, it is noteworthy to include these figures for comparison, as the majority of studies calculate rent income ratios in this manner.

A better estimate of what the typical household currently pays toward rent can be provided by taking the median of the

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[10]see columns 4 and 5. Advertised rents and hence rent-income ratios based on these rents are higher than BRA survey rental payments for two reasons: they do not include subsidized units, and may tend to reflect cost increases typical upon re-leasing of apartments.

TABLE VII

Three Measures of Housing Expense to Income Ratios in Boston Neighborhoods, 1988

NPD	- 1 - Median Income Renter Hshlds	- 2 - Median Advrt Rent, 88	- 3 - Median BRA Survey Rent	- 4 - Advtsd. Ratio of Medians	- 5 - BRA Ratio of Medians	- 6 - BRA Median of Ratios	Cases In Sample
W Roxbury	28843	750	451	31.2%	18.8%	22.1%	21
Charlestown	23235	863	443	44.6%	22.9%	22.8%	34
Bck By/Beac	41662	850	794	24.5%	22.9%	23.6%	59
Central	38458	1000	594	31.2%	18.5%	23.9%	26
South End	24036	875	482	43.7%	24.0%	24.5%	56
S Boston	10896	625	398	68.8%	43.8%	25.2%	36
Roslindale	21152	700	562	39.7%	31.9%	25.9%	18
Mattapan	18428	525	519	34.2%	33.8%	26.7%	62
N Dorch	14421	700	326	58.2%	27.1%	26.8%	41
Roxbury	14421	625	411	52.0%	34.2%	27.0%	96
E Boston	14421	688	421	57.2%	35.0%	27.0%	53
Jamaica Pl	14421	800	451	66.6%	37.5%	27.2%	88
Hyde Park	22434	700	593	37.4%	31.7%	28.2%	12
Fenway/Ken	20831	750	559	43.2%	32.2%	29.5%	68
Allston/Brt	24036	725	708	36.2%	35.3%	31.2%	72
S Dorch	18908	700	591	44.4%	37.5%	49.9%	54
Boston	19357	NA	527	NA	32.7%	28.3%	651

1. Based on BRA 1985 income inflated to 1988 levels.
2. May or May not include heat, utilities. Source: BRA, 1988.
3. Includes Heat, Elect, Water. BRA Survey Rents inflated to 1988 $.
4. ratio of 2 divided by 1
5. ratio of 3 divided by 1
6. Median of ratios of all renter households

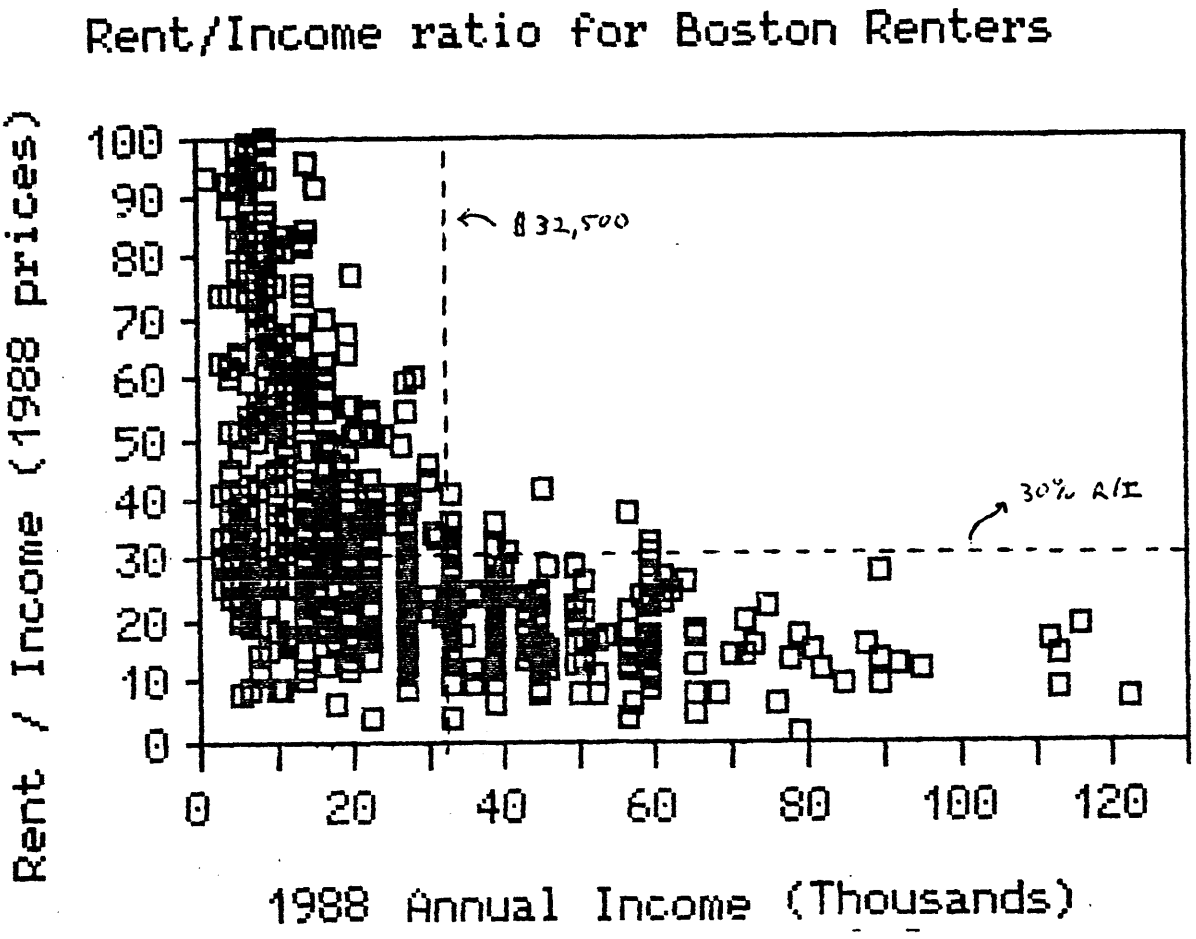
Source: 1985 BRA Household Survey
1988 BRA Housing Informational Report
Inflator: Federal Reserve Bank of Boston, Qrtly Economic Indicators, 1985-1989.

ratios for all households, illustrated in column 6 of Table VII. While these median of ratios figures are not consistently correlated with neighborhood incomes, it does appear that the typical household in highest income neighborhoods pay less of their income toward rent than the typical household in low or median income neighborhoods.

It is also apparent that lower and moderate income households bear higher rental expense burdens than higher income households. Table VIII plots rent-income ratios for all Boston's renter households in the BRA Household Survey sample. While there is a high degree of variability among all income ranges, there is also considerable correlation between income levels and ren-income ratios. At a glance, this scattergram indicates that very few households with incomes above $32,500 pay more than 30% of their income toward rent. The moderate income households delineated by vertical lines have widely dispersed ratios: some of these households pay as little as 10%, while others pay as much as 55% of their income toward rent.

Simply put, lower income households tend to pay more of their income toward rent than higher income households. However, current underwriting guidelines, with ratios set at 25% or 28%, appear to reflect the past experience of primarily those with incomes above $32,500 in Boston, rather than those who, as demonstrated by the HOP experience, frequently run up against

TABLE VIII



SOURCE: BRA Household Survey, 1985. Rents and Incomes inflated to 1988 level with the CPI for housing and total CPI for Boston, respectively, from 1985-1988. Inflator: Federal Reserve Bank of Boston, Qrtrly Economic Indicators.

these barriers.

This higher rental housing expense appears to hold true for lower income households of all neighborhoods. Table IX compares rental expense burdens for three population sectors - those households with incomes below the target range, those with incomes in the 17,500-32,500 target range, and those with incomes above the target range.

With the exception of two neighborhoods (Allston/Brighton and the South End), less than 10% of the highest income population group pays greater than 30% of their income toward rent. Meanwhile, between 20% to 60% of moderate income households pay over 30%. For the group with lowest incomes, between 60% and 100% of households (with the exception of Charlestown households) pay more than 30% of their income toward rent.

Take the case of Roxbury:

62% of Low Income Households Pay More than 30% rent/income
54% of Moderate Income Households Pay More than 30%
0% of High Income Households Pay More than 30%

This demonstrated ability to pay 30% or more of income toward rent among lower income households may occur for several reasons: for lower income households, it is not unlikely that there are simply no cheaper, suitable alternatives. Alternately, perhaps these households have little additional debt, making somewhat

TABLE IX

% Of Household Income Allocated to Rent by Low, Moderate and High Income Households*, Selected Boston Neighborhoods, 1988**

Neighborhood	Income Group	% Paying <25%	% Payin >25%	% Payin >30%	% Paying >40%	# Cases
1) East Boston	LOW Income	19%	81%	71%	52%	31
	MODERATE Income	71%	29%	21%	14%	14
	HIGH Income	100%	0%	0%	0%	8
2) Charlestown	LOW Income	35%	65%	47%	24%	17
	MODERATE Income	40%	60%	20%	20%	5
	HIGH Income	67%	13%	0%	0%	15
5) Back Bay/ Beacon Hill	LOW Income	0%	100%	100%	100%	11
	MODERATE Income	31%	69%	54%	38%	13
	HIGH Income	66%	29%	6%	0%	35
6) South End	LOW Income	8%	92%	72%	36%	25
	MODERATE Income	36%	64%	36%	9%	11
	HIGH Income	80%	10%	10%	0%	20
7) Fenway/ Kenmore	LOW Income	3%	97%	90%	83%	30
	MODERATE Income	26%	74%	37%	26%	19
	HIGH Income	70%	25%	0%	5%	20
8) Allston/ Brighton	LOW Income	0%	100%	85%	73%	26
	MODERATE Income	41%	59%	47%	22%	32
	HIGH Income	77%	5%	14%	5%	22
9) Jamaica Plain	LOW Income	6%	94%	71%	53%	49
	MODERATE Income	53%	47%	35%	12%	17
	HIGH Income	94%	0%	6%	0%	18
10) Roxbury	LOW Income	27%	73%	62%	45%	60
	MODERATE Income	23%	77%	54%	8%	13
	HIGH Income	100%	0%	0%	0%	17
12) South Dorchester	LOW Income	0%	100%	96%	96%	27
	MODERATE Income	41%	59%	29%	12%	17
	HIGH Income	92%	8%	0%	0%	13
13) Mattapan	LOW Income	19%	81%	74%	58%	31
	MODERATE Income	10%	90%	60%	20%	10
	HIGH Income	100%	0%	0%	0%	15

*LOW INC: < $17,500 MOD INC: b/t $17,500 & $32,500 HIGH INC: > $32,500

**Selected Neighborhoods include those for which a minimum of 10 cases describe at least two of three income groups.
Income and Rents Calculated by Inflating 1985 BRA Survey Data with the Total CPI and Housing CPI, respectively, for Boston, 1985-1988.

Source: 1985 BRA Household Survey
Federal Reserve Bk of Boston, Quarterly Economic Indicators, 1/85-1/89.

higher housing expenses possible. Some households may place a higher value on housing than on other necessities, and adjust their budgets accordingly.

For whatever particular reasons, 1/3 to 1/2 of all moderate income households have demonstrated an ability and willingness to devote 30% of their income toward rent. This would imply that Boston's low and moderate income households are being inappropriately limited by underwriting ratios which don't allow them to pay toward a mortgage what they are already paying for rent. These data also suggest that current underwriting ratios, set at 25% or 28%, do not accurately reflect riskiness of mortgage lending in Boston, and that these standards needlessly eliminate many buyers who would otherwise be considered creditworthy. Most frequently hit by these standards are the first-time and moderate income homebuyers who have been the target of state, federal, and community based homeowernship projects.

As has been apparent through past risk experience, there is no "magic" ratio which can limit risk exposure and incidence of default to a given level. The FHA's allowable ratios of up to 38% have not resulted in higher default rates, and in fact have experienced fewer defaults than lower ratio loans in recent years. The objective should not be to establish a uniformly higher standard for all loan applicants, but rather to choose a

reasonable higher limit, say in the range of 35%, from which to make individual decisions based on past rental payment history in conjunction with other lending criteria.

It is also not a trivial point that high rent expenses are perceived as eroding a household's ability to save money toward a downpayment. While higher downpayments are consistently correlated to higher default rates, the inability to save money under local economic conditions may limit a household's initial investment in a home, though not reflect this household's willingness to save and invest in a home. As an argument for lowering downpayment requirements, the Massachusetts Affordable Housing Alliances' Homebuyer's Union, for example, has noted that housing prices are so high, there is a built-in disincentive to "walk away from" a home. Hence the Homebuyers Union catch-phrase, "where would we walk to?".[11]

In sum, the Boston market and Boston's moderate income households are good candidates for more regionally sensitive underwriting standards. These standards would consider both macro and micro aspects of Boston's housing market and its potential homebuyers. In response to restrictive national underwriting policies (and more generally in response to limited affordability of HOP units), state agencies and General Electric Mortgage Insurance Corporation have recently developed several

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[11]MAHA, 2/89.

initiatives designed to provide an alternative to standard private mortgage insurance requirements. In addition to programs which allow slightly higher debt ratios and lower downpayments and closing costs, the Commonwealth and the City of Boston have considered additional subsidy levels or alternative methods of lowering home prices. These policy options being discussed or implemented offer a good context in which to assess the relative costs and benfits of amended underwriting standards, the topic of Chapter 5.

CHAPTER 5 - ESTIMATED IMPACT OF RECENT HOP INITIATIVES

THE HOP INITIATIVES

Of the six initiatives being implemented or planned under the MHP Homeownership Opportunity Program, three involve amendments in standard underwriting guidelines, one involves a direct cash subsidy, and others pertain primarily to the administrative processes of marketing HOP units. Both the underwriting changes and the direct cash subsidy directly change the monthly payment or up front cash requirements for a given HOP unit, and the impact of these initiatives can be analyzed quantitatively. The administrative initiatives primarily address "transactions" costs associated with getting programatically eligible buyers through the underwriting review process. Here, the analysis relies more upon the experiences of HOP developers, the particular attributes of HOP buyers which affect these transaction costs, and insights from the past Federal Housing Authority experience.

After summarizing these initiatives and estimating their potential impacts on moderate income renter households in Boston, rough estimates of the costs of these initiatives will be compared.

1. Borrower's Assistance Program

Under the Borrower's Assistance Program, prospective buyers

of HOP units who meet income eligibility guidelines but lack the up-front cash to pay a 5% downpayment and closing costs which nearly equal that down payment can obtain a second mortgage to cover closing costs. These non-amortized loans of up to $5,000 or 5% of the purchase price of a home bear a 3% simple interest rate which, together with the loan principal, is due upon resale of the HOP unit. BAP has been initially capitalized with $1 million each from the MHFA and MHP and $500,000 from the City of Boston's PFD and BRA. $1 million of this amount will be targetted to Boston HOP buyers.

2. Primary Mortgage Insurance Alternatives - the GE/MHFA Self-Insurance Initiative

This program provides more flexible underwriting standards through the creation of a shared-risk insurance pool with its own loan loss reserve fund. The housing expense to income ratio is, at 30%, slightly more liberal than the old GEMIC ratio of 28% (and considerably looser than many PMI's restriction at 25% for down payments under 10%). In late March of 1989, the Massachusetts Affordable Housing Alliance was still hopeful in negotiations for increases to 33%.[1]

The program also reduces the required up-front PMI premium from 1 1/2% to 1% of the loan value. It should be noted,

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[1]Interview, Tom Callahan.

however, that this reduction does not represent a decrease in PMI premium rates, but only in the length of coverage that must be paid up-front, the remainder being amortized within the cost of the mortgage.

Finally, the co-insurance program waives requirements to have two months worth reserve savings for PITI in escrow, thus also reducing up-front cash requirements by some $1400 - $2000, depending on the loan's monthly payment amount.

GE Mortgage Insurance Coroporation and MHFA jointly assume the additional risk of this program through a formula which has GE pick up the first portion of a claim on a defaulted loan, and MHFA the second portion of the claim, each in roughly equal amounts. As first claimant, GE takes the primary position of risk assumption.[2]

3. MHP Unit Cost Write-Down for Boston Non-Profit Projects

With the help of the Massachusetts Affordable Housing Alliance and the Massachusetts Association of CDCs, MHP has initiated a Demonstration Program to provide additional HOP resources for non-profit developers of HOP projects in distressed urban markets. The rationale behind this program rests in the fact that certain urban areas, particularly those in which non-

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[2]MHP HOP Brochure, 2/89, MHFA Newsletter, March 89, and discussions with HOP Staff.

profits have targetted activities, have too soft housing markets to provide the cross-subsidization of units through a range of below market and market rate prices. This soft market and a desire to maintain maximum affordability is reflected in newer HOP projects such as Fields Corner CDC's Erie-Ellington and Josephine Street projects, both of which contain 100% HOP units.

As of late March, this pilot demonstration project was still undergoing final program design. Then-current proposals called for a $500,000 loan pool, capitalized by a set-aside of HOP appropriations, to provide "silent second" mortgages. Up to $10,000 per unit on up to 8 units per development would be available in order to reduce as many as 50% of the units in HOP projects to the $70,000 price level. These non-amortized loans would be payable by the buyer on sale or refinancing, such that the subsidy would be available to the future HOP unit buyer. Thus, for the buyer's purposes, this subsidy would basically act as a unit-cost write down at no cost to the borrower.

In addition to these underwriting changes and a direct price write down for some HOP units, MHP and the City of Boston have also implemented initiatives to expedite project approvals and assist in marketing and mortgaging of HOP buyers. A "small builders" program, for example, was established to provide a limited amount of funds in a pilot program to create a "one-stop shop" for approval processes. Instead of the old two-process application procedure, which required projects to undergo a

preliminary MHP approval and a final MHFA approval, only one approval is required directly by PFD. EOCD and MHFA are also thinking of developing a regional marketing system similar to one already in operation on the Cape. The basic idea behind this planned clearinghouse for pre-screening buyers is, instead of each development marketing units to essentially the same population, the City of Boston will have a centralized marketing service to provide outreach and possibly credit training for buyers and developers.[3] Finally, MHP has begun to require more complete marketing plans at the time of project approval.

Estimated Impact of Proposed Initiatives Under the HOP Program

The following analysis of the impact of various underwriting and loan term alternatives on the affordability of HOP units is thus limited to:

1) a 3% and 6% increase in allowable H/I;
2) a 1/2% decrease in up-front mortgage insurance premiums;
3) a waiver of 2 months PITI escrow requirement;
4) a 50% decrease in required down payments and/or closing costs;
5) a 1% increase or decrease in interest rates;
6) a 10,000 decrease in purchase price;
7) and the more process oriented developer incentives for project application and homebuyer application processing.

Impacts of HOP Initiatives on the Affordability of Actual HOP Units

One way in which to estimate the potential impacts of recent HOP initiatives on unit affordability is to apply these changes to current actual HOP units which have closed in Boston. It

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[3]HOP Conference, "Marketing HOP Projects", 4/3/89.

should be noted that a softer condo market and new guidelines which limit average prices to $75,000 will have a tendency to both narrow and lower the income range of HOP units in a given development. Moreover, while some HOP units have closed with 10% downpayments (primarily in those developments for which PMI was unattainable), the GE/MHFA self-insurance program will likely mean that nearly all Boston HOP units will close with 5% down payments. However, testing these changes against actual HOP units to date allows the use of other important information on these units, e.g., the income of actual HOP purchasers, the condo fees applied, and the appraised value vs sales price of these HOP units.

Table X applies changes in underwriting terms under the BAP program and the GE/MHFA co-insurance initiative to Boston HOP units which had closed as of 2/27/89. The columns compare actual and hypothetical minimum income and cash requirements before and after these initiatives for six HOP projects studied in this thesis. (A seventh, Roxbury Crossing, was not included here due to insufficient information on buyer incomes).

Of particular note is the fact that actual incomes of HOP unit buyers are very close to the minimum possible income levels based on old underwriting guidelines. In all but one project (Blue Hill Avenue), actual incomes of HOP purchasers were above 92% of the minimum income: Despite trouble reported in finding mortgageable buyers of the right income range, developers have

TABLE X

AFFORDABILITY OF UNITS PRODUCED UNDER THE HOP PROGRAM

	- 1 - ACTUAL AFFORDABILITY		- 2 - MINIMUM CURRENT AFFORD. Under Convt'l Underwriting (28% H/I)		- 3 - MINIMUM PROPOSED AFFORDABILITY Under Revised Underwriting (Actual & Proposed)		
		Avg. HOP Afford.*					
	PROJECT #1	HOP	HOP			GE/MHFA	MAHA
	CODMAN - DORCH	Low	Low		BAP	30%	33%
1)	Avg. 3-br = 96000	(5.5%)	(5.5%)		(5.5%)	(5.5%)	(5.5%)
2)	Avg Mtg = 85000						
3)	Actual Avg. Inc	28324	28842		--	26920	24472
4)	Mo. Payment	598	598		--	598	598
5)	+ Condo	75	75		--	75	75
6)	Cash Requirement	14172	14172		N.A.	14172	14172
	PROJECT #2:	HOP	HOP			GE/MHFA	MAHA
	Bradfd - S DORCH	Low	Low		BAP	30%	33%
	Avg. 2-br = 89500	(5.5%)	(5.5%)		(5.5%)	(5.5%)	(5.5%)
	Avg Mtg = 83900						
	Actual Avg. Inc	29100	28286			26400	24000
	Mo. Payment	585	585			585	585
	+ Condo Fees	75	75			75	75
	Cash Requirement	8985	8985		2327 (+ 4174 soft 2nd mtg)	8985	8985
	PROJECT #3:	HOP	HOP			GE/MHFA	MAHA
	ROCKVL - J.P.	Low	Low		BAP	30%	33%
	Avg. 2-br = 86500	(5.5%)	(5.5%)		(5.5%)	(5.5%)	(5.5%)
	Avg Mtg = 81700						
	Actual Avg. Inc	28600	25243			23560	21418
	Mo. Payment	514	514			514	514
	+ Condo Fees	75	75			75	75
	Cash Requirement	8758	8758		2163 (+ 4104 soft 2nd mtg)	8758	8758

1) Avg. Sales Price for most common HOP unit type in project (e.g., 1-br low
2) Avg Mortgage Assumed by Purchaser of these units
3) Actual Avg Income of Purchaser of these units (col. 1), estimated Minimums (columns 2 and 3)
4) Mo. Payment (PITI) includes principle and initial HOP interest (5.5%), Assumes Taxes = .012 x Sales Price/yr, Private mortgage insurance of 1.5%/yr on remaining loan balance. Does not include property insurance.
5) + Condo Fees. To control for results, the average condo fee was applied to all projects.
6) 5% or 10% downpayment (except under BAP, 2.5%); $600 attorney fees; $180 appraisal; $104 Recording fee; $25 Credit Report, 1/2 month's interest; 3 mo. real estate taxes.

TABLE X, p. 2

AFFORDABILITY OF UNITS PRODUCED UNDER THE HOP PROGRAM

	ACTUAL AFFORDABILITY		MINIMUM CURRENT AFFORD. Under Convt'l Underwriting (28% H/I)		MINIMUM PROPOSED AFFORDABILITY Under Revised Underwriting (Actual & Proposed)		
	Avg. HOP Afford.*						
PROJECT #4: BLUE HILL - ROX	HOP Low		HOP Low		BAP	GE/MHFA 30%	MAHA 33%
Avg 2-br Low: 8600	(5.5%)		(5.5%)		(5.5%)	(5.5%)	(5.5%)
Avg Mtg = 81700							
Actual Avg. Inc	33000		27557			25720	23382
Mo. Payment	568		568			568	568
+ Condo Fees	75		75			75	75
Down Payment	8881		8881		2150	8881	8881
					(+ 4087 soft 2nd mtg)		
PROJECT #5: SUMNER - N DORCH	HOP Low		HOP Low		BAP	GE/MHFA 30%	MAHA 33%
Avg. 2-br low = 8	(5.5%)		(5.5%)		(5.5%)	(5.5%)	(5.5%)
Avg Mtg = 80800							
Actual Avg. Inc	28800		27471			25640	23309
Mo. Payment	566		566			566	566
+ Condo Fees	75		75			75	75
Down Payment	8625		8625		2125	8625	8625
					(+ 4052 soft 2nd mtg)		
PROJECT #6: BOTH - Roxbury	HOP Low		HOP Low		BAP	GE/MHFA 30%	MAHA 33%
Avg. 2-br = 79500	(5.5%)		(5.5%)		(5.5%)	(5.5%)	(5.5%)
Avg Mtg = 75500							
Actual Avg. Inc	26800		26143			24340	22182
Mo. Payment	535		535			535	535
+ Condo Fees	75		75			75	75
Down Payment	8127		8127		1788	8127	8127
					(+ 3775 soft 2nd mtg)		

Note: For Explanation of Figures, see p. 1 of Table

SOURCE: Massachusetts Housing Partnership HOP Database, Boston Projects which had closed as of 2/27/89; for condo fees, Project developers or mktg. agents.

managed, perhaps only through considerable investment in working with buyers, to serve affordability to the best of their ability, given then-current market underwriting guidelines, mortgage financing costs and price levels. (It should be noted however, that because these units were for some projects the first several marketed, they may not be representative of the units which followed).

As illustrated, the change in allowable housing- expense to income ratios from 28% to 30% under the GE/MHFA program would decrease minimum eligible income levels by 6.7%, or roughly $2000 at these unit price levels. A further increase in allowable housing to expense ratios to 33%, as suggested by the Massachusetts Affordable Housing Alliance, would reduce minimum income eligibility by 15.2% below actual minimum levels, or by over $4000 dollars. However, as previously noted, condo fees and monthly payment amounts remain constant, with the burden of higher housing expenses falling largely on the shoulders of the homebuyer, and indirectly on the mortgage underwriter or investor who assumes potential added risk.

Also illustrated in Table X are the impacts of the Buyers Assistance Program (BAP). When closing costs are less than $5,000 (as in the case of all referenced HOP projects), full coverage of closing costs, decreases in up-front PMI premiums, and allowable gift payments of up to $2500 can together reduce up

front cash requirements to 1/4 of their former level, or from roughly $8800 to $2200 for typical HOP units. Roughly 2/3 of this reduction is due to the "silent second" mortgage on closing costs, just under 1/3 to the gift payments, and $400-500 to the PMI decrease (as note between the difference between up-front cash plus second mortgage and previous up-front cash requirement.) This assumes, of course, that buyers can find someone to provide a gift payment. Without seller concessions or gifts from family and friends, the up-front cash requirement would be reduced by about 50% under the BAP program. Moreover, the BAP program's provision to waive former PMI requirements that 2 months PITI be held in escrow will decreasing savings requirements by some $1500 per unit (based on double the monthly PITI expenses).

$10,000 Unit Price Write-Down

The effects of a $10,000 price decrease can also be illustrated by comparing monthly payments, and income and cash requirements for the Bradford Estates project and the Back of the Hill project. The difference in pricing between these two projects, one selling 2 bedroom HOP units for $85,000 and the latter for $75,000 are a good reflection of the likely impact of the recent establishment of a maximum average price for HOP 2 bedroom units of $75,000. In isolation, the $10,000 price write down would reduce monthly payments by some 8% (50 dollars, at this price range), down payments by roughly 10%, and minimum

potential incomes by 8%.

Effects of the HOP Initiatives when Applied to Boston's Renter Household Population

Up Front Cash Requirements

What little information is available on household savings has been collected by the MAHA Homebuyers Union through surveys of 63 of its members. These members, 98% of whom have incomes within the "target" range of $17,500 to $32,500, are not only similar to HOP applicants, but in fact many have been HOP applicants, and make up what has been termed the "lotto losers" and frustrated buyers of Boston.[4] Under the actual HOP price and down payments for projects which required 5% down, only 3 of 63, or less than 5%, of MAHA's surveyed members could afford up front cash requiements in the $8000 range. When those cash requirements are reduced to $2500, half of MAHA homebuyers savings would cover these amounts. At 1800, 62% of MAHA homebuyers qualify.

While there are no data in the BRA Household survey to indicate the level of savings that moderate income households have available for a home purchase, the survey did contain a few questions on whether or not down payments or monthly payments

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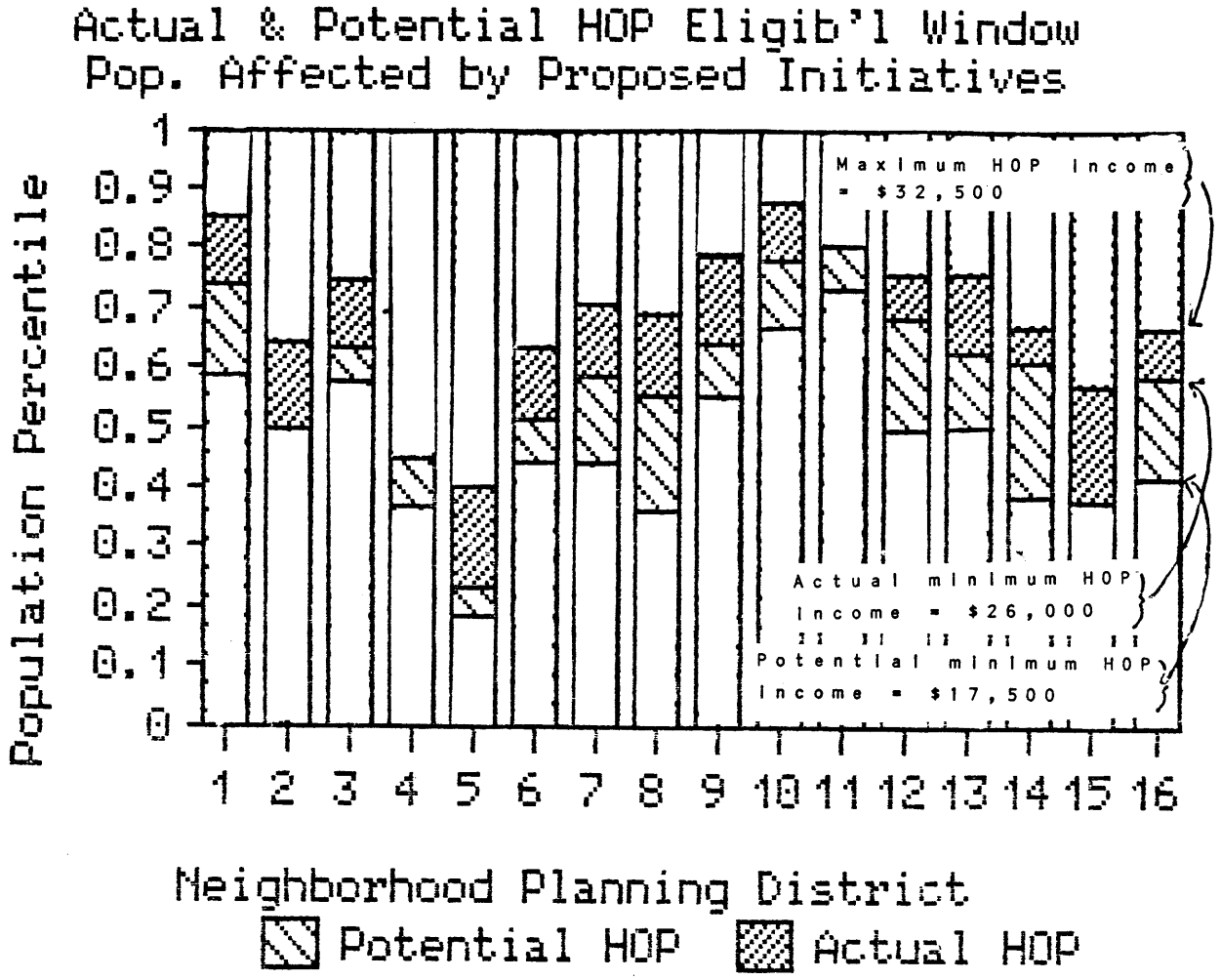
[4]Interview with Tom Callahan, Organizer, MAHA Homebuyer's Union

were perceived to be a stronger barrier to homeownership. The 81% of Boston households who considered themselves interested in purchasing a home were all asked these questions, whether they thought they had a high or low probability of actually purchasing a home. As might be expected, those who considered themselves likely to buy a home (those, generally of moderate to higher incomes) reported down payment most frequently as their main barrier (see Appendix V). Those who did not consider themselves at all likely to buy a home quite realistically perceived both down-payments and monthly paymetns to be a problem. Both BRA and particularly the MAHA data, in conjunction with developer surveys, indicate that BAP could increase by severalfold the number of applicants who meet up front cash requirements for HOP units.

A $10,000 Price Write-Down, 1% interest rate decrease, and 2% Increase in Allowable Debt Ratios

It has been noted that at current HOP price levels, the effects of the given marginal changes in prices, interest rates and debt ratios are roughly equal. How do all of these initiatives, taken together, impact the minimum income eligibility and up front cash requirements under the HOP program? Table XI displays the actual and potential HOP eligibility windows under program guidelines prior to fall of 1989, and under the initiatives which have been implemented, proposed or are currently under negotiation. The table, which is based on

TABLE X



Note: Potential HOP affordability based on three initiatives applied to current HOP units: an increase in allowable housing expense to income ratios from 28% to 33%; a $10,000 price decrease from $75,000 to $65,000; and a 1% decrease in first year PMI premium.

Source: Income data based on BRA Household Survey, 1985, inflated to 1988 figures with the Federal Reserve's CPI for Boston. Actual HOP affordability based on Massachusetts Housing Partnership Database as of 2/27/89.

estimated 1989 incomes in Boston NPDs, illustrates the maximum decrease in eligible income levels which could be accomplished by all changes relevent to monthly housing expenses, that is initiatives #1-4 listed above (including an increase in allowable housing expense to income ratio from 28 to 33%). Because the 1989 income distribution employed is an estimate based on 1985 BRA survey incomes and inflated to 1989, these estimates assume that the population's income distribution has remained unchanged since 1/85.5

The Table is designed to illustrate 1) the percentage of the rental population in each NPD reached by the sum affects of initiatives 1-4 and 2) the position/rank of actual and potentiallly eligible HOP buyers in relation to the income rages of the entire population. In the low income neighborhoods which have hosted HOP projects (including E. Boston, Jamaica Plain, Roxbury and N. Dorchester), the population of income eligible buyers under old HOP guidelines and underwriting standards falls roughly between the 65th and the 85th percentile of the population income ranks. In Boston's moderate-income HOP neighborhoods such as Charlestown and the South End, the previous population of income-eligible buyers falls between the 50th and 65th percentile of all incomes.

5This is not entirely realistic, as there exists considerable evidence that certain neighborhoods and sub-neighborhoods in Boston have had considerable in- or out-migration, and some have experienced fast gentrification within just the past few years.

The effect of the 1989 HOP/MHFA initiatives 1-4 is 1) to lower these rankings of eligible populations to about the 50th and 40th percentiles within low and moderate neighborhoods, respectively and 2) to increase the entire eligible population of many low- and moderate income neighborhoods by 100% or more. In many low income NPDs, including East Boston, Roxbury, North Dorchester, and South Dorchester, the initiatives extend eligibility to an even larger pool of households who fall closer to the median income households in these NPDs. However, in certain neighborhoods such as Charlestown, where very few households have incomes in the $17,500 to $25,000 range, this "window" of eligibility is only opened to a small percent of the population.[6]

COSTS OF ALTERNATIVE SUBSIDY FORMS, AND THE COST OF LOAN DEFAULT

How costly are the risks of increased default? While it is a relatively simple task to demonstrate the potential benefits of changes in underwriting standards relative to additional price or interest subsidies, estimating the costs of these subsidies is a more complex matter, particularly where the costs of assuming

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[6]In fact, none of survey participants from Charlestown had incomes that, inflated to 1988 levels, had incomes between $17,500 and $32,500. Given the relatively small sample size (see Appendix I, Table II), and normalization due to a single inflator, this exact percentage is not a reliable exact estimate.

additional risk are concerned.

The costs of an additional price write-down, at a proposed level of $10,000 per unit, is relatively straight forward. Subsidizing 100 units directly would cost $1 million. If the price write down took the form of a monthly payment subsidy, its costs would resemble those of an additional interest rate write down, where each 1% write down for a period of 10 years at the $75,000 price level costs roughly $5,000.[7]

However, calculating the costs of looser underwriting standards is a much more difficult matter. For one thing, past literature on underwriting guidelines and associated risk of default vary widely, with default rates estimated in different manners, and with study scopes pertaining to different loan types, geographic areas, and time periods. While down payments are consistently demonstrated empirically to lead to greater risk of default, little correlation has been found between higher debt-income ratios, and both standards, moreover, are known to be highly dependent upon local economic conditions.

One way in which to approach a cost estimate of the proposed underwriting changes, without requiring complex risk analysis and

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[7]Net present value of 1% interest on $10,000, declining balance. Compares to roughly $13,000 for the HOP subsidy which starts at 3% subsidy (3% below MHFA rates) and falls to 0% subsidy over 10 years.

its application to local conditions, is to calculate the number of mortgage loan defaults which would be required to completely offset the benefits of the changes themselves. Here, the benefits are defined in relation to other subsidy forms: for example, it is known that at HOP price levels, a 3% increase in allowable H/I ratios would have roughly the same impact on lowest income eligibility limits as would a $10,000 price write down or 1% interest rate write down. Thus, the question becomes, how costly is mortgage loan default, and how high would claims have to rise, in order for these costs to exceed the costs of other subsidy forms?

Mortgage foreclosure costs vary widely from state to state, and from loan to loan, depending upon legal systems, foreclosure laws, and the particular default circumstances which may or may not require interim property maintanence, title transfer processes, and eventual advertising and resale of the property. An estimate of foreclosure costs ranges for MHFA loans, provided by the Agency, is illustrated in Appendix IV.

For purposes of simplicity, we may base the average cost of foreclosing a property in Massachusetts on the "rule of thumb" used by MHFA and PMIs in calculating their loan loss reserve funds: This rule of thumb states that reserve levels be based upon the probable default rate, and an estimated average cost for each foreclosure of 15% of the loan amount. Thus, for HOP units

the average cost of foreclosing one property might be roughly .15 times $75,000, or $11,250. Based on 100 units, the subsidy costs are as follows:

$10,000 price reduction: $10,000 x 100 = $1 million
1% interest write down: $5,000 x 100 = $500,000

Thus, given average per-unit foreclosure costs of $11,250, 88 out of 100 mortgages would have to default and foreclose in order to exceed the costs of a $10,000 outright price reduction on 100 units. Alternately, 44 out of 100 mortgages would have to default in order for these underwriting changes to exceed the cost of a 1% interest rate write down. Again, compared to current default rates of 3% or less for FHA and PMIs, and even compared to the high rates of the early 1980's (when 9% of FHA loans and 3.5% of PMI loans were in default), this increase in defaults seems highly improbable. As the next section will indicate, this unlikelihood of extreme increases in default is especially strong given the compensating factors characterizing Boston's moderate income buyers and HOP projects.

Summary

The initiatives encapsulated in Table XI indicate that a large level of potential benefits is likely to result from changes in underwriting guidelines (benefits comparable to a 1%

interest rate write down or a $10,000 price write down). Moreover, without these changes, and in absense of large additional subsidies (e.g. of over $20,000 per unit), it is apparent that HOP units are unlikely to reach the lower end of the moderate income household range -- that is, households earning around $20,000 per year.

However, these initiatives alone cannot guarantee increased access to households with lower incomes than recent HOP buyers. rently served under the program. Marketing success, as demonstrated by interviews with 10 HOP developers in Boston, will also depend highly on the specific site location of a project, the marketing strategy of the developer, the degree of community activism, leadership, representation and outreach in a particular neighborhood, and not least of all, the mortgageability of these buyers. The primarly lesson of the HOP experience is that the act of marketing and concept of affordability cannot be addressed in isolation from the issue of mortgageability.

Surveys of HOP project developers indicated that mortgagability is more than a matter of issues regarding down payments and debt ratios -- While loosening of ratios will enhance the mortgagability of all moderate income buyers, and particularly those at the lower moderate income range, the HOP experience indicates that a considerable level of commitment in

time and money will be required to get buyers through current documentation and credit review processes. This review process has been quite rigorous for lower income populations who, in addition to being "borderline" cases with respect to meeting ratios, are subject to laborious and sometimes impossible documentation and verification requirements associated with 5% down loans.

While several banks have been creating self-insurance programs which decrease documentation requirements (or allow alternative documents) and expedite underwriting processes on 10% down loans, the adoption of more flexible underwriting standards under the HOP program will, if anything, be likely to generate increased screening and documentation costs. As Carol Asklund, underwriting manager for MHFA, notes, in order to consider compensating factors for lower-income households with smaller down payments and higher ratios, it is likely that the transactions costs of screening eligible buyers will be increased under the new HOP guidelines. These increased costs arise, for example, in considering a household's previous rent and installment debt history (and in general, considering alternative criteria and documentation sources for determining creditworthiness); in considering the stability of income from secondary sources and two-income families; in considering the household's programatic eligibility (as Asklund notes, "we are underwriting not just on the basis of qualifying for a mortgage

loan, but also on the basis of meeting program income guidelines and guidelines requiring that applicants be first time buyers).

More hands-on underwriting processes and increased transactions costs through more careful screening have also been notable features of the FHA/VA loan insurance program. Noted for its more flexible underwriting guidelines, the program has been able to maintain acceptably low default rates (between 3% and 4% in recent years) by adopting more careful underwriting review processes which encourage underwriters to consider a greater number of underwriting variables as well as any compensating factors which might offset the increased risk associated with high LTV, high ratio loans. The FHA/VA experience suggests that these two policies -- more flexible underwriting standards and more careful, complete underwriting reviews -- can be combined under the MHFA/GE self-insurance program and the HOP Buyers Assistance Program to maintain high investor standards and low default rates. The FHA experience also indicates that on balance, increased transactions costs are not high enough to endanger fiscal solvency, and in the case of HOP, will not be high enough to offset additional benefits due from flexible underwriting.

CONCLUSION

Summary of Findings

This thesis was undertaken to provide an understanding of the impact of secondary mortgage markets and standardized underwriting on access to affordable housing in Boston. Boston's high priced housing market and the experience of developers and homebuyers under the Commonwealth's Homeownership Opportunity Program have provided the context for the study.

Chapter 2, The HOP Experience, demonstrated that moderate income households in Boston's lower income neighborhoods have been limited in mortgageability both due to initial income and up-front cash requirements, and subsequently due to the rigorous documentation and clean "hard copy" credit reports demanded at loan closing. These households' attributes, including limited income and wealth, limited credit experience or for that matter any experience with lending institutions, and dual incomes tends to subject this group to an already more rigorous underwriting process than higher income households. Buyers with higher down-payments often circumvent these requirements because they either qualify for bank's self-insurance programs or do not require PMI for sale to the secondary market.

The third chapter reviewed the rise of secondary mortgage markets, standardized underwriting practices, and the recent

history of defaults resulting from loans made in the early 80's which has led to stricter underwriting guidelines in recent years. As a result of loan losses which were highly specific to various regions and loan types (e.g., ARMS and GPMs), Massachusetts has "paid for losses in Houston, Detroit, Dallas, and elsewhere" by suffering stricter national underwriting guidelines despite the Commonwealth's very low default record. While the characteristics of Boston moderate income buyers provides compensating factors for additional risk inherent in higher loan to value and debt to income ratios, the characteristics of the Boston housing market, including historically low rates of default and the continued outlook for appreciating home values, provide compensating regional factors which should be considered in the application of national of underwriting standards.

The 4th Chapter focused on underwriting standards in the Boston market context. The affordable housing crisis has made underwriting standards a key factor of affordability in recent years, and at the same time has endowed Boston households with an ability (or forced need) to support higher rent payments relative to their incomes. Additionally, the macroeconomic factors surrounding mortgage lending in Boston appear sound, and the outlook for demand of affordable housing high. Boston residents, who have paid a higher proportion of rents than any other city in the nation, and many of whom pay 25%, 30% or more of their

incomes toward rent, are good candidates for less restrictive debt to income ratio guidelines used in underwriting.

Chapter 5 indicated that a 2% increase in housing/income ratio, a 1% decrease in interest rates or PMI premiums, and a further cost reduction of $10,000 for the average HOP unit price would all have similar impacts on the affordability of typical HOP units. Each of these margins, employed separately, may reduce HOP buyer incomes some 4000 to 5000 dollars, from the present-day average of $28,000 in Boston to a potential minimum of $23,000. A combination of all three may further reduce affordability levels to those with incomes of roughly $17,500, thus potentially reaching a population which more closely aligns the median income renter household in Boston's lower income neighborhoods. Finally, chapter 5 indicated that in order for the costs of these underwriting amendments to reach the level of cost provided by other policies with similar affordability impacts (e.g., a 1% interest rate write down or $10,000 price write down), an astronomically high level of defaults would have to occur.

While more regionally-oriented and buyer specific underwriting relaxations are highly preferable subsidy forms given current subsidy structures, the HOP experience also indicates that many major problems related to mortgageability cannot be solved by these initiatives alone. It is not just underwriting standards per se, but the underwriting review

process, which limits mortgage availability. This process has become highly institutionalized, nationalized, and mechanized by virtue of the secondary market. Even in a basically cooperative environment as that which occurs under HOP, this institutionalized lending process has, for a number of reasons, entailed rigorous, costly and lengthy underwriting reviews. Under the new MHFA/MHP initiatives, these costs are likely to be higher due to the need to consider and increased number of underwriting factors, including local and individual compensating factors, in order to increase access to marginal households while controlling for highest risk cases among moderate income households.

Conclusions and Recommendations

The HOP experience and the continued, though perhaps slightly eased, affordability gap in Boston indicate first and foremost a need to endogenize the mortgage financing process within the affordable housing production process. Given today's high-priced housing market, access to mortgage credit has become a vital factor of affordability. As mortgage credit tightens and interest rates rise, the importance of how available mortgage credit is allocated will be magnified.

The increasing influence of secondary mortgage markets in determining access to credit by setting national underwriting

standards must also be considered in designing affordable homeownership production and financing programs. While some alternatives to the national secondary market do exist[1], the ultimate goal should be to reintegrate affordable housing credit policies under the domain of the mainstream national secondary markets. The demonstration co-insurance initiative implemented by MHFA and GEMIC is certainly one viable way to start a regionally oriented secondary market. If those changes adopted under the GE/MHFA plan prove successful in extending homeownership access to lower income target groups without excessive increases in defaults, this program will provide a good model for replicating in the local private lending sphere.

There is already evidence here and elsewhere in the nation that banks are initiating or considering many first time buyer and more flexible underwriting programs, and these initiatives provide the type of commitment among local lenders which could be used to approach national secondary markets. It is frequently thought that by route of demonstration with "seasoned" non-conforming loans (ie, those which have been aged for a few years, and hence have passed the most crucial stage of default risk),

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[1]For example, the Neighborhood Redevelopment Corporation has provided a secondary market outlet for homes produced under the Neighborhood Housing Service Programs (Boston has 4 NHSs); and the Local Initiatives Mortgage Assistance Corporation provides a similar function for some community based housing projects (LIMAC has also proposed the securitization of Boston Linkage moneys as a way of increasing opportunities for higher volumes of lending activity).

banks might more successfully broker deals with the FSCAs.

Such demonstration programs, as in the case of one recently announced by the Bank of Boston, need not necessarily be tied to a particular housing market or population, but must be sensitive to the current housing market and mortgageability attributes facing lower income buyers in targetted areas. For example, in Boston, it would do little good to target a loan pool to buyers with incomes under $30,000 if there exist no housing opportunities affordable to groups at this income, despite lower interest rates or more flexible underwriting guidelines. Moreover, a prime factor in the success of these initiatives will be associated with documentation and verification processes, ie, the current underwriting processes which determine criteria for evaluating the stability of income and soundness of credit history. At a very minimum, any such initiative, whether geared toward portfolio lending or sale on the secondary market, must acknowledge these costs and endogenize them within the affordable homeownership program, first and foremost by making explicit the roles of developer, community, bank, local government, and borrower in the underwriting review process. The "explicitization" and fine-tuning of mortgage underwriting review must also entail increased interaction between the borrower and the underwriter --not just as an "assist" to the borrower, upon whom the burden of proof of "ability and willingness to pay" falls, but as a requisite part of the underwriter's judgement

concerning the borrower's creditworthiness.

While underwriting review processes are likely to become more detailed and complex under more flexible guidelines, one must wonder whether this need be the case. The trend towards self-insured 10% down loans, and the looser requirements under these bank-insured loans indicates that alternative criteria for judging credit histories and income stability might well be implemented. For example, CitiCorp Mortgage Corporation, as one of these self-insurers, requires only "soft copy" credit reports for 10% down loans, rather than "hard copy" reports which can take several months to correct, if containing an inaccuracy. Additionally, CitiCorp often waives the typical PMI requirement for two years of tax returns to verify income, relying instead upon borrower's paycheck stubs. Renee Beatty, CitiCorp's State Manager, explains that because borrower equity is considered the most important factor in determining the soundness of a given loan, they will make these adjustments for self-insured 10% down loans.[2] In the course of employing a greater variety of risk assessment factors in underwriting 5% down loans, underwriters should also consider the appropriateness of alternative criteria for a specific population group which may, for example, have little formal credit history or shorter work histories.

While the primary objective of flexible underwriting

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[2]Phone Interview, Renee Beatty, 4/89.

standards is to increase access to homeownership among lower-income groups with little initial "wealth" or savings, the point of underwriting amendments is not to institutionalize uniformly looser standards. As the present day nationwide underwriting standards have demonstrated, any uniform standards are likely to behave differently under different market contexts, and vary in appropriateness across regions and over time. Rather, the point is to institutionalize an "ability and willingness" (to use a pun) of conventional lenders and secondary markets to underwrite, originate and purchase non-conforming loans. These will include not just loans with lower down payments and higher ratios, but a broad and growing array of financing needs for today's alternative affordable homeownership tenures such as limited equity coops and land trusted property. Ultimately, it would be desireable for national secondary market channels to reinstitute their charter commitment to setting and achieving a target proportion of lower income loans. Such targets, like the guidelines they use, must also be regionally based, and should be coupled with a commitment to accomodate a target percentage of non-conforming loans in general.

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APPENDIX I

Neighborhood Data Employed in This Thesis

Data on Rents, Income, homeownership preference, and obstacles to homeownership were extracted from the 1985 Boston Redevelopment Authority Household Survey computerized data tapes. The following description of methodology used in the BRA sample and in subsequent elimination of "non-valid" cases for the purposes of this analysis will discuss the advantages, limitations and level of confidence associated with this approach.

BRA Household Survey Methodology

Data contained in the BRA Household survey was collected through a "stratefied two-stage cluster" sampling procedure as follows:

1) first, Boston's housing units (roughly 1/4 million) were divided into three groups: BHA public housing units; major new construction (over 50) units; and all other housing units. It should be noted that institutional units and homeless individuals were not included, thus the Household survey does not reflect the entire Boston population.

2) second, these catagories of housing were divided into clusters of 25 or more units in a manner which 1) would ensure a 1 in 120 chance of each unit being selected (the chance of a cluster being chosen times the chance of a unit from that cluster being chosen = 1/120), and 2) was stratified to ensure that the number of units chosed from each NSA reflected the proportion of Boston's population residing in that NSA.

3) after discovering that this method would not provide adequate cases to reliably describe certain neighborhoods, survey authors decided to sample some (Mission Hill, Franklin Field) at twice the rate and one (Allston-Brighton) at half the rate of other neighborhoods.

4) 300 sample clusters were randomly selected, and an average of 6.7 units from each of these clusters, which ended up yielding an average of 5 completed surveys in each.

From an initial 2064 households chosen to be surveyed, 229 vacant, non-residential, or group-quarters units were eliminated. This left 1835 potential households, and an additional 295 unrelated individuals from whom an in-house interview was attempted. 1625, or 76.3%, were completed: 1491 with household heads and 224 with unrelated persons.

Two potential sources of error within this sampling methodology deserve attention: As a sample of boston's housing units and their associated households, the survey excludes persons in dormitories, jails, convents, nursing homes, and other "group quarters" as well as those with no permanent home. However, as such persons are unlikely to be first-time homebuyers in the immediate future, this omission should not present substantial biases within the context of characterizing "potential homebuyers" and homeownership demand.

The largest source of error in the BRA Household survey arises from a 24% non-response rate. While it is impossible to know exactly how the omission of these households and individuals biases the survey results, those conducting the surveys report that "what information is available about non-respondents indicates that they do not differ systematically and significantly from respondents except that they are more likely to live alone, to be white, to be under 65 years old, and to have no children living with them" - none of which fit traditional characterizations of first-time homebuyers.

The present study's focus on first-time homebuyers required subsequent "filtering" of the original 1625 individuals to obtain those who could be considered potential "first-time homebuyers", and those for whom suffiencient income and housing expense data were reported. First, multiple respondents were eliminated from each household to reduce the unit of analysis to the household, as it is typically household demographic characteristics which are used in caluculating mortgage-carrying capacity. (Because responses for household characteristics were identical among each interviewee of a household, it made no difference which respondent was chosen. In this case, the respondent appearing first on the computerized database was retained).

The total 1399 households were then grouped into owner-occupant, renter, and "first-time homebuyer" populations. 951, or roughly 2/3s of all survey households were renter households (including lodgers, roomates, and those living rent free). Of these renters, just over 75% (772) considered themselves interested in purchasing a home. This is about 50% of all households (renter and owner occupied), thus roughly 1/2 of all Boton's households could be considered potential first time homebuyers.

While this "would be buyer" population best describes first time homebuyers, after non-respondents to income and rent questions were excluded, too few cases remained to be reliable. Therefore, the total renter population reporting income and rent (796) cases, was retained as the sample "first time buyer" population for rent expense and other analysis used in this thesis. Frequently, a "target" population of those with incomes between $17,500 and $32,500 (in 1988 figures, inflating 1984 figures with the Federal Reserve's CPI for Boston) is referred to.

A sample population of 50 cases, with a response rate of 80% has a 95% confidence interval of 12%. This means that chances are that 95 in 100 surveys will reflect the true mean of the entire population, plus or minus 12%. Thus, if the mean renter income were $20,000, the 95% confidence interval would be the range $17,600 to $22,400. This is an acceptable range for the purposes of analysis in this thesis. Two of the lower income and HOP neighborhoods (North Dorchester and Charlestown), and four more of the non-HOP, moderate or high income neighborhoods contain fewer than 50 cases. Results for these neighborhoods should be viewed cautiously. Also, given the 12% confidence interval, precision of income and rent distribution is limited; however, these estimates are fine for the purposes of making ordinal comparisons between neighborhoods.

APPENDIX I, TABLE A
BRA HOUSEHOLD SURVEY: TOTAL, OWNER, "WOULD BE" BUYER, AND TARGET POPULATIONS

	TOTAL POP			OWNER POP*			RENTER POP**		
	All Hhld	# Rpt Inc	% Rpt Inc	All Own	# Rpt Inc	% Rpt Inc	All Rent	# Rpt Inc	% Rpt Inc
1. E.Boston	83	75	90%	26	22	85%	57	53	93%
2. Charlestown	60	50	83%	21	16	76%	39	34	87%
3. S.Boston	66	50	76%	20	14	70%	46	36	78%
4. Central	61	44	72%	20	18	90%	41	26	63%
5. BackBay/Beacon	85	74	87%	16	15	94%	69	59	86%
6. South End	69	63	91%	7	7	100%	62	56	90%
7. Fenway/Kenmore	86	72	84%	5	4	80%	81	68	84%
8. Allston/Bright	99	89	90%	20	17	85%	79	72	91%
9. Jamaica Plain	134	112	84%	27	24	89%	107	88	82%
10. Roxbury	135	121	90%	27	25	93%	108	96	89%
11. N Dorchester	64	50	78%	13	9	69%	51	41	80%
12. S Dorchester	119	95	80%	49	41	84%	70	54	77%
13. Mattapan	131	109	83%	53	47	89%	78	62	79%
14. Roslindale	63	52	83%	40	34	85%	23	18	78%
15. W.Roxbury	70	59	84%	48	38	79%	22	21	95%
16. Hyde Park	74	60	81%	56	48	86%	18	12	67%
BOSTON	1399	1175	84%	448	379	85%	951	796	84%

* Owner Occupants of condo and 1-4 family dwellings
** "All renters" includes lodgers, roomates, those who live rent free
"Rptg Income" includes lodgers, roommates, excludes those living rent free

	"WOULD BE" BUYER POP***			TARGET POPULATION****	
	All Buy	# Rpt Income	% Rpt Income	#	As % of Tot Pop
1. E.Boston	42	38	90%	16	21%
2. Charlestown	31	26	84%	10	20%
3. S.Boston	32	25	78%	6	12%
4. Central	37	24	65%	2	5%
5. BackBay/Beacon	55	48	87%	22	30%
6. South End	50	46	92%	18	29%
7. Fenway/Kenmore	56	50	89%	18	25%
8. Allston/Bright	61	56	92%	30	34%
9. Jamaica Plain	92	78	85%	20	18%
10. Roxbury	94	83	88%	23	19%
11. N Dorchester	39	30	77%	9	18%
12. S Dorchester	58	46	79%	17	18%
13. Mattapan	71	56	79%	21	19%
14. Roslindale	19	16	84%	8	15%
15. W.Roxbury	19	18	95%	5	8%
16. Hyde Park	16	11	69%	3	5%
BOSTON	772	651	69%	228	19%

*** Excludes those who say they have no interest in purchasing a home
**** Includes Renter Households with incomes between $17,500 and $32,500.

APPENDIX I, TABLE B

Income Distribution of Boston's Renter Households, 1989 Estimate

	9,999 or less	10,000 17,499	TARGET POP 17,500 25,499	25,500 32,499	32,500 39,999	40,000 +	MEDIAN HSHLD INCOME, RENTERS	# CASES IN SAMPLE
E Boston	32%	26%	15%	11%	8%	8%	14421	53
Charlestown	21%	29%	0%	15%	15%	21%	23235	34
S Boston	50%	8%	6%	11%	11%	14%	10896	36
Central	33%	4%	8%	0%	25%	29%	38458	26
Bck Bay/Beacn	8%	10%	5%	17%	20%	39%	41662	59
South End	23%	21%	7%	13%	14%	21%	24036	56
Fenway/Kenmr	22%	22%	15%	12%	12%	18%	20831	68
Allston/Brtn	19%	17%	19%	14%	17%	14%	24036	72
Jamaica Plain	40%	16%	9%	15%	6%	15%	14421	88
Roxbury	38%	29%	11%	10%	4%	8%	14421	96
N Dorchester	41%	32%	7%	0%	15%	5%	14421	41
S Dorchester	31%	19%	19%	7%	13%	11%	18908	54
Mattapan	26%	24%	13%	13%	13%	11%	18428	62
Roslindale	22%	17%	22%	6%	17%	17%	21152	18
W Roxbury	19%	19%	0%	19%	19%	24%	28843	21
Hyde Park	33%	8%	17%	8%	33%	0%	22434	12
Boston	29%	20%	11%	11%	13%	16%	19357	796

*1989 incomes are estimated by inflating the incomes of renter households in the 1985 BRA Housing Survey with the Boston CPI, 1/85-1/89

Source: BRA Household Survey, 1985
Federal Reserve Bank of Boston Qtrly Economic Indicators, 1/85-1/89.

APPENDIX II

MINIMUM INCOME ELIGIBILITY LIMITS FOR AFFORDABLE HOMEOWNERSHIP OPPORTUNITIES
UNDER VARYING INTEREST, UNIT PRICE, LOAN TO VALUE RATIO and HOUSING EXPENSE

CASE 1:110,000

	Nominal Interest = 10%			Nominal Interest = 9%			Nominal Interest = 8%		
Hsg Exp/	Loan-To-Value Ratio			Loan-To-Value Ratio			Loan-To-Value Ratio		
Income	0.9	0.95	0.975	0.9	0.95	0.975	0.9	0.95	0.975
25%	48,286	50,675	51,869	44,912	47,113	48,214	41,538	43,552	44,559
28%	43,112	45,245	46,312	40,100	42,066	43,049	37,087	38,886	39,785
31%	38,940	40,867	41,830	36,219	37,995	38,883	33,498	35,123	35,935
33%	36,580	38,390	39,295	34,024	35,692	36,526	31,468	32,994	33,757

CASE 2:100,000

25%	43,896	46,068	47,154	40,829	42,830	43,831	37,762	39,593	40,508
28%	39,193	41,132	42,102	36,454	38,241	39,135	33,716	35,351	36,168
31%	35,400	37,152	38,027	32,926	34,541	35,348	30,453	31,930	32,668
33%	33,255	34,900	35,723	30,931	32,447	33,205	28,607	29,995	30,688

CASE 3:90,000

25%	39,506	41,461	42,439	36,746	38,547	39,448	33,985	35,634	36,458
28%	35,274	37,019	37,892	32,809	34,417	35,222	30,344	31,816	32,551
31%	31,860	33,436	34,225	29,634	31,087	31,813	27,408	28,737	29,401
33%	29,929	31,410	32,150	27,838	29,203	29,885	25,747	26,995	27,619

CASE 4:80,000

25%	35,117	36,854	37,723	32,663	34,264	35,065	30,209	31,674	32,407
28%	31,354	32,906	33,681	29,163	30,593	31,308	26,973	28,281	28,935
31%	28,320	29,721	30,422	26,341	27,633	28,278	24,362	25,544	26,134
33%	26,604	27,920	28,578	24,745	25,958	26,564	22,886	23,996	24,551

CASE 5:70,000

25%	30,727	32,248	33,008	28,580	29,981	30,682	26,433	27,715	28,356
28%	27,435	28,793	29,471	25,518	26,769	27,395	23,601	24,746	25,318
31%	24,780	26,006	26,619	23,049	24,178	24,743	21,317	22,351	22,868
33%	23,278	24,430	25,006	21,652	22,713	23,244	20,025	20,996	21,482

CASE 6:60,000

25%	26,338	27,641	28,292	24,497	25,698	26,299	22,657	23,756	24,305
28%	23,516	24,679	25,261	21,873	22,945	23,481	20,229	21,210	21,701
31%	21,240	22,291	22,816	19,756	20,724	21,209	18,272	19,158	19,601
33%	19,953	20,940	21,434	18,559	19,468	19,923	17,164	17,997	18,413

Source: Author's Calculations. Includes Payments for PITI, including PMI insurance at 1.5% per year, fire and hazard insurance of 1% per year, and property taxes of 1% of the home value (price).

MINIMUM INCOME ELIGIBILITY LIMITS FOR AFFORDABLE HOMEOWNERSHIP OPPORTUNITIES UNDER VARYING INTEREST, UNIT PRICE, AND LOAN TO VALUE RATIOS

CASE 1:110K

	Nominal Interest = 7%			Nominal Interest = 6%			Nominal Interest = 5%		
Hsg Exp/	Loan-To-Value Ratio			Loan-To-Value Ratio			Loan-To-Value Ratio		
Income	0.9	0.95	0.975	0.9	0.95	0.975	0.9	0.95	0.975
25%	38,259	40,091	41,007	35,123	36,780	37,609	32,176	33,671	34,418
28%	34,160	35,796	36,614	31,359	32,840	33,580	28,729	30,063	30,730
31%	30,854	32,331	33,070	28,325	29,662	30,330	25,949	27,154	27,756
33%	28,984	30,372	31,066	26,608	27,864	28,492	24,376	25,508	26,074

CASE 2:100K

25%	34,781	36,446	37,279	31,930	33,437	34,190	29,251	30,610	31,289
28%	31,054	32,541	33,285	28,509	29,854	30,527	26,117	27,330	27,936
31%	28,049	29,392	30,064	25,750	26,965	27,573	23,590	24,685	25,233
33%	26,349	27,611	28,242	24,189	25,331	25,902	22,160	23,189	23,704

CASE 3:90K

25%	31,303	32,802	33,551	28,737	30,093	30,771	26,326	27,549	28,160
28%	27,949	29,287	29,957	25,658	26,869	27,474	23,505	24,597	25,143
31%	25,244	26,453	27,057	23,175	24,269	24,816	21,231	22,217	22,710
33%	23,714	24,850	25,418	21,770	22,798	23,312	19,944	20,870	21,333

CASE 4:80K

25%	27,825	29,157	29,823	25,544	26,749	27,352	23,401	24,488	25,031
28%	24,843	26,033	26,628	22,807	23,883	24,422	20,894	21,864	22,349
31%	22,439	23,514	24,051	20,600	21,572	22,058	18,872	19,748	20,186
33%	21,079	22,089	22,593	19,351	20,265	20,721	17,728	18,551	18,963

CASE 5:70K

25%	24,347	25,512	26,095	22,351	23,406	23,933	20,476	21,427	21,902
28%	21,738	22,779	23,300	19,956	20,898	21,369	18,282	19,131	19,556
31%	19,634	20,575	21,045	18,025	18,876	19,301	16,513	17,280	17,663
33%	18,444	19,328	19,769	16,932	17,732	18,131	15,512	16,232	16,593

CASE 6:60K

25%	20,868	21,868	22,368	19,158	20,062	20,514	17,551	18,366	18,773
28%	18,633	19,525	19,971	17,105	17,913	18,316	15,670	16,398	16,762
31%	16,829	17,635	18,038	15,450	16,179	16,544	14,154	14,811	15,140
33%	15,809	16,567	16,945	14,513	15,199	15,541	13,296	13,913	14,222

Source: Author's Calculations. Includes Payments for PITI, including PMI insurance at 1.5% per year, fire and hazard insurance of 1% per year, and property taxes of 1% of the home value (price).

APPENDIX III

TYPICAL UP-FRONT CASH REQUIREMENTS
FOR A SINGLE-FAMILY CONDOMINIUM WITH LOAN TO VALUE < .80

	10%	5%
Down Payment (x price)	0.100	0.05
3 Mo. Real Estate Taxes (X price)	0.003	0.003
FACTOR:	0.103	0.053
Points (x mortgage)	0.020	0.020
1 yr. PMI Premium (x mortgage)	0.015	0.015
1/2 Mo. Prepaid Interest (x mtg)	0.003	0.004
Title Insur. (x mtg)	0.001	0.001
FACTOR:	0.039	0.040
Appraisal ((fixed)	180	180
Credit Rpt (fixed)	25	25
Secondary Mkt. Fee (fixed)	60	60
Legal (fixed)	600	600
Recording (fixed)	104	104
TOTAL:		
FIXED DOLLARS:	969	969
+ Factor 1 x price	0.103	0.053
+ Factor 2 x mortgage	0.039	0.040

(+ 1 MONTHS CONDO FEES)

Source: Urban Edge Housing Corporation, Confirmed by PFD and MHFA.
Compares slightly lower than conventional single family homes, where no condo fees pertain, prepaid fire and hazard insurance is added, and legal, appraisal and credit report fees may be slightly higher.

APPENDIX IV

Estimated Foreclosure Costs Per Dwelling
MHFA Residential Mortgage Loan Foreclosures

Time To Take Title:	12-15 months
(Loss of Interest & Premium)	N.A.
Legal Fees	$1,000
Real Estate Taxes	$8,000-12,000
Fire & Hazard Insurance Premiums	$400-500
Clean Up, Repair, Maintanance	$0 - $5,000
Sales Cost (Real Estate Broker, Advert)	N.A.

"Rule of Thumb" and Loan Loss Reserve Factor: 15% of loan amount

*Factor Based on 8.5% interest, 30 yr maturity. Does not include Taxes or Insurance.

Source: Rough Estimates Provided by MHFA

APPENDIX V

MAJOR BARRIERS TO HOMEOWNERSHIP CITED BY BOSTON'S POTENTIAL HOMEBUYERS*

	Those Not At All Likely To Buy			Those Very or Fairly Likely To Buy		
	Down Pymt	Mo. Pymt	Both	Down Pymt	Mo. Pymt	Both
1. E.Boston	12%	0%	88%	40%	20%	40%
2. Charlestown	10%	0%	90%	46%	8%	46%
3. S.Boston	6%	0%	94%	50%	25%	25%
4. Central	11%	11%	78%	63%	38%	0%
5. BackBay/Beacon	27%	0%	73%	58%	15%	27%
6. South End	35%	15%	50%	74%	0%	26%
7. Fenway/Kenmore	24%	10%	67%	35%	17%	48%
8. Allston/Brighton	30%	9%	61%	29%	18%	54%
9. Jamaica Plain	13%	3%	83%	40%	24%	36%
10. Roxbury	16%	4%	80%	47%	13%	41%
11. N Dorchester	19%	0%	81%	60%	0%	40%
12. S Dorchester	18%	0%	82%	57%	10%	33%
13. Mattapan	14%	3%	83%	48%	13%	39%
14. Roslindale	0%	0%	100%	60%	10%	30%
15. W.Roxbury	0%	0%	100%	86%	0%	14%
16. Hyde Park	0%	0%	100%	20%	20%	60%

*Includes Renter Households with an interest in owning.
See Appendix I, Table A.

Source: 1985 BRA Household Survey