Southern New Hampshire University (SNHU)

School of Community Economic Development (SCED)

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Topic:

Differences in foreclosure Rates of Owner-Occupied and Non-Owner-Occupied Residential Multi-Family Properties during Depressed Housing Market Conditions (2007-2008).

Analyses of quantitative data and Survey of Key Informant Perceptions on two New Hampshire cities: Manchester and Nashua.

Date: November 22, 2010.



SOUTHERN NEW HAMPSHIRE UNIVERSITY

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A DISSERTATION SUBMITTED TO THE SCHOOL OF COMMUNITY ECONOMIC DEVELOPMENT OF SOUTHERN NEW HAMPSHIRE UNIVERSITY IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF DOCTOR OF PHILOSOPHY IN COMMUNITY ECONOMIC DEVELOPMENT

I certify that I have read this dissertation and that, in my opinion, it is fully adequate in scope and quality as a dissertation for the degree of Doctor of Philosophy

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Dedication

This dissertation is dedicated to my Amazing Wife and Best Friend, Stella; to our four children:
Thembalethu Victor, Thandiwe Esther, Rejoice Farai and Thokozile Courage; to my sister, Lillian, and brothers, Paul and Ndangenyi Robert.
Above all, this work is dedicated to my parents:
Phineas Muhlauyo and Esther Tafai, who taught me to always show and express gratitude,

Joy and unlimited success to all, who run, while others walk.

to work hard, to serve & and to love people, and who inspired me to celebrate life.

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Abstract

This dissertation study examines whether owner–occupation (OO), in depressed housing markets, has significant impact on foreclosure rates of residential multi-family properties in Manchester and Nashua, New Hampshire. The study is an extension on Wardrip & Pelletiere's 2008 research that covered four New England states: New Hampshire, Connecticut, Rhode Island and Massachusetts. In this study Wardrip & Pelletiere found that residential multi-family properties have significantly higher foreclosure rates compared to single-family properties. This researcher adds value to Wardrip & Pelletiere's study by arguing that owner-occupation is a significant factor in foreclosures of residential real estate in general, and especially, in foreclosures of residential multi-family properties, in general.

To examine the problem of increasing and higher foreclosure rates amongst residential multi-family properties, the study uses quantitative and qualitative research methods. The quantitative component covers the entire population of residential 2- to 4-unit multifamily properties in Manchester and Nashua over the 2-year period from 2007 to 2008. The study compares the foreclosure rates of owner-occupied and non-owner-occupied residential multi-family properties in the two cities. For hypothesis testing Independent Samples t Test was used to measure differences in the maintenance and upkeep of randomly selected owner-occupied and non-owner-occupied multi-family properties in Manchester. Geographical Information System (GIS) mapping was used to lay out and analyze the spatial distribution of all residential multi-family properties, and the location of foreclosures within that distribution, in Manchester. Detailed interviews were conducted with key informants representing major multi-family stakeholder institutions in New Hampshire to gather their perceptions on owner-occupied and non-owneroccupied multi-family homeownership. The study found that there are significant differences between the foreclosure rates of owner-occupied and non-owner-occupied multi-family properties in Manchester and Nashua, New Hampshire.

To theoretically explain the differences in foreclosure rates of OO and NOO multi-family properties two theoretical frameworks were developed and applied, i.e., "Broken Windows" and "Meaning of Home".

Broken Windows (BW) theory, attributed to two criminologists, James Wilson and George Kelling, says that if broken windows remain unrepaired, vandals will soon break the building's remaining windows and the windows of abutting properties and those of other properties in the neighborhood. This researcher uses "Broken Windows" as a metaphor for the hypothesized relative neglect in upkeep and maintenance of NOO multi-family properties. "Meaning of Home" theory is a construct developed from four concepts: "Home Use Value"; "Meaning of Home"; "Rental Value"; and "Investment Value" as applied to owner-occupied and non-owner-occupied multi-family homeownership, based on perceived and actual expectations, behaviors and the general psychology of multi-family homeowners.

Homeowners are classified as owner-occupiers (OOs) and non-owner-occupiers (NOOs). The study argues that owner-occupiers are usually more financially and psychologically invested in the multi-family property and the neighborhood they live in. On the other hand, non-owner-occupying investors are hypothesized to be less socially and economically invested in the property and neighborhood, mainly because neither is their own home. The researcher argues that if rental income and investment value are not on a financially rewarding trajectory for the non-owner-occupying multi-family investor, there is no, or very little, incentive for him / her to continue holding on to the asset.

The study found that, on average, owner-occupied multi-family properties are significantly better maintained, and have positive social and economic externalities for their neighborhoods, communities and local authorities. This is in keeping with the Meaning of Home theory as developed and advanced in this study. Non-owner-occupied multi-family properties were found to be significantly more in disrepair, to have significantly less curb appeal, and to have significantly greater risk of being foreclosed in depressed housing market conditions. Based on GIS mapping analyses of Manchester, New Hampshire, this study also found that owner-occupied and non-owner-occupied multi-family buildings tend to cluster around each other or to be clustered in specific neighborhoods of the city.

The study recommends that low-income to moderate-income multi-family homeownership policies be seriously considered in their varied formats, including but not limited to having exploratory and specific programs that support, promote and finance owner-occupation of residential multi-family properties. The study also raises a strong case for policy makers to promote policies that support mixed-income neighborhood development, and explore possibilities for the conversion of non-owner-occupied residential multi-family buildings to owner-occupied condominiums, housing co-operatives and land trusts.

Chapter One: Introduction

1.01 Introductory Overview

In the United States of America (USA) there is the widely shared belief that homeownership is at the core of realizing "the American Dream" (Boshara. 2007; Sherraden. 2001; Rivera. 2006). Homeownership is often projected as a major indicator denoting the realization of the "good life" for the individual homeowners, their families, neighborhoods and communities. The notion that the higher the homeownership rate in any given community, the better, appears to be a widely shared belief amongst many community development advocates and authorities (Scanlon, 1998; Coulson, Hwang and Imai. 2003; Rohe, Van Zandt and McCathy. 2001). The rate of homeownership is generally considered to be positively correlated with many desirable personal, family, community and neighborhood outcomes including, but not limited to the following: neighborhood stability, safety, peace and tranquility; neighborhood cleanliness; better home maintenance and yard upkeep; greater neighborhood social capital; better outcomes for offspring; higher life satisfaction for individual homeowners and their family members; and greater political participation (Sherraden. 2001; Denton. 2001; Apgar. 2005; Scanlon. 1998; Dietz. 2003).

Homeownership, however, is not a homogeneous or a clearly definable phenomenon as it is delivered in various formats. There are several forms through which homeownership may be configured. Alternative homeownership formats include, but are not limited to: single-family and multi-family, mobile homes, limited equity co-operatives, community land trusts, and condominiums, just to mention a few. This study focuses on

"residential multi-family properties". The study examines whether owner-occupation (OO) significantly affects the rate of foreclosures of residential multi-family properties during depressed housing market situations (such as the period 2007 to-date – October 2010).

Promoting owner-occupation of multi-family housing is one effective way of promoting an increase in neighborhood homeownership, and with that social and economic stakeholdership in neighborhoods and communities. While homeownership promotion is one of the few concepts around which there is across-the-board, broad-based, agreement amongst policy-makers left, right and center of the political divide (Scanlon. 1998), there is an on-going debate about the efficacy of promoting low-income to moderate-income people to buy and own residential real estate in general and residential multi-family properties in particular (Dennis. 1994).

The purpose of this study is to find out if there is significant association between owneroccupation, residential multi-family properties and foreclosure rates. The study is based
on research of foreclosure rates in four New England states: Massachusetts, Rhode
Island, Connecticut and New Hamspshire, carried out by Wardrip & Pelletiere (2008).
The 2008 Wardrip & Pelletiere study found that multi-family properties were
experiencing significantly higher foreclosure rates compared to single family properties.
This study first sought to test the applicability of this finding to two New Hampshire
cities: Manchester and Nashua. The study then went further to hypothesize that owner-

¹ Residential multi-family property is defined as 2- to 4-unit multi-family properties. Any residential multi-family property with 5-units or more is considered commercial property.

occupation significantly matters in residential real estate development in general and residential multi-family properties' and neighborhood development in particular. Owner-occupation is hypothesized to significantly matter both for the physical up-keep of multi-family buildings, and for the social vitality and economic vibrancy of the neighborhoods, communities and the municipalities involved.

1.02 Problem Statement

Published data on homeownership shows that foreclosures on residential homes are occurring at increasing rates. Gains made on homeownership rates in recent years are under the real threat of being reversed with the downward real estate market spiral that started around the first quarter of 2007 (Ferguson. 2008). Published data on residential single-family and multi-family properties usually does not distinguish between owner-occupied (OO) and non-owner-occupied (NOO) properties (Coulson et al. 2003). This research distinguishes between owner-occupied and non-owner-occupied multi-family properties in Nashua and Manchester, New Hampshire.

The study shows that there are distinct differences between owner-occupied and non-owner-occupied single-family and multi-family properties (Coulson et al. 2003). These differences manifest themselves in various ways, directly affecting individual homeowners' and their family members' attitudes and behaviors vis-à-vis their residential homes, impacting on life-chances of off-springs inter-generationally, affecting neighborhoods and communities, and often having significant implications for the respective municipalities (Apgar et al. 2005; Coulson et al. 2003; Sherraden. 2001;

Scanlon. 1998). This research hypothesizes that the foreclosure rates of owner-occupied multi-family properties are on aggregate significantly lower than those of non-owner-occupied multi-family properties in depressed housing market conditions.

1.03 Significance of residential Multi-family housing in New Hampshire

New Hampshire is one of the oldest states of the USA. It was founded in 1623, becoming the first of six states in the union, out of a total of 50 states. Multi-family properties, for a variety of historical, social and economic reasons, constitute a significant part of the housing stock in older cities of the New England region (Coulson et al. 2003). Manchester and Nashua provide a typical glimpse of that reality. Coulson, Hwang and Imai (2003) classified real estate properties in the country (USA) by age, grouping the units built before 1960, units built between 1960 and 1980 and units built after 1980. They found that the Southern USA region had the youngest housing stock while the Northeast had the oldest (p. 35). Residential multi-family properties are generally concentrated in the down-town and oldest sections of these Northeastern cities (Coulson et al. 2003). The cities of Manchester and Nashua, New Hampshire, are in the Northeast.

This researcher has lived in the Northeast USA over the last ten years. It is evident that there is considerable social value in focusing on the residential multi-family sector at this time when many buildings in this category are being lost to foreclosures (Wardrip & Pelletiere. 2008; Baker. 2005; Ferguson. 2008). Wardrip and Pelletiere (2008) found that residential multi-family properties were taking a disproportionately greater foreclosure toll compared to single family properties. Studying foreclosures is important

because they (foreclosures) do not only harm the financial, economic and social interests of the affected homeowners, they also directly or indirectly lead to the lowering of values of abutting and other neighboring properties. In the eyes of existing and prospective residents, foreclosures lower the residential and commercial attractiveness and desirability of affected neighborhoods (Apgar et al. 2005). This study suggests that, in the long-term, neighborhoods and municipalities of cities / towns tend to get more social and economic value out of owner-occupied residential MF properties compared to the non-owner-occupied multi-family properties (Coulson et al. 2003; Apgar et al. 2005). The researcher also suggests that there are greater risks of higher foreclosure rates when large numbers of residential multi-family properties in specific neighborhoods are owned by non-owner-occupying / absentee landlords (LaMontagne Hall. 2010; Apgar et al. 2005).

1.04 Research Rationale

Since the beginning of 2007 worsening foreclosure rates affecting residential multi-family housing have increasingly become problematic (Baker, 2005; Wardrip & Pelletiere. 2008). The first part of this research specifically examines whether multi-family properties in the two New Hampshire cities, Manchester and Nashua, are experiencing higher foreclosure rates compared to single family (Wardrip and Pelletiere. 2008). Secondly, this study hypothesizes that owner-occupation is a significant factor affecting foreclosure rates in residential multi-family properties. This researcher sets off this investigation by hypothesizing that multi-family properties have higher rates of non-owner-occupation compared to single-family homes. The study suggests that higher rates of non-owner-occupation are associated with predictable human behavioral

patterns that negatively affect the upkeep and maintenance of individual real estate properties, the communities and neighborhoods in question. The behavioral patterns associated of non-owner-occupied properties are hypothesized to lead to higher rates of foreclosures.

The Broken Windows theory, popularized by two criminologists, James Q. Wilson and George Kelling, (Peterson. 2004) says that the very existence of broken windows, on any building, tends to lead to more windows being broken on that building and on abutting properties, and ultimately on other properties in the neighborhood. For this study the Broken Windows theory is projected as an effective explanatory construct that underlies the increasing rates of foreclosures in non-owner-occupied residential multifamily properties in the two New Hampshire cities, Manchester and Nashua. Commenting on Broken Windows theory Peterson (2004) explains that the theory "...is a metaphor for ways behavioral norms break down in a community...." (p. 2).

In this light, foreclosure rate differences between residential multi-family and single-family properties are taken to be significantly explained by multi-family properties having higher non-owner-occupation rates compared to single-family homes. By comparing the foreclosure rates of owner-occupied and non-owner-occupied multi-family properties, the third part of the study seeks to find out whether foreclosure rates are significantly higher amongst non-owner-occupied multi-family properties.

Establishing the association between owner-occupation and foreclosure rates of multi-family properties, while interesting, is not an end in itself. It sets the stage for investigating the reasons why owner-occupation is significant. What is it about owner-occupation that tends to lead to lower foreclosure rates? Or, conversely, what is it about non-owner-occupation that tends to raise foreclosure rates amongst residential multi-family properties? The 2008 Wardrip & Pelletiere research study attributes the higher foreclosure rates of residential multi-family properties to their being located in poor and less desirable neighborhoods. Wardrip & Pelletiere (2008), argue that the higher foreclosure rates have more to do with general neighborhood impoverishment and the accompanying community poverty in the geographical areas where multi-family properties tend to be concentrated.

This research is essential and timely because many properties, especially residential multi-family properties, are being foreclosed at increasing rates in the New England region (Wardrip & Pelletiere. 2008). There is discernible panic as the increasing foreclosure rates take their toll on the valuations of abutting properties and other properties in the affected neighborhoods, wreaking havoc on, and destabilizing, neighborhoods, and threatening the very survival of communities in New Hampshire, and in many other cities and towns throughout the USA.

The fact that homeownership is the greatest investment for most families, entailing significant financial outlays, with far-reaching life ramifications for the affected homeowners, especially those that are low-income, makes the focus on owner-occupied

multi-family housing essential and timely from a Community Economic Development (CED) perspective. CED, as a bottom-up strategy, is mostly about the economic empowerment of low-income to moderate-income individuals and communities.

Coulson et al (2003) report that "in the US housing markets, ownership status is highly correlated with [housing] structure type. Owners tend to live in detached, single family units, whereas renters often live in multi-unit complexes" (p. 29). Coulson et al further observe that on average homeowners tend to live in richer neighborhoods.

As stated earlier on in this chapter, multi-family residential housing tends to be relatively older. Logically, everything else being the same, older residential multi-family properties are more affordable per square foot compared to new construction. In the light of the study done by Caulson et al (2003), which classified housing stock into three groupings: pre-1960, 1960 to 1980 and post-1980, residential multi-family properties, which are the focal subject of this study, tend to be mostly pre-1960 housing stock. Because these multi-family properties are older, they tend to be more affordable to lower income people both as rental accommodation, as homes and as real estate investments. For this reason residential multi-family properties maybe considered to be a prime and legitimate target / domain of CED academic interest and research.

Essene and Apgar (2007) argue that to help consumers decide on complex issues "....good products should be defined and effective interventions generated through trusted advisor networks that steer consumers toward socially beneficially choices..."

(p. 5). Home buying, being the complex and multi-layered decision-making process it is, with the far-reaching economic and financial ramifications to homebuyers, especially low-income to moderate- income, needs to be informed by studies of this nature.

1.05 Statement of Purpose and Goals

In the context of depressed housing market conditions (2007 – October 2010) this research set out to find out why and how owner-occupation may lead to reduced foreclosure rates in residential multi-family properties and the neighborhoods in which they are located.

The study accomplishes the above by doing the following:

- Determining if the foreclosure rates of multi-family homes have been significantly higher than those of single-family homes in Manchester and Nashua, New Hampshire.
- Determining if there are significant differences in the rates of owner-occupation between multi-family and single-family properties in Manchester and Nashua, New Hampshire.
- Determining whether owner-occupied multi-family homes have lower foreclosure rates compared to non-owner-occupied multi-family properties.

After accomplishing the above calculations and explaining the outcomes, the study undertook more quantitative analyses and carried out Geographical Information System

(GIS) mapping. The study also carried out substantive qualitative and exploratory surveys with key informants made up of major homeownership stakeholders to add value to what is known about multi-family properties in the state of New Hampshire.

1.06 Research Questions

The central two questions were:

- (a) Are there significant differences in the foreclosure rates of owner-occupied and non-owner-occupied multi-family properties in New Hampshire?
- (b) What explains the different foreclosure rates between owner-occupied and non-owner-occupied multi-family properties in New Hampshire?

Before examining the above two main questions the study quantitatively answers the following two questions:

- (i) Do residential multi-family properties have higher foreclosure rates compared to residential single-family properties in Manchester and Nashua, New Hampshire?
- (ii) Are there significant differences in owner-occupation rates between residential multi-family properties and single-family properties in Manchester and Nashua, New Hampshire?

1.07 Research Context

The housing sector is currently undergoing a major market correction after several years of being extremely bullish and over-heated. The period 2000 to 2005 was characterized by increasing prices for residential houses, decreasing interest rates, introduction and / or expansion of long-term mortgage pay-off periods and increasingly relaxed real estate financing arrangements. While average personal incomes did not dramatically increase during that period, a combination of the above stated factors

created an environment of consumer and investor "irrational exuberance" where real estate was viewed as an ever appreciating asset (NHHFA, 2007). The relaxation of mortgage loan underwriting rules that made home-buying more accessible to sub-prime borrowers also meant increased demand for lower-priced single-family and multi-family homes, especially those within the price ranges affordable to first-time home-buyers. That housing bubble busted around the fourth quarter of 2006 and the first quarter of 2007. Up to now (October 2010) the housing sector is trying to establish a new economic equilibrium. It is within this depressed housing market environment that foreclosure rates of residential multi-family properties are increasing.

1.08 Significance of this Research

This study is significant in a variety of ways including, but not limited to, the following:

- Residential multi-family properties have a strong presence in Manchester and Nashua, New Hampshire. Findings from this study will help inform city and town administrators and managers of Manchester and Nashua, New Hampshire, to better design more appropriate residential multi-family homeownership policies and programs.
- Interalia, CED is about community empowerment and neighborhood
 revitalization. Foreclosures have far-reaching negative implications to individual
 homeowners and their families, neighborhoods, communities, and municipalities.
 Community Economic Development is part of the trusted advisor networks that
 steer consumers toward socially beneficially choices (Essene & Apgar. 2007).
 This study makes a contribution from a CED perspective to a prime area of CED

interest. CED largely targets the social and economic interests of low-income to moderate-income individuals, their families, communities and neighborhoods.

This study, therefore, is significant to various stakeholders, including but not limited to the following: city / town authorities, non-profit homeownership advocates, homeownership funding agencies and lenders, and supporters of low-income to moderate-income single-family and multi-family housing in New Hampshire.

There is no published research that this researcher is aware of that has specifically examined this specific area of enquiry. The wide-spread negative consequences of high foreclosure rates mean that any study aimed at understanding and making policy recommendations to reduce the incidence and prevalence of foreclosures has high social redeeming value.

1.09 Expected Findings

In sum, the expected findings at the beginning of this study were as follows:

- That in keeping with Wardrip & Pelletiere's 2008 study, multi-family properties
 had significantly higher foreclosure rates compared to single-family properties in
 Manchester and Nashua, New Hampshire.
- That there are significant differences in the owner-occupation rates between multi-family and single-family properties in Manchester and Nashua, New Hampshire. Residential Multi-family properties were expected to have lower levels of owner-occupation compared to residential single-family properties.

- There are significant differences in the foreclosure rates of owner-occupied and non-owner-occupied multi-family properties in Manchester and Nashua, New Hampshire.
- That there are plausible, theory-based, and compelling, reasons that explain why
 owner-occupied multi-family properties have lower foreclosure rates than nonowner-occupied, multi-family properties, everything else being equal.

Chapter Two: Literature Review

2.01 Introduction

The literature review chapter is organized into four inter-related parts. The first part is a general overview of the benefits and costs / risks of homeownership, with special focus on low-income to moderate-income homeowners. The second part reviews the literature on residential property foreclosures and their effects on individual homeowners, families, communities, neighborhoods, and to the respective city and town municipalities. The third part looks at differences between residential single-family and multi-family properties, residential owner-occupied and non-owner-occupied multi-family properties, all in the context of depressed housing market conditions. The fourth part discusses the "Meaning of Home" to individual homeowners, to families – especially to the children - and to the neighborhoods and the respective communities.

An insight into the above mentioned four areas was considered essential for framing of the discussion on the significance of owner-occupation to foreclosure rates of residential multi-family properties. The main reference on which this study is anchored is Wardrip and Pelletiere's 2008 research of four New England states that found that residential multi-family properties have significantly higher foreclosure rates compared to single-family properties. This study, built on Wardrip & Pelletiere's 2008 study, posits that owner-occupation significantly matters in the higher foreclosure rates of residential multi-family properties.

The argument is framed as follows. Residential multi-family properties have significantly lower rates of owner-occupation while single-family properties have higher owner-occupation rates. This researcher reviews literature that associates owner-occupation with better property upkeep, and more timely repairs and maintenance. The Broken Windows theory is employed to explain why and how higher levels of owner-occupation in residential multi-family properties often leads to higher levels of stakeholdership, more timely repairs and better maintenance in owner-occupied properties. The researcher argues that, because of pride-of-ownership, home use value, meaning of home, rental value and investment value, owner-occupiers are more likely to take more active interest and concerted efforts in their homes than non-owner-occupiers. These actions of owner-occupiers are deemed effective in leading to greater prevention and reduction of foreclosure rates of residential multi-family properties. "Home Use Value", "Rental Value", "Meaning of Home", and "Investment Value" are defined and explained in the Theory Section (Chapter 3).

2.02 Benefits and Costs / Risks of Homeownership

Find below a general overview of the benefits and costs / risks of homeownership with special reference to low-income and moderate-income homeowners. The objective is to show that while homeownership may present a number of challenges and significant risks, especially to low-income and moderate-income homeowners, there are significant financial and social benefits that make the pursuit of homeownership a worthwhile enterprise, especially to the entrepreneurial poor, their families, neighborhoods and to their communities.

2.02.1 Social and Economic Benefits of Homeownership

Many researchers have written on the social and economic benefits of homeownership to the individual homeowners, their families, communities and neighborhoods (Boshara. 2007; Sherraden. 1991; Rivera. 2006; Denton. 2001; Apgar. 2005; Scanlon. 1998; Dietz. 2003; LaMontagne Hall. 2010). Scanlon (1998) grouped the suggested benefits at two levels: at the household and the community / neighborhood levels. Scanlon says beneficial outcomes at the household level include: enhanced psychological functioning for off-springs of homeowners, increased social participation of homeowners, greater life satisfaction and increased wealth and savings. At the community / neighborhood levels Scanlon cites enhanced property values, improved neighborhood stability and increased neighborhood participation. Homeownership is, therefore, projected as having demonstrable wide-spread benefits that accrue not only to the individual homeowners, but to their respective families, neighborhoods and communities.

Michael Sherraden, along similar lines, identifies nine outcomes, which he terms "the welfare effects of asset-ownership" (Sherraden. 1991). Sherraden claims asset-ownership provides the following advantages to owners: (i) improves household stability; (ii) orientates toward the future; (iii) stimulates the development of other assets; (iv) enables greater focus and specialization; (v) provides a foundation for risk-taking; (vi) increases personal efficacy; (vii) increases social influence; (viii) increases political participation; and (ix) enhances the welfare of the offspring.

Sherraden does not specifically focus on homeownership in most of his research work. He addresses the broader topic of building wealth / asset-building and asset-accumulation. Most researchers agree that homeownership is one of the most effective strategies to build assets and inter-generational wealth (Boshara. 2007; Sherraden. 2001; Rivera. 2006; Denton. 2001; Oliver & Shapiro. 1995). In the light of that general consensus the 'ownership effects' identified and explained above by Sherraden can readily be associated with homeownership. In its robustness, however, asset-building may take other equally life-transforming forms, such as starting a business enterprise and / or acquiring marketable education and essential skills (building human capital).

Referring to the value of real estate Belsky and Calder (2004) observe that there are certain assets that have greater appeal or priority as targets for social policy, noting:

Homes are the most commonly held asset with significant potential for large returns on small amounts of invested capital. Since homeownership is a highly leveraged investment, relatively small amounts of invested capital can earn large gains even if the appreciation in the value of the underlying asset is only a few percentage points. Homeownership provides opportunities to later borrow against equity at lower tax-advantaged and secured lending rates (p. 2).

Some of these homeownership benefit claims do not readily lend themselves to empirical testing. However, there tends to be general agreement amongst many homeownership scholars and housing policy-makers on the normative significance and desirability of these benefits. For example, four out of the nine welfare effects identified by Sherraden (1991) above were also identified and discussed by Shlay (2005) in her research paper *Low-income homeownership: American dream or delusion?*

Shlay groups homeownership benefits into four categories: (i) social and (ii) economic benefits that accrue to the homeowner and his / her family; (iii) political benefits and (iv) neighborhood benefits. Under economic benefits accruing to the family Shlay argues that homeownership is a reliable asset-building strategy. She asserts that homeownership can effectively substitute for investments in other wealth-building instruments such as retirement plans, stocks and trust funds. She asserts that homeownership allows homeowners to contribute monthly towards buying a real asset, their home. As mortgage payments happen on a monthly basis, she observes that savings are, therefore, forced and become automatic. Under social benefits Shlay acknowledges that social stability arises from homeownership, allowing for greater family control and functioning. The sense of control and predictability that homeownership brings about leads to greater life satisfaction for homeowners and their family members. Evidence from a number of studies, cited by Scanlon (1998), confirms greater voluntary civic participation by homeowners striving to protect their vested interests in their greatest investment, their homes (Shlay. 2005; Scanlon. 1998).

Shlay (2005), and Sherraden (1991), cite better children's outcomes as being significantly associated with homeownership. Better children outcomes were detected in areas such as reduced school-drop-out rates, reduced number of teen-pregnancies and improvements in general school test scores performance.

At the political level, Shlay (2005) finds that higher homeownership rates are associated with less criminal activity, more commitment to employment, increasing population, an

increase in the tax-base and more political participation. At the neighborhood level Shlay identifies benefits in terms of increasing or stabilizing property values, better maintenance and more timely repairs of homes, less abandonment of homes, less graffiti, less litter, and lower incidence rates in other negative social manifestations, signs and symptoms of decline and neglect.

To summarily portray the benefits discussed above a table of homeownership benefits developed by Shlay (2005) is reproduced below:

Table 2.1: List of the Benefits of Homeownership

Family Economic	Family Social	Political	Neighborhood
Asset building	More social stability	Less criminal activity	Higher property values.
Substitute investment for 401Ks, stocks, trust funds, etc	More Family functioning	More commitment to employment	Better care of houses
Create "fixed" housing costs	More satisfaction.	Increasing population.	More stability
Enforced savings	More Voluntary civic participation	Increasing the tax base.	Less abandonment.
	Better children's outcomes: cognitive and behavioral: Less delinquency More school attendance Better physical and mental health	More political (voting) participation	Less graffiti, litter and other signs of decline

A copy from Shlay (2005) List of the Benefits of Homeownership (table 1, page 513) Low-income homeownership: American dream or delusion? (Source: Urban Studies, Volume 43, No. 3. pages 511 – 533 March 2006).

Smith Van Zandt came up with a similar list of homeownership benefits from a more extensive literature review (Van Zandt. 2003). His research focused on three aspects of opportunity which are affected by homeownership: perceived opportunity, social resources and neighborhood quality. He found that homeownership is associated with differences among the various dimensions of opportunity, and that people who bought homes have better perceptions of opportunity, larger social networks and live in better neighborhoods. Observations by Van Zandt (2003) are consistent with findings by Coulson, Hwang & Imai (2003) who also found that homeowners live in better neighborhoods. Coulson et al (2003) also report that "...the average homeowner lives in a neighborhood with a higher proportion of homeowners" (p. 36) noting "...one of the things that make owners better neighbors is that they do not move as much...it is the case that owners live in neighborhoods with higher rates of stability" (p. 36).

Owner-occupiers, therefore, tend to cluster around each other in specific geographical neighborhoods that are perceived to be better than the immediately comparable alternatives. Do owner-occupiers cluster in better neighborhoods or do neighborhoods become better as owner-occupation rates improve? Available literature does not answer this question directly but this researcher submits that the two may be mutually reinforcing. Increasing rates of owner-occupation lead to improvements in the upkeep and maintenance of individual properties. As more and more properties are better maintained, the neighborhood improves. Improving neighborhoods are magnets for more and new owner-occupiers, while effectively retaining "homeliness" to existing residents.

One of the challenges is that some of the benefits attributable to homeownership are only normative claims. They have not been subjected to empirical research, and some have been researched on but have had inconclusive results. The greatest challenge, however, is in some aspects that have been researched, where establishing causality is problematic. Louie, Belsky & McArdle (1998) conclude by observing "some doubts still exist, however, whether these relationships are causal, since most of the studies do not adequately account for the self-selection of households to owner and renter occupancy" (p. 22). Coulson et al (2003) cognizant of causality problems did verify "... the existence of neighborhood ownership effects on housing prices, after controlling for self-selection and unobservable characteristics..." (p. 46). Thus, while in some cases causality may be difficult to prove, as is the case in most social research areas, there are indisputable and clear associational relationships between homeownership and some real social and economic benefits.

What is also apparent is that in the USA homeownership is highly promoted, celebrated, preferred and enormously rewarded. The tax benefits to homeowners from the federal government make homeownership extremely rewarding from a financial and wealth-building perspective. On the other hand, renting is structured to be financially disadvantageous. With reference to this differential treatment of homeowners Denton (2001) highlights the clearly advantaged position of homeowners by noting how "...the combined effects of housing equity, tax advantage, and home value appreciation constitute the final path to asset-building..." (Denton. 2001. p. 236).

Current tax concessions to homeowners include the following, amongst others, (i) non-taxation of capital gains for up to \$500,000 for married couples and up to \$250,000 for single taxpayers for any property held for a minimum of two years; and (ii) deductibility of mortgage interest and property taxes from adjusted gross income (Bourassa & Grigsby. 2001). Bourassa et al (2001) also comments on the advantaged position of homeowners, remarking "... the major concessions are not only quite large, they are extraordinarily generous to individual homeowners" (p. 523).

When one looks at the privileged position homeowners occupy in the US economy, access to homeownership for low-income and moderate-income homeowners becomes more an issue of equity and fairness. Denton (2001), after noticing the skewed distribution of homeowners' benefits in favor of the rich, suggests that instead of eliminating these tax benefits to the rich, the benefits should be extended to low-income and moderate-income homeowners. She notes "...the basic unfairness of mortgage and property tax deductions, combined with the widespread support they enjoy [at government policy levels] should persuade policy makers to make the arguments based on extending them [to low-income and moderate-income people], and not retracting them" (p. 256).

The foregoing shows that homeownership has many significant benefits. There are, however, also some significant costs and risks that are associated with homeownership.

2.02.2 Costs and Risks of Homeownership

While homeownership has many social and economic benefits that accrue to homeowners, their families, neighborhoods and communities, the negative outcomes that often arise from homeownership are also equally well documented. Di (2006) refers to homeownership as "a double-edged sword". Belsky, Retsinas & Duda (2005) refer to "... the serious risks of homeownership..." identifying four risky scenarios

[i] The risk of defaulting on the loan if the homeowner is unable to continue with mortgage payments because of an income shock [e.g. lost wages, hours, or job] or budget shock [e.g. major home repair or replacement expenses, heating or major medical bills]; [ii] The risk of losing money on the home if the homeowner cannot hold the house long enough to significantly reduce the principal or see some home value appreciation. [The relationship between ownership or holding periods and the high transaction costs of buying and selling often gives rise to large losses over short-term holding periods]; [iii] The risk of losing money through selling for less than the price bought at [negative equity]; [iv] The risk of losing money through forfeiture of ownership rights to the value of the home as a result of loan default even in situations where one has paid off a significant portion of the mortgage.

The above list shows that low-income to moderate-income people are more prone to risks of homeownership. These risks are significant and point to serious potential scenarios that may lead to foreclosure.

Analyzing the riskiness of homeownership, Shlay (2005) observes that low-income homeowners are exposed to risk in two housing market characteristics: *location and financial intermediation*, which are central variables to homeownership's ability to deliver for low-income families. Shlay (2005) defines location as "... a home's relationship with space... and financial intermediation as "... a household's relationship with sources of housing finance". In her cautionary remarks Shlay notes "...low-income

homeownership, as a policy goal, may move already at-risk households to take on even more risk under conditions of greater uncertainty...."

Shlay observes that, in some circumstances, low-income homeowners may end up being stripped of their wealth, if they buy in the wrong residential locations, and / or do not use effectively advantageous financial intermediation. Wealth stripping occurs, for example, if a low-income person bought property at the peak of the housing market, when housing prices and property valuations were grossly exaggerated, and the homebuyer fell for one of the predatory sub-prime mortgage loans, such as the interest-only adjustable rate mortgages (ARMs), accompanied by teaser rates.

Economic cycles, which Ferguson (2008) terms *booms and busts*, while essential for correcting the housing market, often have devastating consequences for low-income to moderate-income homeowners.

2.03 Remedies to Risks of Homeownership

Focusing on homeownership needs of low-income people Lind and Friedman (2006) identified six remedies to mitigate some of the risks identified above under two broad categories: asset-building and asset-protection. Lind et al (2006) suggest that most of these risks can be reduced by the provision of financial literacy education; creation of opportunities and incentives to save; an improvement in access to mainstream financial services; an increase or supplement to low earnings; curbing predatory lending practices; and by expanding access to insurance services.

Denton (2001) also adds value to the discussion of what is required for low-income persons to regard homeownership as a viable asset-building strategy, asserting

Low-income persons need three things: [i] access to regular means of asset building; [ii] adequate housing; and [iii] good neighborhoods. Unless homeownership can contribute to all three of these, it might be better for the poor to look for other asset building mechanisms" (p. 257).

Housing policy also needs to be attentive to issues of racial and economic integration.

Regarding the need for racial and economic integration Denton (2001) notes

As a result of the longstanding connection between race and poverty in the USA and the well-established linkages between race, housing discrimination and residential segregation ... [low-income homeownership discussion]... must also deal explicitly with race. It does not make sense to discuss homeownership for the poor without taking these differences into account (p. 233).

Regarding the issue of race, Paula Zahn, CNN TV News anchor, in a special feature, *Skin-Deep Racism in America*, screened on December 26 2006, alluded to the prevalence of institutional racism. She discussed field research which found that real estate agents routinely steer white homebuyers away from racially integrated neighborhoods, while directing black homebuyers to predominantly black neighborhoods.

Regarding the characteristics of homeowners, Coulson et al (2003) found that across the US, homeowners are generally older, have higher incomes, more of them are white and they tend to be married (p. 35). Robert Putnam characterizes the situation of impoverished neighborhoods as having serious deficits or lacking in bridging social-capital with other communities. Isolation, in poor neighborhoods, leads to poor job prospects and further economic isolation that leads to, among other things, low levels of personal efficacy to the inhabitants of low-income neighborhoods.

The Development Leadership Network (DLN) on its 1999 report of the Success Measures Project came up with definitions of benefits and indicators with which to measure benefits in three sectors: housing, economic development and community building. It (DLN) identified the indicators at three levels: measuring benefits to residents; to the community; and to the municipality and society. The DLN indicators are instructive and relevant to low-income homeownership. This study uses two indicators identified by the DLN Success Measures Project:

- (i) quality of housing; and
- (ii) proportion of owner-occupied homes as measures that positively correlate with desirable neighborhoods and communities, i.e. higher housing quality and higher rates of owner-occupation are associated with more desirable neighborhoods and better performing communities (DLN Success Measures Project. 1999).

In conclusion, it is apparent that homeownership continues to be an established and highly rewarded opportunity enhancing strategy for upper middle-income to high-income earners in the USA. From a Community Economic Development (CED) standpoint of community empowerment, it is essential that homeownership be more accessible to low-income and moderate-income people, not only for their economic empowerment but also as a matter of equity and social justice, the risks mentioned above notwithstanding.

2.04 Foreclosures and their Effects

Foreclosures have significant negative effects to homeowners, their families, communities, neighborhoods and municipalities and the national economy at large. This section on foreclosures and their effects reviews the literature that explains how and

why foreclosures have negative impacts going beyond homeowners directly affected, to neighboring properties, entire neighborhoods and to the respective municipalities. Foreclosures, as explained in this section, while economically necessary for market correction, have far-reaching negative consequences and can be kept to a bare minimum through the promotion of owner-occupation in residential multi-family homeownership (Coulson et al (2003).

Borgos, Chakrabarti, & Reade (2007), comment on the negative effects of foreclosures to homeowners, the pain and demoralization of property loss, damage to credit scores, and the negative externalities to neighboring properties. They note how this all "... negatively [affects] ...their credit rating for years to come...[and] the adverse credit [score] effects [costing] money down the line " (p. 10). They (Borgos, Chakrabarti, & Reade. 2007) site a 2004 study that found that each foreclosure costs the lender around \$59,000 and takes about 18 months to resolve (p. 10). Borgos, Chakrabarti, & Reade . (2007) and Apgar et al (2005) explain how foreclosures destabilize entire neighborhoods by eroding property values and decimating tax revenues. They also found that high foreclosure rates have significant effects on neighborhood crime, claiming that "every three foreclosures of 100 owner-occupied properties in one year correspond to an increase in neighborhood violent crime of approximately 6.7 percent" (Borgos, Chakrabarti, & Reade p. 10).

These two studies are important because while Borgos, Chakrabarti, & Reade (2007) focused on Boston, Massachusetts, Apgar & Duda (2005) focused on Chicago, but

remarkably, the two teams document similar results. Apgar & Duda (2005), looked at the municipal costs of foreclosures "...including both direct municipal expenditures for foreclosure related services and indirect costs linked to the blighting effect that foreclosures have on urban neighborhoods... [and found that] ... in worst case scenarios [such as abandoned properties being damaged by fire] looking after one foreclosed property can cost upwards of \$34,199 in municipal costs alone..." (p. 15).

Lee (2008) found that foreclosures "...negatively impact nearby housing values via three primary channels: blight, valuation and supply" (p. 1). On blight Lee (2008) observes:

Prior to entering foreclosure on their properties, owners with delinquent mortgages usually have limited financial means to properly maintain and / or upgrade their houses. This leads to physical blight because of the declining housing condition. After the delinquent owners foreclose, such properties may be vacant for some time, which attracts vandalism and crime, further exacerbating the blight, [often] making the neighborhood undesirable for potential home-buyers (p. 1).

On property valuation, Lee explains how foreclosed properties usually sell at a significant discount, thereby pulling down values of abutting properties. Real estate prices are mostly established through a process called comparative market analyses (CMA). CMA computes estimated selling prices of property offers by averaging out the prices of recent sales of 3 or 4 comparable properties in the last 3 to 6 months within given geographical areas. As Lee (2008) puts it "...discounted sales of foreclosed properties ... lower valuation benchmarks" (p. 1).

Lee's third factor, supply, can be explained by the basic economic law of demand and supply "... a high concentration of foreclosures ... potentially increase[s] the local supply of available properties and lowers the values of nearby homes, especially in areas with stable housing demand" (p. 1). This is worsened in situations of declining demand.

Lee (2008) sites studies done in Minneapolis that estimated "... a foreclosed home could cost neighborhoods as much as \$10,000 mostly in the form of lower housing values" (p. 1). She (Lee) also cites another study done in 2006 on Chicago by Immergluck and Smith "... that examined foreclosures in Chicago and estimate[d] that, on average, a foreclosure within one-eighth mile of a single family home could lower the sale price by 0.9% holding other conditions constant..." Borgos, Chakrabarti, & Reade (2007) point out how

In terms of investor or public perception, the higher foreclosure rates may stigmatize an area as a poor place for non-housing-related investment. Business owners look for positive signs for business related activity when undertaking site selection. Other investors also seek positive signs of economic activity when developing retail or mixed-use projects (p. 15).

Borgos, Chakrabarti, & Reade conclude by noting how "foreclosures may have a dampening effect on investment potential, even in the presence of positive characteristics like an under-served market" (p. 16).

This means that a study on foreclosures of multi-family properties is not only narrowly interested in the impact it has on the transacting parties (borrower and lender), but mostly with what happens within the communities and neighborhoods. Since multi-

family properties are dominated by renters, and most of the renters are low-income, there is also that part of extended human suffering and social damage that happens when multi-family properties get foreclosed.

The negative externalities and direct effects of foreclosures, the risks and costs of homeownership discussed in this section of Chapter 2 are particularly essential for consideration by agencies that promote low-income homeownership to avoid pitfalls.

2.05 Differences of Residential SF & MF, OO & NOO Properties

This section looks at differences between single-family (SF) and multi-family (MF) properties, and owner-occupied (OO) and non-owner occupied (NOO) residential housing in the context of depressed housing market conditions.

Most research that is currently available on homeownership is derived from studying single family properties (Despres. 1991; Coulson et al. 2003). As Coulson et al (2003) point out "...homeownership policy ...often is directed at single family units...." This study looks at owner-occupation in residential multi-family properties. Existing literature on homeownership sometimes implies owner-occupation in the very concept of homeownership and uses the concept *investment property* for *non-owner-occupied rental property*. For the purposes of this study non-owner-occupied multi-family property means the same as multi-family investment property.

Commenting on differences between single-family and multi-family properties Coulson, Hwang and Imai (2003) observe

In the US housing markets, ownership status is highly correlated with structure type. Owners tend to live in detached, single family units, whereas renters often live in multi-unit complexes. The differences in what constitutes a neighborhood [or even a square foot of space] in these two environments is vastly different. In multi-unit complexes the nearest neighbors ... live in adjacent units, with adjacent walls and perhaps even shared heating and cooling systems or water heaters. (p. 29).

The distinctions Coulson et al (2003) bring up are significant "...owners tend to live in detached, single family units, whereas renters often live in multi-unit complexes...."

They also found that "...the average homeowner lives in a neighborhood with higher proportion of homeowners and ... [that] ... on average homeowners live in much higher income neighborhoods than renters..." (p. 36). In a study of foreclosures in New England Wardrip and Pelletiere (2008) report that "the real foreclosure hot spots are neighborhoods with high levels of poverty and average-to-high levels of renter-occupied housing..." They found that "...foreclosure activity in high poverty neighborhoods is associated with increased rental housing." What this means is that there are neighborhoods that are made up of mainly single-family housing units, which are mostly owner–occupied on one hand, while on the other hand, there are neighborhoods that are made up of predominantly multi-family properties, which are mostly populated by renters.

What this study focuses on is what owner-occupation does to residential multi-family properties with regard to foreclosure rates in reference to the Wardrip and Pelletiere

(2008) study. That study found that "...29% of properties foreclosed in Massachusetts were multi-family, although multi-family buildings represent[ed] only 10% of the properties in the state..." (p. 3).

The 2008 study by Wardrip and Pelletiere found that almost 1 in 5 of all foreclosure starts at the end of 2007 were multi-family properties. The study suggested that the proportion of foreclosures affecting residential multi-family buildings may be even greater than 20% nationally. Wardrip and Pelletiere's 2008 study was concerned with what happens to tenants of these multi-family rental buildings when the properties they live in get foreclosed. The main reasons that Wardrip and Pelletiere cited for the foreclosures were that multi-family properties tended to be located in mostly disadvantaged communities where home prices had significantly fallen. This study adds value by looking at whether the high foreclosure rates amongst multi-family properties could also be explained by the relatively lower rate of owner-occupation in such neighborhoods.

Owner-occupation is considered important because various studies associate it with higher property values, better maintenance and more timely repairs, greater neighborhood stability, greater social capital, higher political participation and better outcomes for off-springs (DLN. 1999; Shlay. 2005; Scanlon. 1998; Coulson et al. 2003).

Regarding home maintenance Rohe, Van Zandt and McCarthy (2001) report "...many homeowners find satisfaction in both maintaining and improving their homes. Renters

are less inclined to engage in these activities since they will not reap the economic benefits of improvements upon leaving their units and since they are less attached to their units" (p. 3). Rohe et al also commented on how owner-occupiers "have a greater latitude in customizing units to suit their own tastes [so that] their living environments ...better support their styles of life, thus increasing their satisfaction with both the residence and life in general."

Unlike other studies that generalize these to owner-occupation in general Rohe et al (2001) particularly mentioned that these results were found to be true even amongst owners who purchased their units in relatively less desirable neighborhoods (p. 3). This is significant because most multi-family properties are generally located in less desirable neighborhoods.

Coulson, Hwang and Imai (2003) used price estimates to find out if owner-occupation mattered for the neighborhood. Their study verified "... the existence of neighborhood ownership effects on housing prices, even after controlling for self-selection and unobservable characteristics" (p. 46).

The above shows the following: (i) That multi-family properties are being foreclosed in greater numbers compared to single family properties; (ii) Multi-family properties are located in less desirable neighborhoods with lower levels of owner-occupation; (iii) Owner-occupation is associated with desirable effects on homeowners, their families

and neighborhoods; and (iv) Foreclosures are associated with devastating effects to homeowners, their families and neighborhoods.

This study seeks to explore how owner-occupation may be harnessed for the realization of the desirable effects to homeowners, their families and neighborhoods and to reduce the devastating effects associated with the high foreclosure rates of residential multifamily properties.

2.06 Real Estate Foreclosures and Depressed Real Estate Markets

It is vital to note that real estate in normal macro - economic times tends to appreciate. In conditions where values are steadily appreciating the question of foreclosures is not as much of a serious problem because people can refinance, sell off the appreciating property to make a small profit, or at least break-even, or incur a small short-fall. It is only during depressed housing markets that high foreclosure rates become a significantly disruptive force to the residential real estate sector.

2.07 The Meaning of Home

Homes are profound centers of human existence..., the primary and central point from which the rest of the world is experienced and defined. (Moore. 2000, p. 209).

For this study understanding the meaning of home is an essential component for a variety of reasons, including but not limited to the reasons stated below. First, the concept *home* may be defined differently depending on the focus of the discussion. In this study there is need to explore the wider scope of meanings to which the concept of

home can be applied in the literature. There is also greater need to carve out the specific boundaries within which the concept is operationally used for the purposes of this study. Secondly, the meaning of home as discussed in the literature tends to refer to free-standing single family homes normally associated with middle-class Americans. This study focuses on multi-family residential properties which are generally referred to as investment properties, and that are usually occupied by rent paying tenants in mainly lower-income neighborhoods. There is, therefore, need to specifically frame the multi-family property as both a home and investment property for the owner-occupant.

For the absentee landlord a real estate investment is not necessarily a home. There is a specific operational definition to the meaning of home that excludes non-owner-occupation. The significant differences in foreclosure rates between owner-occupied residential multi-family properties and non-owner-occupied multi-family properties are posited to be directly or indirectly connected to the highly powerful psychological attachments that exist over time between owner-occupants and the residential multi-family home.

Carol Despres in her 1991 study on the Meaning of Home identifies and discusses several dimensions associated with "home". In Despres (1991) review of existent literature she notes that one's home is associated: (i) with security and control; (ii) as a reflection of one's ideas and values; (iii) as forum for acting upon or modifying one's dwelling; (iv) as permanency and continuity; (v) as the center for relationships with family and friends; (vi) as center of activities; (vii) as a refuge from the outside world;

(viii) as an indicator of personal status; (ix) as a material structure; and (x) as a place to own.

Despres (1991) notes that under the psycho-analytical perspective "...which defines the home as a symbol of one's self...the home [is viewed]...as the most powerful extension of the psyche...after the body itself." This paradigm of viewing the home helps show and explain why / how owner-occupants would find it extremely difficult to abandon a property that they live in even if there may be no financial gain accruing to them by continuing ownership.

In a similar vein akin to that of Despres (1991) Mallett (2004) "...brings together and examines the dominant and recurring ideas about home ... (raising) the question of whether or not home is (a) place(s), (a) space(s), feeling(s), practices, and / or an active state of being in the world..." (p. 62). She notes the meaning of home in the literature "...as conflated with or related to house, family, haven, self, gender, and journeying...[and adds] ...many authors also consider notions of being-at-home, creating or making home and the ideal home..." p. 62). Mallett then goes into considerable detail explaining each of the above themes as briefly stated below:

Home [as] ...(i) the place or places where one lives; ...(ii) a house or other dwelling; (iii) a family or other group living in a house or other place; (iv) a person's country, city,...a birthplace, a residence during one's early years, or place dear to one; (v) the environment or habitat of a person or animal; (vi) the place where something is inverted, founded or developed; (vii) a building or organization set up to care for orphans, the aged...informal name for a mental home; a home from home...; (viii) [being]...familiar or conversant with...; bring[ing] home to...[meaning] make clear to or place the blame on... (p. 63).

Mallett (2004) concludes by observing that "...both the meaning and study of home *all depends* [noting that] ...clearly both the experience and the study of home is value laden...researchers in the field need to be clear and transparent about the motivation behind and purposes for their own research...."

In light of the above it is essential to explain the purpose and motivation of this author with reference to the meaning of home. The perspective of home is anchored in the liberal view that homeownership, if structured appropriately, especially in the developing (third world) countries, is an effective vehicle for low-income to moderate-income people to participate and have a substantive stake in the capitalist system. The idea that a home "...is a private, often familial realm clearly differentiated from public space and removed from public scrutiny and surveillance...a space that offers freedom and control ... and scope for creativity and regeneration..." (Mallett. 2004. p. 71) lends itself well to viewing the home as conflated with house, place, family, self and notions of being-athome. Thus, while notions associated with meaning of home above may be mildly interesting in economies where ethos of private property are firmly anchored such as those of developed countries, these features of home are significantly less commonplace and more revolutionary in places where capitalism is not yet firmly entrenched.

A home is a possession unlike other possessions. In this study a home is viewed as a significant material "...possession whose personalization and place attachment concurrently means possession of ...multiple other possessions and places..." (Fernandez. 2008. p. 225). In discussing the transformation of house to a home Fernandez (2008) explains the relevance of place attachment and territoriality. He

defines place attachment as "...the bonding between a person and place that develops over time due to a series of interactions between person and place..." (p. 256). He also observes that "...when attached to a place, people engage in territoriality. Territoriality is the attempt to influence or control actions, interactions and access [of people, things and relationships], by asserting and attempting to enforce control over a specific geographical area..." (p. 226).

Moore (2000) also comments on the Theory of Place Attachment which he defines as "...the study of the affective components of the attachment bond with places..." which he traces as having emerged "...from the meanings of home studies and the transactionalist perspective..." (p. 210). Moore (2000) sites a 1987 study by Tognoli "...who presented five attributes of home: centrality; continuity; privacy; self-expression and personal identity; and social relationships ... [and argued that]... these attributes differentiated a home from a house" (p. 210).

The theme of the distinction between house and home is clear and runs through the explanations by various theorists and authors on the meaning of home. On the subject at hand for this study, that of the distinction between owner-occupants and absentee landlords of residential multi-family properties, it makes logical sense to directly associate the owner-occupant with home and the absentee landlord with house.

Referring to the choice of a home Marcus (1995) notes "... our motives for choosing a particular place are driven by what we can afford, its neighborhood location, and its style and level of upkeep, but also by the symbolic role of the house as an expression of

the social identity we wish to communicate..." (p. 9). The insight Marcus (1995) conjures up by visualizing one's home as an expression of the social identity one wishes to communicate taken together with Brunelli's (2001) assertion that "...housing assumes greater importance the poorer the living conditions of the households..." need to be interrogated further. These two findings are helpful in visualizing how owner-occupiers in residential multi-family properties may have significantly different perspectives to the value of their owner-occupied multi-family properties compared to non-owner-occupying (absentee) landlords even in situations where the financial facts surrounding their real estate investments may be significantly similar.

To start with, if a landlord walks away from a multi-family property she / he does not live in, one has abandoned a mere real estate investment, maybe one within a portfolio of several investment projects. On the other hand, if an owner-occupying landlord walks away from a multi-family property in which the individual and, often, the homeowner's family live in, one has abandoned a home with all the social and financial implications of foreclosure, moving out, finding a new home, physically trans-locating and moving into some other property. All this points to a situation where exit-costs (both financial and non-financial) are significantly higher for owner-occupying landlords than they are for non-owner-occupying landlords. Thus, everything else being the same, it is significantly easier and less costly for absentee landlords of residential multi-family properties to exit ownership than it is for owner-occupying landlords to abandon their investment in a residential multi-family property. Owner-occupying landlords are not only giving up investment in terms of capital outlay and anticipated profits (accruing from rent and

property appreciation), but also the multiplicity of benefits of the real estate as one's home.

In explaining the core theme of her book *House As A Mirror of Self* Marcus (1995) notes that "...the places we live in are reflections of a process of striving toward a state of wholeness, of being wholly ourselves ... the places themselves have a powerful effect on our journey toward wholeness..." (p. 8). How does one measure *the journey toward human wholeness* that is reflected in one's sense of home? The significant, but financially incalculable, value dimensions attached to one's home are deemed to significantly add more to the exit-costs of the owner-occupant than to those of the absentee landlord.

The study suggests that, during depressed housing market conditions, it is more in the costly disruption of the home / use value continuum that being foreclosed implies to multi-family property owner-occupiers than in the loss of the multi-family property as a precious investment that explains the significant differences in foreclosure rates between owner-occupied and non-owner-occupied residential multi-family properties. Everything else being the same, non-owner-occupying (NOO) landlords will tend to abandon their multi-family properties more readily than owner-occupying (OO) landlords. This is because of the financial and social exit-costs for doing so are much greater for owner-occupiers than they are for absentee landlords.

Thus, the difference between a homeowner / landlord who occupies the property and one who does not may be captured by the difference between home and house. Moore refers to homes as "...profound centers of human existence..., the primary and central point from which the rest of the world is experienced and defined" (p. 209). Moore sites Somerville as having "suggested seven dimensions of meaning [of home]: shelter; hearth, heart, privacy, roots; abode and paradise [the ideal]..." As may be deciphered from the direct meanings of the seven concepts mentioned above, most of them apply to a house one lives in. They do not apply to a mere residential real estate investment.

2.08 A Home As A Burden

The above portrayal of home has mostly been on positive aspects of homeownership and owner-occupation of residential real estate. While the benefits of homeownership and owner-occupation are significant, there are also negative aspects associated with home "...home can be a prison and a place of terror as well as a haven or place of love" (Moore. 2000. p. 212). There are cases where homeownership in general, and owner-occupation of a residential multi-family property, in particular, may be disadvantageous to the individual homeowner, the family and the community. Examples given where owner-occupation may have negative consequences include, but are not limited to, those that pertain to elderly people, the unemployed, young people and other people "... in weaker social positions in ...domestic power relationships... where home may mean being home-bound ... in a negative retreatist way" (Moore. 2000. p. 212).

Passaro (1996) as quoted by Moore (2000) argues that "... a home is as much about exclusion as inclusion..." (p. 212). Moore concludes by observing that "...the renewed focus on meaning [of home] will need to focus on ways in which home disappoints, aggravates, neglects, confines and contradicts as much as it inspires and comforts us..." (p. 213). The power of such negative social / psychological aspects of home are evident in the urgency with which many married couples seek to live separately following a separation or divorce, even though living separately imposes significantly higher financial costs.

Pointing out the negative aspects to homeownership, in genera,I and owner-occupation in particular, should not be construed to detract from the positive aspects and benefits associated with homeownership highlighted above. Awareness of situations or target groups (e.g. elderly people, the unemployed, young people and other people in weaker social positions) in whose hands homeownership and owner-occupation maybe potentially disadvantageous helps inform homeownership policy planners, mortgage lenders, mortgage brokers and other stakeholders in setting policy, developing selection criteria of who maybe an acceptable, and who maybe too risky for mortgage financing.

These observations also help to identify target groups who may need additional or special programming for homeownership, especially for residential multi-family homeownership, to deliver more advantages than disadvantages. The negative aspects highlighted above may also serve to explain the risks that come with over-extending homeownership in general, and owner-occupation of multi-family properties, to risky

target groups as happened during the sub-prime debacle of the period 2004 to early 2007 (Baker. 2005).

2.09 What this Study Covers

This research does four things:

- (i) Explores and tests if the foreclosure differences observed by Wardrip and Pelletiere (2008) between multi-family properties and single-families in the four New England states (Massachusetts, Connecticut, Rhode Island and New Hampshire) specifically apply to the cities of Manchester and Nashua;
- (ii) Finds out if there is a significant difference between the owner-occupation rates of single-family and multi-family properties in Manchester and Nashua, New Hampshire.
- (iii) Finds out if there are significant differences in the foreclosure rates of owneroccupied and investor-owned, non-owner-occupied, residential 2- to 4-unit multifamily properties in Manchester and Nashua, New Hampshire.
- (iv) More importantly, the study goes on to identify the explanatory reasons for the significant differences in the foreclosure rates of owner-occupied and investor-owned, non-owner-occupied, residential 2- to 4-unit multi-family properties.

2.10 Relationships to be studied

 Comparisons of multi-family to single-family home foreclosure rates in Manchester and Nashua, New Hampshire.

- Comparisons of the foreclosure rates of owner-occupied and investor owned non-owner-occupied multi-family homes in Manchester and Nashua, New Hampshire.
- Foreclosure rate comparisons of 2-unit, 3-unit and 4-unit residential multi-family properties in Manchester and Nashua, New Hampshire.
- Comparisons of differences in upkeep and maintenance of owner-occupied and non-owner-occupied residential 2- to 4-unit multi-family homes in Manchester, New Hampshire.

Chapter Three: Theory / Conceptual Framework

3.01 Introduction

Given the differences in the foreclosure rates of owner-occupied and non-owner-occupied residential single-family and multi-family properties during depressed housing market conditions (2007-2008), the focus of this chapter is theorizing how and why owner-occupation plays a significant causal role. The study also provides a general theoretical explanation of why foreclosure rates are generally higher during depressed housing market conditions compared to other times.

3.02 Theory

Layder (1994) defines theory as an explanation of how things work (p. 29). In this dissertation, human agency, the idea that people are 'agents' "...they are able to do things which affect the social relationships in which they are embedded..." (Layder. 1994. p. 4) is considered to be dependent on structure. Structure refers to the institutional context that provides the operational framework and boundaries within which agency is facilitated or inhibited. This study argues that while homeownership can be configured to enhance successful long-term tenure and provide opportunities to individuals and their families, it is often structured to precipitate failure for the homeowners and their neighborhoods by depriving, inhibiting, limiting and constraining opportunities. This study advances two main theses: (i) owner-occupation significantly matters in residential multi-family foreclosures; and (ii) institutional policies on

residential multi-family homeownership can enhance or constrain opportunities for success.

3.02.1 Owner-Occupation Significantly Matters In Homeownership

Whether one is an owner-occupier of a given piece of real estate affects the social and economic behavior of that homeowner and his / her family members, and their relationship with the occupied property and the neighborhood in significant ways (Shapiro. 2001; Denton. 2001; Sherraden. 2001; Apgar et al. 2005). "Owner-occupants stabilize neighborhoods...Being an owner-occupant involves [one]... in [various] aspects of [the] community because [one] owns a piece of [that] community, not just real estate..." (Neighborhood Assistance Corporation of America. 2009. p. 21).

3.02.2 Institutional Policies Enhance or Constrain Opportunities for Success

Policies that allow absentee landlords to own and lease out significant numbers of residential multi-family properties are hypothesized to lead to higher residential multi-family foreclosure rates. "Absentee landlords usually want to maximize the rent and have little involvement with the community." (Neighborhood Assistance Corporation of America. 2009. p. 21)

3.03 Foreclosures in Depressed Housing Markets

The environmental context of depressed housing market conditions (DHMCs) presents a particularly conducive medium for high levels of real estate foreclosures. DHMCs are characterized by the following features, *interalia:* declining real estate prices; higher

loan-to-value (LTV) ratios; higher vacancy rates; and conversely, lower occupation rates; large stocks of residential housing (both new construction and existing properties) on the market; higher rates of unemployment; reduced numbers of mortgage prequalified homebuyers; higher debt-to-income (DTI) ratios; longer real estate sales turnover periods; large and increasing numbers of vacant and abandoned houses. As more and more people lose their jobs during depressed housing market conditions, some people default on their mortgages or rental obligations. These defaults lead to homeowners and tenants being evicted by lenders and owners respectively. In many cases these defaults lead to homeowners walking away from the properties. Defaulting homeowners who do not voluntarily walk away are usually evicted for breach of contract. This process generally winds up in foreclosure auctions, short-sales or other distressed sales of the affected properties. Properties sold in these circumstances tend to fetch less than they would, under normal sale / purchase conditions. This process tends to feed on itself in depressed housing markets and often leads to significant downward spiral in housing values, further worsening the housing market situation.

In normal housing market conditions, real estate tends to appreciate over time, residential properties sell in reasonable time of less than 90 days. Homeowners, who are unable to afford their mortgages for any reason, are mostly able to sell off their properties and bail out with some profit margin, or at least, manage to break-even. High foreclosure rates are indeed a major component in the very definition of depressed housing markets.

3.04 Residential Multi-family Foreclosures Explanatory Theories

This study applies two theoretical frameworks to explain the significant differences in foreclosure rates of owner-occupied and non-owner-occupied residential multi-family properties during depressed housing market conditions (2007-2008). The two theoretical frameworks are: (i) the "Broken Windows" theory; and (ii) the "Construct of Home".

3.04.1 Broken Windows theory

The Broken Windows theory, as applied in this study, is driven by the pride of ownership principle. The research posits that owner-occupiers are proud and motivated by the ownership experience (Gates. 1998; Sherraden. 2000; NACA. 2009). This researcher argues that owner-occupiers perform certain roles and do certain activities differently from non-owner-occupants and tenants, especially in the upkeep and repairs to the property which directly or indirectly reduce the likelihood for foreclosure for owner-occupied multi-family properties.

3.04.2 "Construct of Home" theory

The "Meaning of Home" or "Construct of Home" theory is this author's integration of these four concepts: Use Value, Meaning of Home, Rental Value and Investment Value as they relate to owner-occupation of residential multi-family properties. The behavioral differences of owner-occupiers and non-owner-occupiers in relation to their affinity to the residential multi-family property and the respective neighborhoods are also

explained by the distinctive differences of these two groups (OOs and NOOs) in terms of home use value, meaning of home, rental value and investment value.

These two theoretical frameworks are explained in detail under 3.05 and 3.06 below.

3.05 Broken Windows Theory Explained:

The Broken Windows theory, popularized by two criminologists, James Q. Wilson and George Kelling (Gault & Silver. 1999; Peterson. 2004; Bratton & Kelling. 2006) claims that the very existence of broken windows on any property leads to more windows being broken on that property and on other properties around.

While the theory was popularized by the two criminologists, Wilson and Kelling, it was developed from an experiment conducted by psychologist Philip Zimbardo at Stanford University in 1969 (Peterson. 2004)². Zimbardo left two similar vehicles in two different community neighborhoods. One car was driven and left in the Bronx, New York City, and another vehicle was abandoned in a rich neighborhood of Palo Alto, California. Zimbardo had both vehicles' license plates removed and their hoods left open. He then waited and carefully noted what unfolded to the cars in these two different neighborhoods. The reported results were dramatically different. Peterson (2004) explains that in the Bronx, New York,

Within 10 minutes of abandonment, people began stealing parts from the alluring car. It took approximately three days to strip the car of all valuable parts. Once stripped of economic value, the car then became a source of entertainment. People smashed windows. Ripped upholstery,

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² www.stsc.hill.af.mil

and chipped the paint – reducing the car to a pile of junk. (Peterson. 2004. p. 31)

Peterson (2004) reports that it was not the same in California.

In Palo Alto, something quite different happened – nothing. For more than a week, the car sat unmolested. There was no theft, vandalism, or even a scratch. Puzzled, Zimbardo, in plain view of everyone, took a sledgehammer and smashed part of the car. Soon passersby were taking turns with the hammer, delivering blow after satisfying blow. Within a few hours, the vehicle was resting on its roof, demolished. (Peterson. 2004. p. 31)

It was from Zimbardo's 1969 experiment that Wilson and Kelling adapted and popularized the Broken Windows theory. The application of the Broken Windows theory to crime is widely credited with having dramatically improved the security situations of New York City, NY, and Los Angeles, California in the later part of the 1980s and early 1990s (Bratton & Kelling. 2006).

Wilson and Kelling assert that if a broken window on any given property goes without repair for some time vandals are going to destroy the building's other windows. Explaining why broken windows become catalysts for the vandalization of the remaining windows Wilson and Kelling note that "...the broken window sends a signal that no one is in charge, breaking more windows costs nothing, and there are no [significant] consequences to breaking more windows..." (Peterson. 2004. p. 31).

In response to some critics who have challenged the validity of this theory Kelling et al. (2006) explains "...from the first presentation of broken windows we have

argued ...that the link, while clear and strong, is indirect. Citizen fear, created by disorder, leads to weakened social controls, thus creating the conditions in which crime can flourish" (Bratton & Kelling. 2006. p. 5). Broken Windows theory, therefore, is associated with weakened social controls and / or anomie³. Gault and Silver (2008) provide the following conceptual diagram (Figure 3.01) that clearly highlights Broken Windows theory and its association with weakened social controls.

Figure 3.01

Disorder (X) →	Social Withdrawal /	\rightarrow	Crime (Y)
	Low Informal Social Control (Z)		

Gault and Silver (2008) p. 242: Conceptual diagram of Wilson and Kelling's (1982) broken windows theory

Further to the above, several other studies (e.g. Skogan. 1990; Gault & Silver. 2008) have supported the link between disorder and serious crime. The uniqueness of this study is the novelty of applying the Broken Windows theory to explain, not crime rates, but differences in foreclosure rates of owner-occupied and non-owner-occupied residential multi-family properties in depressed housing market conditions (2007-2008).

³ "Anomie is a concept developed by Emile **Durkheim (1858-1917)** to describe an absence of clear societal norms and values. In the concept of **anomie** individuals lack a sense of social regulation: people feel unguided in the choices they have to make" quoted from the SociologyIndex. website on 08/25/2010. Source: http://sociologyindex.com/anomie.htm.

"How does Broken Windows theory apply to differences in foreclosure rates of owneroccupied and non-owner occupied residential multi-family properties in Manchester and Nashua, New Hampshire?"

In answer to the above rhetorical question, there are significant differences in the behavior of owner-occupiers and rental tenants in residential buildings (Denton. 2001; Scanlon. 1998). There are also significant differences in the behavior of homeowners and tenants between situations where the owner lives in the building and where the homeowner is an absentee investor (Apgar. 2005). As NACA observes "...[Multi-family] owner-occupiers [tend to] choose stable tenants that will strengthen the community and maintain the property, even if they [homeowners] could have higher paying tenants." (Neighborhood Assistance Corporation of America. 2009. p. 21)

Everything else being equal, many studies (Coulson, et al. 2003; Apgar. 2005; Sherraden. 2001; Denton. 2001; Scanlon. 1998) have found owner-occupiers to be more timely in carrying out home repairs, maintenance and updates on residential buildings they own and occupy compared to absentee investors (Apgar. 2005; Scanlon. 1998). Non-owner-occupation often means that the people who reside in such buildings are often unlikely to be as concerned and / as effective about taking care of the property, or having the necessary repairs, updates and maintenance done in a timely fashion (Apgar. 2005).

Thus, the application of Broken Windows theory to this study may be chronologically explained as follows.

- Higher owner-occupation in residential multi-family properties leads to better and more timely home repairs, maintenance and updates.
- Updated better maintained residential properties are more attractive to rental tenants. Existing tenants tend to stay longer. Prospective new tenants would prefer better maintained rental properties compared to those that appear to be less up-to-date in their maintenance / upkeep.
- 3. On average owner-occupied residential multi-family properties are less exposed to the risk of prolonged vacancy rates as they always have at least one tenant (the owner-occupier) in residency. On average, owner-occupied multi-family properties have greater occupation rates than non-owner-occupied properties. In between tenants, non-owner-occupied properties may go for a number of months without one or more tenants especially in depressed housing markets conditions such as the current period (2007 to 2008).
- 4. Because the owner lives in the property s/he is less likely to walk away / abandon the building, even if the loan-to-value (LTV) ratio is up-side down⁴. In part, the owner-occupant's unwillingness to walk away stems not only from 'pride of ownership' but also from the extra costs s/he would incur in finding a new residence and moving. In part, it is also because of the social / psychological connection that the owner develops with the housing unit and the surrounding

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⁴ Loan to value (LTV) ratio being upside down means that the loan on the property is worth more than the assessed value of the underlying property. Alternatively, in this same situation the underlying property is referred to as being under-water.

community as described by Meaning of Home theorists as explained later in this chapter.

- 5. The picture painted above points to lower foreclosure rates for owner-occupied residential multi-family properties. The question of walk-aways or abandonments is significant because most foreclosures result from homeowners / home investors taking the "sometimes financially rational decision⁵" of stopping mortgage payments and walking away from the property after seeing that their real estate investment is in a loss-making financial position for an indeterminate period of time.
- 6. Lower foreclosure rates, inversely associated with higher owner-occupation rates of residential multi-family properties, in a given geographical area, means that there is greater neighborhood and community stability in that area. Greater neighborhood stability is often associated with greater community efficacy in dealing with social problems (Apgar. 2005). Even if there are a few foreclosures in the area, proactive community responses can contain the potentially negatively explosive effects of such foreclosures by neighbors taking group or community action, such as, protecting the foreclosed properties against vandalism, or taking turns to cut grass, so that the place looks lived-in, and does not develop into an eye-sore. Gault and Silver (2006) refer to such group or community action as an example of collective efficacy. Gault and Silver (2006) explain collective efficacy as referring "... to [the] group's ability to reach its goals. It has to do with the shared belief that collective action is possible to address a problem..." (p. 241).

⁵ Walk-aways are a rational way to stop financial bleeding and cut one's losses if one is losing money in a given business or product line. It makes sense, therefore, for a non-occupying investor to walk away from a real estate investment that is losing money from month to month.

Referring to Gault and Silver's collective efficacy concept, as defined above, Wilson and Kelling use the term "informal social control" (Gault & Silver. 2006. p. 241). The idea is that where there is order (stability) a group has the ability (capability) to reach its goals through collective action. The opposite of that is a situation of weakened informal controls or Emile Durkheim's anomie as explained in a foot-note earlier in this chapter.

Neighborhood stability comes by way of existing residents, both homeowners and tenants, not moving out in greater numbers than new residents moving into the neighborhood. One of the unique features of owner-occupation, favorable to neighborhood stability, is that owner-occupiers tend to stay in one residential location significantly longer than tenants (Development Leadership Network on Success Measures Project. 1999; Denton. 2001; Coulson, Hwang and Imai. 2003; Baker. 2005).

In depressed housing markets, neighborhood stability assumes greater importance. With residential rent levels falling and occupation rates declining for properties, and higher vacancy rates, the environment is that of a renters' market. A depressed housing market is not a suppliers' market. This means that there is high likelihood of prolonged vacancy if one tenant moves out, for any reason. In depressed housing markets, to attract new tenants the next customer often pays equal or less rent than the tenant who just moved out. In situations where the landlord depends on the rental collections, for the monthly mortgage

payments and operating costs, prolonged vacancies often lead to mortgagepayment defaults and, ultimately, to foreclosures.

In New England, winters are particularly tough times for multi-family landlords. Prolonged rental vacancies may mean that the owner does not only picking up and paying the monthly mortgage bill but also ensures that the vacant property is well heated, often at considerable personal expense.

Owner-occupation means, therefore, that at any given time there is at least one apartment fully occupied and rented out, of the 2- to 4-unit multi-family property, that a minimum of 25% and maximum of 50% guaranteed occupancy rate at any given time. This minimal occupancy and safety-net is non-existent to properties that are non-owner-occupied.

Stable neighborhoods provide a robust base for taxation purposes. Foreclosures blight neighborhoods and erode the tax base for local municipalities (Apgar. 2005). Municipalities not only lose tax income in high foreclosure rate situations, but they also lose money – securing, boarding up, and, sometimes, demolishing the boarded-up properties and revitalizing foreclosure blighted neighborhoods (Apgar. 2005). On the other hand, with stable and robust tax bases, municipalities with zero or lower foreclosure rates are able to provide more and better services to their residents. Provision of more and better services by municipalities make the area in question to be more desirable to existing and

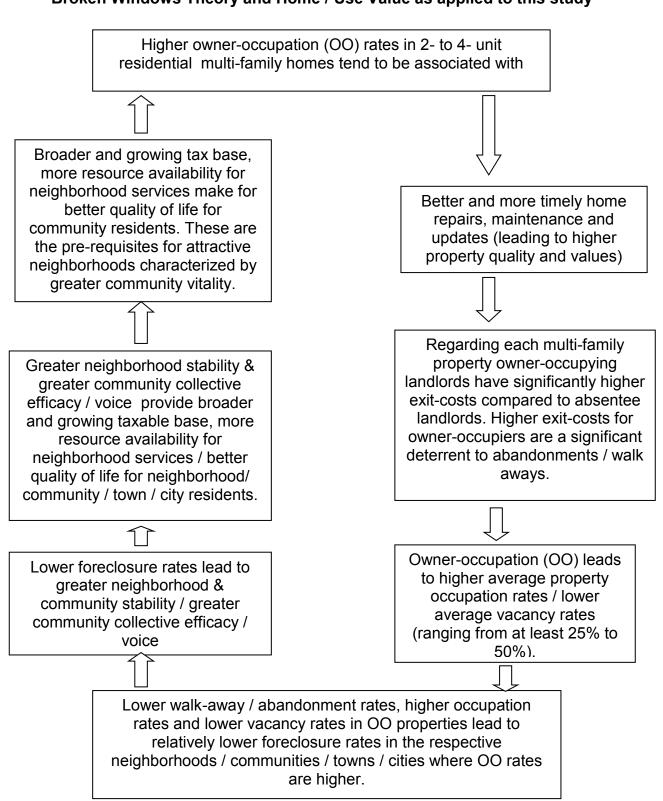
new homeowners, apartment renters, business and social entrepreneurs (Apgar. 2005).

The diagram below (Figure 3.2) helps show the flow of reasoning relative to the application of the Broken Windows theory to the differences in foreclosure rates of owner-occupied and non-owner occupied residential multi-family properties.

On the next page is a conceptual illustration of how Broken Windows theory is applied in this study.

Figure 3.2

Broken Windows Theory and Home / Use Value as applied to this study



Broken Windows theory has been applied to explain a variety of situations. In one case, Ramos and Torgler (2008), tested the theory's application to academia by a field experiment on faculty members and postgraduate students in a university department common room. In this unique Broken Windows experiment, they explored "...the behavior of subjects under an order condition [clean environment] and a disorder condition [messy environment]..." (Ramos and Torgler. 2008). The researchers found "...strong support that signs of disorderly behavior triggers littering ... In the disorder treatment 59% of the subjects litter(ed) compared to 18% in the order condition..." They (Ramos and Torgler. 2008) conclude by observing "...when academic staff members and postgraduate students observe that others violated the social norm of keeping the common room clean, the probability of littering increases *ceteris paribus* by around 40 percent....".

For this particular study, unlike in others, Broken Windows is projected as being a significant explanatory theory that underlies the increasing and significantly higher rates of foreclosures in non-owner-occupied multi-family properties in the two cities, Manchester and Nashua, New Hampshire.

Commenting on the Broken Windows theory Peterson (2004) explains that this "...is a metaphor for ways behavioral norms break down in a community" (p. 31). Partington (2008) explains that Broken Windows theory is about attending to problems while they are still small and manageable. Thus, the use of Broken Windows theory in this study is metaphorically applied to explain the chain of logical events that tend to trigger higher

foreclosure rates among non-owner-occupied compared to owner-occupied multi-family properties, in distressed housing market conditions.

3.06 Construct of Home Explained

As explained below the "Construct of Home" integrates and conceptually sums up four concepts: Home Use Value, Meaning of Home, Rental Value and Investment Value as they relate to multi-family homeownership vis-à-vis owner-occupation and non-owner-occupation. Below, each of these four concepts (home use value; meaning of home; rental value and investment value) is defined and explained.

3.06.1 Home Use Value

Brunelli (2001) defines use value "as a set of attributes of shelter that satisfy human needs in accordance with socially acceptable standards." He goes on to explain that

Although housing use value is relevant whatever the economic conditions of the owners or renters ... housing assumes greater importance the poorer the living conditions of the households. This is not to deny these values for the better off but...in conditions of greater socio-economic vulnerability such as those of the urban poor, housing may play a central role in the survival strategy of [these poor] households.

Use value, as used in this study, refers to the various areas of utility derived by the low-income to moderate-income multi-family owner-occupiers by directly occupying and utilizing the property. As Brunelli (2001) observes above, housing plays a significant role in the survival strategies of low-income to moderate-income households. Home use value is exclusive to owner-occupiers. Non-owner-occupiers do not have it.

3.06.2 Meaning of Home

Owner-occupiers, at the time of acquiring the residential multi-family property, intend to and arrange for moving in. Owner-occupation entails directly utilizing and deriving enjoyment out of the conveniences of the newly acquired property. When and how does a house get transformed into a home? In the process of taking over residency, owner-occupiers transform the house into a home mostly through a deliberate, and sometimes forced, process of "personalization" (Fernandez. 2008). Personalization of a house into a home is characterized by adding value to what exists through a multi-faceted process of cleaning up, adaptations, upgrades, repairs and general maintenance to the property. In many cases there is also the social embedment of the owner-occupier and / or her / his family members into the neighborhood community (NACA. 2009; Fernandez. 2008). Owner-occupiers transform houses into homes. To the non-owner-occupier the acquired house is an investment.

3.06.3 Rental Value

Rental Value is what mainly distinguishes multi-family properties from single-family properties. For owner-occupiers living in residential multi-family property, 1- to 3-units out of the 2- to 4-unit multi-family properties are available for renting out. With this rental income dimension comes the entrepreneurial facet of residential multi-family homeownership. If the homeowner does not reside in the residential multi-family property, buying a multi-family is mostly a business investment decision. Any subsequent decisions by the investor are informed, and should be judged, from a business perspective. Owner-occupation becomes a unique factor that socially

connects and anchors the investor to both the multi-family property and the surrounding community / neighborhood.

3.06.4 Investment / Asset Appreciation Value

Real estate appreciates over time (Gates. 1998; Sherraden. 2000; NACA. 2009). On average owner-occupiers tend to stay in their homes longer than tenants (Coulson et al. 2003) This means owner-occupiers have longer time horizons within which housing booms and busts will definitely occur. Because they tend to live in their homes longer than tenants, owner-occupiers are less likely to abandon / walk-away from their properties during the periods when housing markets may be depressed, periods during which rents decline, property values fall and properties get under-valued and, therefore, under-water.

3.06.5 The Concept of Payment Shock

Payment shock is a concept that is used to measure the financial difference between what one is paying for rent at a given time compared to what they may pay for equivalent or slightly better accommodation elsewhere. With the exception of those who bought at the top of the housing boom (e.g. between 2004 and 2006) for most residential multi-family owner-occupiers the difference between what they pay for monthly their mortgage and the rental receipts from tenants leaves them with relatively small monthly top-up amounts. In addition, any operating expenses on rental units or proportionate parts there-of are tax-deductible for income-tax purposes. Everything else being the same, the interest rates offered by mortgage companies to owner-occupiers are normally 0.25% to 2.00% less than those offered to non-owner-occupiers. For

owner-occupiers financially moving out of this advantaged financial situation means that they will have to pay significantly more, thus suffer greater payment shock. Thus there is little financial incentive, if any, for owner-occupiers, to default on their mortgages or walk-away from their residential multi-family properties even in situations where the property is under-water, as is common in depressed housing market conditions. The same is not true for non-owner-occupiers. In depressed housing markets, when the multi-family investment is not profitable to some non-owner-occupying landlords the most plausible business decision is to cut one's losses by either seeking a short sale of the property or walking away from the investment.

6.06.6 The Construct of Home as a Theoretical framework

To non-owner-occupiers the residential multi-family is an investment property, not a home. It has no home use value. Owner-occupiers of residential multi-family properties have and enjoy use value. Non-owner-occupiers, by contrast, do not live in the property, therefore, they do not have the benefit of home use value relative to the investment property. Given the general inconveniences, hardship and the significant expenses that come with moving out of any home and settling in a new place, owner-occupiers encounter greater exit costs and have more to lose if they abandon the residential multi-family property compared to non-owner-occupying landlords. Non-owner-occupiers are generally interested in rental net-income streams and wealth-building potential through long-term capital appreciation of the real estate investment. In the absence of significant regulatory penalties and / or adequate incentives, from relevant local authorities for non-owner-occupiers, initiating a quick sale (short-sale) or abandoning the property is not

only common but a plausible and rational business decision, especially in the face of a financially under-performing real estate asset.

For non-owner-occupiers, if rental income is higher than the mortgage payment, the surplus income is appreciated and is an incentive to hold on to the investment property. When the value of the multi-family is appreciating there are prospects of selling at a profit in future or refinancing and cashing out. However, in depressed housing markets, that are typically characterized by declining property values and declining rents, there are likely to be financial deficits from month-to-month that require both owner-occupiers and non-owner-occupiers to top-up rent receivable to meet mortgage monthly payments. Given this unfavorable real estate economic scenario it is logical that non-owner-occupiers are more likely to abandon their multi-family investment properties compared to owner-occupiers who have more at stake in their home.

Thus, the study uses these two underlying theoretical frameworks: (a) Broken Windows theory; and (b) Construct of Home, to analyze primary and secondary quantitative data and generate qualitative data from interviews with key stakeholders in the two cities of Manchester and Nashua.

The intention is to come up with observations and identify trends from the quantitative and qualitative data. This researcher analyzes this data to generate policy recommendations for consideration by homeownership and neighborhood development stakeholders.

3.07 General Research Question

Is owner-occupation a significant factor in differences in the incidence and prevalence of

high foreclosure rates amongst residential multi-family properties in urban areas?

3.07.1 Specific Research Questions

Do multi-family homes have higher foreclosure rates compared to single-family (a)

homes in Manchester and Nashua, New Hampshire?

(b) Are there significant differences in the foreclosure rates of owner-occupied multi-

family homes compared to investor owned multi-family properties?

(c) Why do residential owner-occupied multi-family properties have lower or different

foreclosure rates compared to non-owner-occupied multi-family properties,

everything else being equal?

(d) How can the significant foreclosure rate differences between owner-occupied

and non-owner-occupied residential multi-family homeownership be theoretically

explained?

3.08 Main Research Hypothesis

The foreclosure rates of owner-occupied multi-family homes are significantly less than

those of non-owner-occupied multi-family properties in depressed housing market

conditions (2007 to 2008).

Research Hypothesis 2: H_A: Multi-family Housing Foreclosure Rates:

Owner-occupied < (Less than) Non-Owner-Occupied

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3.08.1 Null Hypotheses

The foreclosure rates of owner-occupied multi-family homes are equal to, or greater

than those of non-owner-occupied multi-family properties in depressed housing market

conditions (2007 to 2008).

Null Hypothesis 2: H₀: Multi-family Housing Foreclosure Rates:

Owner-occupied ≥ (Greater than or = to) Non-Owner-Occupied

3.09 Qualitative and Exploratory Part

A survey of the perceptions of key informants representing the main institutional

stakeholders financing and supporting NH's multi-family homeownership activities was

conducted to explain the results and findings from the quantitative parts of the research.

In this section the research sought further corroborating evidence and other reasons for

the differences between owner-occupied and non-owner-occupied multi-family housing,

identifying and explaining the underlying theories as appropriate.

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Chapter Four: Method

4.01 Introduction to Research Structure and Research Design

This study is divided into three parts: Part 1, Part 2, and Part 3.

4.01.1 Research Design

Research design provides the framework that guides the research project. Research design serves "... to show how all the major parts of the research project – the samples or groups, measures, treatments or programs, and methods of assignment – work together to address the central research questions..." (Trochim. 2001. p. 171). Thus, the three parts, two quantitative, and one qualitative (as explained above), constitute the structure of inquiry for this study.

4.01.2 Type of Analysis and Unit of Analysis

The research design for this research compares measures cross-sectionally (between and within comparison groups) over a specific time period (two-year-period from 2007 to 2008). The unit of analysis is a residential real estate property (i.e. single-family or multifamily property). Wherever there is a deviation from this operational definition, that will be explicitly mentioned as appropriate (for example, where the neighborhood becomes the unit of analysis).

Part 1

4.02 Comparisons of Single-Family (SF) and Multi-Family (MF) Properties.

Part 1 is made up of comparisons of owner-occupation rates and foreclosure rates of residential single-family and multi-family properties in Manchester and Nashua, New Hampshire, as listed below:

- 4.02.1 Comparison of foreclosure rates of residential single-family and multi-family properties in Manchester and Nashua, New Hampshire;
- 4.02.2 Comparison of owner-occupation rates of residential single-family and multi-family properties in Manchester and Nashua, New Hampshire;
- 4.02.3 Comparison of foreclosure rates of owner-occupied (OO) and non-owner-occupied (NOO) residential multi-family properties in Manchester and Nashua, New Hampshire.

Part 2

4.03 Two Tests and Geographical Information System (GIS) Mapping

Part 2 examined three areas of interest, namely:

Differences between owner-occupied and non-owner-occupied residential multi-family properties in terms of Property Quality. Hypothesis testing was conducted using independent samples t-testing;

To examine if there are any differences based on number-of-units of each residential multi-family property in Manchester and Nashua. Properties were grouped according to number-of-units (i.e., 2-unit, 3-unit and 4-unit);

GIS mapping was also used with the purpose of plotting the distribution of all residential multi-family (MF) properties. Multifamily properties were also analyzed for the dispersion of foreclosures within Manchester city, New Hampshire.

The two tests and GIS mapping are explained in greater detail below:

Test 1: Hypothesis testing (Independent Samples t-Test) was conducted on a random sample of 40 residential multi-family properties, made up of 20 owner-occupied and 20 non-owner-occupied properties. The study sought to establish association between

owner-occupation and property quality. For purposes of this study, property quality is defined in terms of upkeep, repairs, and maintenance on an ordinal scale from 1 to 5.

Test 2: The second test was a comparison of 2-unit, 3-unit and 4-unit residential multifamily properties. The objective was to find out if there were any discernible patterns on 2007 and 2008 residential MF foreclosure rates based on number-of-units.

Test 3: The third component, GIS mapping, plotted the distribution of all residential multi-family properties and multi-family foreclosures in the city of Manchester on a city map. The objective was to check for patterns that may be associated with the physical location and / or distribution of MF properties and the associated foreclosures.

Part 3

4.04 Qualitative Evidence From Key Informants

Part 3 was qualitative and exploratory. Qualitative evidence was used mostly to address issues and answer research questions that could not be answered quantitatively through calculations employed on parts 1 and 2 and to verify, confirm, and / or test the validity (or otherwise), of findings from parts 1 and 2. For the qualitative part two methods were used;

- (i) In-depth (or detailed) interviews with key informants; and
- (ii) participant observation by the researcher.

4.05 Foreclosure Comparisons For Single-Family & Multi-Family Properties

The objective of this calculation was to find out if the 2008 Wardrip & Pelletiere study which found that multi-family properties are foreclosing at significantly higher rates in the New England Region *held true* for Manchester and Nashua, New Hampshire.

The procedure was as follows: the researcher identified the number of foreclosed multifamily properties and those of single-family properties in Manchester and Nashua over the period 2007 to 2008. Foreclosure rates of residential multi-family and single family properties in Manchester and Nashua, were computed and compared over a two year period from 2007 to 2008.

The hypothesis guiding this comparison was based on Wardrip & Pelletiere's 2008 study. The objective was to find out if residential multi-family properties in Manchester and Nashua had significantly higher foreclosure rates compared to those of residential single-family properties in the two cities.

Instrumentation

The researcher used quantitative data (on Sales) from a data-base provided by Read Data Corporation of Manchester, New Hampshire.

Sample

In the comparison of foreclosure rates of multi-family and single family properties in Manchester and Nashua, New Hampshire, a census was taken, not sample, to determine the foreclosure rates of multi-family and single family properties in the two cities. The database used was up-to-date. It comprehensively covered the entire residential housing stock of residential single-family and multi-family properties in the two cities.

Analysis

While absolute numbers were calculated and may be important, analysis on this component was mainly focused on foreclosure rates in the sub-groups of interest (i.e.

single-family and multi-family properties). These rates were then compared with the findings of the 2008 Wardrip & Pelletiere study which reported that multi-family properties in New England have significantly higher foreclosure rates compared to those of single-family properties. Findings on this component are reported on in Chapter 5.

4.06 Multi-Family and Single-Family Owner-Occupation Rates

This section focuses on comparisons of multi-family properties and single-family properties in Manchester and Nashua in terms of differences in owner-occupation rates.

Objective

This component sought to find out if multi-family properties have significantly lower rates of owner-occupation compared to single family properties in Manchester and Nashua as hypothesized by the researcher. The hypothesized higher rate of non-owner occupation amongst multi-family properties was thought to be part of the explanation for Wardrip & Pelletiere's 2008 finding where multi-family properties had significantly higher foreclosure rates compared to single-family properties. This component sought to find out if there were significant differences in owner-occupation rates between multi-family properties and single-family properties in the two cities.

Procedure

The Procedure involved identifying owner-occupied and those that are non-owner-occupied single-family and multi-family properties. An assumption was made that where the registered homeowner's residential address was not the same as the property's physical address that single-family or multi-family home was non-owner-occupied. An

assumption of owner-occupation was made where the residential address of the registered owner was the same as the physical address of the property. Once this distinction was established, the next step was comparing the owner-occupation rates of single-family and multi-family properties in the two cities.

The hypothesis for this component was, everything else being equal, residential multifamily properties have significantly lower rates of owner-occupation compared to single family properties.

Instrumentation

The researcher used quantitative data from Real Data Corporation of Manchester, New Hampshire.

Sample

This component utilized population parameters on a comprehensive data-set, not sample data, to calculate the actual owner-occupation rates of single-family and multi-family properties in Manchester and Nashua.

Analysis

Similar to the component above, while absolute numbers were calculated, and may be important, analysis on this component was mainly focused on owner-occupation rates in the sub-groups of interest (i.e. single-family and multi-family properties).

4.07 Owner-Occupied & Non-Owner-Occupied MF Foreclosure Rates

This section compared differences in foreclosure rates of owner-occupied (OO) and non-owner-occupied (NOO) multi-family properties in Manchester and Nashua.

Objective

This section is the core of the study. This study sought to learn if and how owner-occupation is associated with, or impacts on, multi-family housing foreclosure rates during depressed housing market conditions (2007 to 2008). The objective was to find out if there was association between owner-occupation and foreclosure rates in residential multi-family properties in Manchester and Nashua. The researcher hypothesized that during depressed housing market conditions owner-occupation rates are negatively correlated with foreclosure rates in residential multi-family properties.

Procedure

The procedure involved calculating and comparing the foreclosure rates of owner-occupied and non-owner-occupied multi-family properties over the two years 2007 and 2008, in the two NH cities. The data was extracted from Real Estate Sales data-set provided by Real Data Corporation of Manchester, New Hampshire.

On this data-set a query was formulated to identify the aggregate number of foreclosure sales from 2007 to 2008. The numbers that resulted from the query were then calculated into percentages. These rates were then compared between owner-

occupied and non-owner-occupied multi-family properties. The results are reported on under Chapter 5.

Research Hypothesis

The researcher hypothesized that, in depressed housing market conditions, foreclosure rates were significantly higher in non-owner-occupied than in owner-occupied residential multi-family properties.

Instrumentation

The researcher worked with quantitative data provided by Read Data Corporation of Manchester, New Hampshire.

Sample

Similar to above state, this component utilized up-to-date comprehensive (population) data-set, not sample data. This comprehensive dataset was used to determine and compare the foreclosure numbers and the foreclosure rates of owner-occupied and non-owner-occupied multi-family properties in Manchester and Nashua.

Analysis

This component constitutes the core of this research study. Descriptive statistics were calculated and compared to establish the differences between the foreclosure rates of owner-occupied and non-owner-occupied multi-family properties in Manchester and

Nashua. The study sought to find out if there were any significant differences between foreclosure rates of owner-occupied and non-owner-occupied multi-family properties.

4.08 Internal validity

Internal validity, defined as, "...the approximate truth about inferences regarding cause-effect or causal relationships.... is relevant in studies that try to establish a causal relationship..." (Trochim. 2001. p. 172). This study seeks to establish causal relationship between owner-occupation rates and foreclosure rates amongst residential multi-family properties in Manchester and Nashua, New Hampshire.

The three components discussed above sought to establish the following relationships:

- (i) Linkage of this research with previous studies. Comparison of foreclosure rates of residential single-family and multi-family properties in Manchester and Nashua, New Hampshire. This component examined whether multi-family properties in Manchester and Nashua had higher foreclosure rates compared to single family homes in line with the findings by Wardrip & Pelletiere (2008).
- (ii) Owner-occupation differences between multi-family and single-family properties. This component was based on the researcher's hypothesis that multi-family homes had higher rates of non-owner-occupation compared to single-family homes. Higher rates of non-owner-occupation were assumed to be associated with higher foreclosure rates. Owner-occupation was assumed to be associated with positive human behavioral patterns that positively impacted upon residential properties, communities and neighborhoods. In this light, the differences in foreclosure rates of single-family and

multi-family properties were assumed to be partly explained by variations in owneroccupation rates.

(iii) Owner-occupation matters in foreclosure rates of residential multi-families. Comparing multi-family properties, based on whether they are owner-occupied or non-owner-occupied, this component sought to identify and compare foreclosure rates of these multi-family properties. If foreclosure rates were significantly higher on non-owner-occupied multi-family properties compared to those owner-occupied, or a stronger case could be made claiming higher foreclosure rates could be explained by owner-occupation rate differentials between residential multi-family and single-family properties.

4.09 Quantitative Tests and GIS Mapping

Wardrip and Pelletier's (2008) study suggested two issues, interalia. First, residential multi-family properties were hypothesized to be clustered in poor and less desirable neighborhoods, and second, they suggested that there were no differences in foreclosure rates of owner-occupied and non-owner-occupied multi-family properties.

Testing to find out if there is any clustering and if there are any differences between owner-occupied and non-owner-occupied residential multi-family properties requires mapping. Mapping was, therefore, done for all neighborhoods in Manchester, NH. Mapping reveals which neighborhoods have significant numbers of residential multi-family properties and how these properties are geographically distributed. Mapping also

reveals residential multi-family properties in the city of Manchester classified as owneroccupied and non-owner-occupied. Findings on mapping are reported under Chapter 6.

4.10 Operationalization of Broken Windows theory

4.10.1 Systematic Random Sampling

Systematic Random Sampling is the sampling method used for the selection of the two samples totaling 40 properties for the hypothesis testing (independent Samples t-test). How the Systematic Random Sampling was carried out is explained in detail on Appendix Number .

4.10.2 Independent Samples t- testing (hypothesis testing) was carried out on the observed scores of the five dimensions / indicators (i) Windows' condition, (ii) External facades (Siding and Painting), (iii) Driveway, (iv) Landscaping, and (v) Roof condition as shown on Appendix Number 1. The results are reported in Chapter 6.

4.11 Comparison of MF Properties Categorized by Number-of-Units

The proposition underlying the comparison of multi-family properties by number-of-units (i.e. 2-units, 3-units and 4-units) is the researcher's hypothesis that in depressed housing markets, foreclosures are affected by a multiplicity of factors, including high vacancy rates, lower rents receivable to landlords or homeowners occupying their multifamily homes. These and other situations affecting cash flows to the homeowner contribute to increased mortgage default risk to multi-family homeowners.

Depending on whether a building is 2-unit, 3-unit or 4-unit there are expectations on the part of both homeowners and bankers that owners will cover their mortgage payments partly from cash streams from the rental units. For a 2-unit multi-family property, if it is owner-occupied the expected external financial contribution (from tenant rent) is only for the one unit being rented out. In this case 50% of rental space is occupied by owner and 50% is rented out.

Thus, if an owner-occupying homebuyer acquires a duplex (2-unit multi-family) they are expecting rental income from only one unit which they usually have to top up to be able to cover the monthly PITI (principal, interest, taxes and insurance) mortgage payment. If they have a 3-family they are expecting rental income from two units. The same goes for an owner-occupier who buys a 4-unit multi-family building. The difference is that for a 4-unit multi-family property the homeowners expect rental income from three (3) tenants.

In a real estate rental market where the vacancy rates are high and increasing and where rents are going down, it is hypothesized that owners of larger units (3 and 4 unit multi-family properties) are most likely going to have higher foreclosure rates than the homeowners who own smaller units (2-unit multi-family properties), especially amongst owner-occupying homeowners. At least one of the bankers interviewed for this research study indicated that the people who tended to have higher vulnerability to foreclosures were those who had bought multi-family properties through one of the *low-down-payment* financial products the bank was involved in with one of the Housing Finance

Authorities. It was observed that most of the people in this target group were struggling to meet their monthly mortgage payments as the vacancy rates in Manchester got higher. An estimate from the Report of the Mayor's 2008 Task Force estimated the vacancy rate at up to 9% as at December 2008.

To test the above proposition the researcher analyzed the multi-family housing stock in Manchester by categories of 2, 3 and 4 family units. Each of the three groups is analyzed relative to the total number of foreclosures over the period 2007 and 2008. The objective is to find out if there is a significant difference in the rates of foreclosures in each of the three categories.

4.12 Qualitative and Exploratory Part

The third component looks at collecting and analyzing qualitative data on perceptions of residential housing stakeholders. Detailed interviews were held with key informants representing major institutional stakeholders that fund and support single-family and multi-family housing in New Hampshire.

Qualitative research was used in Part 3 mostly to address and answer issues that could not be exclusively answered by the quantitative calculations employed on parts 1 and 2, and to verify, confirm, and / or test the validity of findings from the quantitative parts of the study.

Procedure

Part 3 was qualitative and exploratory in nature. It consists of a survey of the perceptions of key informants representing the main institutional stakeholders financing and supporting single-family and multi-family homeownership in New Hampshire. The purpose was to seek explanations, further enlightenment and elaboration to the results of the quantitative parts of the research study.

Instrumentation

Qualitative Data collection techniques: Two research techniques were used to collect data for this research: (i) in-depth (or detailed) interviews with key informants; and (ii) participant observations by the researcher.

The main advantages of using in-depth key informant interviews in research include, but are not limited to, the following:

Quality of data - eliciting in-depth and rich information. Unlike quantitative research that tends to deal with large numbers in terms of respondents, in-depth interviews, as the concept suggests, often deals with fewer subjects but delves deeper, yielding richer and more detailed information:

Time utilization - effective and efficient time use. Because the number of subjects observed or respondents interviewed is relatively smaller, time is saved while greater detail is achieved in the process;

Scope and Depth - can provide a lot of information in one or just a few interviews.

Steps were taken to mitigate the two commonly cited disadvantages of in-depth key informant interviews which are:

Research bias because of the people selected for interview, and / or the individual or group interests they represent; and

Misrepresentation of the larger population of interest.

The researcher took deliberate action to ensure that representatives of as many stakeholder interest groups as possible took part in key informant interviews. The short-listed institutions included the following: developers, builders, bankers, State and Local government authorities, homeownership advocates, homeowners and homeownership scholars and researchers.

To ensure that broad and balanced representation of stakeholder perceptions was achieved the final question for all key informants interviewed was "...In your opinion, who amongst the main homeownership stakeholders you know of in Manchester and Nashua, or in New Hampshire as a whole, holds significantly different views from your personal views or the views of your agency or institution on multi-family housing?" The researcher followed up on the leads provided in answer to this question. This is how the list of key informants interviewed grew from 15 to 26 and finally to 29.

Type of Sampling Used:

Representatives from diverse interest groups were identified through non-probabilistic purposive and snow-ball sampling. Non-probabilistic purposive sampling is "... a method of selecting those individuals who are most likely to provide information-rich or fruitful data..." (Girden. 2001. p. 29). In this study the people that were shortlisted for

key informant interviews had to have intimate knowledge of the real estate market in general, and residential multi-family properties, in particular.

Snow-ball sampling was used once the initial listing of key stakeholder institutions and individuals was established by the researcher. The shortlisting of key stakeholder institutions and individuals was done through identifying the key actors under each of the following stakeholder groups: Multi-family homeowners; Bankers; State and local government authorities; Homeownership advocates and activists; Homeownership scholars / researchers. This list was developed after wide consultation with persons familiar with real estate issues in New Hampshire. A list of organization that were represented at the August 2008 and September 2009 Annual Housing Conference convened by New Hampshire Housing Finance Authority was used as a basis of gleaning who are the major actors in the Housing Industry in the state of New Hampshire.

Once this shortlist was developed contact was made with various institutions shortlisted by the researcher to seek who would be the best person to represent each specific institution as a key informant. Detailed information was sent to the representative of the organization about the topic, findings from quantitative analysis and areas of further inquiry as well as proposing dates for meeting with the researcher. The enthusiasm was palpable in most cases. After each meeting the respondent was asked whether she / he could identify other organizations that would be helpful in providing data on the issues discussed apart from those listed on paper read to them. To preclude "group-think" of a

few organizations with similar policies there was also an explicit indication by the researcher that the key informant should make an effort to consider those organizations and / or individuals that do not necessarily share the same policies with their own. This is where the snow-ball sampling technique came in.

Snow-ball sampling is a form of sampling in which existing sample members suggest potential new sample members (Trochim. 2001). It is reference based sampling where the researcher is referred to additional respondents by the respondents who have been interviewed.

Broad and Balanced Representation

To ensure broad and balanced representation of stakeholder group perceptions there was a deliberate effort to ensure that key informants with varied and different viewpoints and interests were invited to, and did, participate in the in-depth key informant interviews.

Analysis

The interviews were audio-recorded after seeking explicit permission from the respondent / key informant. Where permission was not granted, detailed notes were taken by the researcher, who was the sole interviewer in this study. Transcribed notes were archived as appropriate. Key observations were written down on-the-spot or immediately after each interview to ensure that key non-verbal cues and other readings observed during the interview were retained in the written report as appropriate.

Content analysis was done first using ENVIVO and then manually looking through themes line by line. ENVIVO was useful to quickly identify general themes touched on by the more than 50 percent of the respondents, for example, issues to do with subprime mortgages, costs of heating fuel, property values decimation and high taxation appraisals. After identifying these general themes significant issues raised by a minority of key informants were manually identified by line-to-line analysis.

4.12.1 Trustworthiness and Transferability

Trustworthiness in qualitative research refers to how the research can be made significantly valid in the eyes of other people, including other researchers and stakeholders. Transferability refers to the degree to which the results of qualitative research can be generalized or transferred to other contexts or settings (Trochim. 2001).

From a qualitative perspective transferability is primarily the responsibility of the one doing the generalizing. The qualitative researcher can enhance transferability by doing a thorough job of describing the research context and noting the central assumptions to the study. The person who wishes to transfer the results to a different context is then responsible for making the judgment of how sensible the transfer is, given what the researcher has disclosed about research context and other research relevant factors.

4.12.2 Dependability

The notion of dependability denotes the need for the researcher to account for the everchanging contexts within which the research occurred. Triangulation was used to enhance the trustworthiness and dependability of the research. Triangulation refers to using multiple means to converge to a given end (for example, using interviews with key informants, participant observation, literature review to study various aspects of the same phenomenon). Triangulation in this case, therefore, involved comparing and reconciling observations of homeowners and CED scholars on specific aspects relevant to the topic, doing quantitative analyses, carrying out field tests including mapping and exterior assessments of randomly sampled owner-occupied and non- owner-occupied residential multi-family properties.

In pursuit of dependability the researcher ensured that the research process is clearly documented and auditable. In line with Girden (2001) "...an auditable decision trail is kept to enhance dependability... [this] includes memos, all data-reduction products, data interpretations and all data reconstruction products..." (p. 33).

For this study the researcher clearly described the process and changes that occurred in the research and the settings where research was carried out and how these changes affected the way the study research went on and was concluded.

4.12.3 Confirmability

Qualitative research assumes that each researcher brings a unique perspective to the study. Confirmability refers to the degree to which the results could be confirmed or

corroborated by others (Trochim. 2001). There are a number of strategies to enhance confirmability. The researcher documented the procedures for checking and re-checking the data throughout the study (e.g. all interviews were audio-recorded with explicit permission from the respondents and clearly labeled. Audio tapes were archived as appropriate).

4.12.4 Qualitative Research Rigor

Specific methodological strategies taken to ensure and demonstrate qualitative rigor include the following:

- (i) Audit trail: maintaining effective records and audio-tapes
- (ii) Confirming results with participants.
- (iii) Peer debriefing.
- (iv) Prolonged engagement with participants.
- (v) Triangulation.

To enhance research rigor, all the above five techniques were employed in this study.

4.12.5 External validity

External validity refers to the degree to which the conclusions of the study would hold for other persons in other places and at other times. (Trochim. 2001. p. 347). Findings may be generalizable to Manchester and Nashua and other cities that have comparable real estate market situations to that of these two NH cities.

4.12.6 Reliability of the Study

Similar to Rivera's 2006 dissertation study (p. 62) reliability in this study was ensured by the taking the following steps:

- (i) The use of secondary data from official data-sources. Data used was mainly provided by Real Data Corporation of Manchester, which gathers and processes data and provides information regularly and consistently to various local authorities in the state of New Hampshire. Both the Manchester and Nashua Board of Assessors' Offices provided updated data;
- (ii) Interviews were undertaken exclusively by the researcher, thereby significantly enhancing the level of consistency in data gathering and field observations;

 The maps were produced using the mapping codes, lot numbers, neighborhood names and other concepts that the city of Manchester uses in its day-to-day delivery of business and social services to the residents of the city. This allows for replicability of

4.13 Limitations

study as appropriate.

(i) External Validity: The generalization of findings may apply to multi-family properties in Manchester and Nashua, and other cities that have comparable real estate situations to that of the two New Hampshire cities.

Chapter Five: Results and Findings

5.01 Introduction

As explained in Chapter 4 (on Methodology) this study is organized into three research parts. The first two parts are quantitative. The third part is qualitative and exploratory. Chapter 5 presents results of Part 1 and Part 3, linking them to the three research questions and the three hypotheses as presented in the foregoing chapters. Part 2 is mainly quantitative, results of which are presented in chapter 6.

The three hypotheses that were tested are presented below together with the context within which they were formulated.

Hypothesis 1: Residential multi-family property foreclosure rates are significantly

higher than those of single-family properties (building on Wardrip &

Pelletiere's 2008 study).

Hypothesis 2: Residential multi-family properties have significantly higher rates of

non-owner-occupation than single-family properties (Coulson et al.

2003).

Hypothesis 3: During depressed housing market conditions owner-occupation

significantly affects the foreclosure rates of residential multi-family

properties (Adding value to theory).

The three questions that were answered are:

Question 1. Do residential multi-family properties have higher foreclosure rates

compared to single-family properties in Manchester and Nashua,

New Hampshire?

Question 2 Are there significant differences in owner-occupation rates between

multi-family and single-family properties in Manchester and

Nashua, New Hampshire?

Question 3. Are there significant differences in the foreclosure rates of owner-

occupied and non-owner-occupied residential multi-family

properties in Manchester and Nashua, New Hampshire?

5.02 Results on Quantitative Comparisons

Because of their specificity Part 1 sections (i), (ii), and (iii) are quantifiable. For that reason quantitative calculations and analyses adequately answer questions 1 and 2 stated above. Notably, these calculations are based on actual figures, and not statistical approximations. The raw data on the two cities, Manchester and Nashua, was provided by Real Data Corporation of Manchester, New Hampshire.

5.02.1 Comparing Foreclosure Rates of Multi-Family and Single-Family Properties

This section compares foreclosure rates of multi-family and single-family properties in

Manchester and Nashua, New Hampshire.

Question 1.

Do residential multi-family properties have higher foreclosure rates compared to single-family properties in New Hampshire?

This question was the entry point to the entire study. The researcher sought data on the two NH cities, Manchester and Nashua, and compared the foreclosure rates of multifamily and single family properties over a two year period, 2007 and 2008. The objective was to find out if Wardrip & Pelletiere (2008) study which found that multi-family properties are foreclosing at significantly higher rates in parts of the New England Region held true for these two New Hampshire cities.

Why were Manchester and Nashua selected as case studies?

Manchester, with a population of about 110,000, is the largest city in New Hampshire New Hampshire, based on population. Nashua, at 87,000, is the second largest city in the state. The researcher wanted to study a maximum of two cities in New Hampshire. Manchester and Nashua were selected on the basis of their larger populations and with the hope that research findings on them would have relevance for and potentially benefit, more people.

Results: Table 5.1 below shows the figures and rates relating to single-family properties and their foreclosure rates in Manchester and Nashua during the period 2007 and 2008.

Table 5.1 Single-Family (SF) Properties – 2007 and 2008 Foreclosures in Manchester and Nashua, New Hampshire.

Row #		Mancheste	er		Nashua		
02		(2009 Population = 110,000)			(2009 Population = 87,000)		
03		Number	Fore- closure Rate	% Δ 2007 to 2008	Number	Fore- closure Rate	% Δ 2007 to 2008
04	Total Number of SF Homes	16,928 (100%)			15,057 (100%)		
05	Foreclosed SF Homes 2007	146	0.86%		119	0.79%	
06	Foreclosed SF Homes 2008	221	1.31%	51.37%	185	1.23%	55.46%

Legend:

 Δ = Change

SF = Single-Family Property
MF = Multi-Family Property

On table 5.1 the foreclosed single-family properties are presented both as absolute numbers and as percentages of the total residential single family property stock.

The year 2007 is considered as the first year of the current depressed housing market cycle (New Hampshire Housing Finance Authority. 2008). The US nation-wide housing market correction was still continuing as work on this research study concluded in October 2010.

In May 2009 the total number of single family homes for Manchester was 16,928 and that of Nashua was 15,057. Of these 146, or 0.86%, and 119, or 0.79%, were foreclosed in 2007 in Manchester and Nashua, respectively. During the following year (2008) 221 (or 1.31%) and 185 (or 1.23%) of single family properties were foreclosed in Manchester and Nashua respectively. These numbers show quite significant year-on-year, 2007 to 2008, increases for both cities at 51% and 55% for Manchester and Nashua respectively.

Table 5.2 below shows that at the end of May 2009 the total number of multi- family homes in Manchester was 4,622 and that of Nashua was 2,249. Of these 89 (1.93%) and 39 (1.73%) were foreclosed in 2007 in Manchester and Nashua respectively. In the following year, 2008, an additional 131 (or 2.83%) and 67 (or 2.98%) multi-family properties were foreclosed in Manchester and Nashua respectively.

Similar to the trend with single family properties reflected on table 5.1, table 5.2 on residential multi-family foreclosures shows highly significant year-on-year, 2007 to 2008, increases for both cities at 47.19% and 71.79% for Manchester and Nashua respectively.

Table 5.2: Residential Multi-Family (MF) Properties – 2007 and 2008 Foreclosures in Manchester and Nashua, New Hampshire.

Row #		Manches	ster			Nashua			
02		(2009 Population = 110,000)			(2009 Population = 87,000)				
03		No.	Fore- closure Rate	% 2007 2008	$_{to}^{\Delta}$	No.	Fore- closure Rate	% 2007 2008	$rac{\Delta}{to}$
04	Total Number of MF Homes	4622 (100%)				2249 (100%)			
05	Foreclosed All MF Homes 2007	89	1.93%			39	1.73%		
06	Foreclosed All MF Homes 2008	131	2.83%	47.19°	%	67	2.98%	71.79%	%

Legend: Δ = Change

SF = Single-Family Property
MF = Multi-Family Property

At 0.86% and 0.79% respectively Manchester and Nashua 2007 foreclosure rates of single family homes are significantly less than those of multi-family property foreclosures in the same cities at 1.93%. and 1.73% respectively. Remarkably, single family properties' foreclosure rates are less than half of the residential multi-family property foreclosure rates in both cities.

In 2008 Manchester and Nashua foreclosure rates of single family homes at 1.31% and 1.23% were significantly less than those of multi-family property foreclosures in the same cities which were at 2.83% and 2.98% respectively.

Table 5.3, below, presents the figures for multi-family and single family properties for Manchester and Nashua side-by-side.

Table 5.3: Combined Single-Family (SF) and Multi-family Properties – 2007 and 2008 Foreclosures in Manchester and Nashua, New Hampshire.

Row #		Manchester			Nashua		
02.		(2009 Population = 110,000)			(2009 Population = 87,000)		
03.		Number.	Fore- closure Rate	% Δ 2007 to 2008	Number	Fore- closure Rate	% \(\Delta \) 2007 to 2008
04.	Total Number of Single Family Homes	16,928 (100%)			15,057 (100%)		
05.	Foreclosed Single Family Homes 2007	146	0.86%		119	0.79%	
06.	Foreclosed Single Family Homes 2008	221	1.31%	51.37%	185	1.23%	55.46%
07.	Total SF & MF Foreclosures 2007 and 2008	367			304		
08.	Average SF & MF Foreclosures 2007 and 2008		1.09%			1.01%	
09.	Total Number of MF Homes	4632 (100%)			2249 (100%)		
10.	Foreclosed MF Homes 2007	89	1.93%		39	1.73%	
11.	Foreclosed MF Homes 2008	131	2.83%	47.19%	67	2.98%	71.79%
12.	Total Foreclosures 2007 and 2008	220			106		
13.	Average Foreclosures 2007 and 2008		2.38%			2.36%	

Legend: Δ = Change

SF = Single-Family Property
MF = Multi-Family Property

The observed foreclosure rate differentials between residential multi-family and single-family properties in Manchester and Nashua, NH, are significant in several ways:

- (a) In both years, i.e. 2007 and 2008, multi-family properties have foreclosure rates that are more than double those of single family properties. In Manchester the average foreclosure rate for the two years (2007 and 2008) combined for multi-family properties is 2.38% compared to 1.09% for single-family properties. In Nashua the multi-family average foreclosure rate for the two years, 2007 and 2008, comes in at 2.36% compared to an average of 1.01% for single-family properties.
- (b) The population count of multi-family properties in Manchester, New Hampshire, is only about 27% compared to that of single-family properties in the same city. However, in terms of foreclosure numbers multi-family properties contribute 60 percent to the total number foreclosures in the city.
- (c) The above observation is further magnified by the fact that multi-family residential properties, by definition, are made up of more than one family unit or one family apartment. Since we are focused on multi-family properties ranging in size from 2- to 4-units, this means the numbers of residential family apartments (or family units) effectively involved under the multi-family category are significantly understated in the above comparisons. To get the accurate number of family units in residential multi-family properties one needs to multiply the number of 2-unit multi-family properties by 2, multiply the number of 3-unit multi-family properties by 3, and multiply the number of 4-unit multi-family properties by 4. Finally one needs to add up the 3 sub-totals from 2-, 3-,

and 4-unit sub-totals to get the total number of family units within a given number of residential multi-family properties.

- (d) The above results adequately show that, in both cities, Manchester and Nashua, multi-family property foreclosure rates are significantly higher than those for single-family properties.
- (e) The results presented here are in agreement with the research hypothesis formulated for this study as stated above. The results are also in agreement and serve to confirm those of Wardrip & Pelletiere (2008) in their New England study where they found that multi-family properties had significantly higher foreclosure rates compared to single family homes.

At this point of the study the first hypothesis and the first research question have been affirmatively answered.

The study moves to the next part. Part 1 Section (ii) requires quantitative calculations to satisfy both hypothesis 2 and question 2 (as stated on page).

5.02.2 Multi-Family and Single-Family Owner-Occupation Rates

This section compares the differences in owner-occupation rates between multi-family and single-family properties in Manchester and Nashua, New Hampshire.

Part 1 section (ii) compares owner-occupation rates of multi-family and single-family properties in Manchester and Nashua. The objective is to find out if multi-family properties have significantly lower rates of owner-occupation compared to that of single-family properties. The hypothesized higher rates of non-owner-occupation rates amongst multi-family properties is thought to be *part of* the main explanations why multi-family properties have higher foreclosure rates compared to single family properties.

For Part 1 section (ii) the researcher sought quantitative data on the two NH cities, Manchester and Nashua, New Hampshire. The question of whether a residential property is owner occupied or not, was not readily ascertainable in available data-sets as they were.

Explanation of the method that was used to distinguish between owner-occupied and non-owner-occupied single-family and multi-family properties is presented. The results are presented on Table 5.4 below:

Out of a total of 16,928 and 15,057 single family (SF) properties in Manchester and Nashua only 619 (or about 4%) and 494 (or about 3%) of the SF properties in these cities respectively, are non-owner-occupied. This leaves 16,309 (or about 96%) and 14,563 (or about 97%) of the single-family property stock in Manchester and Nashua, respectively, as owner-occupied.

Table 5.4: Multi-Family and Single-Family property Owner-occupation (OO) Figures and Rates for Manchester and Nashua, New Hampshire.

Row #		Manchester	Nashua
02		(2009 Population = 110,000)	(2009 Population = 87,000)
03	Total Number of Single Family Homes (May '09)	16,928 (100%)	15,057 (100%)
04	Number of Owner-Occupied (OO) Single Family Homes	16,309 (96.34%)	14,563 (96.72%)
05	Number of Non-Owner- Occupied (NOO) Single Family Homes	619 (3.66%)	494 (3.28%)
06	Total Number of MF Homes	4,622 (100%)	2,249 (100%)
07	Number of Owner-Occupied MF Homes	3,618 (78.28%)	1,770 (78.70%)
08	Number of Non-Owner- Occupied (NOO) MF Homes	1,004 (21.72%)	479 (21.30%)

Legend: Δ = Change

SF = Single-Family Property
MF = Multi-Family Property

On the other hand, out of a total of 4622 and 2249 multi-family (MF) properties in Manchester and Nashua up to 1004 (or about 22%) and 479 (or about 21%) of the MF properties in the two cities, Manchester and Nashua, are non-owner-occupied. This means 3618 (or about 78%) and 1770 (or about 79%) of residential multi-family properties in Manchester and Nashua, respectively, are owner-occupied.

The figures above show differentials in owner-occupation rates of between 1 to 5 and 1 to 7 for Manchester and Nashua respectively. It means, therefore, for one non-owner-occupied single-family property there is on average five non-owner-occupied multifamily properties in Manchester. In Nashua for every one non-owner-occupied single family property there are on average seven non-owner-occupied multi-family properties.

By any standard these are very significant differentials, more so given that multi-family properties, by definition, have more than one residential apartment. Residential multi-family properties covered in this study range in size from 2 to 4 units.

These findings are in keeping with the hypothesis cited earlier, the one that says: In general multi-family properties tend to have significantly lower owner-occupation rates compared to single family properties.

The above calculations and quantitative analyses made for Section 2 of Part 1 affirmatively and effectively answer research question number 2 "Are there significant differences in owner-occupation rates between multi-family properties and single-family properties?"

Thus, results from Part 1 section (ii), interalia, show the following:

- (a) that there are significant differences in rates of owner-occupation between single family and multi-family properties in Manchester and Nashua, New Hampshire;
- (b) that, going by the data from Manchester and Nashua, New Hampshire, there are relatively very high rates of owner-occupation of 96% and 97% respectively, amongst single family properties in the two cities;
- (c) that non-owner-occupation in Manchester and Nashua at 22% and 21%, respectively, for multi-family properties, is a unique feature amongst multi-family properties;
- (d) Amongst single-family properties, where the non-owner-occupation prevalence rate is at 4% and 3% for Manchester and Nashua, respectively, the issue of nonowner-occupation does not pose a significant problem. Non-owner-occupation poses a significant problem to multi-family properties because the level of nonowner-occupation is significantly higher within this segment;

The above observations are an effective spring-board into Part 1 section (iii) which focuses exclusively on the conceptual intersection of multi-family properties, owner-occupation / non-owner-occupation and foreclosures in depressed housing market conditions (study focuses on the time period 2007 and 2008).

5.02.3 Owner-Occupied and Non-Owner-Occupied Multi-family Foreclosure Rates

This section compares the foreclosure rates of owner-occupied and non-owneroccupied multi-family homes in Manchester and Nashua, New Hampshire.

Sub-topic 5.02.3 touches on the core thesis of this study, which is finding out whether owner-occupation is associated with residential multi-family properties' foreclosure rates during depressed housing market conditions (2007 to-date). The objective is to find out if there are significant relationships between owner-occupation / non-owner-occupation and foreclosure rates in the residential multi-family housing markets of the two New Hampshire cities; Manchester and Nashua. Section (iii) of Part 1 is where this research study seeks to add value to the body of existing knowledge on homeownership.

Under the Sub-topic 5.02.3 the researcher sought quantitative data on multi-family properties in Manchester and Nashua, New Hampshire. The quantitative data was analytically dissected from various perspectives, both quantitatively and qualitatively. The finding made is not necessarily a causal one, but one that focuses on associations between residential multi-family properties, non-owner-occupation rates and foreclosure rates. This researcher hypothesizes that there is significant negative correlation between owner-occupation and foreclosure rates in residential multi-family real estate markets, especially during depressed housing market conditions (in this case during the period 2007 to 2008). Alternatively expressed, the higher the owner-occupation rates, the lower the rates of foreclosures, in the respective neighborhoods.

For quantitative data analysis purposes the two year period, 2007 and 2008, is covered. The qualitative and exploratory component covers the period 2007 up to the end of May, 2010. May 2010 was the last month the researcher went out to interview key

informants. Table 5.5 below shows the absolute numbers and the percentages as appropriate.

Table 5.5: Differences in foreclosure Rates Between Owner-occupied and Non-Owner-Occupied Multi-Family Homes during the two – year period from 2007 to 2009.

Row #		Manches	ter		Nashua		
02		(2009 110,000)	Population		(2009 Population = 87,000)		
03		No.	Fore- closure Rate	% Δ 2007 to 2008	No.	Fore- closure Rate	% Δ 2007 to 2008
04	Total Number of MF Homes	4622 (100%)			2249 (100%)		
05	Number of Owner-Occupied (OO) MF Homes	3618 (78.28%)			1770 (78.70%)		
06	Foreclosed OO MF Homes 2007	7	0.19%		2	0.11%	
07	Foreclosed OO MF Homes 2008	12	0.33%	71.43%	8	0.45%	300.00%
08	Total Foreclosures 2007 and 2008	19			10		
09	Average Foreclosure Rate 2007 and 2008		0.25%			0.28%	
10.	Number of Non- Owner-Occupied (NOO) MF Homes	1004 (21.72%)			479 (21.30%)		
11.	Foreclosed NOO MF Homes 2007	82	8.17%		37	7.72%	
12	Foreclosed NOO MF Homes 2008	119	11.85%	45.12%	59	12.32%	59.46%
13.	Total Foreclosures 2007 and 2008	201			96		
14.	Average Foreclosure rate 2007 and 2008		10.01%			10.02%	

Legend:

 Δ = Change

SF = Single-Family Property
MF = Multi-Family Property

The following results are apparent from table 5.5

(a) In line with national trends there was a significant increase in rates of foreclosures of both owner-occupied and non-owner-occupied multi-family homes from 2007 to 2008 in both cities. Manchester saw an increase of 71% for owner-occupied and 45% for non-owner-occupied from 2007 to 2008. Nashua had an increase of 72% for owner-occupied and 300% for non-owner-occupied over the two years, 2007 to 2008, respectively.

The rate of foreclosures of non-owner-occupied multi-family homes during the period under review (2007 and 2008) averaged at about 10% for both Manchester and Nashua. Compare the 10% foreclosure rate with that of owner-occupied multi-family properties in Manchester and Nashua that averaged 0.25% and 0.28% over the two year period, 2007 to 2008, and the foreclosure rate differentials between the two, non-owner-occupied (NOO) and owner-occupied (OO) multi-family properties, become spectacularly glaring.

These calculations clearly reveal that non-owner-occupation rates of multi-family properties in Manchester and Nashua, negatively correlate with foreclosure rates. Situations where owner-occupation rates are high are associated with lower foreclosure rates and where owner-occupation rates are low, foreclosures are much higher.

To gain further insights on why owner-occupation in multi-family residential properties has such negative correlation with foreclosure rates interviews were carried out with key informants. Findings from interviews with key informants are discussed below.

5.03 Results from Detailed Interviews with Key Informants

The main objective under this section is to report on results and findings of perceptions of key informants based on the detailed interviews conducted.

Main Research Question

Are there significant differences in the foreclosure rates of owner-occupied and non-owner-occupied multi-family properties in Manchester and Nashua, New Hampshire?

5.03.1 Key Informant Stakeholder Groups Interviewed

Key informants interviewed consisted of multi-family homeowners and representatives from major institutions associated with homeownership. A list of the institutions represented by the respondents is provided below as Table 5.6. The institutional stakeholders identified, whose representatives were interviewed, were all active players in the promotion, funding, research and study of homeownership programs in Manchester, Nashua or throughout New Hampshire. One agency covered Vermont, in addition to New Hampshire.

A total of 29 key informants were interviewed over a period of ten months. The sample was made up of 21 men and 8 women. Eleven out of the 29 key informants were

interviewed on more than one occasion, whenever there was need for continuous comparison, clarification and / or need for answer(s) to follow-up question(s).

Table 5.6: Stakeholder Groups Interviewed

Stakeholder Group	Number of People Interviewed
Multi-family homeowners	11
Bankers	3
State and local government authorities	4
Homeownership advocates	6
Homeownership scholars / researchers	5
Total Number of Key Informants	20
Interviewed	29 (21 men and 8 women)

(i) Multi-family Homeowners

In-depth interviews were held with 11 current and former multi-family homeowners.

They ranged in experience from failed first home buyers to experienced and successful residential multi-family property investors.

(ii) Bankers:

The researcher interviewed 3 banking officials from 3 banks in New Hampshire, two represented Credit Unions and one represented a large regional Commercial Bank.

(iii) Federal, State and Local Government Authorities

The 4 officials represented government authorities. One key informant represented HUD throughout the state of New Hampshire. Three represented city municipalities, Manchester (2) and Nashua (1).

(iv) Homeownership Advocates

Key informants interviewed represented Neighbor-Works for Greater Manchester, New Hampshire Housing Finance Authority (NHHFA), Neighborhood Housing Services of Greater Nashua and Consumer Credit Counseling Services (CCCS) for New Hampshire and Vermont. A total of 6 homeownership advocates were interviewed.

(v) Homeownership Scholars / Researchers

This researcher interviewed scholars and researchers with extensive academic and professional exposure to housing and / or homeownership issues from Southern New Hampshire University's School of Community Economic Development (SCED), Neighbor-Works for Greater Manchester, and New Hampshire Housing Finance Authority (NHHFA).

5.03.2 Questions Asked of Key Informants

The following four questions were asked to all key informants, except homeowners.

1. How do you explain the contemporary housing situation in Manchester and Nashua, New Hampshire, where non-owner-occupied residential multi-family properties are being foreclosed at significantly higher rates compared to single-family properties?

- 2. What, in your opinion, explains the significant differences between the foreclosure rates of owner-occupied and non-owner-occupied residential multifamily properties?
- 3. In your opinion, are there any significant differences in property upkeep, maintenance and repairs between owner-occupied and non-owner-occupied residential multi-family properties in terms of property quality?
- 4. What do you think about the advisability of promoting and supporting low-income to moderate-income residential multi-family homeownership? Kindly think about your answer in the context of a claim that owner-occupied residential multi-family properties are said to have significantly lower foreclosure rates compared to those owned by absentee landlords. Would you encourage or discourage low-income to moderate-income residential multi-family homeownership? Why or why not?

Understandably, answers from the respondents tended to fall in line with those of others from the same industry: banking, government advocacy. It was the scholars, researchers, and homeowners who gave substantively diverse responses.

Below is a discussion of the main ideas from the responses of key informants to the four open-ended questions listed above.

The responses from most respondents showed that there were three main causes that contributed to the high foreclosure rates, namely:

- (i) Inflated property taxes based on valuations significantly higher than current property valuations;
- (ii) High energy costs and heavy heating bills; and
- (iii) Increasing mortgage interest rates, especially on adjustable rate mortgages (ARMs), sub-prime risk-based loans and outright predatory loans.

(i) Taxes:

The re-appraisal of real estate properties in most New Hampshire cities around 2005 / 2006 saw values rising from an average of about \$50,000 for each 2 – 3 bedroomed multi-family apartment in 2001/2002 to about \$110,000 in 2005/2006 at the peak of the real estate market⁶. Valuations on the same properties that peaked at \$110,000 per unit in 2005/2006 are currently between \$30,000 to \$50,000 per unit.

One of the respondents, a former hard money lender⁷, who used to lend money to residential homebuyers before the practice was outlawed in New Hampshire in June 2009, told the researcher "... I can easily pick up a 3-unit or 4-unit multi-family property for anything between \$90,000 and \$150,000 right now...."

According to one of the key informants who heads an institution that helped many low-income to moderate-income homeowners acquire residential multifamily properties before the real estate burst "...Four-unit residential multi-family properties in reasonable physical condition appraisals ranged from \$300,000 to \$500,000 at the peak of the real estate boom in 2005 to 2006...Now we are buying them at \$70,000 to \$120,000...."

⁶ These multi-family price figures are reliable. They were disclosed by a CEO of an agency that has been active in buying and selling low-income to middle-income residential multi-family properties as part of its neighborhood revitalization programs since the early 1990s.

⁷ A hard money lender is a person who lends cash out at relatively higher interest rates, normally as bridging capital before conventional financing is secured. This practice was outlawed in New Hampshire, from July 1, 2009.

It became quite clear that high property tax assessments arising from inflated property valuations made at the peak of the real estate boom were creating affordability problems to some residential multi-family homeowners. There were significant differences between the assessed valuations being used by the Tax Departments and the current market valuations of most properties in Manchester and Nashua.

This has created significant financial burdens to multi-family property homeowners leading to higher mortgage default rates, which ultimately give rise to increased foreclosure rates. In normal macro-economic situations this burden would be easily passed on to tenants through increased monthly rents, but in the contemporary depressed economic scenario, where vacancy rates are high and increasing, and occupancy rates low and declining, residential monthly rents are declining. This puts further economic pressure on landlords' ability to break-even, let alone make a profit.

(ii) Fuel

In the Northeast, USA, gas prices peaked at just over \$4.00 per gallon in the summer of 2007. Multi-family properties in Manchester and Nashua are dominated by older housing stock. In general older properties are not well insulated and are significantly less energy efficient than new construction. Because they are less energy efficient, it costs significantly more to heat multi-family properties through the cold New England winters. According to one key informant "...Many homeowners who lost their homes had anticipated all their other living expenses, except for the heating bills that shot out through the roof. The total monthly heating bills were exaggerated by the very high fuel costs in 2007 and part of 2008...."

(iii) Interest rates

The interviews also revealed that annual interest rates on conventional mortgage financing have been relatively low, at not more than 6.500% per annum, for a borrower with a credit score of 620 or better. However, since 2001, there was increasing and wide-spread use of non-conventional mortgages especially for sub-prime and some refinancing borrowers. Non-conventional mortgages include, but are not limited to, interest only mortgages; jumbo rate mortgages; balloon payment mortgages; teaser rate mortgages, and 1-, 3- and 5-year adjustable rate mortgages (ARMs). These and others of their ilk are distinguished from the conventional fixed-rate 30-year and 15-year mortgages because of the variability and unpredictability of monthly amounts payable over time. While conventional rate mortgages are structured in a manner that assures the borrower of fixed monthly mortgage amounts (principal and interest only) over the total duration of the term of the loan, non-conventional loans tend to provide lower payable monthly amounts at the beginning of the loan term. The payments can rapidly spiral up once a certain defined time period has elapsed depending on the nature of agreement. This could be anything from 1 to 5 (sometimes 7) years for ARMs. After the set period payments fluctuate up and down depending on an agreed index, prevailing prime rate, and agreed maximum mark-up limits above the prime rate.

Key informants, familiar with mortgages, reported "...from mid 2006 to the beginning of 2008 adjustable rate mortgages (ARMs) have been adjusting upwards..." Key informants talked about adjustable interest rates rising from as low as 2% (teaser rates) to as high as 14.500% per annum. While the above figures look extreme, in general,

interest rates do not have to rise that dramatically to create serious shocks and real risks for default amongst homeowners. One key informant explained to the researcher the following scenario.

If one had a 3-year ARM at 4.75% per annum on \$230,000 at the beginning of 2004 that rate can rise to 7% or 7.50% at the end of the 3-year period. PITI (Principal, Interest, Taxes and Insurance) payment can rise from \$1,650.00 per month to over \$2,100.00... It is for the above reason that compound interest is sometimes referred to as the eighth wonder of the world....

Other Reasons

(iv) The type of tenants that live in the rental building.

Seven of the respondents said that whether one lives in the multi-family or not has significant implications for the behavior of tenants living in the rental building. What one homeowner said below sounded representative of what the other 6 respondents said.

I live in the building.... I will not allow anyone come into the building, where my two daughters and wife live with me, without doing thorough background checks on any applicant. If I did not live in the building I may not care that much...I would simply consider the tenant's ability to pay.

It became very clear from most respondents that there are significant differences in selection criteria for tenants when the landlord lives on the property compared to where the landlord lives elsewhere. When the landlords live in the same building they tend to invest more time in choosing who will be their next-door neighbors. Because of the differences in the character of the tenants, there are likely to be differences in the tenants' paying patterns.

- (v) The landlord's Timeliness and Frequency in Showing Up to Collect Rent.

 For owner-occupying landlords, geographical proximity to tenants, who live in the same building with the landlord, makes for better chances of timely and regular rent payments.

 There are significant differences between owner-occupying landlords and absentee landlords in terms of timeliness and ability to show-up and collect rent when it is due.
- (vi) Owner-occupants live in the multi-family. It is their home, not just an investment

 The fact that the owner-occupying landlord stays in the multi-family home and does not
 have any alternative home to go to is clearly stated in what one homeownership
 advocate said to the researcher.

Where is the homeowner going to go once they leave their home, their multifamily building as you say it, even if the figures do not work out profitably for them... Investor landlords, who live in another house, most probably a singlefamily property, have an alternative. They do not have to keep on throwing money down the drain if the investment property is not financially breaking even...

This sentiment was mentioned by 23 of the 29, (79%) respondents interviewed. This attitude, reflective of the Meaning of Home theory, is evidently a major explanatory variable for the differences in foreclosure rates between owner-occupied and non-owner-occupied multi-family properties.

It became clear during the in-depth interviews with key informants that some multifamily investors are not being foreclosed out of inability to pay for their mortgages. According to one of the respondents

Some homeowners will have seen that it does not make business or financial sense to keep on paying for a multi-family property that is underwater, with no signs that the economic situation will soon turn around for the better...

(vii) Some Homeowners Hiding Behind the Corporate Veil.

There are differences between the credit-worthiness of business entities and personal creditworthiness. The business / corporate legal entity veil allows individual investors to declare bankruptcy or get foreclosed without necessarily damaging their personal creditworthiness. As one respondent put it "... those that have other homes normally have them registered in corporate names or under a spouse's maiden name".

According to 4 of the respondents, there was cause to believe that some property investors / absentee landlords ensured that they register the ownership of the investment property under a legal business entity that is independent and separate from the investor's name. As one homeownership advocate put it:

Business people know how to play the game, when to get out and when and how to come back into the game ...the people who are really hurt by this depressed real estate situation are the low income and lower-middle-income brackets. Those who are upper middle income and above have not been affected that much.

(viii) Neighborhood Stabilization organizations and Financial Institutions are more willing to work with owner-occupants in loan modifications and forbearances.

Homeownership advocates and the bankers revealed that banks, local authorities, politicians, and other agencies, as well as society in general, are more willing to negotiate and restructure mortgage loan situations with owner-occupiers. There tends to be more social sympathy for the owner-occupying landlord whose multi-family investment is also his / her primary residence than for the absentee landlord. Most progressive organizations such as NACA (Neighborhood Assistance Corporation of America) and Neighbor-Works will only work with an owner-occupier to restructure a

mortgage loan if the affected property is their primary residence and the only real estate property they own.

- Eleven of the respondents said that they thought there are significant differences in management styles of homeowners and management companies. Tenants respond differently to homeowners who live in the building and to Management Company officials. They indicated that compared to situations where the landlord lives in the building, the relationship between management companies and tenants is exclusively business. When the homeowner lives in the building, over time there tends to develop more personal relationships, and possibly varying levels of social capital, between the homeowner and the tenants. The relationship between an owner-occupying landlord and tenants was associated with more timely rent payments and less mortgage payment defaults.
- (x) Resident Homeowners have the Right and Motivation to Improve their Home.

 Quoting one of the self-described successful owner-occupants:

As homeowner I have very strong motivation to maintain, pay for and repair the building because I live in it. If I were an investor, and my finances are strained, there would be no incentive to keep on spending and getting deeper into debt for a house I do not live in.

Many respondents generally indicated that either they thought owner-occupants were significantly better at repairing and maintaining multi-family properties or they were not sure whether owner-occupation really mattered. Since this was a central issue for undertaking the research in the first place, it became important to develop an

instrument (Appendix 1) for gathering and measuring data. From this measuring instrument hypothesis testing, Independent Samples t - Test, was conducted as presented and reported in Chapter 6.

In answer to question 3 one banker responded as follows

When financing non-owner-occupying landlords... as a bank, we take that reality into consideration. We demand more down-payment from non-owner occupying landlords. The minimum we are demanding currently [May 2009) for non-owner occupying landlords is 20 to 30 percent plus closing costs. The logic of this hefty down-payment is that if someone is already financially invested to between 20% and 30% of total valuation of the [multi-family] property, they may not simply walk away from their investment [property].

Do large up-front financial outlays on absentee landlords offset owner-occupation? Would large up-front financial outlays sufficiently make the absentee landlord have higher levels of interest in their investment properties comparable to that of owner-occupants? This is an appropriate subject for further research. However, given that property values have gone done in some cases by more than 30 percent hefty deposits of up to 30% may not be sufficient deterrent for walk-aways.

Training for First-time Low-income to Middle-income Potential Homebuyers

The response from homeownership advocates was that if well-trained low-income to middle-income people should be able to successfully buy and manage multi-family properties, especially smaller residential multi-family buildings. At least three of the respondents thought that 4-unit multi-family properties and above are too large for someone who may be relatively new to real estate investment and management.

(xii) Mandatory Owner-Occupation Terms

There was a suggestion that whoever is assisted to buy a multi-family property should be encouraged to stay in the building before flipping it or moving out. This, it was argued, could be achieved through the use of carrots and sticks. One suggestion was that homeowners be given minimum occupy-and-hold periods within which if one vacates or sells the property, the financial subsidy extended to them would be fully or partially recoverable from the homeowner based on the length of time one held the property. Suggested mandatory owner-occupation periods of 5 to 10 years were suggested with graduated payback arrangements.

(xiii) The High Cost of Subsidizing Low-Income to Moderate-Income to Afford MFs Some respondents were concerned about the feasibility of low-income to moderate-income people being ever able to own and manage multi-family properties. They wondered about the cost of realizing this lofty goal. Respondents, however, generally agreed that neighborhood and community stabilization was very important.

Some respondents argued that the cities, and the state of New Hampshire, already had adequate policies that provided for owner-occupation. They thought that there was no need for more incentives for low-income to moderate-income people to buy homes if they are not able to succeed within the current policy framework.

Amongst the 29 key informants, the 3 bankers sounded more cautious and cited problems with mortgage insurance companies being extremely conservative during cycles of depressed housing markets. Banks become extra stringent in terms of the risks they could tolerate in response to mortgage insurance companies tightening up the approval process and terms of mortgage coverage, in the face of greater risk exposure.

(xiv) Most banks are relying on FHA qualifying loans

Because of the insurance problem banks are facing most banks are at present relying on Federal Housing Authority (FHA) qualifying loans. It is only FHA that does not adjust further downward the appraised values of properties in declining markets (e.g. Manchester and Nashua, New Hampshire). Thus mortgage financial institutions are looking more at government for help with insurance coverage of most of their customers than at any time in the recent past.

(xv) Strong agreement that cities, especially Manchester and Nashua, needed to do more to promote homeownership

There was, however, strong agreement that cities, especially Manchester and Nashua, needed to do more to promote homeownership because that has been the general engine of economic development at local and national level.

Chapter Six: Results of Tests and GIS Mapping

6.01 Introduction

Chapter 6 reports on results and analyses of two tests and Geographical Information System (GIS) mapping. The two tests reported on are: (i) independent samples t-test; and (ii) comparisons of foreclosure rates of residential multi-family properties grouped according to number-of-units (i.e., 2-unit, 3-unit and 4-unit). The third component reported on, GIS mapping, focused on the physical distribution of all residential multi-family (MF) properties and the dispersion of MF foreclosures within Manchester, New Hampshire.

The two tests and GIS mapping are explained in greater detail below:

Test 1: Reports on results of hypothesis testing (Independent Samples t-Test) carried out on a random sample of 40 residential multi-family properties, made up of 20 owner-occupied and 20 non-owner-occupied. The study sought to establish association between owner-occupation and property quality. For purposes of this study, property quality is operationally defined in terms of upkeep, repairs, and maintenance on an ordinal scale from 1 to 5.

Test 2: The second test is a comparison of 2-unit, 3-unit and 4-unit residential multifamily properties. The objective is to find out if there are any discernible patterns on 2007 and 2008 residential MF foreclosure rates based on number-of-units.

Test 3: The third component, GIS mapping, plots the distribution of all residential multifamily properties and MF foreclosures in the city of Manchester. The objective was to check for any discernible patterns that may be associated with the physical location and / or distribution of MF properties and associated foreclosures.

Below is a discussion of the results on each of the three components. For more detailed discussion of the process and quantitative calculations on each of these three tests please refer to the appropriate appendices.

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6.02 Results of Hypothesis Testing

6.02.1 Hypothesis Testing on the Property Quality of OO and NOO MFs Explained

Given what the literature and key informants said about owner-occupied and non-owner-occupied multi-family homeownership the researcher set out to examine if there were any significant differences between owner-occupied and non-owner-occupied MF

properties in terms of property quality.

Property quality is denoted by a combined score that measures quality levels in each of the following 5 dimensions, Windows condition, External facades (Siding and Painting),

Driveway, Landscaping and Roof condition. The 5 dimensions of each residential multi-

family are measured on an ordinal scale calibrated as follows:

Poor = 1; Needs Attention = 2; Fair = 3; Good = 4; and Excellent = 5.

For a detailed explanation and operational definitions on each of the five dimensions refer to an industry-proven instrument that details how each of these five dimensions is measured. The instrument is attached to this report as Appendix 6.01. Based on an ordinal scale with 5 levels, the 5 attributes are measured on each of the 40 residential

multi-family properties.

Question: Does property quality of residential multi-families, using exterior

appearance (curb appeal) as a proxy, significantly differ based on whether

the property is owner-occupied or non-owner-occupied?

(i) Definition of Property Quality

For purposes of this study property quality is operationally defined as the exterior appearance of the building based on the five dimensions, Windows' condition, External facades (Siding and Painting), Driveway, Landscaping, and Roof condition.

(ii) Unit of Analysis

Each residential multi-family property, irrespective of the number of units, is considered a single unit of analysis.

(iii) Research Question

Research Question may also be stated:

At an alpha = 0.05, is there a significant difference in the quality of owner-occupied and non-owner-occupied residential multi-family properties in the city of Manchester, New Hampshire?

The theory underlying this hypothesis testing is the assumed association of owner-occupation with higher residential real estate property quality as a result of better maintenance and more timely repairs (Scanlon. 1998; LaMontagne Hall, 2010; Coulson et al. 2003).

(iv) Background to the Independent Samples t- Test:

The researcher randomly selected and observed a sample of 40 multi-family properties (20 owner-occupied and 20 non-owner-occupied). For details on the process through

which systematic random sampling was accomplished for this test refer to Appendix Number .

(v) Variable Specification:

Variables specification Independent Variable (IV) = Owner-occupation

Dependent Variable (DV) = Property Quality

6.02.2 Results from Independent Samples t-Testing (Hypothesis Testing)

Below are SPSS Output tables generated from the independent samples t – test.

Table: 6.1: Group Statistics

	Ocstatus	N	Mean	Std. Deviation	Std. Error Mean
Qlscore	1.00	20	20.7500	1.86025	.41596
	2.00	20	15.8500	3.99045	.89229

Legend:
Ocstatus = Owner-Occupation Status;
1.00 = Owner-Occupied MF Property
2.00 = Non-Owner-Occupied MF Property

Please note that 1.00 denotes owner-occupied multi-family (MF) properties, while 2.00 represents non-owner-occupied multi-family properties.

Table 6.1 above clearly shows that owner-occupied multi-family properties have the higher mean score of 20.75 out of 25.00 while non-owner-occupied multi-family properties have the lower mean score of 15.85 out of 25.00. In percentage terms this equates to owner-occupied multi-family properties averaging a score of 83.00% and

non-owner-occupied multi-family properties scoring 63.40%. The difference is significant.

 Table 6.2:
 Independent Samples T Test

		Levene's for Equa Variar	ality of	t-test for Equality of Means							
						Sig.	Mean		Interva	onfidence al of the rence	
		_		Т		(2 -	Diffe-	Std. Error			
		F	Sig.		Df	tailed)	rence	Difference	Lower	Upper	
Multi- Family Exterior Quality Score	Equal variances assumed	11.375	.002	4.977	38	.000	4.90000	.98448	2.90701	6.89299	
	Equal variances not assumed			4.977	26.886	.000	4.90000	.98448	2.87960	6.92040	

Table 6.2 above shows that there is a significant difference in the exterior quality scores of owner-occupied and non-owner-occupied multi-family properties sampled. The F-statistic obtained at 11.375 is definitely in the critical region and the p value (sig.) at 0.002 is less than the given alpha of 0.05 (or confidence level of 95%). The norm for reading the t-statistic is that anything over 2 is considered good because the t-statistic represents standard deviations from the mean.

The combination of tables 6.1 and 6.2 above shows that the independent samples t-test points to a significant difference between the exterior quality scores of the sampled owner-occupied and non-owner-occupied multi-family properties. This is further strengthened by the standard error means that are only 0.41596 and 0.89229 for group 1.00 (owner-occupied) and group 2.00 (non-owner-occupied) respectively.

In this case, the researcher rejected the null hypothesis that there is no difference in the exterior quality of owner-occupied and non-owner-occupied multi-family properties in Manchester, New Hampshire. The researcher could have only failed to reject the null hypothesis if p was not less than 0.05 or if F obtained was not in the critical region.

Results show that there is significant difference in the exterior quality of owner-occupied and non-owner-occupied multi-family properties in Manchester.

Result:

At t = 4.977 (p < .002), reject the null hypothesis; there is significant difference in the exterior quality of owner-occupied and non-owner-occupied multi-family properties in Manchester, New Hampshire.

According to David Cornell, recent former Chairman of Manchester City Assessors' Board, "...the way a house looks from outside generally reflects how it looks inside...." Thus, this finding on exterior quality of residential multi-family properties may be taken as indicative of how the residential multi-family properties look inside.

The results and findings from the independent samples t test are significant because they are based on a randomly selected sample from all owner-occupied and non-owneroccupied residential multi-family properties in Manchester, New Hampshire.

6.03 Comparison of MF Property Groups vis-à-vis Foreclosures

The results on this test are divided into two. One part focuses on the city of Manchester, and the other part on Nashua. Using data on Manchester and Nashua, New Hampshire, the study compares the foreclosure rates of 2-unit, 3-unit and 4-unit multi-family properties to see if there are any discernible patterns in foreclosure rate differences of these three groups, i.e., 2-unit, 3-unit and 4-unit multi-family properties.

The researcher hypothesized that, in depressed housing markets, foreclosure rates are affected by a multiplicity of factors, including but not limited to, high vacancy rates and lower levels of rents to landlords. In this light, it is plausible to assume that the homeowner's capability to pay the monthly mortgage is affected by income flows from the rental units. Whether a property is a 2-unit, 3-unit or 4-unit affects the amount of rental income to the homeowner, shielding or exposing the homeowner to increased or decreased mortgage default risk.

Depending on whether a property is 2-unit, 3-unit or 4-unit there are financial considerations, expectations, and implications that affect both the homeowner and mortgage lenders. Multi-family homeowners are expected to cover their mortgage payments partly through the income from rental apartments. This is an industry-wide practice where 70% to 75% of expected rental income is factored into the deal. For example, for an owner-occupied 2-unit multi-family property, rental income is expected from the one unit rented out. In this case, 50% of available space is occupied by the owner and 50% is rented out.

Thus, if an owner-occupier buys a duplex (2-unit) multi-family, there is the expectation of rental income from one unit. For a 3-unit owner-occupied multi-family property rental income is expected from the two rental units. The same goes for an owner-occupied 4-unit multi-family property. The only difference being that for a 4-unit multi-family property the homeowner expects rental income from three rental apartments. The more the number of residential units in the multi-family property, the greater the number of rental units, and the greater the expected financial contribution from the rental units. This researcher called this proposition the *Rent Expectancy Hypothesis*.

In a depressed residential housing market, where vacancy rates are high and increasing and where rent and property valuations are going down, it is hypothesized that owners of larger residential multi-family properties (those with 3-units and those with 4-units) are more likely to default on their mortgage payments.

One of the bankers interviewed for this study indicated that the people who tended to have higher vulnerability to foreclosures were those who had bought multi-family properties through one of the *low-down-payment* financial products offered by his bank in partnership with a Housing Finance Authority. It was reported that some homeowners in this target group were struggling to meet their monthly mortgage payments as rental vacancy rates in Manchester increased with the deteriorating real estate market situation. An estimate from the Report of the Mayor's Task Force put the vacancy rate at 9% for the end of December 2008 up from about 4% during the fourth quarter of 2005 (Tourigny, 2009).

Each of the three groups (i.e., 2-unit, 3-unit and 4-unit residential multi-family properties), was analyzed relative to the actual number of foreclosures over the two-year period, 2007 and 2008. The objective was to find out if there was any discernible association between each category and foreclosure rates in the two cities.

Table 6.4, on the next page, shows that results from the quantitative analyses mildly support the research hypothesis that there is some association between foreclosure rates and the number of units for each residential multi-family property.

The findings on this test were, at best, partially supportive, and at worst, inconclusive. There is some discernible associational pattern on foreclosures of 4-unit multi-family properties based on the data from Manchester. There is no discernible association on the data from Nashua.

6.03.1 Results on Manchester

Manchester's foreclosure rate for 4-unit multi-family properties is significantly higher than the 4-unit multi-family properties' proportionate representation in the residential multi-family sub-group, for both owner-occupied and non-owner-occupied. For Manchester, 4-unit multi-family properties constitute only 2.28% of the population and about 5.15% of foreclosures.

Chapter 4 provides a detailed explanation of how the calculations were made and the inferences drawn from these calculations.

6.03.2 Results on Nashua

The same tests performed on Manchester were also performed on Nashua. The figures and rates of foreclosure are shown below on Table 6.5. Note that for Nashua data there was no distinction made between owner-occupied and non-owner-occupied foreclosures. The Nashua City Assessor's Office indicated that they had just started tracking foreclosures by owner-occupied and non-owner-occupied status from the beginning of 2009. This study covers the period 2007 and 2008.

The non-separation of owner-occupied and non- owner-occupied, notwithstanding, the available data from Nashua still allowed the researcher to test the hypothesis that there are differences in overall foreclosure rates on the basis of number of unit of residential multi-family properties. There is no discernible trend that shows that 2-unit, 3-unit and 4-unit multi-family properties are foreclosing at significantly different rates based on number-of-units. See tables on the next page.

The 2-unit multi-family properties constitute 71.2% of the aggregate population of all Nashua residential multi-family properties and their percentage in terms of foreclosures is 76.8%. The 3-unit MF properties constitute 17.1% in the population and their percentage in terms of foreclosures is 14.6%. The 4-unit multi-family properties constitute 12.9% in the population and their percentage in terms of foreclosures is 8.5%. The results do not support this researcher's *Rent Expectancy* hypothesis as explained at the beginning of this chapter.

Table 6.4 Comparison of 2-, 3- and 4-Unit Multi-Family Properties in Manchester

Table 6.4	Companson of 2-, 3- and 4-Onli Mulli-Family Properties in Mand								
	Total N Owner Non-O								
		Non-Owner-Occupied = 1052 (22.71%) MF Property Totals							
		2-Family 3-Family 4-Family						Notes on Calculations Made	
	No.	% of Total	No.	% of Total	No.	% of Total	No.	% of Total	
Total No of All OO MF Properties	3580	77.29%	2639	73.72%	907	25.33%	34	0.95%	1.
Owner – Occupied Foreclosures	87	47.28%	62	71.26%	24	27.59%	1	1.15%	2.
Total No of NOO MF Properties	1052	22.71%	553	52.57%	475	45.15%	24	2.28%	3.
Non Owner- Occupied Foreclosures	97	52.72%	49	50.52%	43	44.33%	5	5.15%	4.
Total MF Properties	4632	100.0%	3192	68.91%	1382	29.84%	58	1.25%	5.
NOO & OO Foreclosures	184	100.0%	111	60.33%	67	36.41%	6	3.26%	6.

Legend:SF=Single-Family PropertyMF=Multi-Family PropertyOO=Owner-OccupiedNOO=Non-Owner-Occupied

 Table 6.5
 Comparison of 2-, 3-, and 4-Unit Multi-Family Properties in Nashua

	Nashua	1									
	Owner-	Total Number of MF Properties = 2248 (100%) Owner-Occupied = 1769 (78.70%) Non-Owner-Occupied = 479 (21.30%)									
		MF Property Foreclosures Totals									
			2-F	2-Family 3- 4-Family Family				Notes			
	No.	% of Total	No.	% of Total	No.	% of Total	No.	% of Total			
Total No of All OO MF Properties	1769	100.0	130 6	73.8	275	15.5	188	10.6	1.		
Total No of NOO MF Properties	479	100.0	295	61.6	82	17.1	102	21.3	2.		
Total MF Properties	2248	100.0	160 1	71.2	357	15.9	290	12.9	3		
NOO & OO Foreclosures	82	100.0	63	76.8	12	14.6	7	8.5	4		

Legend: SF = Single-Family Property MF = Multi-Family Property

OO = Owner-Occupied

NOO = Non-Owner-Occupied

From the Nashua data, there is simply no discernible pattern that suggests that there are different rates of foreclosures depending on whether a building has 2-units, 3-units or 4-units. From this data analyses it looks as though larger buildings (i.e. 3-unit and 4-unit multi-family properties) actually foreclosed at lower rates compared to 2-unit multi-family properties. This is opposite to what the researcher hypothesized. The hypothesis was that in depressed housing market conditions, where vacancy rates are high, the greater the number of units in the multi-family property, the higher the likelihood of the property being foreclosed. The basis of this researcher's hypothesis was that the

anticipated rental income streams may not materialize because of lower rental occupancy rates and diminished rent levels as landlords are forced to charge less rent in competition for a shrinking market of paying tenants.

6.04 Results and Findings From GIS Mapping

This third section of Chapter 6 comes with two maps. One map shows the spatial distribution of residential multi-family properties in all 25 neighborhoods of Manchester. The other map shows the spatial distribution of all the residential multi-family foreclosures over the period 2007 to 2008. The distributions of 2007 to 2008 residential multi-family properties and foreclosures are grouped into two: owner-occupied and non-owner-occupied.

6.04.1 Observations on Residential Multi-family Property Distribution in Manchester

Out of a total of 25, the five neighborhoods that have the greatest concentration of residential multi-family properties are: Straw / Smyth with 553; Kalivas / Union with 506; Rimmon Heights at 503; Hallsville with 370; and Somerville with 346. See table below.

Table 6.6 The Five Neighborhoods that have the greatest number of Residential Multi-Family Properties in Manchester, New Hampshire.

Neighborhood	Number of Multi- Family Properties	Number of Owner-Occupied	Number of Non- Owner-Occupied
Straw / Smyth,	553	274	279
Kalivas / Union,	506	244	262
Rimmon Heights,	503	277	226
Hallsville and	370	193	77
Somerville.	346	208	138

Between these five neighborhoods they have a total of 2278 out of 4485 multi-family properties in the city. Thus, amongst the five of them, or 20 percent of the population (25 in all), they contribute 51% (50.79%) to the total residential multi-family property population of Manchester. This confirms the tendency of residential multi-family properties to cluster in specific neighborhoods as reported by Wardrip and Pelletiere (2008).

604.2 Manchester's 2007- 2008 Residential Multi-family Property Foreclosures

The five neighborhoods which have the highest numbers of foreclosures in Manchester are Kalivas / Union (32), Rimmon Heights (18), Hallsville (17), Somerville (15), and Correy Square (13). Between the five neighborhoods, they have a total of 95 foreclosures out of the city's total of 172. They collectively bear 55% of residential multi-family foreclosures in Manchester for the period 2007 to 2008. This shows clustering of foreclosures. It is in line with, and further confirms, findings from the Chicago case-study by Apgar et al (2005) which highlighted the negative externalities of foreclosures to abutting properties, and other properties in the neighborhood and the huge costs to the respective city municipalities.

Clustering of residential multi-family properties is distinctively apparent for both the distribution of residential multi-family properties and the distribution of the foreclosed multi-family properties. Mapping shows that 87% (149 out of 172) of all foreclosures are in only 10, or 40 percent of the 25 neighborhoods. Owner-occupied residential multi-

family properties tend to be clustered in close proximity to each other along some few blocks in specific neighborhoods.

The next table, Table 6.7 provides a full list of the 25 neighborhoods, number of residential multi-family properties in each of them, ranking of neighborhoods in terms of numbers of residential multi-family properties and numbers in terms of owner-occupied and non-owner-occupied multi-family properties in each neighborhood respectively.

A Comparison of the foreclosure rates in these 25 neighborhoods relative to each neighborhood's proportionate numbers of residential multi-family shows the following:

- (i) While five neighborhoods, or 20 percent of 25 neighborhoods, collectively hold about 43.22% of the residential multi-family property population, their contribution to foreclosures in the two-year period, 2007 to 2008, was at 55% of all the multifamily foreclosures in the city. This observation confirms findings by Apgar et al (2005) who report the tendency of foreclosures to cluster around each other, and explain how vacant and abandoned properties tend to attract crime, violence, and other social ills.
- (ii) While it may be difficult to attribute causality for the high foreclosure rates in these five neighborhoods of Manchester, it is plausible to extrapolate that earlier foreclosures that took place in the city may have created chain-processes of negative externalities that may have created a conducive environment for additional foreclosures in abutting, and other, properties in the respective

neighborhoods. This is one of the issues raised for further research under Chapter 7 of this study.

Table 6.7

City of Manchester, New Hampshire. USA
Residential 2- to 4-unit Multi-Family Property Buildings
as at June 2009
(Grouped Owner-Occupied and Non-Owner-Occupied)

	Neighborhood	Total 2-4 Residential Buildings	Ranking in Number of 2- to 4-unit Buildings	Number of Owner- Occupied	Number of Non-Owner- Occupied
1.	Straw / Smyth;	553	1.	274	279
2.	Kalivas / Union	506	2.	244	262
3.	Rimmon Heights	503	3.	277	226
4.	Hallsville	370	4.	193	177
5.	Sommeville	346	5.	208	138
6.	Piscataquog	300	6.	163	137
7.	Notre Dame	261	7.	131	130
8.	Hanover Hill	248	8.	155	93
9.	Corey Square	218	9.	124	94
10.	North End	212	10.	98	114
11.	Mast Road	180	11.	113	67
12.	Bakersville	166	12.	84	82
13.	Wolfe Park	139	13.	79	60
14.	Highlands	123	14.	76	47
15.	Southside	121	15.	68	53
16.	Green Acres	61	16.	39	22
17.	Eaton Heights	44	17.	27	17
18.	NorthWest	43	18.	29	14
19.	Youngsville	34	19.	23	11
20.	Downtown	19	20.	6	13
21.	Goffs Falls	14	21.	6	8
22.	Wellington	11	22.	6	5
23.	Crystal Lake	7	23.	5	2
24.	South East	4	24.	2	2
25.	Lower South Willow / Airport	2	25.	1	1
	Totals	4485		2431	2054

- (iii) Negative externalities of the foreclosure phenomenon manifest themselves in various ways, interalia, there is the reduction in valuations of abutting properties, outward flight of businesses, and the decimation of neighborhood attractiveness to prospective homebuyers (Apgar. 2005; Lee. 2008). Lee, in an extensive literature review of foreclosures' price-depressing spillover effects on nearby properties, found that foreclosures "...negatively impact nearby housing values via three primary channels: blight, [negative] valuation and [over] supply" (p. 1).
- (iv) In Kalivas / Union and Rimmon Heights, the two neighborhoods that have the highest number of foreclosures in Manchester, there are more non-owner-occupied MF properties than owner-occupied MF properties. This is significant in a study that looks at whether owner-occupation matters in the differences of foreclosure rates of residential multi-family properties. While not conclusively certain, the high foreclosure rates suggest that the higher incidence of non-owner-occupied properties in these two neighborhoods may have something to do with the higher foreclosure rates, especially in view of the above observations by Apgar et al. (2008), and Lee (2008) on their analyses of neighborhood spillover effects of foreclosures.
- (i) An analysis of the five neighborhoods, with the highest foreclosure rates, also reveals that, all of them have significantly higher ratios of non-owner-occupied properties relative to their population of owner-occupied properties, when compared to the other neighborhoods.

(v) In 50% of the 10 neighborhoods most affected by foreclosures, non-owner-occupied multi-family property numbers exceed those of owner-occupied multi-family properties.

The table below shows the five neighborhoods with the percent distributions of owneroccupied and non-owner-occupied properties.

Table 6.8

Neighborhood	Number of Multi-Family Properties	Number of Owner- Occupied	Percentage of Owner-Occupied	Number of Non-Owner- Occupied	of Non- Owner-
			(00) to		Occupied
			Total		(NOO) to Total
Straw / Smyth,	553	274	49.5%	279	50.5%
Kalivas / Union,	506	244	48.2%	262	51.8%
Rimmon	503	277	55.1%	226	44.9%
Heights,					
Hallsville and	370	193	52.2%	177	47.8%
Somerville.	346	208	60.1%	138	39.9%

The issue of absentee landlords and non-owner-occupied multi-family properties being problematic continues as evidenced by a recent newspaper article by Beth LaMontagne Hall of the New Hampshire Union Leader (on October 12, 2010) where David Albin, Manchester Code Enforcement Supervisor, was quoted as saying the city of Manchester spends "... an inordinate amount of time chasing 10 percent of landlords" (p. B1). The title of the report was *New Law Targets Absentee Landlords*. In this recent newspaper article LaMontagne Hall wrote about some of the issues this study reports on including, but not limited to the following: (i) non-owner-occupiers (absentee landlords) walking away from the multi-family property investments; (ii) most of the MF

properties owned by absentee landlords being in serious disrepair; (iii) the multiplicity of problems absentee landlords create for the tenants who rent from them because of delayed repairs and deferred maintenance and other acts of negligent landlordism; (iv) difficulties of tracking the real identities and physical locations of absentee landlords; (v) insufficient numbers of code enforcers on the part of Manchester city; (vi) the need for tighter regulation and stricter enforcement by authorities at local, state and federal levels; and (vii) the problem of non-owner-occupiers hiding behind out-of-state limited liability companies.

Although this researcher did not discuss his findings with the newspaper reporter, it is not surprising that the two came up with common observations because they were looking at the same data.

Chapter Seven: Conclusions and Implications

7.01 Introduction

The main purpose of the dissertation was to find out if owner-occupation could be one of the main explanatory variables for the higher foreclosure rates amongst 2- to 4-unit residential multi-family properties in New England. This study builds on Wardrip and Pelletiere's (2008) study that found that 2- to 4-unit residential multi-family properties in New England have significantly higher foreclosure rates compared to single family properties. In that study, Wardrip and Pelletiere claimed that residential multi-family properties tend to have higher foreclosure rates because they are located in poor and less desirable neighborhoods where real estate property values have plummeted as a result of the depressed housing market situation that started around the last quarter of 2006 to the first quarter of 2007. This researcher argues that the question of owner-occupation is a significant factor in foreclosures of any residential real estate in general, and that of 2- to 4-unit multi-family properties in particular.

To find out if owner-occupation could be one of the main explanatory variables for the higher foreclosure rates of multi-family properties a case study covering Manchester and Nashua, New Hampshire (NH) was conducted. The assumption is that findings on Manchester and Nashua are relevant to other towns and cities in the USA. Additionally, the findings may be used as a springboard to launch further research in other towns and cities in the USA. As observed by Coulson, Hwang and Imai (2003), most of the existing literature on residential housing and homeownership tends to be premised and focused

on single family homes. Doing a study on multi-family homes adds value to an area often neglected in homeownership research.

In line with Perry (1995) conclusions and implications of this study are covered under the following sub-topics:

- (i) Conclusions about research questions and hypotheses;
- (ii) Conclusions about the research problem;
- (iii) Implications to theory;
- (iv) Implications to practice;
- (v) Implications to policy; and
- (vi) Implications for future research.

7.02 Conclusions about hypotheses and research questions

The following 3 hypotheses and 3 research questions guided the study.

7.02.1 Hypotheses

Hypothesis 1: Residential multi-family property foreclosure rates in Manchester

and Nashua, New Hampshire, are significantly higher than those of single-family properties in the two cities (building on Wardrip & Palletions, 2008)

Pelletiere. 2008).

Hypothesis 2: Residential multi-family properties in Manchester and Nashua, New

Hampshire, have significantly higher rates of non-owner-occupation than single-family properties in the two cities (building on Coulson

et al. 2003).

Hypothesis 3: In depressed housing market conditions owner-occupied multi-

family property foreclosure rates are significantly lower than those of non-owner-occupied multi-family properties in the same cities.

(Adding value to theory).

7.02.2 Questions

Question 1. Do residential 2- to 4-unit multi-family properties in Manchester and

Nashua, New Hampshire, have significantly higher foreclosure rates compared to residential single-family properties in the same

two cities?

Question 2 Are there significant differences in non-owner-occupation rates

between multi-family properties and single-family properties in

Manchester and Nashua, New Hampshire?

Question 3. Are there significant differences in the foreclosure rates of owner-occupied and non-owner-occupied, residential 2- to 4-unit multifamily properties in Manchester and Nashua, New Hampshire?

The research was centered on hypothesis 3 and question 3. The findings confirmed the hypothesis that owner-occupied multi-family properties tend to have lower foreclosure rates compared to non-owner-occupied multi-family properties.

The quantitative differences between the foreclosure rates of owner-occupied and non-owner-occupied multi-family properties in Manchester and Nashua for 2007 and 2008 at

are extremely large. The scale of these differences surprised many people in the housing industry. Twenty-one of the 29 key informants interviewed explicitly remarked that they were very surprised by the dramatic differences between the foreclosure rates of owner-occupied and non-owner-occupied multi-family properties. Their surprise led the researcher to re-check the data for validity and reliability.

To compare the foreclosure rates of owner-occupied and non-owner-occupied residential multi-family properties there was need to verify the findings of Wardrip and Pelletiere (2008). This study confirms that Wardrip and Pelletiere's (2008) New England study directly applies to both Manchester and Nashua, New Hampshire.

To get to the main research question (3) hypothesis 2 had to tested. There was need to find out if owner-occupation was significantly different between single-family properties

and multi-family properties in Manchester and Nashua. The findings support the second hypothesis, i.e. residential multi-family properties in Manchester and Nashua, New Hampshire, have significantly higher rates of non-owner-occupation than single-family properties in the two cities. The results are in line with Coulson, Hwang and Imai (2003) who found out that "...in the US housing market ownership status is highly correlated with (housing) structure type..." (They further note) "... Owners tend to live in detached, single family units, whereas renters often live in multi-unit complexes" (p. 29). The findings of this study confirm Coulson, Hwang and Imai (2003) finding that there is "...a paucity of single family units with less than 100% ownership rate in single family property neighborhoods of the Northeast (region)..." (p. 30), with Manchester and Nashua's owner-occupation rates at 96% and 97%, respectively, for single family properties.

7.02.3 Contribution

The contribution of this study is the finding that non-owner-occupied multi-family properties foreclose at significantly higher rates compared to owner-occupied multi-family properties in both cities. The study clears quantifies the significant magnitude of that difference. Applying two theoretical frameworks, "Broken Windows" and the "Meaning of Home" theories, this study significantly adds value in theorizing the process of how owner-occupation tends to lead, directly and indirectly, to lower foreclosure rates for residential multi-family properties in Manchester and Nashua.

7.03 Conclusions about the research problem

The problem that gave rise to this research was the escalating foreclosure situation negatively affecting homeownership and its effects on individual homeowners, tenants and their families. Foreclosures also devastate neighborhoods, as foreclosed homes imply empty abandoned buildings. Since there is no one caring for empty and abandoned buildings they become magnets for vandalism.

Emptiness and abandonment of foreclosed multi-family properties and the high likelihood of their being vandalized give rise to negative externalities for abutting properties in particular and the neighborhood in general. Neighboring homeowners watch helplessly as values of their abutting properties go down. A shrinking tax base accompanied by increased demand for services to police and to board-up empty vandalized properties negatively affects city and town authorities. Financial institutions lose income as foreclosures mean complete stoppage of mortgage payments. Foreclosures also mean loss of insurance coverage on affected properties as premiums are no longer paid.

Foreclosed homes normally fetch significantly lower prices when they are ultimately auctioned off because of their distressed situation. Lower property sale prices reduce values of abutting properties because the real estate market mostly relies on comparative market analysis (CMA) to set sale prices. Comparative market analysis averages prices of recent sales (going back 3 to 6 months) of comparable real estate properties (in terms of style, square footage, acreage, location, etc.) to estimate prices

of new real estate offerings in the neighborhood. It is clear, therefore, that foreclosures are a lose-lose game to many parties involved with the foreclosed property. In most cases the only beneficiaries from foreclosures are the new buyers who get foreclosed properties for bargain prices depending on what they are auctioned for.

The specific research problem identified was that published data on residential single-family and multi-family properties rarely distinguishes between owner-occupied and non-owner-occupied properties. The challenge for this researcher, inter alia, was to distinguish between owner-occupied and non-owner-occupied residential multi-family properties in Nashua and Manchester from the composite data. This was accomplished by researching and comparing the physical address of each multi-family property with the physical home or mailing address of the registered owner. Where the homeowner's address coincided with that of the property address, it was deemed owner-occupied. Where the property address and that of homeowner's mailing address were different, it was deemed non-owner-occupied.

This study, based on an analysis of the entire population of residential multi-family properties in the two cities (Manchester with 4632 and Nashua with 2249), conclusively found that for the two cities, non-owner-occupied multi-family properties had significantly higher foreclosure rates than those of owner-occupied multi-family properties. In many cases increasing foreclosure rates devastate entire neighborhoods, stretching and causing havoc to city and town authorities' finance and policing resources.

7.04 Implications to theory

This research touched on two areas that are often either left out or under-studied by real estate and homeownership researchers / scholars: (i) residential multi-family properties; and (ii) the phenomenon of non-owner-occupation relative to residential multi-family properties.

Existing literature on homeownership is mostly based on research of single-family properties (Coulson, Hwang and Imai. 2003). Because most single-family homes are owner-occupied (96% and 97% in the case of Manchester and Nashua respectively) most researchers tend to focus on issues related to owner-occupied situations. In most literature on housing (Sherraden. 2001; Denton. 2001; Apgar. 2005; Scanlon. 1998; Dietz. 2003; Scanlon. 1998; Coulson et al. 2003; Rohe et al. 2001; etc.) the concept "homeownership" is often used to refer to owner-occupation. This study looks at homeownership from an ownership, entrepreneurial and wealth-accumulation / assetbuilding perspective. A homeowner, after investing in a multi-family property, may either decide to live in the asset or simply lease it out and live elsewhere. Often the homeowner first lives in one unit of the residential multi-family property and then moves on to a single family home. This study found that this private individual decision has significant foreclosure implications and consequences for the multi-family properties and the neighborhoods in which they are located in Manchester and Nashua, NH.

Two theoretical frameworks, "Broken Windows" and "Meaning of Home" theories, were identified, developed and applied to explain how non-owner-occupation directly or

indirectly leads to significantly higher foreclosure risk for residential multi-family properties.

7.04.1 "Broken Windows" Theory

Broken Windows theory explains how abandoned, empty and non-occupied foreclosed multi-family properties become magnets for vandalism and the source of neighborhood deterioration. The Broken Windows theory (Gault & Silver. 1999; Peterson. 2004; Bratton & Kelling. 2006) claims that the very existence of broken windows on any property tends to lead to more windows being broken on and around that real estate property.

James Q. Wilson and George Kelling, two criminologists who popularized Broken Windows theory (Gault & Silver. 1999; Peterson. 2004; Bratton & Kelling. 2006) asserted that if a broken window on any given property goes without repair vandals are going to destroy the building's other windows. To explain why broken windows become catalysts for the vandalization of the remaining windows Wilson and Kelling hypothesize that "...the broken window sends a signal that no one is in charge, breaking more windows costs nothing, and there are no consequences to breaking more windows..." (Peterson. 2004. p. 31). In many ways the Broken Windows theory is conceptually linked to Emile Durkheim's sociological theory of anomie⁸. The opposite of anomie in this context would be a sense of stakeholdership (or citizenship) where people feel,

⁸ "Anomie is a concept developed by Emile **Durkheim (1858-1917)** to describe an absence of clear societal norms and values. In the concept of **anomie** individuals lack a sense of social regulation: people feel unguided in the choices they have to make" quoted from the SociologyIndex. website on 08/25/2010. Source: http://sociologyindex.com/anomie.htm.

being resident homeowners, they have vested interests in their own homes and that of their neighborhoods.

The study found that non-owner-occupied homes had significantly higher foreclosure rates in Manchester and Nashua, New Hampshire in 2007 and 2008. It also found that in depressed housing markets multi-family investments generate monthly net losses, where total monthly mortgage payments and expenses exceed total monthly rental income. In such situations non-owner-occupying landlords tend to walk away from loss-generating real estate investments unless there are significant penalties for walking away and / or significant incentives for holding on to the investment.

Broken Windows theory has been applied to explain a variety of situations. Since it was popularized by criminologists, James Q. Wilson and George Kelling (Gault & Silver. 1999; Peterson. 2004; Bratton & Kelling. 2006) the theory has mostly been applied to law enforcement. The researcher is not aware of situations where the Broken Windows theory has been used in Community Economic Development (CED) to explain the higher foreclosure rates of non-owner-occupied residential multi-family properties. To the extent that multi-family homes have higher foreclosure rates compared to single family homes, and non-owner-occupied multi-family homes have higher foreclosure rates compared to owner-occupied multi-family properties, Broken Windows theory robustly explains the process as summarized below.

- (i) The walking away or eviction of multi-family property investors means property abandonment and non-payment to financial institutions.
- (ii) Property abandonment by the investor also means that tenants have to vacate and the building becomes empty.
- (iii) Empty buildings mean that there is no care for the building and its surroundings.
- (iv) The look of abandonment of foreclosed properties coupled with increased likelihood for their being vandalized give rise to externalities that negatively affect abutting properties.
- (v) Neighboring homeowners watch helplessly as their property values go down.
- (vi) City and town authorities are negatively affected by the shrinking tax base while there are increased costs from rising demand for services to police and to boardup vandalized abandoned properties.

Broken Windows, therefore, becomes a powerful explanatory theory through which stakeholders may seek prevention and intervention methods to ensure that in the first place there are significantly reduced foreclosures (by reducing the number of nonowner-occupied properties by increasing the ratio of owner-occupied multi-family properties). Broken Windows theory can also be used to ensure that where multi-family foreclosures happen there are no visible broken windows or there are reduced instances of broken windows. One of the deterrents to reduce multi-family foreclosure rates is to deliberately increase homeowner and / or real estate investors exit costs, both financial and non-financial. The study revealed that the financial and non-financial exit costs for owner-occupiers are already significant especially from the perspective of

the meaning of home. The current situation suggests that there are no significant financial or psychological consequences that accrue to non-owner-occupying landlords when they walk away from, or abandon, an investment multi-family property, thereby increasing foreclosure rates.

7.04.2 Meaning of Home Theories

The other cluster of theories applied to explain differences in owner-occupation and non-owner-occupation are the "meaning of home" theories. In this study the meaning of home theories mostly look at the non-financial and psychological aspects of the home as they affect the behavior of owner-occupants of multi-family properties compared to that of absentee landlords. As observed in the theory section Mallett (2004) aptly notes that "...both the meaning and study of home depend (on the interests of the presenter and the context being considered). Mallett (2004) further notes "..clearly both the experience and the study of home is value laden (and) researchers in the field need to be clear and transparent about the motivation behind and purposes for their own research..."

In the light of the above instructive advice for disclosure the researcher explained in the introductory chapter that his perspective of home is anchored in the liberal view that homeownership, if structured appropriately, especially in the developing (third world) countries, is an effective vehicle for low- to moderate-income people to meaningfully participate and have a substantive stake in emerging capitalist economic systems. The notion of the home as "... a private, often familial realm clearly differentiated from public

space and removed from public scrutiny and surveillance...a space that offers freedom and control ... and scope for creativity and regeneration..." (Mallett. 2004. p. 71) lends itself well to viewing the concept of home as conflated with many aspects including but not limited to: house, place, family, self and notions of being-at-home (Moore. 2000; Mallett. 2004; Fernandez. 2008).

7.04.3 Broader Theoretical Application of this Research

It should be noted that while notions associated with meaning of home above may be mildly interesting in economies where ethos of private property are firmly anchored such as those of developed countries, these features of home are significantly less commonplace, less understood and definitely more revolutionary in places where capitalism is not yet firmly entrenched and property rights not yet quite strictly enforced. To this extent the study has ramifications that go well beyond the confines of the cities of Manchester and Nashua, New Hampshire. The lessons learned from this study relative to owner-occupation have far-reaching international application and relevance as they touch on the primacy of private ownership and stakeholdership to incentivizing personal drive and effort in the upkeep of private property. De Soto (2000) in his epic book, "The Mystery of Capital: Why capitalism triumphs in the west and fails everywhere else" explains how the lack of clearly defined property rights for the majority of the people in developing countries constrains Capitalism from succeeding in many countries of the developing world. While homeownership is widely claimed to symbolize the American Dream, the desire and pride in acquiring and owning a home is universal, and not exclusively American.

A home is unique asset. As Fernandez (2008) says a home is a unique possession "...whose personalization and place attachment concurrently means possession of ...multiple other possessions and places..." (p. 22). Fernandez (2008) explains the relevance of place attachment and territoriality. He defines place attachment as "...the bonding between a person and place that develops over time due to a series of interactions between (the) person and place..." (p. 22). He observes that "...when attached to a place, people engage in territoriality. Territoriality is the attempt to influence or control actions, interactions and access (of people, things and relationships), by asserting and attempting to enforce control over a specific geographical area..." (p. 22).

The theme of the distinction between house and home is clear and runs through the explanations by various theorists and authors on the meaning of home. Looking at the distinction between owner-occupants and absentee landlords of residential multi-family properties, it is plausible to directly associate the owner-occupant with home and the absentee landlord with house. Basically the theories of home claim that owner-occupied residential real estate, once acquired, evolves from being a piece of real estate to a home through a process of personalization. This process of personalization is associated with various property improvements, adaptations and changes that engender a positive change in the structure and / or appearance of the property over time (Fernandez. 2008).

The independent samples t test carried out for this study showed that, to a large extent, owner-occupied multi-family homes have significantly better upkeep, are better maintained and have better curb appeal compared to non-owner-occupied multi-family homes. Interviews with key informants revealed that owner-occupied multi-family homes tend to be timely repaired, are more frequently and better maintained and have significantly better upkeep and therefore, better curb appeal, compared to non-owneroccupied multi-family homes. The interviews confirmed that amongst the majority of key informants interviewed owner-occupiers tend to have significantly higher exit costs and would look at more options to retain their multi-family property investment even if it was under-water. Non-owner-occupiers were found to be more prone to walk away or give up ownership more readily to an investment property once the multi-family property investment was under-water (worth less compared to what is owed on it). According to interviews with key informants the apparent higher propensity for non-owner-occupying landlords to walk away or default on their multi-family rental investment properties appears to be directly or indirectly related to them having lower ownership exit costs. Policy recommendations towards this problem are made under Implications to Policy below.

7.05 Implications for policy

7.05.1 Various government levels require focused multi-family homeownership policy
There is greater need for homeownership policies specifically designed for residential
multi-family properties because multi-family type properties tend to be inadequately
addressed by various levels of government. As Coulson et al (2003) point out
"homeownership policy ...often is directed at single-family units..." (p. 30). This study

recommends that there is need for homeownership policy specifically directed at residential multi-family properties in New Hampshire. Residential multi-family properties tend to be predominantly located in low-income to moderate-income neighborhoods. As Essene & Apgar (2007) allude, CED "...is part of the trusted advisor networks that steer low-income to moderate-income consumers toward socially beneficial choices".

7.05.2 Need for Regulations piercing residential multi-family investors' corporate veils

There is need for regulations that enforce and incentivize personal accountability for investors who own residential multi-family properties. Discussions with some key informants revealed that some multi-family investors may be exploiting incorporation for personal gain and are able to walk away from investment properties with impunity. Some real estate investors were said to have registered the ownership of investment properties under some corporate legal entity. These legal entities exist independently and separately from the owners at law. Subject to further research to prove how substantive this problem may be, there is need for financial institutions to get under / behind the corporate veil to ensure that residential homes are owned by, or the ownership is at least under-written by, individual persons even when it is owned under some legal / corporate entity name. The idea is to have effective policies and regulations that penalize walking away while incentivizing owner-occupation and sustained property retention.

7.05.3 Maintain and expand current low-income to moderate-income residential multifamily homeownership promotion and support programs in New Hampshire

Low-income homeownership remains a worthwhile goal. Because of various longstanding and recent federal incentives homeownership is one of the pillars within the structure of opportunity in the USA. As Nancy Denton (2001) says "...the combined effects of housing equity, tax advantage, and home value appreciation constitute the final path to asset building..." (p. 236). Homeownership can be an opportunity enhancing measure that has potential to effectively mitigate the effects of accumulated disadvantage to entrepreneurial low-income to moderate-income people. In many cases it is considered the sure way towards the pursuit, and the very realization, of the American Dream (Boshara. 2007; Sherraden. 2001; Rivera. 2006).

In view of the above there are compelling reasons for the researcher to recommend that policy makers actively promote and financially support owner-occupation of residential multi-family properties by low-income to moderate-income homebuyers.

The researcher advises that this recommendation be viewed and treated with extreme caution. Like every other social policy, low-income multi-family homeownership is not the magic bullet to solve foreclosure problems in residential multi-family housing. There is need for developing criteria defining and identifying characteristics for potentially viable low-income to moderate-income candidates that can benefit from residential multi-family homeownership. Through the use of such criteria the candidates need to be identified, trained and educated on the aspects that can make them stronger multi-family homeownership candidates with higher chances of homeownership success.

For the many low-income to moderate-income people that are not ready to be multi-family homeowners for whatever reason, Denton (2001) makes an insightful observation noting "...low-income persons need three things: (i) access to regular means of asset building, (ii) adequate housing, and (iii) good neighborhoods. Unless [residential multi-family] homeownership can contribute to all three of these, it might be better for the poor to look for other asset-building [strategies]...." (p. 257).

Related to the foregoing Gerri Willis, TV host of CNN Money (Saturday mornings TV program) *Your Bottom Line,* remarked on 06/26/2009 "...buying a house is like getting married, don't do it unless you are ready...low interest rates, low home prices [subsidies and other homeownership promotional incentives] are only a boost to those who are ready to own a home...."

This study, therefore, recommends that policy makers in institutions that support low-income to moderate-income homeownership in New Hampshire may consider to actively promote and financially support owner-occupation of residential multifamily properties by low-income to moderate income homebuyers in Manchester and Nashua. This is subject to more research having confirmed that the positive effects out-weigh the negative effects. Specific financial packages and incentives need to be available to low-income people to create conditions for more successful homeownership.

7.05.3 Owner-Occupiers stay longer in their homes, thereby promoting neighborhood stability.

This study found that there is general hesitancy by owner-occupying homeowners to get rid of their homes, even if, in the short-term, the financial returns of homeownership are negative. This finding is consistent with findings by other researchers. For example, Coulson et al (2003) note that "...one of the things that make owners better neighbors is that they do not move as much..." (p. 36). The interviews revealed that owner occupiers have vested interests in keeping the multi-family properties because, first and foremost, these are their homes. Longer-term tenure by owner-occupiers positively contributes to neighborhood stability.

The tendency to stay longer in a given property and neighborhood should be weighed against the physical, social and economic entrapment that may happen. Entrapment happens, for example, when the property is located in an undesirable location. Undesirable locations are characterized by declining property values and other negative social and economic neighborhood variables. Policies that promote and financially support people to move into poor and undesirable neighborhoods (steering) may create further impoverishment to low-income to moderate-income people.

Coulson et al (2003) study found that owner-occupation total surplus accrues to both the landlords and residents of a neighborhood (p. 45). The study "...verified the existence of a neighborhood ownership effect on housing prices, even after controlling for self-selection and unobservable characteristics" (p. 46). If one goes into a poverty infested neighborhood with very low owner-occupation rates that homeowner may end

up worse off as the benefits that derive from owner-occupation may be offset by the negative externalities of high non-owner-occupation rates in the neighborhood. This means that any approach that looks at encouraging low-income multi-family homeownership is better advised to adopt an integrated approach that combines homeownership promotion with other neighborhood and community revitalization programs.

7.05.4 Mixed-Income Neighborhoods are more preferable to socio-economic status specific neighborhoods.

Denton (2001) observed that the socio-economic needs of low-income families do not tend to often coincide with the economic needs of low-income neighborhoods. Based on findings from this study and Denton's (2001) study, it is recommended that, to get favorable outcomes for low-income people and low-income neighborhoods it is advisable that low-income people buy homes in middle-income or high-income neighborhoods while middle-income and high-income people buy homes in low-income neighborhoods. The concept of integrated or mixed-income neighborhoods is promoted and espoused by Neighbor-Works and other progressive housing institutions in New Hampshire and throughout the country. William Julius Wilson (1999) highlights how the structure of opportunity is constrained and negatively impacted by the lack of living-wage-jobs and role-models in low-income ghettos.

In the light of the above policy makers need to critically look at the two aspects identified by Shlay (2005), i.e., residential location (a home's relationship with space) and financial intermediation (a household's relationship with sources of housing finance). In

this context residential location would relate to the need for low-income people to move into and own homes in non-poor neighborhoods, e.g., middle- or high-income neighborhoods. Financial intermediation refers to the need for governments and financial institutions to structure financial packages that support successful low-income homeownership.

The negative externalities of foreclosures and the risks and costs of homeownership discussed in chapter 2 are particularly important for consideration by agencies that promote low-income homeownership to avoid the pitfalls that cautions against when she says "low-income homeownership as a policy goal may move already at-risk households to take on even more risk under conditions of great[er] uncertainty...."

7.05.5 Residential Housing Programs that guarantee affordability are desirable Given that booms and busts have always occurred in the housing sector, this study recommends that low-income to moderate-income multi-family homeownership policies be seriously considered in their varied formats, including but not limited to, seriously considering housing programs that guarantee affordability such as land trusts and housing co-operatives. Local authorities in Manchester and Nashua may find it helpful to engage in exploratory and specific programs that are geared at understanding land trusts and housing co-operatives as these tend to help more low-income to moderate-income people.

Where practical, policies that support conversion from non-owner-occupied multi-family housing to owner-occupied condominiums or co-operatives, may be a viable option to investigate. Condominiumization is one way of promoting owner-occupation without the homeowner taking over the entire multi-family property.

7.05.6 Maintaining and Expanding Fuel Assistance and Winterization programs

State and city governments need to consider providing more help towards residential heating to needy cases. Given how expensive foreclosures are to the homeowners and city authorities and the negative externalities they have on abutting properties and neighborhoods it may be less expensive for state and local authorities to spend more money in foreclosure prevention measures. One of the findings was that exorbitant residential heating bills negatively affected a good number of low-income multi-family homeowners and led them into foreclosure. Subject to further research to determine the extent of this winter heating problem, providing financial support to needy cases, especially those on fixed incomes, such as pensioners, could help reduce foreclosures. Financial help towards heating costs combined with weatherization grants and subsidized loan programs targeted at older buildings can significantly reduce the number of multi-family properties that foreclose due to the cost of winter heating.

7.05.7 Hiring more inspectors for code enforcement.

Some key informants observed that the city of Manchester, NH, has very few housing inspectors. There is need to look at how that can be remedied so that there is adequate

code-enforcement of multi-family properties, especially those that are non-owner-occupied.

7.06 Implications for practice

Homeownership advocates and the bank officials interviewed made it very clear that many banks are more willing to work with owner-occupiers than they are with non-owner-occupying absentee landlords. New government policies that prepare low-income to moderate-income people to be effective owner-occupiers of multi-family homes, therefore, can exploit this positive attitude of banks.

7.06.1 Owning a residential multi-family property is running a small business

What became very clear from key informant interviews with bankers and homeownership scholars was that residential multi-family residences are just one form a small business takes. So training can not only be confined to real estate maintenance and repairs, it should also focus more on business management skills, record-keeping, financial literacy and entrepreneurial skills. One of the key informants dealing with credit counseling services indicated that bank lines-of-credit and overdraft facilities are almost nonexistent amongst low- to moderate-income multi-family homeowners. She noted that lines-of-credit and overdraft facilities can allow many struggling multi-family homeowners to bridge-over periods of short-term financial deficits such as when a tenant moves out until another one moves in.

As a practical matter, financial institutions that support low-income to moderate income people may need to seek innovative ways to extend over-draft facilities to low-income to moderate-income homeowners who run a "multi-family property small business." Over-drafts are financial life-lines to most businesses for short-term financial gaps.

7.07 Implications for future research

As Perry (1995) observes "..this final section [Implications for future research] is written to help ... researchers in selection and design of future research...." This researcher addresses three areas under this sub-topic, i.e., (i) inadequacy in theories;

(ii) Methodological issues; and (iii) Gaps in policy-related knowledge.

7.07.1 Inadequacy in theories

Various aspects of successful residential multi-family homeownership are explained by different but complementary theories. The theories discussed, "Broken Windows" and "Meaning of Home" are relevant to owner-occupation. There is need, however, for future research to identify other theories that are particularly relevant to residential multi-family homeownership. Measuring the relative significance of owner-occupation to successful residential multi-family homeownership against the significance of other explanatory variables, such as financing, location, building quality, etc. through multiple-regression, can provide specific information to inform policy makers, researchers and other stakeholders about the relative weight of owner-occupation as a policy concern.

7.07.2 Methodological Issues: How to better improve the validity and reliability of results

(i) More Positivist Survey Research Studies are required

Case studies are great for laying research foundation. However, whenever case studies and exploratory research are conducted there is need for more positivist survey research studies to corroborate the findings and determine their external validity / generalizability (Perry.1995). This is important to further establish and confirm internal validity (cause and effect) and external validity (generalizability) of owner-occupation to successful residential multi-family homeownership.

(ii) Broadening research coverage in terms of Time and Space

For understandable practical reasons this research was confined to a two-year time period (from 2007 to 2008) and to only two cities: Manchester and Nashua, in the small state of New Hampshire. For greater learning and to confirm external validity of findings to other places and other times there is the need to broaden coverage of research in terms of both time and space. In this case future research can cover a significantly larger geographical area, say a number of states, or a longer than 2 year time frame, ideally both. Since the idea was to examine foreclosure rates of residential multi-family properties during depressed housing markets. There is need to look at more depressed housing market time periods and carry out time series longitudinal studies that look at trends during past depressed housing market periods in the USA. For example, the one of early 1980s and the one for the 1990s those in the future. There is also need to

thoroughly examine and analyze the current housing market correction and it's outcomes when it is ultimately over.

(iii) The need for more geographically focused research

One issue that become apparent after mapping the distribution of foreclosures in the various neighborhoods of Manchester, NH, as discussed in chapter 6, was how over 55% of foreclosures were located in only 5 (20%) of the 25 neighborhoods. Understandably, these 5 neighborhoods: Straw / Smyth (with 553), Kalivas / Union (with 506), Rimmon Heights (at 503), Hallsville (with 370), and Somerville (with 346) together have 43% of residential multi-family properties in Manchester. But why do they bear 55% of foreclosures in the city? It is worthwhile to conduct further research to find out why these 5 neighborhoods have disproportionately large numbers of foreclosed multi-family properties.

7.07.3 Gaps in policy-related knowledge.

(i) The Residential Multi-family Housing Sub-sector deserves focused research attention. What is known on homeownership is mostly based on single-family homeownership research (Coulson et al. 2003). There is need to carry out multi-family focused research studies to examine aspects specifically relevant to that housing sector. There are unique experiences that distinctively apply to either single-family or multi-family properties, and not both. One key informant observed that his agency had noted an alarming level of disrepair amongst abandoned multi-family buildings on

Western side of Manchester. As part of its neighborhood revitalization activities, his agency is acquiring these properties, at low prices, from the city and / or owners and demolishing them to reduce building over-crowding. Subject to further research, building over-crowding appears to be mostly unique to areas populated by residential multifamily properties in Manchester and Nashua.

(ii) Are non-owner-occupying landlords walking away under cover of the corporate veil? The issue of non-owner-occupying landlords walking away from under-water multifamily properties was mentioned by several key informants during this research. Further research is recommended to find out how substantive and extensive this problem is. Are property investors hiding under the corporate veil and walking away without major consequences? Could it be in the interest of local authorities that residential homes are owned by, or ownership is under-written by, individual persons even when it is owned under some corporate entity name? These questions can only be answered by future research.

7.08 Limitations

There were time and financial constraints against doing a more extensive study covering more cities in New Hampshire and beyond. However, to a large extent, the goals that were set for the study at the beginning were successfully accomplished.

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Appendices

Appendix 1.00	Definition of Concepts
Appendix 2.00	Residential Real Estate External Look Evaluation Instrument (External Look Evaluation Checklist)
Appendix 3.00	Geographical Information System (GIS) Maps Appendix 3.01 Appendix 3.02

Appendix 1: Definition of Concepts

Foreclosure

"Foreclosure is a legal action used by a mortgage company to recover any money from a customer when the customer does not pay his or her debt in accordance with the mortgage agreement. ... it is the legal remedy used by a mortgage company to assume ownership of a property when the required loan payments are not made... Foreclosure can be a lengthy or very rapid process depending on the state. The first stage in the foreclosure process is the petition to foreclose and the last step is the Foreclosure Deed". [Homeownership Preservation Foundation (HPF) website: www.hpfonline.org. Retrieved May 28, 2009].

Short Sale

"A short sale occurs when a lender agrees to allow the sale of a property on which they have a lien ... for less than the amount currently owed on that property. There are many reasons for this type of sale being approved ... They may decide that it is far better to get most of their loan returned than to go to the trouble and expense of foreclosure ... A short sale agreement is done when the lender determines that it is fruitless to press the borrower due to hardship or poor economic conditions... The borrower needs to ensure that any short sale agreement explicitly includes that [it] would settle and clear the entire debt including any unpaid amount due or they will remain liable for the difference to the lender". (Source: http://loanmodme.org/foreclosure/short_sale.html)

Mortgage Restructure

"Whether it is called a loan modification, mortgage modification, restructuring, or workout plan, it is when a borrower who is facing financial hardship, having difficulty making their mortgage payments and is facing foreclosure, works with their lender to change the terms of their mortgage loan to make it affordable... The workout plan varies by lender, but changes could include temporary or permanent changes to the mortgage rate, term and monthly payment of the loan, the past due amount could be rolled into the loan, and the new balance re-amortized"... How do loan modifications benefit lenders and borrowers? A loan modification is usually a win-win situation: the lenders get their money in a reworked fashion and borrowers get a new chance to support their mortgage payments at a reduced cost. (http://www.zillow.com/loan-modification/)

Mortgage Forbearance

"In an effort to avoid foreclosure by both the lender and the homeowner, a mortgage forbearance agreement is typically used to delay impending foreclosure. In the agreement, the lender and homeowner make special arrangements that allow the homeowner to catch up on late mortgage payments on a new schedule. These arrangements... benefit both the borrower and the lender. The lender gives up his right to foreclose, and at the same time helps the homeowner make good on his debt.

There is no standard mortgage forbearance agreement, and each one varies by situation..." (Source: http://loanmodme.org/mortgage/mortgage forbearance.html)

Appendix 2.00 Residential Real Estate External Look Evaluation Instrument (External Look Evaluation Checklist)

Manchester Multi-Family Research Study June 2009 Exterior Look (Curb Appeal) Evaluation Checklist

Address: _		Date:
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Aspects Examined	Y/N		Good	Fair	Needs Attention	Poor	Weighting	Score (Out of	Remarks and Comments (If Any)
		5	4	3	2	1		25 Max)	
Window (Condition)							20%		
External Facades / Siding / Painting							20%		
Driveway or Main Door Entrance							20%		
Landscaping / Exterior Trim							20%		
Roof Condition							20%		
Total Score							100%		

Comments and Remarks:

External Evaluation Checklist Adapted from the Inspect-America Home Inspection Checklist – Exterior, Manchester City's Inspectors, Checklist, Nation-Wide Real Estate Discounters Corporation (RC 55094F Form) and The American Society of Home Inspectors (ASHI) Exterior Visible Conditions Form.

Multi-family Windows' Condition

Measurement Score	Operational Definition
Excellent = 5	Windows look almost new, is double-hang, clean, without any visible damages looks extremely well looked after.
Good = 4	Windows are in good condition, a bit changed by the external elements, looks clean, windows are the same for the whole visible house.
Fair = 3	Windows look in fair repair, looks a bit worn out by the elements, does not look quite clean.
Needs Attention = 2	Windows look worn and may not be double hung.
Poor = 1	The windows have clear chips of paint falling off, may be the old wooden and string hung windows, look dirty and some are broken or have cracks.
Total Score	

Multi-family External Facades / Siding / Painting

Measurement Score	Operational Definition
Excellent = 5	Painting / siding / and other external facets on the wall are in excellent condition, look relatively new, are clean and in excellent repair condition.
Good = 4	Painting / siding / and other external facets on the wall are just below the condition of excellent stated above, good condition, look are clean but not new, and in good repair condition.
Fair = 3	Painting / siding / and other external facets on the wall are look to be in fair condition. Just below the condition of good stated above, fair condition, look not quite clean, and in fair repair condition.
Needs Attention = 2	Painting / siding / and other external facets on the wall are look like they are fast deteriorating. Chipped off here and there, no apparent repairs taking place. Just below the condition of fair stated above, neglected condition, look dirty, and look like they need some cleaning and updating, bad repair condition.
Poor = 1	Painting / siding / and other external facets on the wall are already really deteriorated. Chipped off in many places. Growths on the side and unkept trees and grass all over the aprons of the walls.
Total Score	

Multi-family Driveway

Measurement Score	Operational Definition
Excellent = 5	Driveway(s) looks new and well done. No cranks or lines. Looks clean and very well kept.
Good = 4	Driveway(s) look in good condition, and well looked after. Clean. No cranks or lines. Looks clean and very well kept.
Fair = 3	Driveway(s) look in fair condition, reasonably looked after. Just Clean. A few cranks or lines here and there. Looks worn out and not very highly kept.
Needs Attention = 2	Driveway looks in need of some repair work. Not that good of a condition, not quite looked after. Not quite Clean. Quite many cranks or lines all over. Looks worn out and seems like its falling apart.
Poor = 1	Driveway looks worn and with pot-halls. In need of some significant repair work. Not good condition at all. No one appears to be maintaining the driveway.
Total Score	

Roof Condition

Measurement Score	Operational Definition
Excellent = 5	New and Clean. No tree- leaves damages on the roof.
Good = 4	Reasonably new and clean.
Fair = 3	Some work looks apparent and it the roof is still in intact position.
Needs Attention = 2	Roof needs inspection and some major . Areas where it may be whopping.
Poor = 1	Looks like the roof needs repair now as it may be a danger of falling off. Maybe some saying here and there.
Total Score	

Landscaping / Exterior Trim

Measurement Score	Operational Definition
Excellent = 5	Grass and trees are excellent condition, they are well looked after, grass and shrubs look health. The grass and trees are not affecting in any way the roof, the walls.
Good = 4	Grass and trees are in good condition, they are reasonably looked after, grass and shrubs look healthy The grass and trees are not affecting in any way the roof, the walls.
Fair = 3	Grass and trees only in fair condition. They seem to be getting very little trimming and other attention.
Needs Attention = 2	Grass and trees is un-kept. They seem not to be getting trimming and other attention
Poor = 1	Grass is overgrown. No one seems to be taking care of it.
Total Score	

Appendix 3.00 Geographical Information System (GIS) Maps

